



Moving Food Along the Value Chain:



Innovations in Regional Food Distribution



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Innovations in Regional Food Distribution



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Contents



Summary	1
Introduction	3
La Montanita Co-op: Retail-Driven Model #1	9
Co-op Partners Warehouse: Retail-Driven Model #2	18
Oklahoma Food Cooperative: Consumer-Driven Model	27
New North Florida Cooperative: Producer-Driven Model	39
Growers Collaborative/CAFF: Nonprofit-Driven Model #1	47
Red Tomato: Nonprofit-Driven Model #2	55
Minnesota Food Association and Big River Farms: Nonprofit-Driven Model #3	66
Appalachian Harvest: Nonprofit-Driven Model #4	73
Conclusion: Lessons Learned from Case Studies	86
References	94



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Summary



This report examines the aggregation, distribution, and marketing of eight diverse food value chains to glean practical lessons about how they operate, the challenges they face, and how they take advantage of emerging opportunities for marketing differentiated food products. A focus on the operational details of food value chains—business networks that rely on coordination between food producers, distributors, and sellers to achieve common financial and social goals—demonstrates how to facilitate moving differentiated products from regional food suppliers and buyers to customers.

The key business practices of food value chains include:

- Recruiting producers and developing producer networks
- Identifying, branding, and marketing differentiated farm products
- Managing infrastructure to transform, pack, and transport farm products
- Negotiating with buyers to secure a fair return for the producers.

By analyzing what has and has not worked within food value chains, we hope to show organizations interested in building local food systems lessons to build on, blunders to avoid, and inspiration to draw from.

Our eight case studies were selected to examine a variety of participating farmers, locations, product mixes, markets, and types of partnership or collaboration. They are categorized by the type of organization that drives the distribution operation.

Retail-Driven Models

La Montanita Co-op, based in Albuquerque, NM, established its Regional Foodshed Initiative in 2007 to expand purchases by the Co-op's four stores of sustainably grown regional products and to assist regional producers in accessing other wholesale market channels for its products.

Co-op Partners Warehouse, located in St. Paul, MN, was started in 1999 by the Wedge Cooperative to provide high-quality organic produce to the Co-op, and now serves 200 consumer cooperatives, health food stores, buying clubs, and restaurants in the Upper Midwest.

Nonprofit-Driven Models

Appalachian Sustainable Development's **Appalachian Harvest**, located in Abingdon, VA, has been selling organic produce to regional supermarket chains and specialty grocery chains in the Southeast and Mid-Atlantic regions for 10 years.

Minnesota Food Association's **Big River Farms**, based near Stillwater, MN, has provided production training and distribution/marketing services to aspiring immigrant and refugee farmers since 2007.

Growers Collaborative was established by Community Alliance for Family Farms (CAFF) in 2005 to offer aggregation, distribution, market promotion, and education services to California family farms. In 2009 CAFF went from being a full-service distribution company to playing a matchmaker role, transferring distribution and marketing services to independent aggregators and distributors.

Red Tomato, founded in 1996 and based in Canton, MA, arranges for the aggregation, transportation, and sale of a wide variety of produce supplied by 35–40 farmers to grocery stores and distributors throughout the Northeast. Its signature Eco Apple™ line of apples is grown using advanced Integrated Pest Management methods subject to third-party verification and accounts for more than half of Red Tomato's sales volume.

Producer-Driven Model

New North Florida Cooperative has been aggregating, processing, and selling produce in the Southeast since 1999. It sells primarily chopped fresh collard greens, sweet potatoes, and green beans from mainly small-scale minority farmers to 60 independent grocery stores and more than 30 school districts in the Southeast serving more than 200,000 students.

Consumer-Driven Models

The Oklahoma Food Cooperative has been operating an Internet-based buying club since 2003. It is a producer- and consumer-owned cooperative in which 200 producer members sell more than 4,000 individual items, including meat, produce, milk, and value-added items, to 3,800 Co-op members.

Findings

Four themes that cut across the eight case studies provide valuable insights for value chain practitioners:

The level of investment in infrastructure should match the organization's stage of development and marketing capacities.

How much and when an organization invests in infrastructure is vital to the success and even the survival of the enterprise. Whether it makes sense for food value chain distributors to invest heavily in infrastructure depends on operational scale, proximity to customers, availability of existing distribution assets, financial capacity, and its ability to capture value throughout the supply chain. The four nonprofit distribution models tended to overinvest in infrastructure because of its ability to solicit grants and donations and its tendency to focus on needs in the community rather than assets that could be mobilized. The four cooperative distribution models were much more conservative; they only invested in infrastructure in tandem with business growth and needs.

Value chain managers must ensure identity preservation from farm to market as a way to establish marketing claims and improve negotiating position with buyers.

The type of identity preservation employed by the various distribution models to differentiate its products was largely dependent on its relationship with farmers, retailers,

and individual consumers. When there is a great deal of preexisting trust between consumers and the seller, there is less need to specify which farmer produced an item or to create a third-party certification scheme. When there is less trust or social connection between consumers and sellers, identifying the farmer on each produce package helps establish marketing claims and better position products in a competitive selling environment.

Distribution entities using informal producer networks can adapt to the constantly shifting demands of diversified, niche food markets.

While agricultural cooperatives have played a major role in product aggregation and food marketing, new models of producer coordination are emerging that offer more flexibility to suppliers and buyers. With more informal supply networks, farmers benefit from a more diverse market channel mix by balancing risk and not "putting all its eggs in one basket," and the distribution entities are under no obligation to take all of its members' production. Informal farmer networks seem to be particularly appropriate for marketing diverse products like fruits and vegetables; more formal cooperative structures may be more appropriate when dealing with single, uniform products. A diverse range of products, each with its own separate costs of production, processing requirements, and prices, makes it difficult to allocate costs and benefits to cooperative members.

Nonprofits and cooperatives can play key roles in value chain development but should recognize its organizational competencies and play to its strengths.

As nonprofits and cooperatives engage in value chain activities, they should consider what roles are most suited to its capacities and recognize how its limitations can be mitigated through building strategic partnerships with other value chain actors. Cooperatives may benefit from partnering with nonprofits for training, education, and resource prospecting; nonprofits may find it worthwhile to partner with cooperatives or other business entities to provide infrastructure support or supply chain management services.

Introduction



The Changing Agricultural Landscape

Agriculture in the United States is at a crossroads. It has made tremendous strides in improving labor productivity with mechanization and land productivity through advances in plant and animal genetics, application of fertilizers, and myriad pest control technologies (Cochrane, 1993). With these technologies, the overall number of farms in the United States has plummeted from over 6 million in 1935 to around 2 million in 2007, even as the population has increased 140 percent from 127 million to 308 million in this time period. Compounding this dramatic reduction in overall farm numbers, we have seen intense concentration of farm ownership to the point where 55,509 farms—2.5 percent of all farms—accounted for 59 percent of total farm income in 2007 (USDA, 2009). Never have so many been fed by so few.

Although this dramatic increase in agricultural productivity has been a triumph of technology and has released millions of people from backbreaking work, it also has transformed the agricultural landscape. The steady increases in average farm size have made it increasingly difficult for small and midsized operators to compete successfully in the marketplace, especially in bulk commodity markets. In response to these prevailing trends, many smaller and mid-scale farmers have capitalized on growing consumer interest in food provenance to sell through direct-to-consumer food markets such as farmers markets, community supported agriculture (CSAs), and farm stands. According to the USDA National Agricultural

Statistics Service, direct marketing of all types was worth \$1.2 billion in 2007, having grown 105 percent in value from 1997 to 2007, compared to a 48-percent increase in total farm sales for the same period (Diamond & Soto, 2009).

Direct-marketing outlets can increase returns to farmers by allowing farmers to capture additional income streams from traditionally off-farm food system activities such as aggregation, processing, and marketing (Martinez et al., 2010). Nevertheless, direct-marketing channels alone are not equipped to accommodate the bulk of midsized agricultural producers—those earning between \$50,000 and \$250,000 in gross farm income (Stevenson et al., 2008). More than 270,000 farmers, with gross farm income of \$33 billion in 2007, belong to this "agriculture of the middle" category (USDA, 2009). Generally speaking, they are too big to rely primarily on direct-to-consumer marketing channels to dispense of their output. Farms in this size range are likely to specialize in one or two crops and be located far enough from population centers to make direct marketing impractical. On the other side of the coin, these midsize producers are often too small to compete on price with large commodity producers (Stevenson & Pirog, 2008). Their larger competitors are often more able to take advantage of economies of scale related to farm machinery, farm management, and/or get better terms of trade in the marketplace due to their large sales volume. "Agriculture of the middle" farmers are thus caught short, having difficulty capitalizing on two simultaneous, if contradictory, developments in contemporary American agriculture—the growth of small-scale, niche, local

production alongside the continued industrialization of agriculture into ever larger production units. The number of midsized farms declined 10 percent just from 2002 to 2007, and thirty six percent from 1987 to 2007.

In response to this conundrum, many midsized farmers are turning to a burgeoning array of alternative strategies for wholesale food aggregation and distribution, ones that can broadly be characterized as less intermediated and more direct sales from farm to institutions or retailers (Day-Farnsworth, L., McCown, B., Miller, M., & Pfeiffer, A., 2009; King, R., Hand, M., DiGiacomo, G., Clancy, K., Gomez, M., Hardesty, S., Lev, L., & McLaughlin, E., 2010). Such marketing strategies usually involve some degree of product differentiation based on attributes such as place of origin, production practices, and product quality, combined with product aggregation, to improve producers' bargaining position relative to buyers. These efforts to bypass both undifferentiated commodity markets and direct-to-consumer market channels depend on the creation of new collaborative supply chains and the marketing of differentiated products.

Key to these new food marketing strategies (King et al., 2010) is the establishment of strong relationships between the different actors involved in growing/raising crops; processing crops; and marketing food to retailers, institutions, restaurants, and other food buyers. The phrases "values-based value chains" and "food value chains" refer to emergent supply chains emphasizing vertical coordination rather than integration throughout the supply chain (Stevenson & Pirog, 2008).

These food value chains strive to create economic value through product differentiation and advance particular social or environmental values by espousing the concept of social entrepreneurship, or doing good works through good business (Barnes, 2006; Porter & Kramer, 2011).

Stevenson, as part of the Ag of the Middle Project, has described in a series of case studies how farmers, distributors, retailers, and food processors coordinate their actions for mutual economic benefit while advancing social and ethical values such as agricultural sustainability and farm viability (Stevenson, 2009). Others have built on this framework to assess the effectiveness of conventional food distributors in building up local food systems (Bloom and Hinrichs, 2011) and the capacity of pasture-raised livestock production to strengthen farm viability and rural communities (Conner, Campbell-Arvai, and Hamm, 2008). These studies have examined how the attitudes and behaviors of food value chain actors facilitate the creation of regionally based, sustainable food systems. Building on this body of work but also offering a new perspective, this report focuses on distribution mechanics and operations within the food value chain framework.

This focus on distribution is meant to address the oft-cited challenge to regional food marketing: farmers are willing to grow produce for local markets, and food buyers want local food, but there is no practical way to connect local demand with local supply (Day-Farnsworth et al., 2009; Zajfen, 2008). In focusing on the operational details of food value chains, this report seeks to explain how mission-oriented food distributors can facilitate connections between regional food suppliers and buyers through appropriately scaled and designed business operations.

Research Inquiry and Methods

The following analysis focuses on the myriad ways that value chain distributors:

- Recruit producers and develop producer networks.
- Identify, brand, and market differentiated farm products.
- Manage infrastructure to transform, pack, and transport farm products.
- Negotiate with buyers to secure a fair return for the producers.

By analyzing what has and has not worked in regional food distribution enterprises, organizations interested in building local food systems will have lessons to build on, blunders to avoid, and inspiration to draw from. These factors affect value chain performance:

- Organizational structure
- Financing
- Distribution logistics
- Buyer-grower relationships
- Price negotiation
- Marketing/branding

In order to capture the level of detail and richness of various distribution models, a case study approach was chosen as the primary research method. The themes described in this paper emerged from our analysis of interview transcripts and notes and other primary sources, such as organizational newsletters, websites, and journalistic accounts. Furthermore, given the dynamic nature of these alternative models of local food distribution, the study took

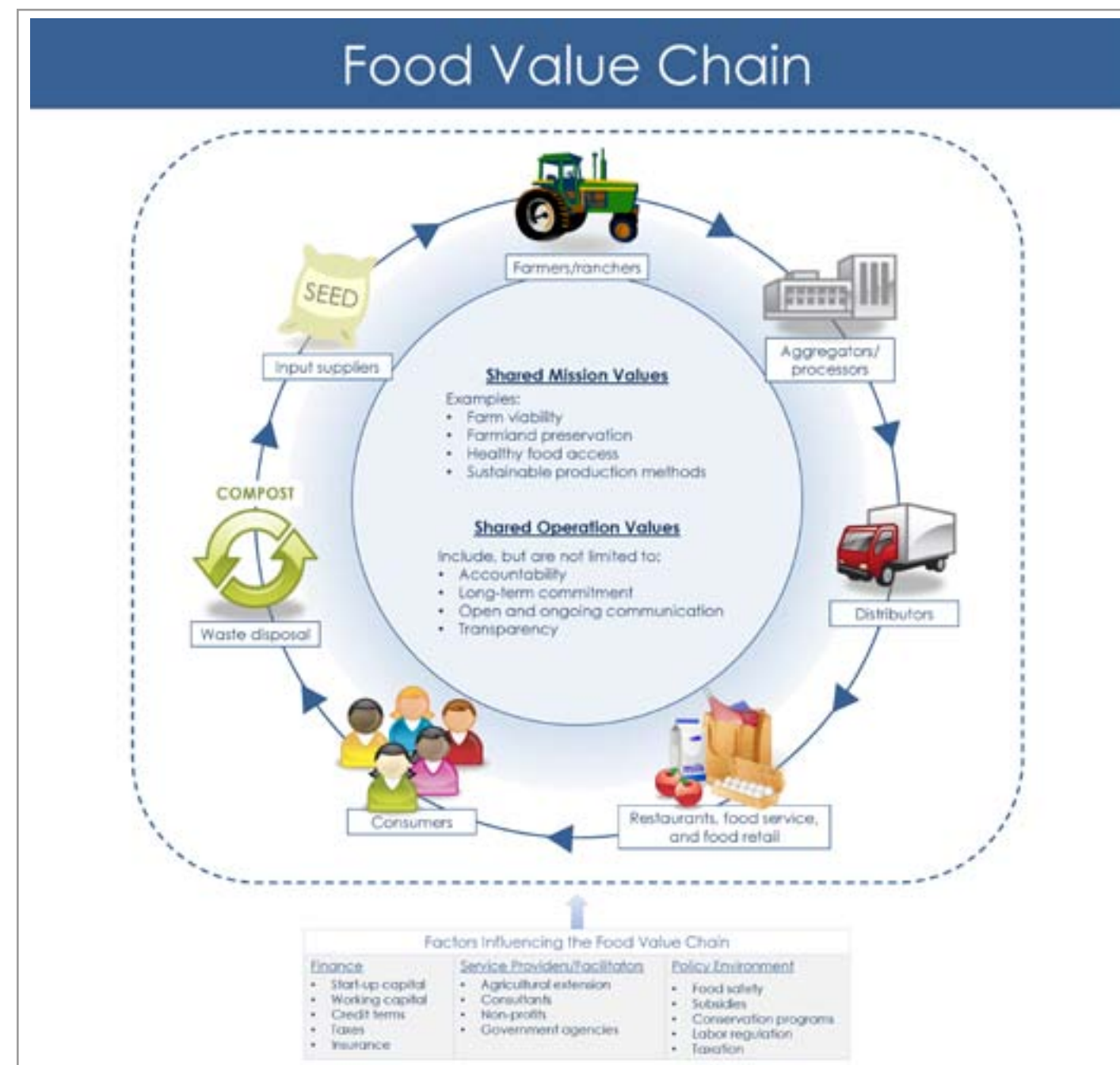
a longitudinal approach to examine how these organizations have faced challenges and seized opportunities to best advance their business goals and social missions.

A baseline review of value chain distribution models was first conducted to ensure a diverse representation of cases. An initial list of around 25 cases was gathered via key informants involved with the regional food distribution sector to create a broad set of cases from which to choose a diverse sample. While this initial list was not exhaustive, it was sufficiently diverse to form our sampling frame. Eight case studies were chosen, considering the following criteria:

- Types of participating farmers (e.g., minority, transitional, refugee/immigrants, new/beginning)
- Geographic location
- Agricultural products
- Markets (e.g., institutional buyers, retail grocery stores, restaurants)
- Types of collective producer structures (e.g., cooperatives, farmer networks, associations)
- Types of collaborations

The initial data-gathering period occurred with visits to each case study location, beginning in August 2007 and concluding in June 2008. Each site visit lasted an average of 2 days and included semi-structured interviews with distribution entity staff, including general managers, sales staff, and farmer-relations personnel. Our key informants at the distribution entities provided names of buyers (customers) and suppliers (farmers) who work with them. Periodic follow-up interviews were conducted either in person or by phone through February 2011 to chart their progress. In total, this study captures a rich, evolving narrative of over 3 years in the life of each case study.

Figure 1: Food Value Chain



Source: Designed by the USDA's Agricultural Marketing Service and the Wallace Center at Winrock International for *Food Value Chains: Lessons Learned from Research and Practice*

Value Chain Distribution Models

The final selection of case studies is shown in Table 1, which indicates the type of distribution model and stage of development for each case study. In this study, value chain distribution

models are classified by the type of organization driving the process, in terms of both establishing and growing the distribution enterprise.

For example, in some cases an individual producer or a group of producers claims greater ownership over the supply chain by carrying out certain aggregation and distribution

functions, instead of contracting this out to a third party. We have classified this type of arrangement as a producer-driven distribution model. In a second classification, nonprofit organizations assist small-scale producers by providing distribution and marketing services to create new wholesale market opportunities for producers. We classify them as a

nonprofit-driven distribution model. The section on retail-driven models examines how two food cooperatives have assumed distribution functions in order to maintain their competitive advantage and ensure that they can meet their customers' demand for locally grown food. Lastly, the consumer-driven model refers to new-generation buying clubs that utilize online networking and transaction platforms to link consumers with producers. In this model, consumers themselves are actively engaged in the aggregation and distribution of farm products to buying-club members.

Along with providing an overview of distribution model types, Table 1 also shows the stage of development, which takes into consideration how long the distribution enterprise has been operating, the level of professionalization regarding staffing and division of labor, and the overall scope and scale of the operation.

To show the range of case studies analyzed in the body of the report, we have included brief summaries of each case study below. They are categorized by model type, with the retail-driven, consumer-driven, and producer-driven models all representing different types of cooperatives, as compared to the four models driven by nonprofits.

Retail-Driven Models

La Montanita Co-op is a retail-driven distribution model based in Albuquerque, NM. It provides business development, distribution, and marketing services for producers located within a regional foodshed encompassing the Rio Grande River Valley Rift, about a 300-mile radius from Albuquerque. *La Montanita's* Regional Foodshed Initiative was established in 2007 to expand purchasing of sustainably grown regional products from small and mid-scale producers by the Co-op's four stores, and to assist regional producers in accessing other wholesale market channels for their

products. The Co-op's distribution business has been operated and funded largely from Co-op revenues. It currently stocks and sells more than 1,500 products purchased from nearly 900 growers and producers within its regional foodshed.

Co-op Partners Warehouse, located in St. Paul, MN, is a retail-driven distribution model started in 1999 by the Wedge Cooperative, which has 14,000 member households. Using its own fleet of trucks as well as contract trucking companies, it primarily sells organic produce supplied by a network of 30 or so farmers in Minnesota and Wisconsin during the growing season, and from West Coast sources the rest of the year, to 200 consumer cooperatives, health food stores, buying clubs, and restaurants in the Upper Midwest. Annual sales for Co-op Partners are \$16.8 million, with about one quarter of its sales accounted for by the Wedge. This organization is unique in its focus on selling primarily to retail cooperatives and in its commitment to being a full-service organic produce distributor with a regional focus.

Consumer-Driven Models

The Oklahoma Food Cooperative is a consumer-driven distribution model based in Oklahoma City, OK, that has been running an Internet-based buying club since 2003. It is a producer- and consumer-owned cooperative in which 200 producer members sell more than 4,000 individual items, including meat, produce, milk, and value-added items, to the 3,800 co-op members using an Internet ordering portal and 48 member-operated distribution routes that reach cities, towns, and hamlets across Oklahoma each month. Members always know which farmer produced their food and even have the opportunity to meet their farmer

on delivery day. Farmers bring their merchandise to a central drop-off location, where it is assembled into member orders and then routed by a crew of volunteers, who are compensated for their time with work credits redeemable for goods sold through the cooperative. All products sold through the cooperative must be made in Oklahoma.

Producer-Driven Models

New North Florida Cooperative is a producer-driven distribution model based in the Florida panhandle that has been aggregating, processing, and selling produce in the Southeast since 1999. It sells primarily chopped fresh collard greens, sweet potatoes, and green beans from mostly small-scale minority farmers to 60 independent grocery stores and more than 30 school districts in the Southeast that serve more than 200,000 students. The cooperative is one of the oldest farm-to-school programs in the country and has achieved considerable success by focusing on supplying a handful of food items that are culturally appropriate, easily accommodated into school menus, competitively priced, and require minimal preparation.

Nonprofit-Driven Models

Appalachian Sustainable Development's *Appalachian Harvest* is a nonprofit-driven distribution model located in Abingdon, VA, that has been selling organic produce to regional supermarket chains and specialty grocery chains in the Southeast and Mid-Atlantic regions for 10 years. This organization works with more than 50 farmers, ranging from market gardeners with less

than an acre to commercial farmers with 200+ acres, providing technical assistance, farmer mentoring, and aggregation services. *Appalachian Harvest* distinguishes itself from California organic produce with its local origin and short field-to-shelf time: "48 hours fresh."

Minnesota Food Association's *Big River Farms* is a nonprofit distribution model based near Stillwater, MN, that provides production and marketing services to aspiring immigrant and refugee farmers. *Big River Farms* (formerly *Big River Foods*) was established in 2007 as a "training distribution company" that combines brokering functions and transportation logistics with on-farm production and postharvest handling training. In any given year, *Big River Farms* works with 8 to 10 farm enterprises in its training program to broker and distribute certified organic fruits and vegetables to supermarkets, food co-ops, and restaurants.

Growers Collaborative is a Limited Liability Corporation established in 2005 to offer aggregation, distribution, market promotion, and education services to California family farms. As a nonprofit-driven distribution model, *Growers Collaborative* is wholly owned by the nonprofit organization *California Alliance with Family Farms*, whose mission is to promote small and medium-sized family farmers throughout California with sustainable education, public advocacy, and market development. *Growers Collaborative* works with a network of over 70 fruit and vegetable producers to increase its access to institutional markets in both southern and northern California. In 2009, *Growers Collaborative* transitioned from being a full-service distribution company to playing more of a matchmaker role by connecting farmers, aggregators, distributors, and institutional food service operators, and focusing its efforts on providing support services through market promotion and education to local supply chain actors.

Table 1: Value Chain Distribution Models and Stages of Development

Distribution Model	Stage of Development		
	Start-up/Nascent	Developing/Emerging	Mature/Developed
Retail-Driven		La Montanita Co-op, New Mexico	The Wedge/ Co-op Partners Warehouse, Minnesota
Nonprofit-Driven	MFA/Big River Farms, Minnesota	Growers Collaborative/CAFF, California	Red Tomato, Massachusetts ASD/ Appalachian Harvest, Virginia
Producer-Driven			New North Florida Cooperative, Florida
Consumer-Driven		Oklahoma Food Cooperative, Oklahoma	

Red Tomato, founded in 1996, is a nonprofit distribution model based in Canton, MA. It arranges for the aggregation, transportation, and sale of a wide variety of produce supplied by 35–40 farmers to grocery stores and distributors in the Northeast primarily. Relying on farmers and contract trucking firms to provide aggregation and transportation services, it never physically handles the product sold under its name. Its signature Eco Apple™ line of apples is grown using advanced Integrated Pest Management methods subject to third-party verification, and accounts for more than half of Red Tomato's sales volume. During the growing season, each tote of Eco Apples contains fruit grown by one farm, which is named and described on every package.

Although there are many differences in both structure and function from retail- to producer-driven models, and from nonprofit- to consumer-driven models, all the case studies selected for this study have several features in common:

- They all seek to improve the economic welfare of small-scale farmers and ranchers within specific geographic regions.
- They combine traditional business strategies with social missions.
- They all move beyond direct-to-consumer marketing activities yet incorporate the basic principle of building more direct connections between producers and consumers.

The next eight chapters examine how a diverse range of distributors have sought to build these connections, the challenges they have faced, and the opportunities they have seized. The concluding chapter looks at how four themes cut across the eight case studies and provide valuable insights for value chain practitioners:

- The level of investment in infrastructure should match the organization's stage of development and marketing capacities.
- Identity preservation is a critical market differentiation strategy.
- Distribution entities utilizing informal producer networks are well suited to meet the constantly shifting demands of diversified, niche food markets.
- Nonprofits can play key roles in value chain development but should recognize their organizational competencies and play to their strengths.

La Montanita Co-op: Retail-Driven Model #1



La Montanita Co-op is a retail-driven distribution model based in Albuquerque, NM. It provides business development, distribution, and marketing services for producers located in a regional foodshed encompassing the Rio Grande River Valley Rift (about a 300-mile radius from Albuquerque). La Montanita's Regional Foodshed Initiative was established in 2007 to expand purchasing of sustainably grown regional products from small and mid-scale producers by the Co-op's four stores, and to assist regional producers in accessing other wholesale market channels for their products. The Co-op's distribution business has been operated and funded largely from Co-op revenues. It currently stocks and sells more than 1,500 products purchased from nearly 900 growers and producers within its regional foodshed.



La Montanita is committed to offering products that are “fresh, fair, and local.”

History

La Montanita Co-op Natural Food Market is a community-owned consumer cooperative that first opened its doors in 1976 in Albuquerque. Since then, La Montanita has opened three more retail stores in New Mexico, adding a second store in Albuquerque in 1999 and third and fourth stores

in Santa Fe and Gallup in 2005. La Montanita is also scheduled to open a new location in University of New Mexico's bookstore building. The Co-op is overseen by a membership-elected, nine-person Board of Directors. It employs more than 200 full- and part-time staff. All stores offer a wide variety of natural and organic groceries, freshly prepared delicatessen foods, natural body-

care products, and vitamins and nutritional supplements. The Co-op currently stocks and sells more than 1,500 products purchased from nearly 900 local growers and producers. La Montanita defines “local” as any products grown or produced within a 300-mile radius of Albuquerque.

Even in the highly competitive environment of food retail, the Co-op has seen tremendous growth in its sales and membership. From 2004 to the present, La Montanita has seen its sales more than double from \$12 million to \$28 million, and seen its membership grow from 10,000 to almost 17,000 members. Much of the Co-op's continued success has resulted from the organization's strong commitment to its core principle: offering products to its consumer members (and the general public) that are “fresh, fair, and local.”

La Montanita's dedication to satisfying the needs and preferences of its members is best exemplified by its creation of the Regional Foodshed Initiative, an initiative to bolster the supply and demand for regionally grown products through the creation of an alternative food-distribution model. The initial impetus for this initiative and La Montanita's entry into the distribution business emerged after the organization's management team analyzed responses from its annual member survey. As far back as 2002, Co-op members increasingly identified the availability of local foods at the Co-op as one of its top priorities.

Bolstered by these findings, and coupled with the ever-growing presence of natural and organic products in mainstream supermarkets, La Montanita's board realized that the only way it could satisfy the demands of its members and maintain a competitive advantage in the food retail marketplace was to focus its energies on local products. As C.E. Pugh, former general manager of La Montanita, points out, "We began to look out and say, okay what are we going to do, how are we going to maintain our position in the marketplace 10 years from now, 15 years from now, 20 years from now? It just seemed clear that the support of local products made a lot of sense."

La Montanita's first step in broadening its range of local product offerings was to take a closer look at its current procurement strategies. La Montanita found that in 2003, 16

“How are we going to meet this demand if we keep losing producers?”

percent of its sales revenues came from local products. In an effort to boost these sales, La Montanita's management began to actively promote the company's local product offerings through in-store signage, educational articles in its monthly newsletter, and other events. These promotions had the desired effect of boosting sales from 16 percent in 2003 to more than 20 percent of the stores' sales totals by 2006.

Concurrent with these promotion efforts, La Montanita began to examine each department systematically to see how to best strengthen existing relationships with

top local producers, as well as to see how it could attract more local producers as vendors. In the process of doing this, a disturbing trend began to emerge, as Robin Seydel, La Montanita's Membership Director, recalls: "We kept seeing producers going out of business, farmers not being able to do their deliveries, the local bagel man went out of business, Sunrise Juice, our local juice company, went out of business. We began to see all this falling apart on the producer end, and at the same time, we're hearing the members say we want more local: how are we going to meet this demand if we keep losing producers?"

After speaking to a number of local producers, what La Montanita found was that over the previous 15 years, many of the smaller independent retail food stores in the area had closed, partially due to competition from larger chain stores. Consequently, many smaller scale producers lost their wholesale market outlets, and either went out of business or scaled back production and turned to direct marketing venues, such as selling at farmers markets.

As Pugh points out, "It got to the point that it was more economical for them to cut back their production, just go to the farmers market and get the [premium] price . . . And so it concerned me that these guys were probably more important to us long term than we are to each of them. If the local producers go away, where are we in the market? Where is our competitive advantage? If we don't have a key point of differentiation in the marketplace, we've lost."



Many of the products that are part of La Montanita's Foodshed Initiative are branded with the Co-op Trade logo.

Starting the Regional Foodshed Initiative

It became clear to La Montanita's management team that the only way to keep many of these local producers in business was to help them expand their wholesale market opportunities. Even as demand for local foods was beginning to take hold in the early 2000s, the ability of many of these local producers to tap into these markets was impeded by high transportation and storage costs that effectively stymied their ability to grow their businesses. In 2006, La Montanita's management team presented a strategic plan to its Board of Directors that proposed investing \$150,000 of the Co-op members' contributions over a 3-year period in setting up the Regional Foodshed Initiative. The basic goals of the Regional Foodshed Initiative were to "increase the quantity, diversity, and availability of local foods and to provide support for producers and value for consumers."

As presented to the Board of Directors, the strategic plan envisioned the "creation and expansion of a wholesale-based income stream for farmers and producers, the development of a distribution network for pick-up of product and delivery of farm inputs (livestock feed, packing boxes, etc.) and the opening of additional Co-op locations throughout the foodshed region that would serve both as grocery stores for underserved communities and as drop-off and pick-up depots for the distribution network." To create the proper framework for discussion, the concept of a "foodshed," akin to a watershed, was used as the anchor of the proposal's vision statement:

The concept of a regional foodshed is a natural outgrowth of the concept of a watershed. Just as a watershed provides for fauna and flora in its eco-region, a regional foodshed based on that watershed provides food for the region's inhabitants. We have defined our Co-op foodshed region as just beyond the area that spans the whole Rio Grande River Valley Rift; about a 300-mile radius from Albuquerque. (Citation—*La Montanita website*).

Upon receiving board approval, La Montanita began to develop distribution routes to serve the regional foodshed. An early key partner in its efforts was Beneficial Farm and Ranch Collaborative (BFRC), a group of 14 northern New Mexico farmers who sold product under a regional eco-label that certified the sustainable production practices of its members. BFRC assisted La Montanita with its early distribution planning and connected La Montanita with several producers who potentially could be part of the Co-op's distribution network. Shortly after partnering, La Montanita and BFRC decided to bring the Beneficial Farms eco-label under the Co-op umbrella, which meant that producers could sell to La Montanita under this label (once inspected by BFRC), as well as use this marketing claim when selling to other market outlets. With many local producers not certified organic, having this additional marketing claim was important to command a higher price point (and thus a willingness to sell to La Montanita or other wholesale market channels), and was essential for assuring Co-op shoppers, as well as other wholesale buyers, that these local products were produced in a manner consistent with sustainable farming practices.

Business Structure and Operations

In the spring of 2006, La Montanita began distribution of regionally produced products with 1 leased refrigerated truck and 2 drivers delivering more than \$100,000 of meat, eggs, milk, and fresh produce from about 30 producers. In January 2007, it formally opened its Cooperative Distribution Center (CDC) in Albuquerque. The leased warehouse facility provides approximately 1,500 square feet of refrigerated storage, 500 square feet of frozen storage, and over 4,000 square feet of dry storage. The CDC also houses the main administrative office for La Montanita. Initial capital expenditures were roughly \$100,000 to renovate the warehouse, install the coolers and purchase other warehouse equipment essentials (e.g., pallet jacks, scales, etc.). The CDC is managed by Michelle Franklin, who oversees all distribution logistics and internal and external store accounts. The CDC is the center of La Montanita's Foodshed Initiative, providing pick-up, supply, and storage services for producers and distribution of regional products to its four retail stores and other retail outlets. The CDC also obtained liability insurance for products that would pass through its warehouse and had the facility certified to handle organic products.



Moving boxes at the Cooperative Distribution Center.

By operating the CDC, La Montanita is attempting to contribute to environmental sustainability across several measures. The organization seeks to reduce food miles by using the CDC to consolidate trucking routes and coordinate the pick-up of product with delivery of farm supplies, including animal feed, egg cartons, and produce packing boxes. The CDC also serves as a recycling center for farm inputs, as appropriate, and provides postharvest refrigerated space for smaller scale local producers who lack sufficient storage capacity in their own operations.

Pricing/Marketing

By entering into the distribution business, La Montanita knew full well that the Co-op's Foodshed Initiative was not going to succeed unless it served a wider market than just the Co-op's own locations. As Steve Warshawer, CDC's Enterprise Development Coordinator, emphasized:

The Co-op by itself isn't big enough to impact any markets, so we're immediately out into bigger markets. So the real conundrum of the Foodshed Initiative is to build sufficient strategic partnership for the delivery side so that you can get the farmers who are big enough to need and want distribution and make a marriage. Our Co-op could own a 10-acre farm or one or two smaller farms on each end of the State, manage it with Co-op employees and have all the produce it needs and not even do this and probably have better results. But the Foodshed Initiative is a commitment to local economy, business building, and community, etc.—it's not just getting what our store needs.

“We can put up some capital to get the thing going, but it's going to take all of us to move the needle meaningfully.”

One of the first steps the CDC took was to obtain vendor status with Whole Foods, Sysco, Raley's (now Albertsons), and a wide variety of small and medium-sized grocery stores. There was some initial pushback from some of the Co-op members who did not quite understand how the Co-op would benefit from partnering with what many saw as its competitors. But Pugh was clear in the CDC's purpose: “People say, ‘why are you selling to Whole Foods, why are you selling to Raley's?’ Well, if we are really serious about building into a more sustainable food system, it's going to take more than our four stores to do it. We can put up some capital to get the thing going, but it's going to take all of us to move the needle meaningfully.”

During the course of 2007, the CDC more fully developed its distribution routes, delivering product to a number of chain and independent grocery stores, including weekly deliveries to New Mexico's other co-ops: Mountain View in Las Cruces, the Dixon Co-op, and the Silver City Co-op. The CDC also brought local products into cafes, colleges, universities, and small businesses throughout the state.

Not only did La Montanita's management recognize the importance of expanding the reach of the CDC beyond its four stores to make the operation economically viable, but they also recognized the importance of expanding the range of its product offerings beyond locally produced food items in order to utilize its warehouse capacity and generate revenue on a year-round

basis. As Franklin explains, the CDC is “really a hybrid model. We use the distribution system to support local producers but cover our overhead costs by distributing national products [along with local ones].”

A key element of the CDC's success was the ability of La Montanita to strike a deal with Organic Valley to become one of its regional distributors in the Southwest. Offering products with year-round availability, such as dairy, meat, and non-perishables, allows the CDC to stay in constant contact with its retail buyers—a vital part in building strong and lasting customer relations that would not occur if the company were restricted to distributing seasonal produce. As Franklin says, “It's hard to recreate a relationship every year when suddenly peaches are ready. . . Now I can woo a customer because every week I can bring [the customer's] milk, eggs, and butter. Some weeks, you know, the produce items are extremely seasonal in this part of the world.”

Producer Relationships

Just as it was important to build lasting relationships with other nearby retail outlets to support local producers, it was also clear from the onset that local producers were going to need help strengthening and expanding their enterprises if they hoped to take advantage of the emerging market opportunities offered by La Montanita. To help facilitate this process, La Montanita hired Steve Warshawer, the founder



Products being unloaded at La Montanita's Cooperative Distribution Center.

of Beneficial Farm and Ranch Collaborative and a long-time New Mexico farmer with the oldest Community Supported Agriculture (CSA) enterprise in the State, to be the Co-op's Enterprise Development Coordinator. In this role, Warshawer provides business development services to local producers, in such areas as crop planning, marketing, business planning, and goal setting. The idea behind this is not just providing distribution services for producers, but working with them actively to grow their businesses. As Warshawer says, “My job is to make the network, make the connection . . . I help them make basic business decisions, help them with marketing decisions, [and] help them with on-the-ground farming practice. Because of my background in different jobs, I can go in and pretty well assess their situation and if they want help, I can either give it or help them find the person who can.”

Along with providing enterprise development services, La Montanita more recently has set up a Preferred Vendor Pre-pay Program. Through this program, the CDC advances funds to vendors, which are recovered by deducting the advance from future

invoices. This program has allowed a number of smaller producers to overcome early season cashflow constraints and enabled them to expand the wholesale portion of their businesses. Anywhere from 8 to 10 producers take advantage of CDC's pre-pay program each year. Along with this program, the Co-op has also started the La Montanita Fund—a grassroots investing program that allows Co-op members to pool investments to collateralize micro-loans to regional food producers at affordable rates. In the first year of its operation, the La Montanita Fund has raised \$97,000 and will be making loans from \$250 to \$5,000 to a number of farmers, ranchers, and value-added food producers in its foodshed network.

Challenges and Solutions

While La Montanita's Foodshed Initiative has shown remarkable success, this doesn't mean everything has gone smoothly. Shortly after CDC became operational, internal tensions began to emerge between the retail storefront management and CDC

management. Prior to the CDC, all fresh produce was delivered directly to the store; produce managers were the primary decisionmakers on procurement. With the shift of some of this decisionmaking to the CDC, as well as procurement priority on local purchases, produce managers were understandably upset by this loss of autonomy. Produce managers prided themselves for having the best organic produce in town, and the shift to more local procurement meant accepting produce that may have been lower than their usual quality standards, as well as getting produce that did not always arrive in a consistent and timely matter.

Fortunately, over time, much of this tension has been alleviated. Warshawer, as the enterprise development officer, has been working with local producers to improve the quality and consistency of its produce to meet the standards not only of La Montanita, but of other buyers as well. Additionally, through a series of team meetings between CDC and retail store management in 2008, La Montanita identified which products should come through the CDC, and which products are better served through direct store delivery. As a result of these meetings, it was agreed that high-moisture items with specific cooling needs, such as leafy greens, would be delivered directly to the store and large-harvest crops (such as peaches, apples, root crops, and other less perishable produce) and value-added products would go through the distribution center.

Another challenge that La Montanita did not predict was the difficulty of acquiring national brands to cover its overhead costs. In its initial strategy, La Montanita put far greater focus on the local procurement piece, assuming that much of its operational difficulty would be found there, and that securing national brands would be a far easier task. Reflecting on its original plan, Pugh says:

“La Montanita currently stocks and sells more than 1,500 products purchased from nearly 900 growers and producers within its regional foodshed.”

I would have put more work and emphasis on commodities—the national commodity items necessary to cover the overhead. That is the area that’s running woefully behind plan. It has proven much more difficult to build that aspect of the business than I thought. The local piece is actually flat on plan. There’s a national—probably a worldwide—shortage of organic supply, so most of these manufacturers are [working very hard] to meet the current demand. There is no mandate to go out and find new distributors. So when I call these people to talk to them about buying direct, most of them don’t even want to talk to me. So, I was wrong about the focus.

Fortunately, as mentioned earlier, La Montanita was able to establish a partnership with Organic Valley to be one of its New Mexico distributors, which allowed them to start covering the overhead costs as well as building ongoing relationships with other retail stores.

There has also been some confusion by consumers over the Co-op’s Beneficial eco-label. While it made strategic sense to bring this label in-house to bring attention to those local producers using sustainable (but not USDA organic certified) practices, the label was not being as readily connected to the Co-op as they envisioned. In order to alleviate this confusion, La Montanita has dropped the Beneficial eco-label and instead relies on in-store signage and product labeling to designate regionally grown products supplied by the Foodshed

Initiative, and it takes advantage of its newsletter and other media to profile the farms and producers in its network. La Montanita also carries out periodic farm visits to ensure that Foodshed Initiative products are produced using sustainable farming practices. By continually providing information about its products, La Montanita believes that when the Co-op members see a particular “Foodshed Initiative” product, they can be assured that the stated values of the Initiative—such as agricultural sustainability, promoting healthful food, supporting local economies, and enhancing small farm viability—are being upheld.

Successes and New Directions

By all accounts, the Foodshed Initiative has exceeded the Co-op’s expectations. In 2010, the CDC purchased more than \$2.15 million in products, with over \$865,000 of this in “local” products. In 2010, CDC had overall sales of nearly \$2.7 million—\$1.6 million in sales to the La Montanita stores, and the remaining \$1.1 million to external accounts, with foodservice and retail buyers accounting for most of this (almost \$1 million). As a result of these efforts, La Montanita currently stocks and sells more than 1,500 products purchased from nearly 900 growers and producers within its regional foodshed. The current general manager of La Montanita, Terry Bowling, has overseen the Foodshed Initiative for the past 3 years and through his leadership has taken the Initiative and CDC operations from their early stage of growth to their present stage of maturity.

Although the CDC originally only purchased food from farmers and producers for resale, it now also offers local vendors the option of making deliveries to their customers under their own invoice for a fee. To move all this product, La Montanita now leases two 36-foot refrigerated box trucks, which run 5 days a week. Because of the quick trajectory of products moving through the CDC, as well as the projected opening of a new La Montanita location, the warehouse is quickly exceeding its capacity and CDC is looking for a larger facility. The CDC has also expanded its approved vendor status with many chain stores and large distributors, including Whole Foods, SYSCO, ARAMARK, Sodexo, and Bon Appétit.

Even with this remarkable growth, the CDC is still seeking financial self-sufficiency. When La Montanita wrote its initial strategic plan that would invest \$150,000 of the Co-op’s money to start the Foodshed Initiative, the goal was to have the distribution operation break even in 3 years. In its 4th year of operation, the break-even point still eludes CDC. Further investments are still needed to maintain CDC’s current operations, which amount to roughly \$80,000–\$100,000 annually. Nonetheless, this is a small price to pay given the scope of services offered by the CDC to regional producers and the wider community. Both the healthy growth in Co-op membership (from 10,000 to 17,000 members from 2004 to 2010) and continued double-digit sales growth at La Montanita’s storefronts (from \$12 million to \$28 million from 2004 to 2010) can be partially attributed to the CDC’s ability to bring in more local products as well as national brands at discounted prices.

Lessons Learned

Use Existing Assets and Build Relationships in the Wider Community

One of the key advantages that La Montanita had when starting a distribution entity was strong community backing, both internally as well as in the wider community.

Internally, the board of La Montanita fully supported the strategic decision to start the Foodshed Initiative. By providing the Co-op’s management with the requisite start-up capital, the initiative was fully realized without having to depend on outside funding and externally imposed timelines. Further, by establishing the Foodshed Initiative, the Co-op management was responding to its members by developing the local economy and ensuring that its members had access to products that embodied the qualities of “fresh, fair, and local.” As Warshawer says, “This is what’s fun about working for a co-op—the members are saying to management, invest our money in building a local economy. We want local businesses and we want more local products.”

Externally, La Montanita already had a reputation as a “farmer’s friend”—willing to buy local when possible. Given its longstanding relationship with the local farming community, La Montanita was already well positioned to collaborate with local farmers to expand its businesses and take advantage of new market opportunities. A great deal of trust is required to be an effective and successful intermediary between producers and buyers, and La Montanita was fortunate to have this initial base of trust on which to build. As Warshawer reflects, “We’re building trust and credibility, and those are the keys in most businesses. When you have those things, you can make deals because you’re good and you can make deals because they’re profitable, and you have to always be willing to do both. That’s just my opinion of what makes business works.”

Have the Capacity To Absorb Short-Term Losses for Long-Term Gains

Among the pieces of advice from Pugh to other co-ops interesting in entering the distribution business was to make sure you:

... have the tolerance for significant operating losses for several years. If you don’t think you can, then I wouldn’t do it because there’s going to be a ramp-up time to any effort like this. There’s so much inherent tension—long learning curves, tension with the new systems—that you need to recognize. It’s probably going to be 3 years before you’re going to get the thing halfway figured out.

From the very start, La Montanita fully realized that starting this business would require not only a substantial initial investment but also that it could be several years before it reached a break-even point. By laying out a strategic plan that considered these realities, La Montanita management was able to avoid any heightened expectations from the board and the Co-op members of what the CDC would be capable of doing in the short term, and substituting it with a worthy vision of what it would be capable of achieving in the longer term if given the right amount of confidence and financial backing.

Never Lose Sight of Your Core Mission

There is no question that the core mission of the La Montanita is the long-term viability and profitability of its storefront locations. While the objectives of Foodshed Initiative reach far beyond La Montanita alone and into the realm of food system transformation, La Montanita management has never lost sight of its core mission. As Pugh says, “If we started getting in trouble in the retail stores, we’d shut this thing down because that’s what makes it possible

until this thing gets to a break-even. So if we started seeing declining profitability, I wouldn’t hesitate to pull the plug on this thing to protect the Co-op as a whole. I wouldn’t let this thing drag the Co-op down.”

Fortunately for La Montanita, the CDC has brought immediate added value to its storefronts. After the first full year of operation, Pugh and the management were surprised to find La Montanita’s year-to-date net income higher than the previous year—quite astonishing considering the start-up costs of the CDC: more than \$100,000. As Pugh happily points out, “As a result of this work and this effort, our retail sales have been supercharged. We’ve seen sustained double-digit growth when the industry as a whole has dropped to single digits.” But, he also clearly warns, “I don’t think anybody should go out and just throw money at something. It ought to add value to the organization, and that’s the way we set this thing up and that’s what I believed when we looked at it.”

Think Beyond Local and Be Pragmatic in Your Approach

La Montanita entered the distribution business to support local producers, but they also knew that being a distributor of only locally grown products would not, at least initially, be a viable business model. Being a distributor of national brands, such as Organic Valley, allows the CDC to pay the freight and cover its overhead costs, when as Pugh says, “We drive out to the hinterlands to pick up two buckets of garlic.” The lesson here is not to be driven, or even blinded, by a certain ideological fervor that could ultimately undermine the whole enterprise. Instead, balance your core values with a healthy dose of pragmatism that will still allow you to reach your ultimate goals.

As Pugh says, “I don’t really want to be a full-out distribution business. This whole thing is really to support the local effort, but to help cover overhead I need to find a few things

that'll help pay the freight. I'd love to get to the point where I don't need Organic Valley and [non-food items like toilet paper and soap] because they're not local." However, La Montanita thinks that over time, as the local market develops, they can begin displacing these non-local products with more products grown or produced locally.

Make Your Competitors Your Partners

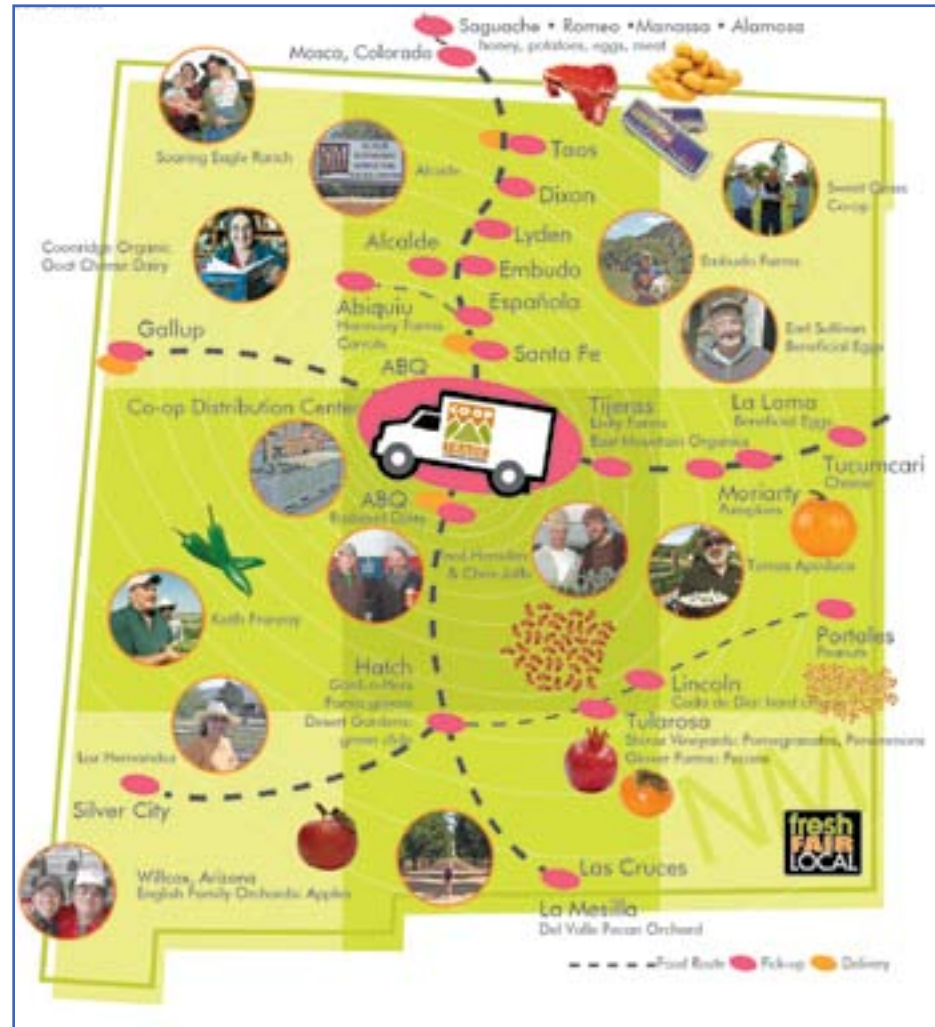
Just as La Montanita needed to expand the distribution product lines beyond local, it was also vital to expand the buyer base beyond the retail storefronts. La Montanita understood that the only way to

develop a strong network of local suppliers meant partnering with its competitors, such as Whole Foods. La Montanita tries to maintain open and transparent lines of communication with other retail buyers so that they can work in partnership to meet their ordering needs. La Montanita often refers its producers to other retail buyers and, in most cases, the other buyers reciprocate in kind. What La Montanita has tried to instill in other retail buyers, as well as in other distributors, is that competition in the food business does not have to be a zero-sum game, that at some point it makes more sense to cooperate to grow the whole pie of local supply, rather than compete over existing pieces of the pie. As Warshawer emphasizes,

We'll broker, we'll aggregate, we'll do whatever it takes. I'll hand them [retail buyers or distributors] names and say, "Call this guy. You don't need me in the business. I don't see a role for the Co-op in this. Make sure you take care of us on the stuff we are doing." He goes, "Fine I understand that." I'm not going to mess the deal up for him. It doesn't do us any good. The grower doesn't succeed if we take an exclusive and mismanage it. If I strengthen a grower so that he stays around for the next 10 years, and I only use 5 percent of his production now and he gets bigger and bigger and then all I use is 1 percent of his production but he gets bigger and healthier. Have I hurt my business or have I helped my business by helping him?

Have the Right People in Place

A large measure of La Montanita's success with the Foodshed Initiative stems from a core group of people with the right combinations of skills and experiences to manage the CDC and the broader goals of the Initiative. Former general manager C. E. Pugh came to La Montanita with more than 30 years of conventional grocery retail experience, with extensive knowledge of distribution and warehouse management and operations. Pugh was well aware of the dangers of entering into the distribution business but also had enough exposure to what works to get behind a strategic plan and vision to make the Initiative a reality. Similarly, people like Michelle Franklin, the CDC manager, bring more than 20 years of local experience in managing food cooperatives, and Steve Warshawer,



Through its Foodshed Initiative La Montanita sources product from a diverse array of New Mexico farmers and ranchers.

the enterprise development coordinator, brings more than 25 years of experience as a farmer, direct marketer, and local foods advocate. Beyond their specific skill sets that make them well-suited for their jobs, their longstanding relationship with the wider community brings an immediate level of local legitimacy and strong dose of the realities on the ground. And finally, La Montanita has Robin Seydel to head its consumer education and community outreach component, which ensures that La Montanita's customers, as well as the wider community, understand the importance of supporting their local economy by buying local.

Ultimately, the development of any successful local food system relies on consumers driving the process. Robin and others at La Montanita have succeeded in raising consumer

consciousness by telling a compelling story (through newsletters, in-store signage, and other outreach activities) that connects what co-op customers consume to larger principles of sustainability, local development, and fairness. In an increasingly competitive retail environment, connecting these principles/attributes to what the co-op sells is a crucial component to maintaining its competitive advantage.

The bottom line is that any mission-driven distribution entity with the ultimate goal of building sustainable local food systems will need several people that can take on the functions mentioned above: A visionary, a savvy businessperson, an operations and logistics person, a farmer liaison, and an educational/marketing person to tell the story. In rare cases, one person can embody many of these

qualities, but in most successful cases, several people fulfill these capacities that allow a distribution system to be ultimately successful. Or, put more succinctly by Warshawer, reflecting on the key components of a successful distribution entity: "Multi-year commitment, the resources to back it up, the willingness to learn on the job, and some dedicated people with the particular skill sets, that's about it. I mean, there is no roadmap really."



La Montanita food market logo.



La Montanita trade logo.



La Montanita distribution center logo.

Co-op Partners Warehouse: Retail-Driven Model #2



Co-op Partners Warehouse, located in St. Paul, MN, is a retail-driven distribution model started in 1999 by the Wedge Cooperative, which has 14,000 member households. Using its own fleet of trucks as well as contract trucking companies, it sells primarily organic produce supplied by a network of 30 or so farmers in Minnesota and Wisconsin during the growing season and from West Coast sources the rest of the year. Its customers are 200 consumer cooperatives, health food stores, buying clubs, and restaurants in the Upper Midwest. Annual sales for Co-op Partners are \$16.8 million, with about one-quarter of its sales accounted for by the Wedge. This organization is unique in its focus on selling primarily to retail cooperatives and in its commitment to being a full-service organic produce distributor with a regional focus.



The Wedge Natural Foods Co-op, circa 1974



The Wedge Natural Foods Co-op, 2010

History

The Wedge Community Cooperative opened in 1974 in Minneapolis as a small store operating out of a basement apartment. One move and three expansions later, the Wedge has more than 14,000 members and more than \$40 million in annual sales from its retail store; Co-op Partners Warehouse (CPW), its distribution arm; and Gardens of Eagen Farm, an organic farm on the outskirts of the Twin Cities, purchased in 2006 by the Wedge. The Wedge is one of the highest grossing grocery cooperatives in the country. In addition to its retail

operation, with CPW the Wedge has developed one of the largest cooperatively owned distributors in the country. It serves its own store and dozens of other retail outlets throughout a five-State region in the Upper Midwest.

In 1995, the Wedge started a direct-buying program from organic farmers in the Midwest, the West Coast, Florida, and elsewhere. Edward Brown, the Wedge's head produce buyer at the time, visited farmers and bought directly from them for the Wedge, earning a good reputation for prompt payment. Laurel Zastrow, a Wedge produce buyer, remembers

that this direct-buying program originally emerged out of a desire to provide a leg up on the competition. At the time, direct farm-to-retail was unusual in the food retail sector.

... the Wedge produce department [wanted] to set itself apart from privately owned competitors. It [needed] to ensure the availability, quality, and fair prices of a huge variety of both locally and nationally grown organic produce. What [could] it do to set itself apart? He (Brown) slowly established long-term relationships with organic

growers. He [bought] their produce directly—with neither the volume purchasing power nor the credibility that backing from a chain could give him. Over the years, the produce purchased through our “Direct Buying Program,” housed in a number of independently owned warehouses, [was] delivered to our store on a daily basis as needed.¹

From 1995–1999, the Wedge contracted with a regional distributor to inspect, grade, and deliver produce purchased directly from farmers,² which worked reasonably well but was hampered by the Wedge's not having its own warehouse. With the support of the Wedge's general manager and board of the directors, the Direct Buying Program was renamed CPW in 1999 and opened a single warehouse run by Wedge personnel.

A permanent warehouse run by Wedge staff increased storage capacity and facilitated more local food purchasing by the store. Lori Zuidema, the current business operations manager for CPW, explains:

Owning a warehouse provided the rapidly growing co-op with several conveniences: bulky overstock items, such as water, pet food and flour for the in-store bakery, could be stored offsite and delivered daily as needed. Contracts with local growers were forged that not only guaranteed the Wedge's purchase of their product but provided storage and delivery for the growers' other customers as well. (Zuidema, August 2007)



Trucks loading up at Co-op Partners Warehouse.

In its early days, CPW primarily served as the Wedge's “back office” and, as such, greatly expanded the Wedge's selling capacity, providing members access to a greater variety of products than would be the case if the Wedge's retail store had to physically store its entire product inventory.

As CPW developed and more warehouse staff were hired, the Wedge leased two refrigerated trucks and started making deliveries to other cooperative groceries in the area. Quickly it became clear that what began as an effort to obtain higher quality produce for the Wedge was becoming a vehicle for regional food system development.

The first few years of CPW were rough and sales were stagnant. However, a combination of favorable market conditions, new infrastructure investments, and key personnel changes contributed to rapid sales growth in the mid-2000s. A key turning point was the purchase of Roots and Fruits—a worker-owned organic distributor in Minneapolis that had been the primary source of organic produce for food stores in the area—by Albert's Organics.³ In the wake of the buyout, turmoil ensued at Roots and Fruits, leading many customers to switch to CPW for their organic produce. As the new ownership brought in new management, several experienced staff people left the company and

1 Laurel Zastrow. “Introducing Co-op Partners Warehouse.” The Wedge Natural Foods Co-Op Newsletter, October/November 1999.

2 Lindsey Day-Farnsworth, Brent McCown, Michelle Miller, Anne Pfeiffer (2009) “Scaling Up: Meeting the Demand for Local Food,” University of Wisconsin-Extension and Center for Integrated Agricultural Systems, December.

3 Albert's Organics is now a division of UNFI, the largest natural and organic foods distributor in the United States.

were hired by CPW, including a produce buyer with 21 years of experience and an experienced warehouse manager. This influx of experienced personnel helped professionalize what had been a fairly informal operation at CPW, and these new employees drew on their skills and industry relationships to bring new business to the firm (Zuidema, August 2007). In the 3 months following the sale of Roots and Fruits to Albert's Organics, business at CPW increased by 60 percent. This meteoric sales growth meant that more warehouse space would be needed before too long.

CPW management discussed different options with its landlord as well as with Wedge management, and then tripled its warehouse space to 45,000 square feet in 2005. The existing space was getting tight because sales had grown after the Roots and Fruits sale. The 30,000 additional square feet were more than was needed to handle CPW's immediate needs, but the rental rates were low enough to make it affordable. CPW and Wedge management decided to secure this additional space to ensure that future growth would not be hindered by space constraints and that the business would not have to move to expand. Expanding the warehouse allowed CPW to vastly increase its ability to serve farmers in the region and to increase its customer base far beyond the Wedge. In 2003, sales were \$2 million, and 80 percent of this was to the Wedge; in 2010, sales were up to \$16.8 million, with only 23 percent of sales to the Wedge. Sales growth was particularly rapid from the period just prior to expansion and a couple years after, increasing 300 percent to \$13 million from 2004 to 2007.

At the same time, consumer demand for locally produced food was increasing and many restaurants wanted to buy local food. Lori Zuidema, CPW Business Operations Manager explains, "And so a lot of restaurant clients were saying 'we really want to buy from you because

you're committed to local (Zuidema, August 2007).'" CPW was well suited to serve these types of customers with its extensive base of local suppliers, daily delivery schedule, and its willingness to create custom packs smaller than cases.

Business Structure

CPW is a wholly owned subsidiary of the Wedge Cooperative, a retail food cooperative owned by its consumer members. Consumer cooperatives, like all cooperatives, are controlled by their members and are obligated to serve them.⁴ As stated in its mission statement, the Wedge's mission is:

... to provide a diverse selection of highest quality, fairly priced products and a deepening understanding of their importance to our members, employees, and community. To achieve this, we will 1) Earn the loyalty of our member-owners through an ongoing commitment to service, 2) Forge a deepening bond between sustainable local producers and the co-op community, and 3) Build upon Cooperative Principles and Values.

This organizational mission directly supports the development of CPW as a vehicle for providing the kind of food members want, and for supporting local agricultural producers and sustainable agriculture.

The members of the cooperative vote for a board of directors, which hires a general manager for the cooperative and authorizes him or her to hire additional staff to run store operations and the warehouse. The warehouse manager at CPW reports directly to the Wedge's general manager, and all the other employees of CPW report to the warehouse manager.

CPW has 32 employees, including 7 drivers, 10 order fillers, 3 buyers, 9 sales associates, 1 bookkeeper, 1 quality control manager, and 1 manager. Profits earned by the cooperative, including the store and the warehouse, range from 1 to 4 percent, and are distributed in one of three ways: one portion is reinvested in the business for maintenance and expansion, another portion is returned as patronage dividends to the 14,000 members of the cooperative, and the third portion is distributed to the Wedge's 262 employees as part of a profit-sharing plan that can amount to as much as \$2 extra per hour worked during the previous quarter (Zuidema, August 2007).



Top: Co-op Partners Warehouse staff checking in produce for drop-ship program.

Bottom: Organic produce being stacked in Co-op Partners Warehouse, St. Paul, Minnesota.

The warehouse is self-supporting, with operating revenue covering its expenses. It has been able to draw on the Wedge for capital infusions, both when it initially started and when it has needed to purchase equipment.

Business Operations

CPW performs two distinct product sourcing and distribution functions for produce buyers and sellers in the upper Midwest: distributing produce and drop-shipping food products.

The vast majority of its sales come from distributing produce; the firm distributes weekly price books to customers, takes orders, makes deliveries, and bills customers, charging its customer 16–25 percent above farmgate prices, depending on the perishability of the commodity.⁵ To satisfy year-round customer demand for fresh produce, the firm buys locally and regionally grown produce from more than 30 farmers in Minnesota, Wisconsin, and other parts of the Upper Midwest in season when available, but relies on California producers for the bulk of its fresh produce supplies. Retail grocery cooperatives account for 88 percent of sales within this business segment, followed by restaurants, independent natural food retailers, buying clubs, CSAs, and food manufacturers. Within this standard distribution segment, CPW is involved in two distinct market channels that underscore the company's commitment to supporting alternative channels of food distribution. One of these includes supplying non-local organic fruit as a supplement to CSAs in the region that want to offer a more diverse market basket to their members⁶ and providing monthly deliveries of frozen and shelf-stable produce items to seven local buying



The Wedge's produce displays incorporate local farmers' stories.

clubs, each of which has around a dozen members. These buying clubs are able to take advantage of CPW's buying power and pass on the savings to their members.

The second distribution function performed by CPW is an unusual drop-ship program for farmers and other value-added food producers in Minnesota and Wisconsin. This service allows smaller producers to

Producers handle all sales, ordering, and invoicing, while CPW is responsible for storing and delivering the orders to customers.

take advantage of CPW's superior logistical capabilities on a fee-for-service basis. This program facilitates direct producer-to-retailer sales and preserves producer identity and visibility in supply chains by allowing farmers to handle the sales and marketing aspects of their business transactions directly with their clients, but entrusting CPW to handle the

logistics portion of each transaction based on a per-case fee. The farmer drops off product to CPW's St. Paul facility with a packing list showing what each customer is supposed to receive. CPW then delivers the farmer's product to area stores. The producers pay CPW \$20 for each drop-shipment and invoice the buyers directly. The arrangement is advantageous for many small and mid-sized farmers and food producers

who do not wish to invest in trucks or warehouse space to transport or hold their goods but still want to maintain direct relationships with their retail customers. Producers handle all sales, ordering, and invoicing, while CPW is responsible for storing and delivering the orders to customers. About 24 farmers or value-added food producer companies are currently using the drop-ship program. This

⁵ Lindsey Day-Farnsworth, Brent McCown, Michelle Miller, Anne Pfeiffer (2009) "Scaling Up: Meeting the Demand for Local Food," University of Wisconsin-Madison Center for Integrated Agricultural Systems, December.

⁶ Ibid.

program is also helpful for co-op stores that want to buy product from local producers but would rather not have a dozen different trucks coming with small deliveries. CPW's drop-ship service saves stores the trouble of having to deal with many small deliveries. Since CPW does not invoice for its drop-ship sales, it does not keep track of the total volume accounted for by this program, but it is a small fraction of its total business.

All produce distribution is served from CPW's 45,000 square foot warehouse, which contains separate sections for refrigerated, frozen, and dry goods, with the refrigerated section being the largest. The warehouse is co-located with the Midwest office of Equal Exchange, a fair-trade coffee company that imports coffee from Central America and distributes it throughout the United States. CPW has a sublease agreement with Equal Exchange to rent space that is not currently needed for CPW's operations.

CPW transports products from its Minneapolis warehouse to its customers in two ways. For customers in Minnesota and Wisconsin, CPW relies on its own fleet of seven refrigerated trucks, ranging from 22 to 24 feet long, each of which can hold about 33,000 pounds. Five of the trucks are owned by CPW, and one is leased. The leased truck is used for daily (7 days a week) deliveries to the Wedge, which still accounts for 23 percent of CPW's business and is by far its biggest customer. Leasing a truck for the Wedge acts as insurance; the leasing company is obligated to provide a replacement truck if mechanical problems occur, ensuring that this critical route is always covered. This fleet of 6 owned and leased trucks accounts for 35 weekly truckloads.

For 25 truckloads of deliveries to customers located in the upper peninsula of Michigan, North Dakota, and Iowa, CPW relies on Edina Couriers, a trucking and warehousing company based in Eden Prairie, MN, just outside the Twin Cities. Through

Edina, CPW uses one tractor-trailer and three 24-foot straight trucks on a full-time basis. CPW also contracts with Winona Fruit to ship apples and other fruit to southeast Minnesota and La Crosse, WI. Originally, it made more sense to contract out this longer distance shipping because it saved CPW the cost of buying trucks and paying driver salaries and insurance. Instead, they contract shipping on a piecemeal basis (personal communication, Zuidema 2007). Now that the business has grown to the point where its shipments with Edina occupy four trucks on a full-time basis, CPW management is weighing whether it makes more sense for CPW to buy more of its own trucks, hire more drivers, and reduce or eliminate contracting trucking services. These practical considerations are compounded by the fact that CPW's key contact at Edina plans to retire soon, which may weaken the ties between the two businesses (personal communication, Rodymre 2010).



Pallet of organic produce wrapped and ready to be loaded in truck.

Producer Relationships

CPW operates like a traditional produce distributor, restricting its core business activity to distribution and logistics. It does not provide the technical assistance and planning services so often associated with alternative marketing entities. It is not supplied by a network of farmers; its suppliers are spread out around the country, and there is little interaction between them. Rather, as much as possible, CPW's buyers seek out small, organic farmers that are not hooked into the mainstream distribution system. Buyers work to establish and maintain long-term relationships with individual farmers based on their ability to supply needed volumes of high-quality organically grown produce and other farm products. However, even as it targets smaller growers, it is often necessary to buy from large growers to secure sufficient quantities for its customers' needs.

Although technical assistance and planning support may not be part of CPW's mission and business operations, the company is committed to building strong relationships with its producers. As the Wedge's general manager Lindy Bannister recently wrote in the store's newsletter:

Dean (the Wedge's produce buyer) and Rick at Co-op Partners Warehouse sign contracts to ensure our farmers receive a fair price for their product and that we have a reliable supply of vegetables and fruit to adorn your tables. Dean and Rick visit the farms, watch the production methods and get to know the families. As we like to say, "we have smelled the dirt."⁷

In general, CPW aims to set prices that enable farmers to cover their costs and are fairly predictable, with minimal variation throughout the season. Lori Zuidema, the Warehouse's business operations manager, clearly articulates how values of fairness to farmers are embedded in CPW's price negotiations with farmers.



Organic and local produce are prominently merchandised in The Wedge.

A lot of people think it's the California market that influences it [prices], but it's more production-cost related. They [farmers] figure out how much it's going to cost them . . . And you know we want their product. We want to be able to present it to our customers. We want them to be in business. We don't want . . . them to sell to us so cheap that they can't make a living and then they have to fold in 2 years . . . So that's our incentive for paying them a fair price.

Fair pricing becomes not only a point of principle but also a pragmatic strategy for ensuring a stable supply of high-quality organic produce for CPW and its customers. Dean Schladweiler, the Wedge's produce manager, has made a point of working with small and new organic farmers to help them price themselves competitively and realistically. Sometimes he has actually had to negotiate prices higher with farmers because he knew they were underpricing themselves and they could charge a higher price. Farmers told Schladweiler they were basing their prices on the California organic price; he told them they were not in California, and they had to consider their own production costs and price their merchandise accordingly. He believes that farmers need to understand their market and stand firm on their pricing, or they will not be able to stay in business (Schladweiler, August 2007).

CPW also has a strong commitment to facilitating direct farmer-to-retail relationships as a means of enhancing farmer returns from retail business transactions. This guiding

principle led CPW to adopt its drop-ship program for food producers and processors in Minnesota and Wisconsin, enabling producers to maintain their direct connections and brand visibility with retail buyers, while reducing their transportation and logistical burdens.

A key indicator of CPW's commitment to local agriculture is that its overall volume actually drops 14 percent during the growing season, when its volume could be expected to increase because of the increased availability of local fruits and vegetables. In the summer, when there is an abundance of local organic produce available in the Minnesota and Wisconsin region, much of it is sold directly from farms to cooperatives, who often have a strong commitment to promoting local food. These farm-to-retail sales displace sales from California, which constitute the vast majority of produce sales the rest of the year. CPW prefers to encourage these relationships between farmers and cooperatives instead of trying to capture more of this seasonal, local produce business, which would be counterproductive because it would alienate farmers. Additionally, the market for local produce tends to be saturated during the harvest season, making it that much more difficult to gain or even maintain market share (personal communication, Tom Rodmyre October 2010).

CPW's warehouse manager explains how the drop-ship program allows the warehouse to benefit from this seasonal boom in farm-to-retail sales. "I can help them do their drop and increase my revenue during a time when I probably wouldn't get anything . . . I get a piece of the pie . . . and it's 20 bucks versus another truck getting in the way of my deliveries."

⁷ Lindy Bannister, "What Makes Us Different?" *The Wedge Natural Foods Co-Op Newsletter*, June/July 2007.

Marketing

Serving Customer's Needs

The high volume of cooperative food sales in the Twin Cities area is in part a legacy of the earlier entry of several cooperative food distributors such as Roots and Fruits and North Farm into the Twin Cities food distribution scene in the 1970s, predating the arrival of CPW in 1999.⁸ Retail co-op sales were still relatively high after these earlier cooperative distributors failed or were bought out, paving the way for CPW to serve the market. Currently 88 percent of CPW's volume consists of sales to retail consumer cooperatives; the remaining 12 percent is split between restaurants and a few natural food stores, CSAs, and buying clubs. In its marketing to other retail grocery cooperatives besides the Wedge, CPW emphasizes that it is a cooperative as well, and that one of the foundational principles of the cooperative movement is "cooperatives helping cooperatives." This emphasis on organizational solidarity with its retail cooperative customers is meant to demonstrate that CPW is committed to its customers' success not only to serve its particular business interests, but as a means for furthering the cooperative movement in general.

However, recent feedback that CPW has received from its customers indicates that cooperative solidarity alone is not enough to influence the sourcing decisions of retail grocery cooperatives. A customer survey conducted by CPW about 3 years ago showed that quality was the number one criterion in picking a distributor; price was number two, and product availability was number three. Purchasing from a locally owned business or a cooperative did not make the list of the top five criteria, even though retail grocery cooperatives constitute CPW's largest group of customers (personal communication Zuidema, 2007).

Furthermore, CPW needs to carve out a niche for itself in which it does not compete head-to-head with United Natural Foods, Inc. (UNFI), the leading natural foods distributor in the United States. Rather than being a full-service distributor that sells everything a store needs, CPW concentrates on organic produce and a few niche processed products. Its focus is on perishable products, while UNFI supplies a large amount of dry goods. CPW wants to be responsive to specific customer requests for dry goods, and stocks some niche dry goods items that have a strong regional appeal. For example, it carries a line of herb-infused olive oils and sea salts made by a farmer in Spring Green, Wisconsin.

“Keeping pricing uniform across all delivery channels for the same products benefits producers.”

With a competitive organic and natural foods sector in the Twin Cities, CPW has worked hard to differentiate itself from its competitors by offering exceptionally strong customer service, reaching above and beyond the level of service other organic and natural food distributors are willing to provide. This has included offering a Sunday delivery service and a "short delivery call" service for in-town customers, in which orders received by 10 a.m. can be delivered that day for no extra charge. The same-day delivery service was instituted because trucks often arrive late in the day, after the price list has already been distributed. Customers can call the next morning, find out which

products just came in (including those that weren't on the previous afternoon's supply list), place an order by 10 a.m., and have it delivered by 4 p.m.; orders received after 10 a.m. are charged \$25 extra. This service allows retail customers to restock supplies quickly, which is particularly important in cases where the retailer is offering a special and the next regularly scheduled delivery may not be for 3 days or more.

Pricing

In addition to its emphasis on service, CPW has a pricing methodology that is designed to stay competitive with other distributors in the region, cover distribution and marketing costs, and ensure that farmers receive a fair price for their goods. Generally, customers located more than 100 miles from CPW's warehouse receive a pricing sheet in which prices are 6 percent higher than for those located within 100 miles. However, some older customers in the outer ring are grandfathered in from when the two-tiered pricing program did not exist.

Operating in multiple market channels has important implications for pricing. In all cases where CPW and a farmer both distribute the same product, CPW requires farmers to charge customers the same prices that CPW does. Farmers are pleased with this arrangement. Keeping pricing uniform across all delivery channels for the same products benefits producers. By agreeing not to undercut CPW's wholesale prices to retailers through their direct sales arrangements, farmers receive a greater volume of sales overall because they benefit from another entity marketing their product, reaching a broader range of customers. Moreover, any sales they make directly to retailers will be at a somewhat higher "wholesale" price point.

Challenges and Solutions

One of the greatest challenges in CPW's early years was the lack of experienced staff and the informal professional culture at the warehouse. The lack of seasoned workers who knew the ins and outs of the produce distribution business made it hard to operate the business effectively, while the informal work culture may have contributed to lost business opportunities because the desire to create a strong sense of camaraderie among warehouse workers hindered productivity. Lori Zuidema, Director of Business Development, explains:

... there's a feeling of a family, there's a tendency to be kind of lax with your personnel stuff... you just want to sit around and drink coffee for a half hour every morning . . . and that's okay because we're all family and we're small, it's not that busy. And you know, trying to lift up the level of professionalism a little bit and trying to be more efficient and not worry about your labor cost. I think you know that was something we had.

As the business evolved, it became more and more clear that the lack of professionalism was hindering success. Not only were new staff persons brought in with more experience, in particular after the purchase of Roots and Fruits, but the work culture was changed in the direction of greater professionalism, formality, and productivity.

New Directions

In 2008, the Wedge took a dramatic step when it purchased Gardens of Eagan Farm, a 100-acre organic farm in Farmington, MN, located on the fringe of the greater Twin

Cities metropolitan area. This farm had been a supplier for more than 30 years, and the owners wanted to move on to other activities, such as policy and education work, but they also wanted to ensure that the land they had worked for so many years remained productive farmland. A deal was arranged in which the previous owners—Martin and Atina Diffley—would still live on the farm, but a farm manager would manage production and coordinate educational programs for farmers and consumers through its associated nonprofit organization, the Organic Field School. The intention behind creating this educational institution was to provide training to beginning farmers on organic farm management, create opportunities for professional development for existing organic farmers, and educate the public on the health and environmental benefits of organic farming. Overall, the school complements the mission of the Wedge and Co-op Partners Warehouse by enhancing consumer and producer understanding of organic farming and food, and thus helps build both the customer and supply base for these organic food marketing enterprises.⁹

During the first 2 years under the Wedge's ownership, the farm continued to sell to its existing clientele of stores, farmers markets, and households. Starting in 2010, a large share of Garden of Eagan's production has been purchased by CPW. At peak season, CPW was getting 5 loads a week, each one containing 20 to 150 cases of produce, from Garden of Eagan. In 2010, CPW's purchases from the farm totaled \$600,000. This is an unusual example of vertical integration from retail to farm. It is shaping up to be a successful arrangement that other cooperatives or food retailers could replicate.

Successes and Lessons Learned

Service, Service, Service: Solidarity Won't Keep You in Business

Even cooperatives are not going to buy from a cooperative distributor without being assured they are getting excellent prices and the highest quality. Absorbing this lesson and building the business with competitive pricing, unique services such as Sunday delivery and short delivery calls, along with a very strong commitment to organic and local food, has been critical to CPW's success.

For a time, CPW management thought that the very fact that it was a cooperative would go a long way towards building customer loyalty. Realizing this was not the case was a tough but important lesson on the realities of working in a competitive retail environment in which many organic distributors serve the Twin Cities area. Food cooperatives have to be conscious of costs as they compete with specialty chains, such as Whole Foods, and supermarket chains that increasingly stock items such as the organic produce, soy milk, and



CO-OP PARTNERS WAREHOUSE

Co-op Partners Warehouse logo.

8 Lori Zuidema. "Co-op Partners Warehouse: Supporting Organic and Local," *Cooperative Grocer*, July/August 2008.

9 http://www.cooppartners.coop/producers_gardens_eagan.php.

“It is critical to both have good equipment and knowledgeable employees to ensure that inventory is cycled through in a timely manner.

tofu that were once the stock-in-trade of food co-ops. Meeting customer needs for good service, competitive prices and high-quality produce has made for a winning combination.

Have the Right Infrastructure

Related to the issue of building loyalty through good service is the need to be adequately capitalized and not cut corners when it comes to infrastructure. Controlling its own warehouse and both owning and leasing trucks has been critical to CPW's ability to distribute a wide range of products to dozens of customers throughout the Midwest in a timely and cost-effective manner. CPW has been careful in its infrastructure investments as it expanded its warehouse in response to an immediate increase in sales and in anticipation of future growth. Expanding its warehouse from 15,000 to 45,000 square feet was also a matter of seizing an opportunity when it was available. The space was available, the price was reasonable, and sales projections justified adding excess capacity to avoid having to move sometime in the future.

Build Human Capital

A professional workforce is critical to running a food distribution operation. In the case of CPW, it floundered initially because the visionary leadership provided by its initial leaders lacked the practical business sense to effectively operate and grow the business. When a key competitor was purchased and experienced transition difficulties under its new owners, CPW was able to seize an excellent opportunity for expanding its resource base—in this case human

capital—and hire several experienced staff from this competitor, bringing on their skills and extensive contacts within the produce industry to improve operations at CPW and gain new customers through an influx of social capital. Lori Zuidema reflected on how it is necessary to buy good equipment and pay people well enough to retain highly skilled staff. Especially with produce, it is critical to both have good equipment and knowledgeable employees to ensure that inventory is cycled through in a timely manner.

Be Pragmatic With Local Procurement

CPW is strongly committed to supporting small local growers, and tries to buy as much produce as possible from small and/or local growers. However, this is often not possible given the high demand for produce throughout the year. Tom Rodmyre, the Warehouse Manager, explains:

Our mission has always been to support small local growers . . . but because we are [mainly] a full-service organic produce warehouse, we have to supplement wherever we can because there just isn't enough local product to fill the needs of what we are doing. You'll try to support as much local product as you can, but there just isn't enough volume to support it all. And then the local farmers themselves . . . want the direct connection with the people they are selling to; they'll be trying to sell their product to the same accounts that we're going to.

Co-op Partners has to be pragmatic in pursuing its mission of supplying co-ops and other customers with high-quality organic produce, with an emphasis on local procurement. If CPW insisted on only selling local produce, it simply would not be able to stay in business. Overhead is too high to run a full-service produce distribution operation seasonally, to say nothing about the high level of direct-to-consumer marketing to food cooperatives during the growing season in the upper Midwest, which makes it hard for CPW to procure enough local produce for its customers even in season. CPW has demonstrated its continued commitment to local growers not only by buying their products and distributing them through its sales network, but also by providing an extra level of service in the form of its drop-ship program. While not a significant revenue earner for CPW, it earns good will with farmers, saves them the hassle of shipping products to stores, and smoothes relations with its retail store customers who are relieved from having to deal with several trucks clogging up their loading docks. This is a good example of how small business ventures can reap rewards far beyond their immediate impact on company sales.

Oklahoma Food Cooperative: Consumer-Driven Model



The Oklahoma Food Cooperative (OFC) is a consumer-driven distribution model based in Oklahoma City, OK, that has been running an Internet-based buying club since 2003. It is a producer- and consumer-owned cooperative in which 200 producer members sell more than 6,000 individual items, including meat, produce, milk, and value-added items to the 3,800 Co-op members, using an Internet ordering portal and 48 member-operated distribution routes that reach cities, towns, and hamlets across Oklahoma each month. Members always know which farmer produced their food and even have the opportunity to meet their farmer on delivery day. Farmers bring their merchandise to a central drop-off location, where it is assembled into member orders and then routed by a crew of volunteers, who are compensated for their time with work credits redeemable for goods sold through the cooperative. All products sold through the cooperative must be made in Oklahoma.



Egg check-in at OK Food Cooperative delivery day.

History

The Oklahoma Food Cooperative was established in November 2003 as a way for consumers to access locally produced food and for local producers to obtain a greater share of the consumer dollar through direct sales. Three core values inspired the creation of the

cooperative, helped define its initial structure, and continue to shape its development and growth. The articles of incorporation explain that “the activities of the Oklahoma Food Cooperative are governed by its Core Values of social justice, environmental stewardship, and economic sustainability.”¹⁰ Together, these values constitute a “triple

bottom line” that is becoming an increasingly common baseline for performance measures in the world of socially responsible business enterprises.¹¹ In the case of the Oklahoma Food Cooperative, the following three principles govern its business operations:

- Participation in the cooperative must be financially viable for producers.
- Goods sold through the cooperative must be produced with methods that do not pollute ecosystems or otherwise waste natural resources.
- The economic benefits of the business should be distributed equitably and not flow disproportionately to a small segment of those involved in its operation.

These core values have guided the cooperative in working towards its goal of building a local food system—a network of producers and consumers that is limited in geographic scope and rich in diversity of product.

The initial impetus for the Co-op's formation grew out of the challenges its founder—Bob Waldrop, the current president and former general manager of the Co-op—faced as he tried to buy his household's food from local sources. In 2002, the year prior to launching an organizing campaign for the Oklahoma Food Cooperative,

¹⁰ <http://oklahomafood.coop/articlesofinc.php>.

¹¹ <http://www.sustainabilitydictionary.com/triple-bottom-line>.

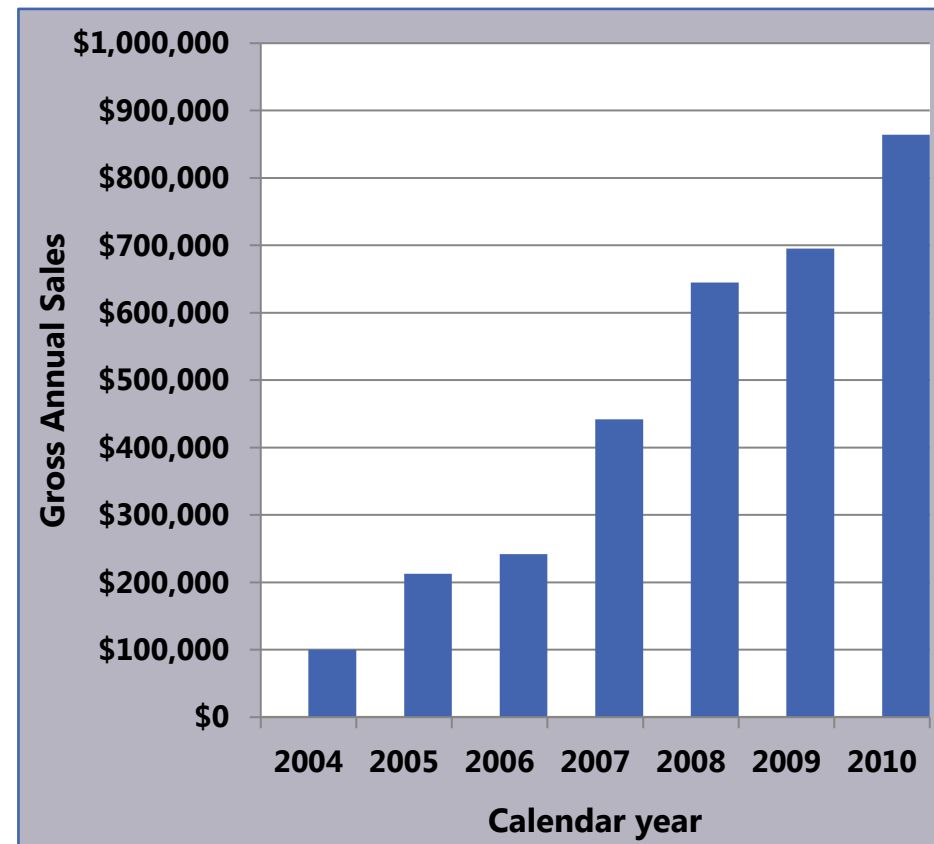
Waldrop made a concerted effort to shift his personal food consumption towards local food. While he eventually managed to supply 80 percent of his household's food from local sources, he also found it to be a time-consuming venture that required him to visit many parts of the State and realized that his community needed an organized mechanism to access locally produced food more conveniently. As a result of his quest for greater access to locally grown food, he started talking with other people he knew, including members of the Oklahoma Sustainability Network. These conversations subsequently evolved into the idea of creating a statewide cooperative focused on Oklahoma foods.¹²

To gather support for this initiative, a series of 12 organizing and outreach meetings were held around the State. Held in local libraries or churches and publicized through local print media, mailings, and the Internet, each meeting elected one person to serve on a steering committee that would guide the development of this new organization.¹³ The steering committee was soon incorporated as The Oklahoma Food Cooperative Organizing Committee.

The committee initially explored the idea of opening a retail store as a way to increase the availability of locally grown food, but soon realized this was not practical because of the high initial cost of such a venture. Seeing that many co-ops started as buying clubs, the committee saw this as a more viable option.¹⁴ It would not need as much start-up capital and would be less risky than a bricks-and-mortar store.

The question was then how to create a buying club that focused specifically on Oklahoma Foods and did not simply let people order out of a catalog tied into a national

Figure 2: Value of Products Sold Through Oklahoma Food Cooperative



food marketing system, as is the case with UNFI. With no model to follow, a database of Oklahoma producers was built up through mailings to direct marketing farmers and ranchers, from a "Made in Oklahoma" Web site, classified ads in newspapers, and people contacting the Co-op on their own initiative. Products were assigned unique codes in the database. Members placed their orders on a Web site. Orders were gathered on delivery day in borrowed space in a church.¹⁵ From these humble beginnings emerged a dynamic, sophisticated, and successful model for marketing locally grown food.

As shown in Figure 2, the value of products sold through the cooperative has grown from \$100,000 in 2004 to \$864,000 in 2010.

Most of the cooperative's financing has come through the sale of lifetime memberships for \$50 (for both producers and consumers) and commissions charged to buyers and sellers on each transaction. Some outside funding has been obtained in the last couple of years from the USDA's Farmers Market Promotion Program to pay for the purchase of refrigerated and non-refrigerated trailers. It is important to note that this outside funding only accelerated expansion; it was not necessary to maintain operations or even expand the operation. In 2009, the recession slowed sales growth, but sales still increased 7.5 percent over 2008 as demand for local food continued to grow and outpace sales growth for overall food sales.¹⁶

12 Bob Waldrop, *History of the Oklahoma Food Cooperative*, unpublished manuscript.

13 Bob Waldrop, *Developing a Local Food System: Lessons from the Organizing Campaign of the Oklahoma Food Cooperative*, unpublished manuscript.

14 As defined by UNFI, which supplies more than 3,000 buying clubs in the United States, "a buying club is a group of people who pool their time, resources, and buying power to save money on high quality healthful foods." <http://www.unitedbuyingclubs.com/RESOURCES/BCHelp/WhatIsABuyingClub.htm>.

15 Bob Waldrop, *History of the Oklahoma Food Cooperative*, unpublished manuscript.

16 Ibid.

Concurrent with this more than 8 fold increase in sales from 2004 to 2010, there has been a similarly rapid expansion in overall membership and the number of producers selling through the cooperative. The number of producers selling through the cooperative has increased almost 10-fold in 6 years, and the number of members has increased more than 35-fold in the same period. A remarkable indicator of member satisfaction with the cooperative is the very low member loss rate of 1.5 percent.

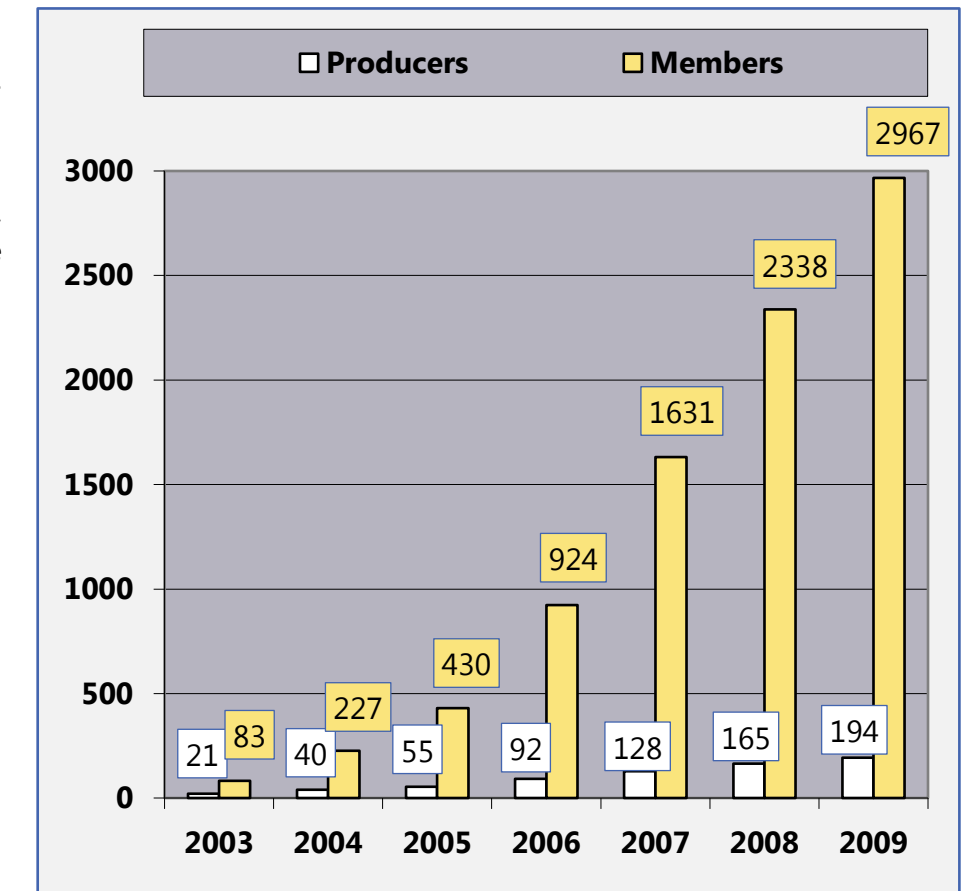
Business Structure and Operations

Decisionmaking Structure and Division of Labor

During the first 5 years of operation, the Cooperative had no formal employees. All work was done by an all-volunteer board of directors, an unpaid general manager who also doubled as the president, 50 to 70 Co-op members—producers and consumers who were compensated at the rate of \$7 an hour in work credits redeemable for items sold through the Cooperative—and route drivers, who were paid 36 cents a mile. The decisionmaking structure was, and largely remains, informal. Waldrop noted when he still was general manager and president of the Co-op, "the Co-op is . . . a little fluid and it is moral as (much) as structural. I mean, I am the president and the general manager, but really the way things work in practice, it's much more of a consensus thing (personal communication Waldrop, August 2007)."

This informality carries over to the division of labor. For instance, any member is eligible to be a route driver; the relationship between drivers and the Co-op is more like a contractor-subcontractor relationship than an employer-employee relationship. The volunteers are responsible for setting up on delivery

Figure 3: Growth in Membership and Number of Producers for the Oklahoma Food Cooperative



day, processing incoming items for inclusion in member orders, and placing orders into coolers and containers marked with the appropriate delivery route that will take orders to pick-up sites near where customers live. It is quite a sight to see dozens of volunteers quickly assemble thousands of items into orders—everything from lamb chops and kale to eggs—with separate tables for frozen, fresh, and nonperishable items.

While it has a somewhat anarchic quality to it, this assembly process has proven to be surprisingly efficient in fulfilling orders; the Co-op reports that its loss rate is only about 1.5 percent for the 600–700 orders shipped out on 48 delivery routes each month, containing a combined total of about 10,000 items.

As participation in the Co-op grew, however, some changes in staffing and organizational structure were required to streamline the Co-op's management and operations and to facilitate future growth in membership and sales volume. During the latter part of 2008, the Co-op created a series of new, largely unpaid, "middle manager" positions to coordinate membership growth, product sourcing, and delivery. These positions included the following roles:

- Route manager—oversees route creation to ensure expeditious delivery of orders to members, and monitors routes to make sure they are running smoothly
- Outreach coordinator—does promotional work to enhance the profile of the Co-op and draw in more members

- Delivery day setup coordinator—manages delivery day
- Logistics manager (a paid position)—manages all logistics
- Quartermaster—pays producers on delivery day
- Producer assistance technician—helps producers manage their page on the Co-op's Web site

Shortly thereafter, in April 2009, the Cooperative hired a long-time consumer member, Lisa Weissenbuhler, to become a salaried employee of the Co-op as part-time general manager, taking over this duty from Bob Waldrop, who had been wearing two hats as general manager and president of the Co-op ever since it was established in 2003. The general manager is responsible for overseeing operations, including logistics and member service. The president leads the board of directors in setting policy and engaging in strategic planning.

Waldrop came to realize that, despite his enormous contribution in getting the Co-op started and off the ground, his multiple leadership roles with the Co-op were no longer serving the organization well because too many day-to-day decisions depended on him alone. In order for the Co-op to prosper and further expand its marketing and distribution activities, the board and Waldrop agreed that the Co-op needed to adjust its all-volunteer leadership model and create some room for dedicated professional resources at this stage of its development.

Weissenbuhler was initially hired as a part-time general manager for 20 hours a week, but it soon became apparent that a complex and growing enterprise like the Co-op required more involvement than a part-time general manager could provide. The general manager

position was converted to fulltime in early 2010, and a new person—Kara Joy McKee—was selected to fill that position after Weissenbuhler decided not to increase her hours (personal communication McKee, January 2010).

To date, the only other paid employees besides the general manager are the logistics manager and some very part-time help for work days at the new warehouse. The logistics manager is paid for 65 hours a month and is overseen by the general manager (personal communication Weissenbuhler, June 2009).

Ordering and Distribution Logistics: A New-Generation Buying Club in the Internet Age

In many ways, the Co-op is based on past models of buying clubs and retail food cooperatives that rapidly spread in the early 1970s, only to rapidly contract in the following decades.¹⁷ During this earlier wave of food system change, more than 1,000 retail food cooperatives formed,



Sorting of dry goods for placement into member orders.

many of which initially started as buying clubs, then developed into stores as business grew. However, OFC's development has a radically new character that sets it apart from these past efforts and appears to give it distinct advantages, not only over the past efforts to change the food system, but also over the mainstream food system. In contrast to retail store-front cooperatives or traditional buying clubs that rely on printed catalogs or price sheets, the Oklahoma Food Cooperative could not function without the Internet and its tremendous capacity to connect large numbers of people in geographically separated areas in real time at a low cost.

Each month, the Co-op provides an 8–14 day ordering window (from the 1st of the month through the 2nd Thursday of the month). During the ordering window, producers list products for sale on their section of the Co-op's Web site, complete with detailed narratives about their farm and information about the methods and practices they use to raise animals or grow crops. At the beginning of each month, members

can initiate their orders by perusing the offerings of more than 100 producer members and placing a given quantity of a particular good in their shopping basket. The order portal on the Co-op's Web site is extremely flexible. Customers can change the quantity of an existing item, add new items, or add comments to their order until the close of the order window. When they close their order, customers have the option of paying online with PayPal. They can print out a receipt to bring on delivery day to ensure they have all the items they purchased.

“Home delivery to disabled members is free; donations to the Co-op cover the cost of these deliveries.”

Between the close of the order window and delivery day, the orders are sorted into a master list to facilitate the assembly of individual customer orders at delivery day. The producers each get a list prior to delivery day telling them to how to number their individual orders. Items are given numbers based on the customer and the type of food. One customer could have more than one number assigned to his or her order if he or she purchased items from different categories such as frozen, perishable, or dry goods. Multiple product orders belonging to the same customer in the same category will be assigned the same number.

At delivery day—the third Thursday of the month—volunteers sort incoming orders from producers by route and perishable/nonperishable status. Each order shows the customer's name and location, allowing the volunteers to determine to which route it belongs and where it should

be placed in the order sorting area. Perishable and nonperishable items have separate sorting areas. Orders are grouped according to route, loaded onto trucks or trailers by volunteers at the central drop-off site, and then taken to 48 pick-up sites around the State, where members have a 4-hour window to pick up their orders. Co-op volunteers are on hand during this period to collect payment and handle problems, such as missing items. Members can pick up their order at the central drop-off site if they live nearby.

Members cannot pay with cash at the pick-up sites due to the difficulty in handling it; they must bring a PayPal receipt, check, money order, or work credit voucher. Home delivery can be arranged for members unable to come to the pick-up site. Home delivery to disabled members is free; donations to the Co-op cover the cost of these deliveries. Able-bodied members are charged \$20 for home delivery (personal communication Waldrop, June 2009).

Just as the ordering portal provides great flexibility to consumers, it provides the same flexibility for farmers selling items through the Co-op; they can add items to their product list until the order window closes. This is particularly useful for fruits and vegetable crops, as a given order window is likely to overlap with harvests of several different crops conducted at different times, making it impossible for farmers to know precisely how much they will have

available when the order window opens. Being able to continually update product availability lists during the order window period allows producers to start offering products in small quantities, conservatively estimating what they will have to sell, and then increase their offerings later in the order window. It also allows producers to assess and meet changing consumer demands, and maximize their returns as supply availability allows.

This Internet-based system, in concert with the network of 48 distribution routes, reduces to a bare minimum the producer overhead costs associated with marketing food. In addition, farmers are not required to meet any volume thresholds to sell through the Co-op. Consequently, the barriers to entry for smaller producers are very low. Producers can start by selling a very small amount and increase sales over time as growing conditions, supply, and consumer demand allow. Producers have complete autonomy in setting their prices and pay only a 10 percent commission to the Co-op. Consumers also pay 10 percent to the Co-op for shipping and handling.

Infrastructure

To accompany the dramatic growth in the Co-op's sales and its increased dependence on paid professional staff, the organization has substantially increased its infrastructure during the last couple of years. It has leased a new storage warehouse and purchased three trailers—two refrigerated and one not—for transporting goods to customers. Prior to leasing the warehouse, the Co-op's delivery day was held in a large warehouse-like structure on the campus of Oklahoma State University in Oklahoma City that was also used for a weekly farmers market. While the space was large enough, the Co-op's limited access to it created logistical problems. Everything needed for delivery day

¹⁷ Warren Belasco (1989) *Appetite for Change: How the Counterculture Took on the Food Industry, 1966–1988*, Pantheon.

had to be brought in and taken out the same day. As Waldrop said, "It's going to cost us more and more all the time to maintain this portability."

With the leasing of the new 12,000-square-foot operations center in May 2009, the Co-op gained permanent storage space for tables, coolers, trailers, refrigerators, and freezers. Producers can drop off items before delivery day, and items left behind can be put in storage for later pickup, while the Co-op's staff can work periodically throughout the month rather than having to set up and take down everything necessary for delivery day in one day. Having a permanent warehouse has also allowed the Co-op to develop a more streamlined sorting process for delivery day. Co-op members built two- and three-tiered shelving systems for use on delivery day, reserving the two-tiered shelves for refrigerated and frozen items



What delivery day looked like when the Oklahoma Food Coop used the Oklahoma State University Armory.

and the three-tiered shelves for nonperishables. This allows for faster processing of items on delivery day, as demonstrated by the fact that the number of volunteers has held steady at around 65, even as total volume has increased dramatically. The reasonable rent that the Co-op pays for use of the operations facility—which started at \$200 a month and escalates \$100 every 6 months, with a maximum cap of \$1,000 a month—ensures that the Co-op will not be unduly burdened by this additional expense (personal communication Waldrop, June 2009).

In conjunction with leasing warehouse space, in 2008 the Co-op purchased two 6' by 12' refrigerated trailers, two 6' by 12' covered, non-refrigerated trailers, and one 6' by 18' covered non-refrigerated trailer. They are attached to trucks and used on delivery day to pick up orders from farmers and drop off customer orders

from the central operations center to the various pick-up sites. One trailer stays in Tulsa, another stays in Norman, and the third is kept at the main operations center in Oklahoma City. The trailer in Tulsa is used on the only route where the route driver brings a substantial amount of product inbound on delivery day, with farmers paying a fee for this service. This arrangement is due to the distance between the two cities.

The purchase of these refrigerated trailers is expected to improve the efficiency of the Co-op's distribution activities. Because very few producer members of the Co-op own their own trailers, it has proven both timesaving and cost efficient for the Co-op to provide this pickup service for distribution routes with greater volume, because most of the members' pickup trucks don't have the capacity to handle the volume. Before the trailers were purchased, most producer members of the Co-op were obliged to rent trailers from U-Haul, picking them up and dropping them off each delivery day, to bring their product to market.

In addition to increasing distribution efficiency, the leasing of the warehouse space and the acquisition of the trailers is expected to eliminate problems related to the storage of ice chests at members' homes, which on one occasion even led to the issuance of a code violation to Waldrop by Oklahoma City's Code Enforcement Division. Waldrop explained that this event was, in a strange way, actually a favorable development and a "call to action" for the Co-op, because it underscored the critical importance of acquiring dedicated storage space. He noted that "One day there were 30 ice chests back on the porch. I was actually glad I got that because then I had the excuse for saying okay, I have a code violation. Everybody understands what that means."

Producer Relationships

Social Networks as an Organizing Catalyst

Key to Waldrop's ability to garner support for and participation in this incipient local food system was his position as the music director at the Grace Epiphany Catholic Church in Oklahoma City. Through his job, he had developed an extensive network of church contacts from which he was able to recruit the initial core group of Co-op organizers. People in this core group reached out to their social networks and grew the consumer member base of the Co-op faster than would have been possible through formal advertising efforts, especially considering the limited resources the group started with. Waldrop's position at the



Incoming and sorted orders in warehouse await inclusion into route shipments.

church was also critical in the early months of the Co-op in providing a space for deliveries, administrative work, and photocopying. The church supported his efforts and made many in-kind donations to the Co-op in its start-up phase.

Obligations of Producers: Product Quality and Integrity

The Co-op places clear restrictions on what can be sold in line with the organization's core values of environmental sustainability, social justice, and economic viability, and its goal of creating a local food system. These marketing restrictions include the following:

- All products offered for sale through the Co-op must be grown or produced in Oklahoma.
- Producers must conform to production standards set by the Co-op's standards committee.
- No hormones can be administered to livestock.
- The routine use of antibiotics in livestock is banned.
- Grains and crops containing genetically modified organisms are prohibited.
- Reselling of farm products is not allowed; producers are only allowed to sell farm products they have produced themselves.
- Processed and prepared foods may be sold through the Co-op, but such items must incorporate significant alteration of the original ingredients, not just repackaging for resale. (For example, a baker may sell frozen pizzas using cheese, tomatoes, and flour purchased from Oklahoma producers, but a butcher would not be able to cut someone else's primal cuts of beef into smaller packages and resell them as his/her own).

Occasionally, the Co-op has had to modify its strict "Oklahoma grown and/or produced" requirement to meet market conditions. This happens most notably with poultry because small producers in Oklahoma currently have little or no access to processing services for poultry within the State. Consequently, producers who raise chickens in Oklahoma are allowed to process their chickens at an Arkansas processing plant before transporting them back to Oklahoma to sell through the Co-op.

To enforce these restrictions, the Co-op arranges for intermittent inspections of the Co-op's producer members by fellow farmers to verify that they are in fact producing the crops or animals they are selling through the Co-op. In the words of Bob Waldrop,

... we go to everybody's farm, not necessarily on any schedule, because it's volunteers who are doing it, but as people, you know, we stop by and have a look . . . we make sure that they have chickens and, if they sell tomatoes, that they have tomato vines . . . in a proportion . . . they can say, okay, this guy is selling 500 pounds of beef a month so they're going to guesstimate that he's going to need so many head to keep that going (personal communication, Waldrop, 2007).

Marketing

Facilitating Transparency and Competition

Price seems to be a distinctly secondary consideration for the consumer members of the Oklahoma Food Cooperative, with the result that producer members of the Co-op have been able to become "price makers" rather than "price takers." The intense commitment of Co-op

With no restrictions on price setting or volume requirements, the Oklahoma Food Cooperative is in many ways a perfect example of the free market in action.

members to obtaining locally grown foods produced with sustainable production methods has led them to value the quality and process attributes of the products they buy over price alone. Waldrop relayed the following story to illustrate the diminished importance of price as an inducement for member purchases within the Co-op.

And so why [do] people choose [one farmer's products over another's]? We had one guy [who] did chicken in the beginning, Mark Parman, and he was charging \$2.50/lb. So Charles Horn joined, and he charged \$2.50/lb. So the next month, Mark Parman raised his price to \$2.75/lb. So the month after that, Charles Horn met that price so Mark Harmon went to \$3/lb. At that point I called Mark and I said okay, usually the response to competition is to lower prices. And he said, "well . . . my chickens are the best in the Co-op, so they will always be priced at the highest price."

The moral of the story here is that consumer members of the Oklahoma Food Cooperative may actually want to pay more for food—and may even be wary of lower priced items—because, to them, higher prices are associated with a higher quality product. Competition between producer members of the Co-op tends to revolve around who has the best product, not who has the lowest price. The strong

bargaining position of producers within the Co-op is evidenced by the fact that when the Co-op has raised the commission levied on producers to fund increased overhead costs, the vast majority of producers have raised their prices to compensate for the higher commissions. This suggests that consumer demand for products sold by co-op members is relatively inelastic.

With no restrictions on price setting or volume requirements, the Oklahoma Food Cooperative is in many ways a perfect example of the free market in action. The Internet-based ordering lubricates this action as consumers and producers interact across wide distances in real time, adjusting their purchases and offerings in response to market signals. In general, the combination of the software interface, the *laissez-faire* approach to pricing, the month-long open order window, and the large number of producers and consumers (3,800) allows for a fluid, functional marketplace in which buyers and sellers are able to meet their needs in a transparent and highly accountable trading system.

Nevertheless, even with this real-time system, imbalances between demand and supply can't always be avoided, and the Co-op rectifies gaps in supply by surveying consumers on what they would like to see on the order sheets, then distributing the survey results to producers in the fall to help them with their crop planning. Eggs, for example, had been in chronic short supply for the first 5 years of the Co-op's existence, with prices

of up to \$4.50 a dozen. However, as information was disseminated to producers about the high demand for eggs, production increased, and in March of 2009 for the first time there were eggs left at the close of the order window, leading egg prices to decline to as low as \$3.25/dozen.

Buyers and sellers who join the Co-op enter into a legally binding contract. Buyers must pay for the goods they ordered even if they are unable to pick up their order on delivery day unless an item is missing, damaged, or spoiled. In such cases, members can notify the Co-op and they will receive credit for the bad item. Sellers must transport their goods themselves on delivery day or find someone to deliver them. If they fail to transport their goods to the delivery site, the Co-op withholds their payment for that month. Beyond these legal and financial accountability measures, the transparent nature of the Co-op's electronic transactions, which record the names of each supplier and the amount that each supplier has committed to sell, makes it next to impossible for producer members of the Co-op to commit fraud.

Payments and Finances

One operational detail that sets the Co-op apart from many other food marketing options is the policy of paying farmers by check on delivery day. It is so unusual in agricultural marketing that some farmers could not believe it. As Waldrop puts it:

. . . there was a story [of] the one sister who thought it was too good to be true. Our flat statement is we would pay them on delivery day when they brought their stuff in; we would write them a check for whatever their thing was. And I think that, more than anything else, that that persuaded them that it was worth a try.

This same-day payment policy is a boon for farmers, who are used to waiting weeks or even months for payment from wholesale distributors or retail buyers. Combined with the fact that they receive 81.8 percent of consumer expenditures, compared to an average of 19 cents for U.S. farmers, these payment terms create an unusually favorable environment for agricultural producers and contribute to substantial improvements in their cash flow.¹⁸

Challenges and Solutions

Logistics

One of the biggest ongoing challenges has been the logistical headache of assembling the orders at delivery day. Initially, delivery day took place at Epiphany Church. When the Co-op outgrew this space, it moved to a large warehouse at the Oklahoma State University campus in Oklahoma City, which also happens to be the location of a weekly farmers market. In May 2008, the Co-op moved to its new operations center, which it rents for a low rate and where it stores all of its coolers, tables, chairs, refrigerators, and trailers. This move has streamlined delivery day logistics; volunteers no longer have to go to a separate storage locker to retrieve the tables and chairs for delivery, as was done previously, or go to U-Haul to rent trailers. The downside of permanently occupying a rented warehouse, however, is that it has added another line item to the Co-op's fixed expenses.

Leadership and Succession Planning

The Co-op has recently made a major change toward greater institutionalization with the hiring of a logistics manager and its first paid general manager, relieving the



Family picking up order at pick-up site in community.

founder and president of primary responsibility for day-to-day operational details, such as managing delivery day set-up, responding to member questions and complaints, and verifying member compliance with Co-op rules. This more complex division of labor helps the Co-op carry out its activities more effectively as people specialize in certain types of tasks.

While Waldrop's skills as an organizer, motivator, and visionary have been extremely effective in spurring the Oklahoma Food Cooperative's growth and success, he and the Co-op's Board of Directors recognized that dependence on one person to manage the entire enterprise was risky and unsustainable. Consequently, the Board not only created a new, paid, general manager position, but restructured the general

manager position so that many of the responsibilities that Waldrop had handled have been delegated to a middle manager.

Regardless of how these institutional changes pan out, they exemplify two interlinked issues that present ongoing challenges for successful alternative food distribution entities. One issue is that, like many nonprofits, the Oklahoma Food Cooperative benefitted from the beginning from very strong leadership provided by its founder and president. However, as the organization has grown, it has become increasingly difficult for one person to bear the burden of leadership and management, and responsibilities had to be spread among more people. The second issue is that exponential growth has brought more expenses, more complex logistics, and the

18 On an order of \$100, \$10 is added for shipping and handling, paid by the buyer. The seller pays the Co-op a 10% commission. This means that the seller gets 90/110 or 81.8% of the consumer dollar. <http://www.ers.usda.gov/Briefing/FoodMarketingSystem/pricespreads.htm>, accessed December 15, 2010.

need to have paid staff. The need for a broader leadership base has advanced hand in hand with some diseconomies of scale, as expenses have increased faster than revenue, leading the board to increase the total commission charged to farmers and consumers from 10 percent to 15 percent to 18 percent and finally to 20 percent of revenue from 2003 to 2009.

Scaling Up

One lesson we can learn from the Oklahoma Food Cooperative example is that alternative food distribution organizations go through developmental stages just like any other enterprise. The initial formative stage is characterized by creative use of limited resources, heavy volunteer input, and informality. As the business grows, more rules are put in place, paid staff is hired, and money is invested in infrastructure, such as trucks and warehouses. In making these changes, the organization moves from a non-hierarchical, informal, and inexpensive way of doing business to a more centralized, formal, and expensive one.

In the process of scaling up operations, some of the economies enjoyed by a grassroots, bootstrap approach are reduced; services such as volunteer labor and donated warehouse space become untenable. As the volume of goods increases,



Oklahoma Food Co-op producers unloading products at warehouse.



Oklahoma Food Co-op producers unloading products at warehouse.

“More than half the Co-op’s sales have come from meat.

more complex systems for record keeping, storage, sorting of goods, and distribution are required. However, this increase in complexity and operational costs need not lessen the Co-op’s economic benefit for participating producers. On the contrary, it may simply represent a more realistic accounting of actual expenses, in which the true costs of delivering the product from farmer to consumer are reflected in what both parties pay to participate in this unique food marketing model.

New Directions

Delivery Frequency

More than half the Co-op’s sales have come from meat, which reflects the influence of the large livestock industry in Oklahoma; the strong demand; the supply of pastured, naturally raised livestock products; and the monthly ordering system. According to Waldrop:

There are more opportunity to sell vegetables than meat in terms of [direct marketing] structures. I think also it’s easier for a producer of meat to get into direct sales without betting their whole farm . . . if they have another cow-calf operation where they have calves every year, and they raise them on grass for so many months and then sell them to the feed lot system, they can continue to do that.

Meat is more suited to the monthly delivery schedule than more perishable fruits and vegetables. There have been discussions of instituting twice-monthly delivery, with producers having the option to sell at one or both of the monthly order days. Presumably this change would facilitate greater sales of produce, which have fallen far behind demand. Waldrop estimated that vegetable sales could double and fruit sales could quadruple.

However, for most producers, who do not produce highly perishable products, more frequent delivery probably would not be particularly advantageous. Experiments with twice-monthly delivery in the first year of the Co-op’s existence just resulted in each order being half the size. Changing delivery frequency will have to be accompanied by considerable increases in availability of produce, which currently is supplied in volumes far short of demand. It becomes a “chicken-and-egg” issue, as more frequent delivery schedules would require more fruit and vegetable suppliers, but produce farmers are less likely to participate in the first place because of the Co-op’s delivery schedule. The primary way the Co-op seeks to influence product availability is through member surveys. Otherwise there is no organized effort to balance supply and demand.

Producer Inspections and Communications

The Co-op is planning changes in how it welcomes producers to the organization and conducts periodic visits to farms. In the past, prospective farmer members were usually visited just once by Co-op representatives prior to their acceptance into the Co-op. Under the new plan, all producers will be visited once by a volunteer from the producer care committee, with biannual visits after that. According to Weissenbuhler, this visitation program will be carried out by volunteers on a regional basis, with each “visitor” responsible for producer members within their particular region. In order to remove any possible stigma, these formal assessments of participating farm operators are being called site “visits” rather than “inspections.” The program is meant to foster better communication and stronger connections between the Co-op’s producer members, establish a more formal mentoring process, and generally help the Co-op develop its marketing capacity and expertise by having members share their successes with each other.

The program is being instituted to address members’ needs for technical assistance and increased knowledge-sharing and the Co-op’s need to address supply shortages in certain product categories through more coordinated planning. Visits are not being made to crack down on violators of the standards. Producer violations of the agreed-upon standards and practices of the Co-op’s standards have been extremely rare. In the history of the Co-op, there has been only one instance in which a producer willfully violated the

¹⁹ <http://oklahomafood.coop/otherstates.php>.

“The model used to form the Oklahoma Food Co-op is a flexible model that can easily be adapted to many other situations.

rules of what can be sold through the Co-op, and this involved the resale of someone else’s pigs, and had nothing to do with a failure to meet desired production standards.

Tips and Strategies for Food-System Organizers: Lessons From the Oklahoma Food Co-Op’s Experience

After providing the authors an overview of the Oklahoma Food Cooperative’s history and operations, Waldrop provided several insights into what has made this organization successful, and what others interested in developing similar Internet-based buying clubs should take away from this experience. First and foremost, he feels it is critical to remember that for a co-op to work, everyone needs to be treated equally. No special treatment should be granted to individual members based on when they joined, how much they sell, or how involved they are in co-op operations. Equal treatment ensures equal access for all, a basic principle of co-ops.

Second, the ability of producers to set their own prices has proven essential to the co-op’s success. The free-flowing character of price setting means that producers never feel the

heavy hand of a higher authority telling them how to run their business. Co-op members may work together to advance the overall success of the organization, but they are not required to abide by price guidelines.

Third, the model used to form the Oklahoma Food Co-op is a flexible model that can easily be adapted to many other situations. When starting a co-op, one needs to think why an element of OFC’s model should be changed or deleted in light of local conditions, such as a different type of customer base, logistical barriers, or a different agricultural landscape. The ordering software that OFC uses, which has been developed under a general public-use license in which all changes must be shared with other users, can easily be modified to suit different requirements and is a central component of the success of the entire model. It is currently in use by upwards of 14 different cooperatives that are modeling their organization after OFC’s and adapting its software to suit their circumstances.¹⁹

Fourth, in reflecting on the resources needed to start and develop an Internet-based buying club or food co-op, it is important to consider the advantages and disadvantages of outside funding sources, particularly grants. The OFC largely was self-financed from the beginning, which helped it subsist with minimal administrative overhead. Grants cost money to administer and raise the question of how ongoing activities will be supported when the grant

runs out. Without the bootstrapping that limited start-up financing requires, an organization can become ensnared by high administrative costs and reliance on paid staff that could lead to a dramatic loss of organizational capacity when the grants run out. Furthermore, self-financed organizers are encouraged to use their creative and innovative skills in running their enterprise on a shoestring budget. It may make more sense for organizations to apply for grants later in their development, when there is greater institutional capacity to handle them, and to only use grant funds for projects that advance the organization but are not critical to its survival.

Successes

The Co-op has created a new market for almost 200 farmers and 3,800 consumers. It has become a business incubator of sorts; several consumer members, seeing the

“Social networks are key to the successful growth and development of decentralized, volunteer-driven organizations such as OFC.

market opportunities, have started to sell food items from their gardens or rural acreage, and restaurants have been alerted to new suppliers and have started to make deals directly with farmers outside the Co-op after finding out about them through the Co-op's website. Given the complexity of sorting thousands of individual items from hundreds of farmers into more than 600 orders each month using volunteer labor, the product loss rate of 1.5 percent is remarkable, as is the member loss rate of 1.5 percent.

OFC has created a new model of direct-to-consumer food marketing with exceptionally low barriers to

entry for farmers. It also provides room for them to expand their sales volumes in an incremental and manageable way.

Social networks are key to the successful growth and development of decentralized, volunteer-driven organizations such as OFC. Having founders and leaders with extensive social networks helps jumpstart consumer interest; word of mouth, personal relationships, and trust are powerful drivers for engaging consumers in local food-marketing enterprises.

By providing a virtual free market for farmers committed to sustainable agricultural practices, this model allows farmers to increase their share of the consumer dollar dramatically over traditional market channels such as sales to feed lots, distributors, or brokers.

The creative use of volunteer labor to handle the complex logistics of delivery day has been critical in keeping down operational costs. Without this volunteer labor, it would be difficult to organize delivery days, distribution routes, and pick-up sites. Even the use of paid labor for the route drivers depends on a strong commitment to the mission of the Co-op on the part of these paid contractors, as the remuneration is low and intermittent. The Co-op organizational form greatly facilitates this social commitment and mobilization of volunteer labor.

The Internet is used to create a virtual free market, which, with a limited set of rules and guidelines, is harnessed to advance an ecologically and economically sustainable food system on a regional basis.



Oklahoma Food Cooperative logo.

New North Florida Cooperative: Producer-Driven Model



New North Florida Cooperative is a producer-driven distribution model based in the Florida panhandle that has been aggregating, processing, and selling produce in the Southeast since 1999. It sells chopped fresh collard greens, sweet potatoes, and green beans, mostly from small-scale minority farmers, to 60 independent grocery stores and more than 30 school districts in the Southeast, serving more than 200,000 students. The Cooperative is one of the oldest farm-to-school programs in the country and has achieved success by focusing on supplying a handful of food items that are culturally appropriate, easily accommodated into school menus, competitively priced, and require minimal preparation.



Collard green are a signature product for the New North Florida Cooperative, which is also branded as the Small Farmer Distribution Network.

History

The New North Florida Cooperative (NNFC) was founded in 1995 when a group of small farmers in northern Florida met under the auspices of the Florida Agricultural and Mechanical (A&M) University's Research and

Extension Center in Quincy, FL, to develop marketing and training opportunities for low-income, minority farmers.

One of the primary motivations for creating NNFC was to help farmers gain access to stable markets and move from being "price takers"

to being "price makers." Banded together, members of the cooperative have some leverage in negotiating with buyers instead of being forced to take whatever price was offered them. The members deliberately chose to focus initially on one market channel (schools) to simplify their marketing efforts. They believed they would be able to provide the best service by focusing on one market rather than trying to serve several institutional markets.²⁰

They also decided to focus on growing, processing, and selling only a few signature crops in order to simplify operational sales, storage, and processing; to streamline aggregation and marketing processes; and to shorten the learning curve for this new business approach.

NNFC chose marketing collard greens directly to schools as its first venture. School food service directors were accustomed to purchasing frozen, chopped collard greens. The Cooperative's leadership saw an opportunity to supply high-quality, locally grown, fresh, chopped, bagged collard greens to schools because it believed the product would meet budgetary and menu requirements of local school districts, and it was not commonly available from standard food service distributors. Furthermore, by providing excellent and responsive customer service and customized delivery to local school food service buyers, the

²⁰ Daniel P. Schofer, Glynn Holmes, Vonda Richardson, Charles Connerly (2003) *Innovative Marketing Opportunities for Small Farmers: Local Schools as Customers*, Agricultural Marketing Service, United States Department of Agriculture.

“After several years of successfully serving only the school food service market, NNFC decided to branch out into new market outlets and sell the same bagged, chopped collard greens to grocery stores.

leadership of NNFC believed it would be able to differentiate itself from other school food service suppliers and build a reputation for quality and dependability.

To introduce itself and its products, NNFC started its farm-to-school program by delivering 3,000 pounds of free collard greens to the Gadsen School District in Northern Florida in 1995. The food service director for the Gadsen School District, J’Amy Peterson, was impressed with the quality and believed in the importance of serving fresh produce to school children. Starting in the 1996-1997 school year, NNFC began making regular deliveries to 13 schools in the district, serving 7,000 students. This pilot program served as a testing ground to work out specific challenges related to aggregation, processing, and delivery to school districts and preparing for expansion to more districts.²¹

A cooperative agreement for \$40,000 in the mid-1990s from the USDA’s Agricultural Marketing Service—shortly after the Gadsen experiment—was critical to developing and expanding the Cooperative’s school food marketing efforts. The funds were used to purchase processing and distribution equipment, including chopping and washing equipment for greens and a refrigerated truck. Some funds were also used to assess NNFC’s farm-to-school business model.

NNFC received a small grant from USDA’s Sustainable Agriculture Research and Education (SARE) program to investigate whether the Cooperative would be a good

match for the Department of Defense’s Food Service Program. Ultimately, it became clear this was not a good match for NNFC due to the frequent small deliveries required under the program.²²

NNFC received a grant for \$327,000 in 2001 from USDA’s Rural Business Enterprise Grant program with which they purchased four refrigerated delivery trucks. The funds also provided working capital to allow NNFC to pay farmers upon delivery while awaiting payment from its customers.²³ Additional assistance has been provided by the Jackson County Development Council in the form of loans.

These grants proved critical in getting the operation off the ground and enabled it to expand its distribution and processing capacity, but NNFC, unlike most farm-to-school programs, has been largely self-sufficient economically. Since its start-up stage from 1995 to 2002, during which grants proved critical to its operation, the cooperative has funded 90 percent of its marketing activities through produce sales to school districts and, later, through sales to grocery stores as well. Some additional income for the cooperative has also been obtained by providing consulting services to the National Farm to School Network.²⁴

During the first 4 years of its existence, the cooperative only sold produce to about 15 school districts in Georgia, Alabama, and Florida. After several years of successfully serving only the school food service market, NNFC decided to branch

out into new market outlets and sell the same bagged, chopped collard greens to grocery stores in the region that were willing to accept direct store delivery. Glyen Holmes, Executive Director of NNFC, believed that students would tell their parents how much they liked eating collard greens for lunch, priming a new customer base for the cooperative’s fresh collard greens. “The schools got them ready for the stores,” he said. The Cooperative also thought that widening its markets to include year-round grocery stores would help offset the 3 summer months that schools weren’t buying.

Collard greens are a good crop for smaller farm operators who want to scale up their production capabilities because their agronomic characteristics make it relatively easy to expand production and sales and to serve a long market season. They can be harvested on a rotating basis throughout the year because the plants “hold” in the ground for several months after reaching maturity before going to seed and becoming inedible. In north Florida, the durability of the crop has allowed cooperative members to harvest and sell collard greens throughout the fall, winter, and spring months, covering the entire school year. Furthermore, with irrigation, the members of the cooperative have been able to grow collard greens through the hot summer months and harvest them for sale to retail grocery stores when local schools are not in session. Some additional labor and water is required to grow the collards for the stores, but no additional land is needed.

Business Structure

The New North Florida Cooperative is legally an agricultural cooperative, but acts more like a hybrid nonprofit/for-profit distribution company; it conducts outreach and training for disadvantaged farmers and also balances high-volume market channels with higher priced but lower volume market channels. The professional staff of NNFC and Vonda Richardson of Florida A&M make most of the decisions regarding sourcing, marketing, and logistics. Farmers do not usually participate in the running of the organization. Glyen Holmes, the executive director of NNFC, is the primary decisionmaker and takes an active role in everyday operations, from scheduling and making deliveries to securing new accounts and deciding what crops to sell. He is assisted by Richardson and another staff person as well as several drivers and processing plant workers. The cooperative’s staffing ranges from 5 to 10 employees, depending on the volume.

Business Operations

Logistics

The cooperative owns and operates 8 refrigerated trucks, with which it picks up produce from as many as 15 farmers in Florida, Georgia, and Mississippi. NNFC delivers the produce to its processing facility in Marianna, in Florida’s panhandle, and distributes it throughout Florida, Alabama, Georgia, Mississippi, and Arkansas to about 60 independent grocery stores and 30–35 school districts to reach 400 schools and approximately 200,000 students. Four employees of the cooperative processing facility in Marianna wash, cut, chop, and package collard greens and sweet potatoes—the two primary crops—into bags for delivery to stores and schools. These two crops can

be grown almost year-round in the South. NNFC also provides turnips to stores and green beans to schools on a seasonal basis.

Deliveries are made to schools once or twice a month. Weekly deliveries are made to grocery stores. NNFC management decided they would prefer to work directly with individual store produce buyers or managers than procurement personnel at retail distribution centers.

“The labor and expense involved in direct distribution has led the NNFC to drop some of its largest school accounts.

In general, NNFC aims to create circular routes with no more than 60 minutes’ driving time between stores. If NNFC brings on a new store that is not close to other stores, it then tries to fill in the gap and pick up additional retail customers along the way.

Distance is a limiting factor with stores but is even more of a problem with schools. The average order for a school is usually much smaller than that for a store. A typical weekly order for a store is around 150–200 2-pound bags of collards; monthly or semi-monthly orders for schools are usually 20–40 bags. Furthermore, due to the way school food service systems are organized, NNFC has to deliver to individual school kitchens, not to third party distributors or centralized kitchens. Consequently, NNFC needs a good-sized cluster of schools on a single route to justify direct delivery to individual schools.

The labor and expense involved in direct distribution has led the NNFC to drop some of its largest school district accounts because the driving distance made it too expensive to

deliver, even to large school districts that place large orders. At its peak, NNFC delivered to 100 school districts serving 1 million students, including the Broward County school district, which serves 270,000 students in southern Florida. The Broward County program was a pilot to introduce the farm-to-school concept to the district, with the hope of passing the business on to farmers near the district. It did not make financial sense for NNFC to make the

10-hour drive to South Florida on a regular basis. This district has since made some farm-direct purchases of green beans and sweet corn, but not collard greens, which are more appropriate for rural populations.

Youth Development and Entrepreneurial Training

In conjunction with its processing and distribution operations, NNFC has created a youth entrepreneurship training and mentoring program. High school students who live near the Marianna headquarters of NNFC are enrolled in the program for 5 days a week in the summers and three afternoons a week during the school year. They are paid \$100 to \$125 per week and receive training in crop production, distribution, marketing, and finance. One graduate of the program has started distributing greens on his own to a couple of school districts near Marianna while he attends junior college in the area.

21 Pamela J. Karg (1999) “A Sea of Greens,” *Rural Cooperatives*, Rural Development Agency, United States Department of Agriculture, August; “The New North Florida Cooperative Farm to School Program,” National Farm to School Network, accessed at <http://www.farmtoschool.org/state-programs>, May 12, 2009.

22 “And Sometimes the Answer is ‘No’” (2004) *Common Ground*, Autumn.

23 Glyen Holmes, Vonda Richardson, and Dan Schofer, “Taking it to the Next Level: Success of Small Florida Vegetable Co-op Leads to a Network of Similar Cooperatives,” in *Rural Cooperatives*, October 2002.

24 “Florida: Growing Collards for the Cafeteria: The New North Florida Cooperative.” Center for Food and Justice, Occidental College. Glyen Holmes (2009) Testimony to the Committee on Agriculture, Nutrition & Forestry, United States Senate, May 15.

Producer Relationships

Recruitment and Coordination

New North Florida Cooperative built a business aggregating multiple commodities from many farmers in different States, processing it in ways that make it attractive to school food service directors and stores, and selling it to stores and school districts in the Southeast. At the same time, it has connected nearly 100 farmers to hundreds of thousands of students and households.

However, for a variety of reasons, efforts by NNFC to involve more farmers in its farm-to-school distribution program have met with mixed success. For many years, NNFC has sought to create a Small Farmer Distribution Network, for which NNFC would provide a coordination and business-incubator role for small farmers in the Southeast—including small producer cooperatives—who might be interested in growing, processing, and distributing produce to schools and grocery stores. NNFC has worked with many small farmers and farmer groups throughout the Southeast to create a series of interconnected but autonomous value-added, farmer-led distribution entities. NNFC wanted each network of farmers to engage in downstream activities, such as distribution, while swapping crops not suitable for growing in its region with farmer networks elsewhere, all working under the umbrella of NNFC.

NNFC's original vision was that farmers would grow and process crops that are particularly suited for their area, and then arrange for their distribution locally and beyond, coordinating with other farmer groups in other areas to optimize market access for farmers and product availability to wholesale customers.



Field of collard greens being grown for NNFC's school and store customers.

For example, all NNFC sweet potatoes are grown in Mississippi because it has the best growing conditions for them. Likewise, Georgia's climate is better suited for growing collard greens. Under NNFC's ideal distribution model, Georgia collard farmers would grow and process their collard greens and then ship a portion of their crop to Mississippi farmers for distribution to buyers in Mississippi, while the Mississippi sweet potato growers would process and distribute their potatoes and ship them to the Georgia growers to be distributed to buyers along with their collard greens.

In this scenario, growers would be able to focus on crops that were most suited to their region and increase their farm-based income through involvement in multi-commodity value-added processing and distribution. Participating farmers would no longer need to increase

or diversify their acreage to increase revenue and profits. Instead, they would capture additional revenue by participating in a greater array of downstream value-added activities, such as processing, distribution, and sales, for multiple product lines.

NNFC has tried several times to launch this type of initiative with existing networks of small farms in the Southeast, but it hasn't work out as planned. According to Richardson, there are two main problems with getting this system to work. One is that farmers lack the financial and infrastructural resources required to engage in processing and distribution. If farmers do not have either substantial cash or equity in their farm property, borrowing money to build processing and distribution infrastructure is difficult and quite daunting. Second, they generally have weak organizational cohesion

and hence have not been able to organize themselves effectively for the purpose of creating such a value-added farmer distribution network. NNFC has tried to bridge both of these gaps by helping farmer groups raise money through grants and intensive training on what takes to be engaged in value-added production and marketing, but largely to no avail. To date, the organization has not been able to foster the kind of resourceful, creative, and entrepreneurial energy or the level of commitment and dedication to a cooperative venture that is necessary to get small farmers in the Southeast to move seriously into value-added processing and distribution.

Even though it has not been able to realize the complete vision of a small-farmer distribution network composed of networked, autonomous farmer groups involved in activities throughout the supply chain, NNFC continues to work in various capacities with up to 100 farmers in 5 States.²⁵ Because of its reputation for enhancing marketing opportunities for limited-resource farmers, NNFC has gotten many calls from farmer groups seeking help in developing new market channels. Holmes helps these farmer groups organize themselves, plan crops, and market to stores and schools. In many cases, these activities have led to pilot marketing efforts with NNFC, but not to the confederation of autonomous food production and marketing enterprises that Holmes envisioned would manifest in the form of the Small Farmer Distribution Network.

Marketing materials associated with NNFC, including T-shirts worn by Holmes and product packaging, mention "Small Farmer Distribution Network," but the Network and NNFC are actually one and the same. Holmes also notes that NNFC is

not a true cooperative but more of a facilitator. "We are working with independent people who aren't accustomed to working in groups," notes Homes. "Meetings can conflict with farming schedules."²⁶

In 2009, NNFC worked with a group of farmers near Pine Bluff, Arkansas, to prepare them for value-added marketing in connection with a pilot farm-to-school program selling sweet potatoes and collards to 12 Arkansas school districts. The program involved training in proper handling and grading, business planning, and marketing education. Despite all the support, in the end, none of the

“We are working with independent people who aren't accustomed to working in groups.”

participating farmers were able to meet the requirements of the school food services. It became clear that the distances between the small producers and the school districts made regular delivery from Florida challenging. In the 2010–2011 school year, the Arkansas program switched to seasonal crops such as green beans, which are more appropriate because of the distance and the lack of strong local support among farmers in Arkansas to take over growing, processing, and distribution functions. If someone was able to take over the distribution or meet an NNFC truck halfway, it would have been possible to sell the collard greens and sweet potatoes to Arkansas schools year round.

Pricing, Planning, and Training

NNFC management recruits farmers into its supplier network for the mutual benefit of all parties, increasing the reach of NNFC to raise the quantity and often the diversity of product that can be offered and, at the same time, providing access to new marketing channels for small farmers.

While not a cooperative in the formal sense, NNFC collaborates with farmers to help with crop planning, irrigation, business planning, and harvesting. NNFC is dedicated to helping farmers improve their profitability through favorable pricing, training in good agronomic and post-harvest handling techniques, and by organizing crews of farm laborers at harvest time, whose wages are paid by the farmers. NNFC technical assistance has improved the availability of supplies and increased the efficiency of farm operations. For instance, encouraging farmers to install irrigation for collard fields helps NNFC maintain consistent supplies of collard greens for sale to schools throughout the school year. Likewise, after seeing that one of its supplying farmers in Alabama was picking peas and green beans by hand, NNFC loaned the farmer its bean picker, shortening harvest time from a week to 45 minutes.²⁷

On the crucial issue of price setting, Holmes indicated that the farmer sets the price; if NNFC cannot sell it for that price, Holmes tells that to the farmer. Price negotiations between farmers and NNFC are conditioned by what NNFC is able to get from its store and school customers. Generally, what has worked for NNFC's model is simple. It looks at considerations of seasonality, cultural acceptability of a particular food item,

²⁵ Glyn Holmes. Testimony to the Committee on Agriculture, Nutrition, Forestry, United States Senate. Atlanta, GA, May 15, 2009.

²⁶ *Common Ground*, News from the Southern Region SARE Region, Autumn 2004.

²⁷ *Common Ground*, News from the Southern Region SARE Region, Autumn 2004.

and the price window for schools—about 8–14 cents per serving of vegetables. Holmes turns this per-serving price into a dollar-per-bushel cost, asks what the farmer wants per bushel, and then sees if he can meet the price requirements of buyers and sellers while providing sufficient margin to pay for transportation, processing, and other marketing expenses incurred by NNFC. Through this process, he has determined that some crops, such as field peas, are too expensive for the school food service market at the \$20-per-bushel price farmers demand. Although detailed price data was not available directly from NNFC, one published account by a project partner—Heifer International—demonstrates how NNFC has been able to negotiate successfully with its customers to secure better prices for its suppliers than they would otherwise have received. In 2002, NNFC farmers got a consistent price of \$14 per dozen plants for collards while the market price swung from \$4 to \$14/dozen. Likewise, farmers selling peas through NNFC were getting \$13 a bushel from NNFC while those selling to traditional wholesale markets such as brokers only earned around \$6 a bushel.²⁸

Marketing

Although NNFC has received the most public attention for its innovative and long-lasting work selling produce to school systems, most of the Cooperative's business actually consists of direct-delivery sales to independent grocers. Its primary products for the retail grocery market are its washed and bagged collard greens, with turnips and sweet potato sticks playing a secondary role. The overall product volume that the Cooperative ships to school districts is only one-third the volume of its store sales. The primary commodities offered by the NNFC—collard greens and sweet potatoes—are only served

once or twice a month in schools and, even when they appear on school menus, they are served in relatively small quantities (individual servings are typically one-quarter cup for elementary school students and between three-eighths and one-half cup for middle and high school students). A typical school may order only 160 pounds a month, while a store may order 400 pounds a week. Retail stores have proven to be some of the NNFC's best and most reliable customers; they buy substantially more than school districts, have more consistent levels of demand throughout the calendar year, and their higher volume orders lower the per-unit costs and are more logistically efficient.

School Customers Play Critical Role in Marketing Plan

However, school food service customers still play a critical function in the NNFC's business model. Schools are willing to pay a higher price for a conveniently packed and easy-to-prepare healthy food item like bagged, chopped collard

greens than grocery stores. Vonda Richardson explained that this is because the stores have to mark up the product for retail sale, but schools do not, notwithstanding their limited food budgets. Schools currently pay \$4 to \$4.50 for a 2-pound bag of collard greens, while retail stores pay around \$3 per bag. The higher volumes overall with stores, bigger orders per stop, and more consistent deliveries throughout the year help to compensate for the lower unit prices they pay. By balancing school-based sales against retail sales, the NNFC is able to optimize its delivery routes, cash flow, and revenue streams.

NNFC's work in supplying fresh produce directly to schools has generated added income streams in the form of grants and consulting opportunities from organizations such as the Community Food Security Coalition and the National Farm to School Network. NNFC has played an important role in helping the National Farm to School Network provide technical assistance to other farm-to-school programs on operational issues such as processing, distribution, and marketing.



While not currently used for processing, as the sign indicates: "This building was the first structure erected for processing and storage of agricultural produce grown by small minority farmers."

Working With School Bidding Requirements

NNFC has been able to bypass competitive bid requirements with many school districts by providing volumes of product just under the maximum value threshold, eliminating the need to compete with other bidders for contracts. For example, in Alabama competitive bids are not required if the entire school district orders no more than \$7,500 worth of product from any one vendor. Because NNFC makes deliveries to each school district only once or twice a month, it's easy for sales to stay under the threshold. The trouble with this practice, however, is the increased distribution cost per unit that results from having many small accounts.

Product Mix

NNFC has maintained a limited product mix for several reasons. One concern is that growing and processing multiple crops would invariably lead to increased complexity and costs, with little expectation that the results would be worth the investment of time and resources. Being in a primarily rural area is a challenge as well. To make its business model work properly, the NNFC needs to concentrate on crops that are generally available on a year-round basis. Crops available for only 2 months out of the year would be able to sustain NNFC only if it was working with densely populated urban school districts that placed large orders. Green beans, a seasonal crop, play a decidedly secondary role in the cooperative's school marketing efforts.

Concerns about competitive pressures from mainstream food service distributors also seem to discourage interest in product diversification. Central to NNFC's school marketing strategy is its interest in downplaying any competition it might pose to existing mainline school food service distributors by focusing on "niche" food items, such as fresh collard greens and sweet potatoes, that fit



New North Florida Cooperative owns a fleet of refrigerated trucks that delivers fresh produce to five Southern States.

into the school lunch menu without undermining the core produce business of mainline food service distributors. Fresh collard greens do not have a direct competitor; the only other options for school food service directors are frozen or canned.

Deliveries to school districts typically only take place once or twice per month, which allows the small orders NNFC receives from its rural-based school food service customers to be shipped in a cost-effective manner, using as much truck capacity as possible. Another advantage that this sporadic delivery schedule offers is the ability of the NNFC to cultivate an unusually wide network of school food service customers, which gives the organization a more visible profile in the farm-to-school advocacy community.

Challenges and Solutions

The biggest challenge faced by New North Florida Cooperative has been its inability to involve a critical mass of small farmers in the Southeast in distributing and processing their production. The vision of creating a network of interconnected but autonomous farmer groups engaging in a series of agribusiness activities, from

farming to processing to sales and distribution, has not been achieved. That said, NNFC has made enormous strides in reaching out to small and limited-resource farmers, helping them upgrade their production and marketing skills, and incorporating them into its supply network.

The second major challenge faced by NNFC has been organizing the complex logistics of distributing product to hundreds of individual schools and retail grocery stores across several States in an economically viable manner, especially when the Cooperative is poorly positioned to deliver fresh vegetables to some of the more densely populated school districts in Florida. Few of the NNFC's local school district customers—primarily small districts in rural communities—are in a position to redistribute products from a centralized location to schools, so NNFC must make almost all its deliveries to individual school kitchens. Meanwhile, attempts to establish business relationships with larger, more densely populated school districts with greater resources are difficult because of the time, labor, and expense involved in making deliveries to such faraway locations, despite the potential volume moved.

It also remains a continual challenge for NNFC to seek out new customers within reasonable proximity to existing customers in order to minimize delivery times and expense.



New North Florida Cooperative Logo.

Much effort has been put into cultivating customers (especially retail grocery customers) within specific geographic locations to form new, economically efficient, delivery routes.

New Directions

In 2009, NNFC ran a pilot "Rolling Store" in Tallahassee, FL, with the support of the United Methodist Conference. The "Rolling Store" was a hybrid community supported agriculture venture, farmers market, and mobile store. Every week a truck dropped off produce at churches in the Tallahassee area as services let out. Customers placed orders for the next week when they picked up their order. This ensured that whatever product NNFC stocked on its truck would be sold. Churches receive a portion of revenue for serving as a drop-off site and source of customer referrals.

Although the Rolling Store only operated for a few weeks as an experiment, with adequate funding it has the potential to increase access to fresh vegetables for low-income residents, who often have limited access to transportation and cannot easily drive to stores that offer a good selection of fresh produce. Rather than trying to bring people to sources of healthy food, the Rolling Store would bring healthy food to people that need it. Furthermore, the model is designed to allow faith-based organizations to operate "Rolling Stores" themselves as fundraising and community outreach tools.

Successes and Lessons Learned

Focus on the Right Product

NNFC's ability to find crops that are culturally appropriate, can be grown year-round, and are processed in a way attractive to school food-service directors and consumers has been key to its success. Collard greens are

a popular and traditional food item throughout the South; this cultural acceptance makes it an easy sell to school food service directors and produce buyers at grocery stores. Although the NNFC sells other foods to schools, including sweet potatoes and green beans, the majority of its business is generated from collard greens sales. By selling chopped collard greens in 2-pound bags, the Cooperative has been able to supply a product that requires minimal storage, is easy to prepare, and is accepted by the student population, all of which are appreciated by school food service directors because of their limited resources and infrastructure. Furthermore, the product itself is a unique product offering that does not compete "head to head" with other packaged fresh vegetables available from mainline school food service distributors.

Develop Complementary Markets

Leveraging schools and retail grocery stores customers simultaneously works on several levels for NNFC: first, retail grocery stores provide a source of business at times of the year that schools are closed. Second, the two marketing channels reinforce each other as marketing tools. Students eating NNFC produce at school tell their parents about the product, making parents more inclined to purchase it in retail outlets. NNFC can also plan its delivery routes to include both retail groceries and schools. Having schools and stores on the same delivery routes makes it easier to extend distribution routes or start new ones. Stores can serve as a beachhead for schools and vice versa within a given area.

Each of the marketing channels has unique characteristics that together help ensure a financially viable business model. The stores buy approximately three times as much as the schools, but pay lower prices; schools pay higher prices but purchase less. This pairing of high volume/low price and low volume/



The Piggly Wiggly store stocks local produce from the New North Florida Cooperative.

high price markets makes a good combination. Holmes notes that "in this line of work you have to be diversified or you'll get caught short."

Moreover, serving schools can open doors to outside funding for education and training programs that can be developed into a stronger business model that benefits retailers as well.

Develop Innovative Production Methods

With collard greens and sweet potatoes, NNFC has sought to ensure a year-round supply of its core product line. The Cooperative has worked on improving irrigation methods practiced by its supplying farmers so as to ensure a stable supply throughout the year and help the farmers run their operations more cost effectively.

Avoid Competitive Bidding

Bypassing competitive bid requirements with school districts by selling product volumes just under the maximum value threshold can be a valuable strategy for getting new business.

Growers Collaborative: Nonprofit-Driven Model #1



Growers Collaborative (GC) began as a limited liability corporation in 2005 to offer aggregation, distribution, market promotion, and education services to California family farms. As a nonprofit-driven distribution model, GC is wholly owned by the nonprofit organization Community Alliance with Family Farms, whose mission is to promote small and medium-sized family farmers throughout California with sustainable education, public advocacy, and market development. GC worked with a network of more than 70 fruit and vegetable producers to increase their access to institutional markets in both southern and northern California. In 2009, it transitioned from being a full-service distribution company to playing more of a matchmaker role, connecting farmers to aggregators, distributors, and institutional food service operators and focusing its efforts on providing support services through market promotion and education to local supply chain actors.

History

The original spark for starting Growers Collaborative (GC) came from Jim Churchill, owner and operator of Churchill Orchards in Southern California's Ojai Valley, as a result of his experience selling produce directly to a local elementary school. Beginning in the early 2000s, Churchill was selling his citrus and a few other growers' produce to the Juanamaria Elementary School in the Ventura Unified School District. Churchill was assembling and delivering the produce himself, but when the school district wanted to expand its purchasing of locally grown products, he realized that a more formal distribution mechanism would be needed to carry out these functions.

At the time, Churchill was a part-time consultant for the nonprofit Community Alliance with Family Farmers (CAFF), and he approached the leadership of CAFF about establishing a program that would aggregate produce from various farmers and sell it to the school district, providing the dual advantage of allowing the district to access a greater range of locally grown produce while only requiring them to make payment to a single vendor. Since CAFF was already involved in various farm-to-school marketing activities, the organization agreed to work with Churchill on a proposal to USDA Rural Development Value-Added Producer Grant Program to start up a pilot farm-to-school distribution program.



Wholesale buyers, like Bi-Rite Market in San Francisco, see value in marketing local products.

In FY 2003, CAFF received a Planning Grant from the Value-Added Producer Grant Program of \$69,400 to develop a business plan for its produce aggregation activities, followed by a Working Capital grant of \$150,000 from the same program in FY 2004 to cover the expenses of marketing locally grown farm fresh produce to schools in California's South Coast region. With these grants and

other sources of funding, GC was officially established in 2005. The Collaborative began with about a dozen growers in Ventura County selling their produce to Ventura Unified and other local school districts and quickly expanded to include the greater Los Angeles area. With further grant support from USDA²⁹ and other funders, GC embarked on an aggressive expansion program,

²⁹ Between 2003 to 2008, a significant portion of GC's operational and farmer outreach costs were subsidized from USDA and other grants. Over the course of this period, CAFF received four USDA Value-Added Producer Grants totaling approximately \$438,000, to support GC operations. CAFF also received additional support in 2008 with a \$55,000 grant from USDA's Farmers Market Promotion Program to provide outreach and technical assistance to growers in its network to improve access to institutional markets.

enlarging the scale of its regional operations in 2007 to include growers and buyers from the Bay Area and Central Coast, as well as the scope of its operations to include a diverse range of institutional food service providers, comprising universities, colleges, hospitals, corporate dining facilities, and private schools (K–12), in addition to its historical public school customer base.

Despite the optimistic hopes of the organization's leadership, however, the rapid expansion of GC was accompanied with its fair share of growth pains, eventually resulting in the restructuring of the organization's fundamental business model. GC experienced a dramatic shift in its operations in early 2009, moving away from being directly responsible for aggregating and distributing products to playing more of an indirect brokering and market promotion role. This deliberate refocusing of business operations and its expected benefits to the organization and its customers are highlighted in the "New Directions" section.

Business Structure and Producer Relationships

In 2006, GC became a limited liability corporation (LLC), wholly owned by CAFF, which is registered as a 501(c) 3 nonprofit. With CAFF able to accept grants from government and private sources on behalf of GC, this structure helped secure necessary start-up capital that would otherwise have been quite difficult to obtain. GC was structured as an LLC to separate the trading operations of GC from the parent nonprofit, and thus pave the way for a self-sustaining business that might even generate income for CAFF. CAFF's mission is to advocate for California family farmers and sustainable agriculture. CAFF carries out this mission by

working with farmers on increasing biodiversity, promoting friendly policy at the State and Federal level, developing markets and new revenue streams, as well as providing education for farmers, students, and consumers. As GC matured as a business entity, so too did its mission and purpose, which includes:

- Developing and facilitating produce sales for family farms in California.
- Providing distribution capacity to build a network of local foodsheds.
- Strengthening diversified, sustainable local food systems.
- Providing customers with exceptionally fresh produce, delivered within 48 hours of being harvested.
- Increasing access to affordable local produce.

GC was licensed by the California Department of Agriculture to distribute produce and held umbrella liability insurance for its producers. The GC sold only source-verified, fully traceable products, sourcing organic produce whenever possible.

By 2007, GC was managing two main hubs, one based in Davis serving the Sacramento Valley and the San Francisco Bay Area, and the original hub in Ventura serving the greater Los Angeles Area. During that year, GC worked with 72 growers, split fairly evenly between these two hubs, and on any given week, GC received orders large enough to support between 8 to 12 farms in each of the hubs.

GC was working with a range of farmers from small operations (less than 10 acres) to medium-sized family-owned farms (400+ acres) capable of fulfilling large orders. About 40 percent of the growers

were USDA-certified organic, and most farms offered a diverse range of products from passion fruit to rice to mushrooms. The demographic makeup of GC farmers was also quite diverse, with more than a third of the farms in the Sacramento Valley/Bay Area network owned by women or minorities, as well as a group of more than 20 Hmong and Laotian farmers in Fresno.

Market Development

From its original intentions of supplying school districts with local family-farm products, GC began to branch out and obtain accounts with a larger range of institutional food service buyers. Such customers fit the mission of GC and also provided a largely unmet market opportunity. In the early 2000s, when GC was established, consumer demand for locally grown food was growing rapidly in California and garnering significant media attention. Restaurant chefs were some of the earliest advocates, followed by student groups at universities and colleges, who soon became some of the most vocal proponents of having local and organic food served at their school cafeterias. As most conventional food distribution companies were ill-prepared at the time to supply adequate volumes of locally sourced



Growers Collaborative takes pride in offering the highest quality produce from California's family farmers.

Business Operations

Between 2007 and 2009, each of GC's hubs in Davis and Ventura maintained a warehouse that served as an aggregation point for the producers in their respective networks. In addition, GC owned three delivery trucks and a van.

To oversee operations at its two aggregation facilities, GC staff included a regional manager and an operations manager at each of its two main hubs, as well as a regional manager in Fresno and a bilingual support person to act as a liaison with refugee growers. CAFF's Farm-to-Institution director provided general management of GC's operations. GC had one truck driver for its Davis hub and two truck drivers for the Ventura hub.

The regional managers were largely responsible for handling institutional customer accounts and serving as the public face of the organization to prospective clients, while the operations managers focused on day-to-day order fulfillment and distribution logistics with growers. As part of their job function, the two operations managers maintained constant communication with member growers to catalog available products and prices. For the most part, GC worked to sell what its growers had already planted and did not actively engage in preseason planning with growers and interested buyers. Furthermore, prices were generally set by the growers themselves rather than negotiated by GC with its customers, in adherence to GC's core mission—that farmers should receive fair prices for their products. However, GC did provide feedback to growers when certain customers were not able to meet their price point, and it would negotiate with growers, particularly in the case of unusually large orders where customers thought that their volume of purchases merited a price discount.



Orders are aggregated and prepped for delivery from centralized food hubs.

produce to institutional food service customers, GC was in an excellent position to capture a good portion of this growing market, given its extensive linkages to local family farms and its expanding distribution and marketing capacity.

Furthermore, it was also becoming increasingly clear to CAFF leadership that it could not run a financially viable local food distribution operation by serving public school districts alone, as they were subject to severe budgetary restrictions (limiting their overall purchasing power) and strong seasonal fluctuations in demand. Hence, GC was under considerable financial pressure to expand its pool of customers to include institutional food service clients with larger volume requirements and greater budgetary flexibility in

their purchasing decisions, such as universities, private schools, hospitals, and corporate cafeterias. It also worked to GC's advantage that many of these same customers saw the opportunity to procure locally grown fresh produce as a way of expressing their commitment to the health and wellness of their cafeteria patrons. Consequently, with the opening of the Davis hub in 2007, much of GC's business focus shifted away from public school districts to working with larger institutional food service customers, and the organization was able to successfully land accounts with two University of California campuses (Davis and Berkeley), several corporate cafeterias operated by the food service company Bon Appétit, and a number of Kaiser Permanente hospitals in Northern and Southern California.

As a rule, each regional manager faxed weekly product sheets to their customers, and when the orders came back, they would call, fax or email their growers and tell them what they needed. Invoice payments from buyers were generally set at net 21 terms (i.e., customers must pay within 21 days of receiving their order) and, in a few cases, at net 30 terms. Even though such payment terms are common business practice in institutional food service transactions—and, in fact, are more restrictive than the 30- to 60-day payment terms that prevail in the retail food sector—they led to considerable volatility in GC's cash flow and made it difficult for GC to pay its participating farmers in as timely a manner as it (and the growers) would have liked. Many of the smaller farmers in the GC network were primarily involved in direct-to-consumer marketing channels, such as farmers markets, where they were accustomed to receiving immediate payment for their goods. While many distribution companies can overcome this cash flow challenge by arranging for a factoring line of credit, this was not an option for a nonprofit organization like GC with few capital reserves.

While GC offered its growers both aggregation and distribution services, it occasionally contracted with a larger produce distribution company to fulfill orders that it could not meet by itself, primarily in cases where clients were requesting an unusually high volume order or were located particularly far away from the nearest GC hub. Although this arrangement was essential to satisfy customer demands, it also gave rise to a new set of challenges such as increased claims of liability (and refusals to pay invoices) from clients who contended that they had received their produce deliveries in unsatisfactory condition. Since GC was not responsible for transporting these shipments or ensuring that its products were properly handled en route to their final destination, the organization was limited in its ability to investigate and refute these claims.

Early Successes and Challenges

Sales Performance

The years 2006 to 2008 represented a remarkable period of growth for GC. Annual sales were \$538,000 in 2007, with each of the two regional hubs garnering about half of the revenue. GC expanded its operations in 2008 to more than 60 accounts and sales reaching more than \$900,000 by the end of the year. GC's major buyers included Kaiser Permanente, Bon Appétit Management Company, and several universities, such as UC Davis, UC Berkeley, and Stanford. But, by the next year, sales began to level off and even shrink, leading to overall sales below \$800,000 for 2009. The decrease in its sales in 2009 can be partly explained by a strategic decision by GC to decrease the number of low-volume accounts as a way to increase efficiency and better cover its fixed costs. It can also be explained by the onset of the recession and reduced demand by buyers for its products. Overlaying all of this was also the fact that a good portion of GC external funding support was coming to an end in 2008 and little private investment



Packing, aggregation, distribution, and marketing are among the services Growers Collaborative offer.

had materialized to substitute for the lack of external funding. Without the same levels of external funding support, CAFF's leadership realized that it was essential to restructure the business model of the organization and make it more financially self-sustaining if it were to survive.

New Directions

In the spring of 2008, CAFF hired Robert Corshen, who had more than 50 years of experience in the produce and food industries, to develop a new, leaner business model that would place GC on more solid financial ground. One of GC's major challenges at the time was its large number of low-volume accounts. This was particularly the case with its school (K-12) accounts, where the largest weekly sales order from a school rarely exceeded \$150. After assessing GC's current operations, Corshen estimated that GC would need to make at least \$2 million in annual sales with a 40-percent markup to be financially viable. In light of GC's infrastructure and management capacity, this looked unattainable, so CAFF began to examine alternative models.

“They know better than we do.... Do I really want to tell them how to sell their product?”

Starting in early 2009, Corshen, under the new title of Director of Local Food Initiatives, started building a new business model in which GC would take advantage of the tremendous diversity of existing infrastructure currently available in California and focus its energies on what it does best, namely technical assistance to small and midsize farmers, creating demand for local food, and playing a matchmaker role by linking together farmers, aggregators, distributors and institutional food service operators.

Corshen effectively dissolved GC's infrastructure-laden model of trucks and warehouses and is now seeking aggregation and distribution partners to operate a new set of regional food hubs around California. Essential supply chain activities such as aggregation, sales, and distribution services are being delegated to companies with the experience, capital, connections, and infrastructure, and with CAFF's assistance, to effectively link small and medium-sized growers to buyers seeking source-verified local produce.

Under this new food hub model, CAFF is working to set up a series of “Growers Collaborative” aggregators, each one serving a particular region of California. For example, Thumbs Up, a small produce distributor in the Bay Area, has already been signed up to do business under the banner of “Growers Collaborative Bay Area.” In this capacity, Thumbs Up is aggregating product from approximately 30 small and midsize family farms in Northern California, many of whom worked with the prior incarnation of GC.

Thumbs Up collects weekly availability lists from the farmers in the CAFF network and sends them to distributors, such as FreshPoint and Daylight Produce, that already serve institutional customers in the region and have agreed to carry GC products, marking them with a “Buy Fresh, Buy Local” label on its price sheet. CAFF licenses the use of “Buy Fresh, Buy Local” from the national organization Food Routes, and it is the only entity authorized to use “Buy Fresh, Buy Local” branding in California. Prices are worked out directly between the growers and Thumbs Up, because as Corshen puts it, “They know better than we do. They know the produce business. These are guys who've been in the produce business for years . . . Do I really want to tell them how to sell their product?”



Ben Ratto's family has been in agriculture and distribution for generations. He started Thumbs Up Distribution, which is now aggregating product under the Growers Collaborative label.

Inset: Thumbs Up logo.

One of the major advantages of this new arrangement for buyers is that customers such as Kaiser Permanente or UC Berkeley are able to buy source-verified local produce from their regular produce distributor. This makes it much simpler for institutional food service directors to implement and develop a local food procurement program, reduces the threat of competition between aggregators and mainline food distribution companies, and reduces overall transaction costs in the supply chain. Furthermore, Corshen argues that with the efficiencies gained in this new model, institutional food service customers are able to pay less for GC's products than they did under the old model, while prices paid to the farmers are able to remain the same because markups are reduced. He gave the following example to show how this would work. When GC was handling aggregation and distribution directly, a case of green peppers with a farmgate value of \$10 would be sold by GC to a school, restaurant, or corporate cafeteria for \$16 per case. This 60-percent markup

was making GC uncompetitive with other produce providers. Under the new, lean GC model, this same case of green peppers would have a final price of \$14.50, with \$1.50 going to the aggregator (for example, Thumbs Up), \$3.00 going to distributors, such as FreshPoint, that make the final sale and ship product to customers, and the same \$10.00 going back to the producer(s).

Overall, it is an attractive partnership for both CAFF and regional food distribution companies like Thumbs Up. For Thumbs Up, it gives them access to a well-known brand of source-verified products from local family farms, and it allows CAFF to shed its aggregation, sales, and distribution functions and focus its energy on its core competencies. These include:

- Helping growers prepare for market by providing technical assistance in such areas as production, post-harvest handling, packing, and food safety.
- Working with distributor sales staff to help them understand and communicate the value of “local” to their clients, as well as providing them with a suite of marketing materials to help their buyers promote their local-procurement purchasing program.
- Working directly with institutional food service operators to assist them in setting up a local-food purchasing program.

In exchange for these services to Thumbs Up, CAFF receives a marketing service fee of 15 cents per case of produce sold.

Corshen envisions that a total of five to seven regional food hubs, operating as small and midsize aggregation and education centers, will eventually be set up around



CAFF uses the Buy Fresh, Buy Local logo to help its Growers Collaborative food hubs sell to retail and institutional buyers.

the State of California, servicing its network of growers and institutional buyers. Using this network of food hubs, CAFF hopes to leverage the existing production and distribution capacity in California to increase the volume of local produce marketed to institutional food service customers, and in doing so, increase small and midsize farm viability and consumer access to fresh, locally grown food.

How Does GC's Business Model Serve Grower and Customer Needs?

For Growers

Most of the farmers in GC's network were already engaged in various direct-marketing and/or wholesale marketing channels prior to selling through GC. However, the market entry barriers for institutional markets are particularly challenging for smaller growers, especially in terms of volume and consistency demands. GC provides these growers access to these markets through its aggregation and distribution services. As such, GC provides farmers with another revenue stream and a more diverse customer base. The majority of farmers in the network sell less than 5 percent of their products through GC, with a small fraction selling up to 30

to 50 percent. For CAFF, the emphasis is on providing farmers with profitable markets and a more diversified set of market opportunities, not on making farmers dependent on any one particular market channel.

For Institutional Buyers

By working with GC, institutions are able to respond to their customers' demand for local food. GC provides buyers with a simple way to buy a variety of local and source-identified produce through a single purchasing mechanism. Strong marketing support from CAFF provides buyers with an additional incentive. CAFF has developed marketing materials to promote its buyers' local procurement purchasing, including farmers' profiles; Farmer of the Month posters; “Buy Fresh, Buy Local” materials (bags, stickers, etc.); menu placards; table tents; and logos for the Web—all of which helps to promote its buyers' purchasing practices, and helps to ensure its customers' demand for local food are being met. CAFF also arranges farm tours for its buyers, particularly for chefs and food preparers of food service companies. Doing these tours helps to solidify the connection between the growers and the buyers and provides the opportunity for the buyers to fully appreciate where their food comes from and for growers to more fully understand the specific needs of their customers.

Enhancing Small Farmers' Abilities To Deliver Fully Traceable Produce

Traceability—the ability to trace back individual cases of produce to its original farm source—is also of vital importance to the institutional buyer. In response to buyer demands, CAFF, in partnership with Top 10 Produce, is working to develop a traceability program that would allow any shipment of goods sold through the regional hub network to be traced back to the farm it came from. GS1-128 codes will be used to allow buyers to trace back individuals produce lots to a specific farm, which would both provide assurance to buyers that they can isolate the source of any food safety problems, and enhance the reputation of aggregation hubs as a reliable source of locally grown food. With this traceback mechanism, CAFF, as the marketing specialist to the GC Bay Area hub and potential new hubs in Sacramento Valley, Fresno, and other regions, would be able to, as Corshen says,

... go to the distributor and say, “You buy the product from this aggregator, and you'll know who you're buying from and it will be marked on the case.” That's what Kaiser wants, that's what Bon Appétit wants, that's what the universities want. So we're giving you a product that not only is identified by the farmer as being local but it also has the “Buy Fresh, Buy Local” symbol on it.

In conjunction with this traceability program, CAFF is educating growers on the importance of adopting Good Handling Practices (GHPs) and Good Agricultural Practices (GAPs), and developing a manual for growers on food safety.

Persistent Challenges With New Business Model

Beyond the standard services most commercial buyers would expect from their produce distributors (e.g., consistent product quality, reliable volumes, timely delivery, competitive prices), many of GC Bay Area's (GCBA) current customers also have specific product requirements that are more prevalent in the institutional foodservice sector than elsewhere. For example, most of its institutional food service buyers are looking to receive produce items that require no additional preparation or processing before they are incorporated into menus. This is particularly true in the case of school and university cafeterias, where kitchens often lack the labor and equipment for onsite food preparation, available refrigerated storage is limited, and cafeteria personnel are accustomed to using and serving bagged or fresh-cut fruit and vegetables. Additionally, in the case of hospital facilities like Kaiser Permanente, produce items that are sourced for use in patient

meals, such as whole fruit, must be consistently small enough to fit on stacked tray carriers. Because approximately 95 percent of GCBA product line consists of whole, uncut fruits and vegetables, there appears to be an inherent disconnect between available supply conditions and demand requirements that may impede the organization's ability to fully develop its market potential.

Lessons Learned

In a relatively short period of time, GC has undergone a fundamental transformation in how it operates and functions as a socially driven food enterprise, and with these shifts have emerged some key lessons.

Take an Assets-Based Approach

An assets-based approach means starting any enterprise development assessment by investigating what assets currently exist that can be utilized to achieve a certain set of objectives, rather than starting



One of CAFF's new labels that identifies the farm family and includes traceability codes provided by Top 10 Produce.

such an assessment by looking at what doesn't exist (i.e., a needs-based approach). CAFF and its early partners clearly saw the need for distribution infrastructure and logistics that would enable small-scale local farmers to take advantage of institutional market opportunities, and thus they went about building a full-service distribution company to meet this need. In contrast, an assets-based approach would have started by assessing the existing state of local aggregation and distribution capacity, followed by determining how best to utilize these assets to achieve CAFF's objective of increasing institutional market access for its network of growers. Given the abundance of aggregation, warehousing, and distribution infrastructure and logistics present in California, it ultimately did not make sense for CAFF to operate GC and remain a full-service distribution company.

It should be said, however, in defense of CAFF's original GC business model, that when they first got started back in the early 2000s, the local food market was still embryonic, and large distributors were not particularly interested in partnering with CAFF. By going it alone, GC was able to demonstrate that it is possible to sell source-verified products from local family farms to large institutional buyers such as the University of California and Kaiser Permanente. Indeed, much of Corshen's progress to date in taking GC in new directions arose from the foundation set by the original management team, which demonstrated that institutional food service markets were demanding—and would pay



Logo for the Community Alliance with Family Farmers.

for—the types of products GC was offering. Nonetheless, the original management of GC will also readily admit that more concerted efforts should have been made to develop other value chain partnerships that could provide the operational expertise in distribution that GC was never fully equipped to handle.

Focus on Your Core Competencies

Intimately tied to the previous lesson is the need for any socially driven food enterprise—or any business for that matter—to identify what it does best. In other words, what are the enterprise's core competencies? Recognizing and focusing on these competencies will play to the strengths of the food enterprise and make clearer which value chain partners are needed to

accomplish its ultimate objectives. CAFF's core competencies include farmer training and education, farmer network building and advocacy, and market promotion (e.g., branding, communicating the value and values of "local," telling the farmer's story, etc.). By stepping into the arena of distribution, CAFF was essentially carrying out activities it had little organizational capacity or competence to do. Furthermore, by relying on existing staff and not hiring additional staff with food industry expertise, GC never achieved a level of distribution competency to make it a viable business model. Ultimately, and somewhat ironically, it took a food industry veteran in Bob Corshen to return CAFF to its core competencies and find an alternative model for the organization to achieve the objectives originally posed by GC.

Red Tomato: Nonprofit-Driven Model #2

Red Tomato, founded in 1996, is a nonprofit marketing and distribution company based in Canton, MA. It arranges for the aggregation, transportation, and sale of a wide variety of produce supplied by 35–40 farmers to grocery stores and distributors, primarily in the Northeast. Relying on farmers and contract trucking firms to provide aggregation and transportation services, it never physically handles the product sold under its name. Its signature product, Eco Apple, a line of apples grown using advanced Integrated Pest Management (IPM) methods subject to third-party verification, accounts for more than half of the organization's sales volume. During the growing season, each tote bag of Eco Apple apples contains fruit grown by one farm, which is named and described on every package.



Heirloom tomatoes come in a veritable rainbow of colors.

Inspiration for Creation of a New Kind of Mission-Driven Business

Red Tomato founder Michael Rozyne, co-founder of Equal Exchange—a worker-owned fair-trade coffee company—was looking for a new challenge in the mid-1990s. He

wanted to create a domestic fair-trade agricultural organization similar to Equal Exchange that would "bring home" fair-trade concepts to the domestic market in the United States. Much like Equal Exchange, Red Tomato strives to bring about social change through trading activities, albeit with a slightly different emphasis. Rozyne described Equal Exchange as being just on the business-driven side of the business/mission divide, while Red Tomato is

just on the mission-driven side. Notably, the decision to create a nonprofit to facilitate domestic fair trade in produce was motivated by the competitive character of the produce industry in the United States. With wholesale margins of 5–12 percent in comparison with margins in excess of 40 percent in the coffee industry, he believed that the nonprofit model would provide more room to experiment and try out different ways of reinventing food systems in ways that a traditional for-profit or cooperative model would not.³⁰

Changing the Model To Suit Market Conditions and Advance the Mission

The name "Red Tomato" is meant to celebrate what a real tomato should taste like—older, garden, and "heirloom" varieties that are more flavorful and disease-resistant than the tough-skinned varieties bred for long-distance shipping, and that are better adapted to local agricultural and environmental conditions.³¹ Rekindling consumer awareness of such tasty varieties of tomatoes and other crops, Rozyne predicted, would go hand in hand with creating a more just and sustainable food system.

When it first began operations in 1996, Red Tomato sought to link producers with consumers and to foster local-food system development in the Northeast through a

³⁰ Michael Rozyne. Presentation at National Workshop on Food Value Chains, held in Portland, OR, in October 2008.

³¹ <http://www.tomatofest.com/what-is-heirloom-tomato.html>

communications and outreach strategy in Philadelphia and Hartford, partnering with nonprofits in both cities. However, it soon realized that small producers faced severe logical barriers. Merely publicizing the merits of local food purchasing and fair trade was not going to create the kind of change that was needed. Rozyne and his colleagues became convinced that a new produce company committed to regional distribution and fair trade would have to be formed to link consumers desiring fairly traded, sustainably produced local fruits and vegetables with producers willing and able to sell such products. Such an enterprise could be expected to increase the amount of fairly traded and ecologically grown produce moving through the food system. To this end, from 1998 to 2002 Red Tomato developed a full-service food distribution service that leased trucks and a warehouse in the Boston area and delivered more than 100 varieties of fruits and vegetables from 35 family farmers three times a week to stores in the Boston and Philadelphia metropolitan areas. Red Tomato established a reputation with customers for its excellent quality, and with farmers for its fair-minded dealings.

However, by 2002 it became clear that this infrastructure-heavy, capital-intensive distribution model was not financially viable at Red Tomato's small scale of operation. In fact, it became so expensive for Red Tomato to operate its distribution infrastructure that the organization was in dire financial straits. Red Tomato had more infrastructure than it could use profitably, and it needed to streamline its operations by divesting itself from directly operating the supply chain. The customers were there, and supplies were relatively abundant, but the trucks were not full and its warehouse space was not being used nearly to its capacity. Red Tomato's managers decided that it

made more sense to take advantage of existing distribution infrastructure on the farms and in the Boston area. In addition, its philanthropic funders were very concerned about the state of the organization's finances and insisted that dramatic changes had to occur if they were to continue their support. With the help of transitional funding from the W.K. Kellogg Foundation, Red Tomato made a dramatic shift in its business practices and switched to a brokering role in which the financial burden and risk associated with handling produce would be dramatically reduced. In the words of Rozyne, the organization would no longer "operate" its supply chain but would "manage" it. The process of switching from operator to manager of its supply chain was completed in early 2003.

Besides divesting itself of trucks, drivers, cold storage facilities, and loading docks, Red Tomato decided to shift away from organic produce toward fruits and vegetables grown using IPM techniques, in which pesticide use is minimized but not eliminated. Red Tomato shifted

to IPM to differentiate itself in a competitive produce marketplace and create a brand based on regional identity and IPM standards. IPM is often seen as a pragmatic middle-ground between organic agriculture's absolute prohibitions against synthetic pesticides and conventional agriculture's routine employment of pesticides. Developing this middle ground would be more practical for fruits in particular, which are hard to grow organically in the humid Northeast. Fungi and insects that feed on fruit are commonly found there and hard to control in that environment using organically approved methods.

With its signature Eco Apple brand, Red Tomato has established a new market for small and midsize orchardists throughout New England and the Mid-Atlantic region; apples now account for about half of Red Tomato's business. Notably, it was the imprimatur of the name Eco Apple and the strict certification standards behind it that really fueled sales growth of IPM apples for Red Tomato. In 2003, Red Tomato



Red Tomato logo.

sold \$150,000 worth of apples labeled as being grown using IPM methods.³² The Eco Apple Program was introduced in 2004. In 2005, the first full year of Eco Apple, sales were \$400,000. Sales grew to \$643,000 in 2006, \$1.47 million in 2007, and \$1.92 million in 2008.³³ The development of the Eco Apple brand represents a shift towards marketing and product development that attracts consumers with products embodying values revolving around environmentally sound production and regional agriculture. This "advanced IPM" protocol pushes the limits of IPM and directs growers to adopt the most benign pest control methods possible.³⁴

Business Structure and Operations

Organizational Structure

Red Tomato is a 501(c) (3) not-for-profit corporation with a board of trustees and eight full- and part-time employees whose primary function is to manage the produce distribution operation. The annual operations budget is approximately \$1 million. Two co-directors are in charge of general management, and six other staff members specialize in finance, operations, sales, graphic design, marketing, business development, and fundraising. Although produce distribution consumes the majority of Red Tomato's resources, the organization also carries out a variety of educational and technical assistance activities, including consulting with like-minded, mission-oriented food businesses and working with disadvantaged farmers to develop markets for their products. About 30 percent of its budget comes from trading income (the commission paid to Red Tomato for arranging produce sales) and



Red Tomato uses farmer stories and information about growing practices to position Eco Apple as an identifiable brand.

60 percent from grants and donors for non-trading activities such as market development, training, and test marketing. The remaining 10 percent comes from consulting and other income-producing projects. In the last few years, the budget has increased substantially; the organization has expanded its staff capacity for a variety of purposes, including developing the Eco Stone Fruit Program, expanding the supplier base into New Jersey and Pennsylvania to access different growing seasons, and increasing the marketing area to include more sales through distributors in Northern New Jersey and New York.

Logistics Management

In its role as a supply chain manager rather than operator, Red Tomato handles sales, marketing, and administrative functions associated with moving product from farmers to retail buyers. It does not take physical possession of the produce at any time, but relies on farmers, trucking companies, and transportation brokers to handle storage, grading, packing, aggregation, and transportation.

Red Tomato's work shapes into distinct cycles. In the off-season winter months, it talks with retail buyers and distributors to gauge what the next season's demand will be,

32 "Eco Apples: Customers Buy Concept of 'Advanced IPM.'" <http://fruitgrowersnews.com>, Accessed 11/16/2010.

33 "Sales Tip Scales for Eco Apple Growers," http://www.northeastipm.org/NewsAndReports/2009winter/Winter09_Eco_Apple.html, Accessed 11/16/2010.

34 http://fruitgrowersnews.com/index.php/magazine/article/Eco_Apples-Customers-buy-concept-of-advanced-IPM, accessed December 21, 2010.

“Red Tomato growers are paid an extra \$1.50/case for every case they ship from the aggregation point to the buyer.

and then works with growers to plan for this projected demand. When the season starts in the spring, Red Tomato is in constant contact with both buyers and sellers, faxing price lists to buyers, calling growers to see what they have available, and negotiating prices with buyers. As the supply chain manager, Red Tomato arranges produce sales with retail buyers by finding sources, coordinating on-farm product aggregation, and arranging shipment to buyers.

The off-season planning helps ensure that both buyers and sellers will be satisfied and prepared, but it still leaves room for flexibility. Demand shifts, bumper crops come in, or disease or pests or weather decimate a crop. Sometimes a buyer asks Red Tomato for a product that was not in the initial demand projections; if it turns out a grower in the Red Tomato supplier network has some of the product available, then Red Tomato sells it to the buyer. Planning contributes to successful trading operations, but the uncertainties of the produce business require maneuvering and negotiation throughout the season.

Although particularly perishable crops, such as strawberries and Romaine hearts, are sometimes shipped directly from farms to stores,³⁵ most orders are shipped to distribution centers or distributors, who in turn make their own sales and deliveries to individual stores. Often an intermediate step is necessary, in which product from one or more farms is shipped to a convenient

aggregation point—usually another farm—where the order is assembled and sent on to buyers. In some cases, product may be shipped three times before it reaches its final destination: from one farm to another, to a holding area owned by a trucking company, and then on to a store or distribution center. If a farmer cannot supply a given order, in most cases, Red Tomato arranges for product from two or more farms to be aggregated on one farm.

This multi-step system of aggregation and transportation brokerage requires careful attention to detail to ensure timely and efficient product movement between producers, distributors, and customers. The per-case price Red Tomato pays growers covers their production and packing expenses; on-farm aggregation costs are paid for by the shipping charge that is added to each packed and sorted produce case. Red Tomato sales managers and logistics coordinators are in constant contact with buyers, suppliers, and trucking companies, matching sales with available supply as they seek the best price for farmers and the lowest possible transportation costs. Overall, this system is designed to optimize the use of existing transportation and storage capacity, reduce Red Tomato's expenses, and limit financial overhead incurred through direct ownership and maintenance of physical assets.³⁶

Knowing what a given amount of truck capacity will cost for a given time period (for example, a 32-foot truck for 24 hours), Red Tomato logistics staff develop their own

estimates of what it costs to move different crops—everything from apples to northern kiwis—to their final destination by the pallet and by the case. These projected average shipping costs are then combined with projected grower prices (based on historical data and information about market conditions) and Red Tomato's usual 10 percent commission (for sales, marketing, certification and administrative costs) to produce the price quoted to buyers for a given order. Figure 4 illustrates how this process works.

Since the change to a brokerage model was implemented, a growing number of Red Tomato's suppliers have purchased their own trucks and transport their own produce, and occasionally move others' produce as well. Red Tomato growers are paid an extra \$1.50/case for every case they ship from the aggregation point to the buyer. Sometimes one farmer may be able to fill an entire order just with his or her product, and then ship it to the buyer, which means the farmer effectively receives more money for his or her crop. In other situations, where product from two or more farmers needs to be aggregated on one farm, the shipping farmer will earn a \$1.50/case payment premium for all cases shipped from the aggregation point to a Red Tomato customer.

When the trucker is not a Red Tomato supplier, Red Tomato's logistics manager works to arrange truckloads as full as possible to meet a target shipping cost of \$1.50/case. This target serves as a benchmark to keep prices as competitive as possible. Even when this target is not met, it influences the sourcing and distribution process and helps keep costs manageable. Angel Mendez, Red Tomato's logistics manager, described his managing of trucking services, storage, and distribution

Figure 4: Calculating Price Quotes

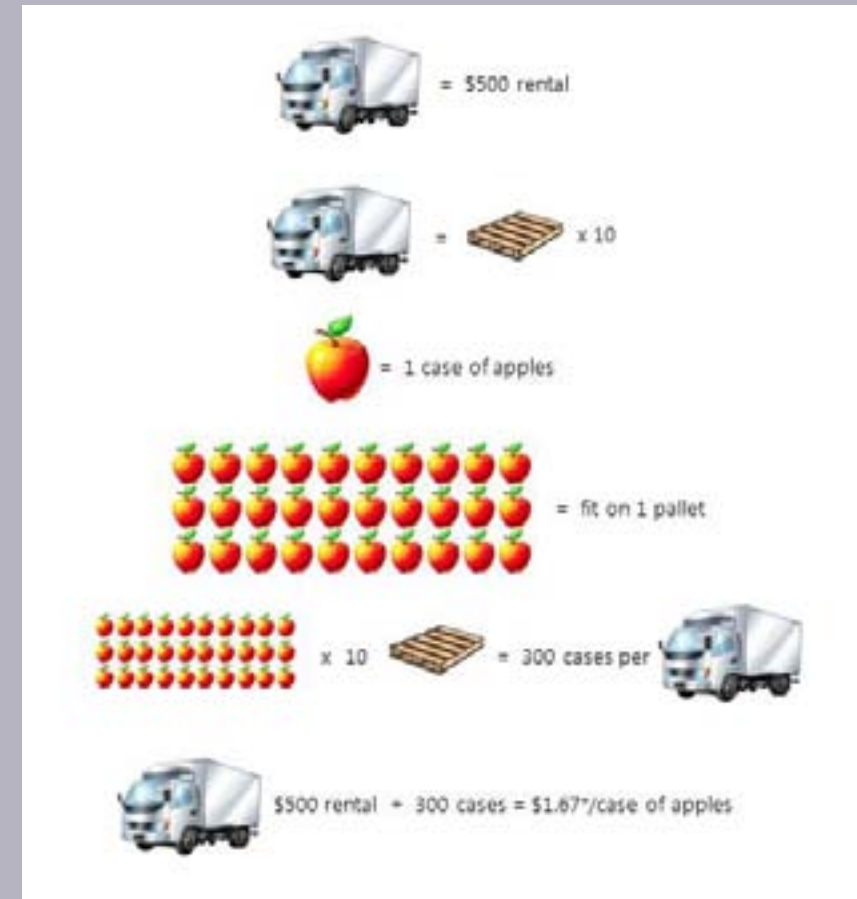
The per-case shipping rate is calculated based on how much the truck costs, how many pallets fit on the truck, and how many cases fit on a pallet.

Assume that the truck costs \$500 to rent and fits 10 pallets.

30 cases of 5-pound apple tote bags fit on a pallet.

30 cases x 10 pallets = 300 cases on the truck.

\$500 cost of the truck/300 cases = per-case shipping cost of \$1.67.



*A safety margin is added to the estimated per-case shipping cost to account for unused space. The estimate of \$1.67/case for the apple shipment will be rounded up to \$2.00/case. The price paid to the farmer is \$20 and the Red Tomato commission is \$2.50, producing a price quote to the customer of \$24.50/case.

35 Steve Stevenson, "Values-based food supply chains: Red Tomato," Center for Integrated Agricultural Systems, June 2009.

36 Duane Dale DFD Associates. "Grower Satisfaction Survey: Red Tomato's 2007 Local Marketing."

“As a nonprofit food broker and supply chain manager, Red Tomato fills a critical logistical need for small and medium-sized growers.

as a constant juggling act as he matches up buyers with sellers and product with shippers. To meet year-round demand for locally grown product and increase sales volume in the offseason, Red Tomato draws on some suppliers with controlled atmosphere apple storage capacity. This does not require holding back product in season; some growers have more than they can sell during the season.

Producer Relationships

Grower Recruitment and Striving for Quality

As a nonprofit food broker and supply chain manager, Red Tomato fills a critical logistical need for small and medium-sized growers. It has built up a supplier network of about 40 farmers over the years through a well-considered yet informal process that considers a range of social, economic, and agricultural factors in its recruitment of new farmers. Representatives of Red Tomato visit farmers during the winter to screen them for possible inclusion in its supplier network, and look carefully at their farm enterprise to determine whether or not they would make suitable Red Tomato partners. Red Tomato looks for small and midsized producers with the highest quality standards. Rozyne says:

Some of the most innovative growers capable of some of the highest quality products are going to be the small family farmers who run their own [operation]. In the case of a vegetable grower who may raise 30 to 100 varieties, every single crop is like a small university . . . that knowledge base is what it takes to do a good job growing food.³⁷

One key tool used to evaluate potential growers for inclusion in Red Tomato's supplier network is to ask experienced growers for their recommendations for ideal Red Tomato grower partners.³⁸ Product quality is the number one criterion in selecting growers. Product quality not only serves as an initial screening criterion, but striving for the highest quality possible also drives ongoing monitoring efforts such as on-farm quality assessments, tastings, and asking store managers and customers about their perceptions of quality. Producers in the network need to make sure their produce meets Red Tomato's quality standards, which suit the needs of retail produce buyers and their customers. If the quality of a Red Tomato product is poor and a customer complains to Red Tomato, a Red Tomato staff person investigates the problem. If necessary, Red Tomato will provide replacement product. This commitment to quality is essential to Red Tomato's business culture. Without a high-quality product that satisfies buyer

demands and good customer service, it would be impossible for Red Tomato to sustain long-term business relationships with commercial retail customers and continue to operate.

Red Tomato also assesses the ability of growers to collaborate and communicate in selecting growers, and evaluates whether they see Red Tomato as adding value for them. This latter criterion pushes attention more to midsized growers, those who are big enough to wholesale yet small enough that competing on global market is challenging.

New Markets, and a New Way of Negotiating Prices

In exchange for supplying high-quality product, farmers who participate in the Red Tomato network gain access to new markets, marketing assistance, and to some extent, enhanced prices. In line with value chain principles, in which all supply chain actors share information and agree to support each other in business for each other's mutual, long-term benefit, Red Tomato initially tried to base pricing on the cost of production.³⁹ However, given the extreme variation in growing conditions, growing methods, and operating margins among farmers in the Northeast, this proved too difficult.⁴⁰

Instead, Red Tomato developed an unusual pricing strategy for all its producers and all its products. Before they start selling to Red Tomato, growers are asked to name three prices. First, they are asked what their average wholesale price has been for a given product in the last couple of years. Second, they are asked to name a desired but realistic price (the target price) for this same crop. Third, they are asked what their "dignity" price is (i.e., the lowest price they can

accept and still feel satisfied). Red Tomato strives to exceed the dignity price, while aiming for the target price. On occasion, unfavorable market conditions make it impossible for Red Tomato to meet even the dignity price. In such circumstances, a Red Tomato buyer will contact sellers to get their permission prior to negotiating a transaction that would involve pricing a product below the identified "dignity price."

With this pricing scheme, the same product coming from two different farmers could be sold to two different customers on the same day for different prices. This works for all parties involved, as one higher volume producer will accept a lower price and the satisfaction of a secure predictable market over time, but a smaller scale, lower volume producer needs a higher price to be satisfied.⁴¹ Red Tomato manages the pricing, the customer relations, and the production in a way that meets everyone's needs.

Marketing and Branding

Developing Markets Through Standards Development and Branded Product

Red Tomato's Eco Apple brand of apples accounts for about half of Red Tomato's total produce trading volume and has emerged as a signature product category. Eco Apple tells the whole story of Red Tomato: helping family farmers stay in business; advancing sound land stewardship practices; and educating consumers about how, where, and by whom their food is produced. Eco Apple occupies a unique market niche

“Eco Apple tells the whole story of Red Tomato: helping family farmers stay in business; advancing sound land stewardship practices; and educating consumers about how, where, and by whom their food is produced.”

between organic and conventional apples because they are produced using the latest IPM techniques, which favor environmental stewardship and manage pests with the least possible exposure to toxic chemicals. Due to climatic conditions, it is virtually impossible to grow large commercial volumes of organic apples and other tree fruits in the eastern United States. The high humidity fosters pest problems that are difficult to address without using chemicals that are prohibited by organic standards. This makes it difficult to bring New England apple orchardist to bring organic apple production to scale.

Red Tomato has worked with scientists at the University of Virginia, University of Massachusetts, Cornell University, Pennsylvania State University, Rutgers University, and the University of Connecticut to develop a set of dynamic standards that embody the best of IPM principles. An IPM pest control regime employs a mix of cultural and chemical practices to minimize crop loss due to pests and exposure of humans and ecosystems to toxic chemicals. This approach includes:

- Careful monitoring of pest levels and avoiding using pesticides until a threshold of pests has been met that poses an economic threat.

- Prevention of problems by planting pest-resistant varieties and selecting pest-free rootstock.⁴²
- Using mechanical and nontoxic pest control methods whenever possible.

While most apple growers use IPM to some degree because it saves growers money as well as reduces harmful chemical usage, Red Tomato, in concert with the IPM Institute of North America, has aimed to foster "advanced IPM," a more rigorous protocol than that followed by many growers who follow basic IPM principles.⁴³

Red Tomato, in developing such standards and vouching for their adherence by its growers, performs two important roles in the marketplace. It assures customers that its fruit is grown using ecologically sound methods, and it creates new market opportunities for farmers using these methods by helping them differentiate their product.⁴⁴

Apple producers interested in becoming Eco Apple suppliers to Red Tomato are screened by veteran suppliers prior to being brought on board and must adhere to a set of restrictions and guidelines, including limitations

³⁷ *Ibid.*

³⁸ National Food Value Chain Workshop, Portland, OR, October 27–29, 2008.

³⁹ G.W. Stevenson and Rich Pirog (2008) "Values-Based Supply Chains: Strategies for Agrifood Enterprises of the Middle," in Thomas Lyson, G.W. Stevenson, and Rick Welsh, Eds. *Food and the Mid-Level Farm: Renewing an Agriculture of the Middle*, pp. 119–146.

⁴⁰ Michael Rozyne. Presentation at "National Workshop on Food Value Chains," in Portland, OR, in October 2008.

⁴¹ *Ibid.*

⁴² <http://www.epa.gov/pesticides/factsheets/ipm.htm>

⁴³ <http://fruitgrowersnews.com/index.php/magazine/article/Eco-Apples-Customers-buy-concept-of-advanced-IPM>, accessed December 21, 2010.

⁴⁴ <http://redtomato.org/beyond.php>

on application of pesticides and fertilizer, and careful monitoring of pest populations. Inspectors verify that Eco Apple growers are following these standards, and the participating growers are certified annually by the IPM Institute of North America. Records are inspected annually, while field inspections are done every 3 years. Red Tomato uses grant funds to pay the IPM Institute to review its protocol periodically and maintain certification records of Red Tomato growers.

Over time, many of the limits on applications of chemicals have been made more strict as Red Tomato producers have become more adept at finding alternative, cost-effective, less toxic pest-control methods. Through this push-pull process between scientifically developed standards, grower innovation, and environmental conditions, Red Tomato growers have set a new gold standard for low-chemical-input apple production in the Northeast.

A pilot Eco Stone Fruit program was rolled out in 2010 for nectarines, apricots, and peaches. The protocol for grower practices has been developed, and three orchards are certified. In 2011, Red Tomato will begin to develop a marketing program for Eco Stone Fruit along lines similar to Eco Apple. Red Tomato staff is now considering several vegetable crops as candidates for another certification program, pending funding. It takes significant resources to create IPM protocols for specific crops because each crop has individual diseases and pests that require individual solutions.

Building the Red Tomato and Eco Apple Brands

In conjunction with this rigorous standards development, Red Tomato has developed an innovative packaging and branding scheme for its Eco Apples. Signs, brochures, training for retail produce buyers, and

brand identification of Eco Apple all support the program. In addition, each participating farmer packs his or her apples in customized bags that tell a story about their farm as well as about Red Tomato's mission. Apples in one set of customized bags are often consolidated with packed customized bags from other farms to fill a given order put in by a customer, but the identity of the individual farm is retained all the way to the consumer. In the future, other Eco programs for other products may use similar marketing and aggregation systems.

Red Tomato growers can also sell Eco Apples to their other accounts as long as the apples meet Eco Apple standards. Growers pay a royalty to Red Tomato of 25 cents a case for every case sold under the Eco Apple brand outside of the Red Tomato network. This allows growers to distinguish

themselves in the wider marketplace generally, to build the brand to a broader audience, and to support greater agro-ecological change as growers reduce application of toxic chemicals on more of their land.

Impacts of Eco Apple Program

In 2008, Red Tomato sold \$3.1 million worth of produce, which accounted for about 25 percent of their suppliers' total sales volume. Considering that Eco Apple accounts for about half of Red Tomato sales, its figures suggest significant potential for expansion of the Eco Apple brand and a corresponding expansion of apple production with few chemical inputs. Many apple growers producing Eco Apples are adapting their apple growing techniques to meet Eco Apple standards, regardless of who the



Red Tomato brands romaine hearts and a variety of other products.

customer is. According to the 2007 grower satisfaction survey, "a large-scale apple grower sees Red Tomato's Eco Apple program as a way to gain experience with IPM practices that he believes 'will become the standard approach to spray programs.'"⁴⁵

Diversifying Markets/ Growing Sales

Most of Red Tomato's product—about 75 percent in 2008—was shipped to Whole Foods and Trader Joe stores, principally in the New England region, (though some product was also shipped to stores in the Mid-Atlantic region and to Texas, the home base for Whole Foods Market). While still heavily weighted toward these two customers, this is an improvement from prior years when these two buyers accounted for more than 80 percent of the organization's total sales. Other retail supermarket chains and independent grocery stores make up the rest of sales, and the Red Tomato team continues to focus on expanding and diversifying its customer base. Sales growth has been rapid, growing 500 percent between 2003 and 2008, from \$500,000 to \$3.1 million in 2008. They dipped slightly in 2009 to \$2.67 million with the onset of the recession, and went up again to \$2.8 million in 2010.

Challenges and Solutions

Redefining Its Role

In its earlier form as a full-service food distribution company, Red Tomato experienced challenges that almost led to the organization's collapse. Simply put, the cost of maintaining storage and transportation

infrastructure was too high, even with considerable philanthropic and other outside financial support. With careful planning, a successful shift was made to a more hands-off model in which infrastructure is owned and operated by others and Red Tomato plays a coordinating and brokering role. This mission realignment allowed Red Tomato to focus its energies on brand development while managing a more efficient aggregation and distribution system.

Expanding Markets While Maintaining Integrity

Red Tomato has continually faced the challenge of achieving financial self-sufficiency in its trading operations. Most other produce companies in New England operate year-round by bringing in produce from warmer growing climates during periods when the region has limited local production. Furthermore, Red Tomato's for-profit competitors are larger than Red Tomato, enabling them to spread fixed costs over more volume and giving them stronger negotiating leverage with retail buyers. The most direct way Red Tomato has worked to overcome the limitations of being a regionally based produce company is to expand the geographic scope of its market. Expanding sales south into the Mid-Atlantic States and as far west as Texas has allowed Red Tomato to boost its market base considerably and open up new market opportunities for participating growers. It also has worked to even out the peaks and valleys of seasonal crop production by storing apples through the winter, spring, and summer for year-round sales. However, Red Tomato's commitment to building a regional food system still places some limits on its sales potential, because it does not aspire to market its products nationally.

Leveraging Partnerships

Red Tomato's work with the Federation of Southern Cooperatives (FSC) exemplifies the tension between expanding market opportunities for farmers and focusing on regional food system development. For several years, Red Tomato worked with this umbrella cooperative to market watermelons grown by African-American farmers from Georgia in Northeast markets.⁴⁶ Although this project had some success, it varied from year to year. Red Tomato and FSC agreed that it made more sense to help FSC growers sell their produce closer to home. This led to Red Tomato working with FSC to develop value-added products and an FSC brand for a Southeast regional market. In support of these goals, Red Tomato received grant funding to work with FSC and the IPM Institute of North America on production, handling, and marketing issues. This partnership sought to identify crops and varieties that would be most appropriate for a regional IPM line of crops and train growers to incorporate IPM techniques into their production regime, which would prepare the ground for a new IPM-based protocol similar to the Eco Apple. This work also encompassed improvements in harvest practices, postharvest handling, and logistics to increase efficiency and profitability for FSC growers. While the grant has now ended, the two parties still have an informal relationship and remain in regular communication.⁴⁷

Another important partnership for Red Tomato has been its work with the IPM Institute of North America and scientists at various universities in the Northeast to develop IPM standards and third-party certification programs for apples and other fruit. Red Tomato had the vision to establish a new product based on

⁴⁵ Duane Dale DFD Associates. "Grower Satisfaction Survey: Red Tomato's 2007 Local Marketing Program," February 28, 2008.

⁴⁶ <http://fruitgrowersnews.com/index.php/magazine/article/Red-Tomato-Turns-a-Symbol-into-a-Useful-Reality>, accessed December 21, 2010.

⁴⁷ Personal communication with Sue Futrell, Communications Director for Red Tomato, November 2010.

The economic impact of Red Tomato's operations on farmers is substantial and increasing.

IPM, but it needed outside help to make it happen, both in terms of technical expertise on designing standards and an accompanying certification program and the legitimacy provided by working with independent experts in the field of ecological pest control.

Moving Toward Self-Sufficiency

To diversify its income sources, Red Tomato provides consulting services to other local food groups while still relying on foundation, government, and donor support to cover a significant portion of its expenses. It is moving towards greater self-sufficiency by leveraging its other assets like consulting, but grants and donations still provide about 60 percent of operating income.

Actually, in hindsight, the decision to create a nonprofit was quite prescient. It is unlikely that activities such as the development of the Eco Apple and Eco Stone Fruit protocols would ever be undertaken by a for-profit produce business, making the nonprofit structure particularly advantageous. As such, the costs of developing IPM protocols should not be counted as part of its trading operations. Not only would it be difficult for one business to sell enough product to justify the costs of standards development, it also would be difficult to establish market legitimacy. A for-profit business would have to spin off a separate nonprofit to create and enforce the standards to establish credibility in the eyes of consumers. Red Tomato, as a mission-oriented

nonprofit committed to supporting local food system development and ecological farming practices, was able to establish strong partnerships with key stakeholders and develop meaningful and effective standards for IPM apple production.

Tips and Strategies for Food System Organizers: Lessons From the Red Tomato Experience

Patience

In discussing the lessons learned, Red Tomato's staff had several valuable insights for food enterprise organizers. They noted that it was important to avoid the "tyranny of the urgent," meaning that one has to balance short-term needs and long-term strategy. One way the organization has put this into practice is by not rushing to increase product variety when its supply network is still being developed. Red Tomato has had to be careful in balancing its need to grow and seek new accounts with its need to respect its suppliers' longstanding business relationships. If this means it loses some business because its suppliers sell product to customers outside the Red Tomato distribution network, then that must be accepted as part of the larger strategy to strengthen the growers' market position.

Quality Is Number One

In integrating social and environmental quality goals into a mission-oriented food business, Red Tomato's director, Michael Rozyne, urged people to internalize the highest quality standards and put product quality above social and environmental goals. He observed that you need the highest quality product to develop a solid position in the marketplace, which can then be used as a foundation for advancing social and environmental goals. Red Tomato's significant investments in quality preservation, quality site visits, and other quality protocols demonstrate how important this concept is to the organization.

Successes and Lessons Learned

Growing Grower Benefits

The economic impact of Red Tomato's operations on farmers is substantial and is increasing. In 2008, the average dollar volume marketed through Red Tomato for the 23 growers surveyed in the annual grower satisfaction survey (out of 27 selling through Red Tomato that year) was \$116,411, up from \$108,680 for a comparable group of 19 growers in 2007 and \$54,923 in 2006 for 14 surveyed growers. In all years, those responding to the survey accounted for almost all of Red Tomato's sales volume. In the 2007 Grower Satisfaction Survey, growers reported gaining access to

new markets as the greatest benefit of working with Red Tomato. And 75 percent of growers reported getting higher—sometimes much higher—prices from Red Tomato than they would have gotten otherwise. Other intangible benefits also cited by growers as significant include the ability to work with a broker that puts farmers first and engages in honest and open communication and having access to substantial marketing and technical expertise.⁴⁸

Success in Selling a Story

Taking the time to develop, market, and sell differentiated products like Eco Apple directly to chain stores within regional food networks can result in higher prices for farmers than they otherwise would receive. Even more importantly, it can offer access to new markets for farmers by adding value to their product by telling their personal story to consumers. Farmers are also able to establish a more direct relationship with retailers than would be the case if they were selling product to a typical wholesale broker or repacker. In those cases, growers would not be able to differentiate their product based on quality or production characteristics, and they would not be able to command a premium price. Moreover, these growers, often smaller operations, do not have the capacity for their own wide distribution systems. Red Tomato fills that crucial infrastructure gap while encouraging farmers to maintain, and even capitalize, on their own identities.

It's All About Relationships

Personal relationships are key to success in the produce business, and especially so in a value chain such as the one Red Tomato has constructed. Formal contracts or relationships with business entities often are transcended by personal, informal relationships, and those involved in the business ignore this principle at



Michael Rozyne, Red Tomato Co-executive Director (right) talking with Homer Dunn, orchard manager for Alyson's Orchard, Walpole, New Hampshire.

their peril. In many instances, Red Tomato has established successful relationships with people rather than institutions; such relationships can change when the people change but the business may then go with the person. In one case, Red Tomato had a key contact at a regional chain in the Boston area; this person took Red Tomato's business with him when he left that company to work for another grocery company.

Certification Paired With Broker Model

Red Tomato is an unusual example of a food value chain that has combined its own certification program with produce brokering responsibilities. For example, its certification program for Eco Apple

provides them with a valuable market niche and an opportunity to market a high-quality sustainable product, while its brokering role reduces its financial overhead. The organization is adding value through brand development, standards development, consumer education, and brokering activities. Handling the physical movement of fruits and vegetables did not add value and was a heavy drain on the organization's resources. While this business model still requires outside support to function, moving to an assets-based approach, in which existing storage and transportation resources are tapped, rather than a needs-based approach that focuses on what is lacking in a target population, has proven highly effective.

⁴⁸ Jordan Bar Am. "Grower Satisfaction Survey: Red Tomato's 2008 Local Marketing Program." March 2009; Duane Dale DFD Associates. "Grower Satisfaction Survey: Red Tomato's 2007 Local Marketing Program," February 28, 2008; Duane Dale DFD Associates. "Assessment 2006: Red Tomato's Fruit and Vegetable Marketing Program, An Analysis of Grower Interview Data," March 15, 2007.

Minnesota Food Association and Big River Farms: Nonprofit-Driven Model #3



Minnesota Food Association's Big River Farms is a nonprofit distribution model based near Stillwater, MN, that provides production and marketing services to aspiring immigrant and refugee farmers. Big River Farms (formerly Big River Foods) was established in 2007 as a "training distribution company" that combines brokering functions and transportation logistics with on-farm production and postharvest handling training. In any given year, Big River Farms works with 8 to 10 farm enterprises in its training program to broker and distribute certified organic fruits and vegetables to supermarkets, food co-ops, and restaurants.

History

The Minnesota Food Association (MFA), a nonprofit organization based near Stillwater, MN, came into existence more than 25 years ago to form a coalition of urban and rural residents interested in actively working together to build a more sustainable food system. MFA is housed on a 120-acre farm that it leases from the Amherst H. Wilder Foundation. Its mission is to "build a more sustainable food system by growing and distributing food; bringing new farmers into farming through training immigrant farmers; and networking, partnering, and sharing with many diverse community-based organizations, nonprofits, foundations, government, local businesses, and institutions."

One of the more notable MFA programs is its New Immigrant Agriculture Project (NIAP). NIAP was established in 1999 to assist immigrant and other limited-resource farmers learn about sustainable agriculture methods and farm business management. Since its inception, more than 250 immigrants (primarily Southeast Asian Hmong and Latinos) and other aspiring farmers have benefited from these trainings.

NIAP offers a wide range of farm training opportunities for immigrants with diverse amounts of experience and varying personal/career aspiration. The organization's entry-



Minnesota Food Association's Big River Farms sells a variety of tomatoes and other fresh produce to supermarkets, co-ops, and restaurants.

level training program is focused on "community gardening" and provides trainees with access to as much as one-half acre of land for growing food for home consumption. The intermediate level of the program is focused on "micro-farming," which allows participants to access up to 2 acres of land for market sales as well

as home consumption. Finally, the most advanced tier of the training program is the produce-farmer program, which enables participants to access up to 3 acres of land with the idea that they will primarily produce food for the commercial market. At all levels of training, NIAP offers group educational workshops

and individual consultations in areas such as crop production strategies, food safety, financial management and recordkeeping, and marketing.

Approximately 10 "farms" participate each year in NIAP's immigrant farm training program. A "farm" may consist of an individual, one or more families, or even a group of relatives or friends that farm together on a shared plot of land leased by MFA. In 2010, the 10 participating "farms" consisted of 28 immigrant growers, including Hmong, Cambodian, the Karen people of Burma, and people with Mexican backgrounds.

Along with NIAP, MFA started a community-supported agriculture (CSA) enterprise in 2005, which currently has 160 members with multiple drop-off sites serving the greater Twin Cities area.

Beginning of Big River Foods

MFA stepped into the food distribution business in 2007, when it established Big River Foods (BRF) as a "training distribution company" that would combine brokering functions and transportation logistics with on-farm production and postharvest handling training. The creation of BRF was a natural outgrowth of the need to meet the growing marketing needs of NIAP's more commercially oriented immigrant farmers, many of whom were looking for other marketing outlets beyond direct-to-consumer sales.

In the face of rising market demand for locally grown, sustainably produced food, MFA began to explore ways that they might be able to help NIAP's farm trainees expand their customer base and enhance their income potential by supplying fresh fruits and vegetables to local retail and food service clients. To launch this initiative, Teresa Cuperus, the original

manager of BRF, contacted a number of grocery retail outlets to assess what kind of local products were most in demand. She also looked carefully at the five family farms that MFA was working with that were in positions to sell wholesale volumes to see what could reasonably be grown to meet these market needs. Given MFA's limited on-farm storage capacity as well as the growers' comfort and experience level, BRF and the growers decided to focus on several tomato and green pepper varieties. The tomatoes were targeted to a number of supermarket chains and retail grocery cooperatives, and BRF was able to broker a deal with the restaurant chain Chipotle Mexican Grill to supply green peppers.

BRF began its distribution operations with little starting capital, which in many ways turned out to be an advantage; it required BRF to start small and think strategically about how to utilize its limited existing resources. Key initial investments included refurbishing a packing shed, installing a small-cold storage unit, and developing a logo and brand identity. The BRF logo simply and effectively states the core values of the operation: "Fresh. Local. Honest."



Big River Farms logo.

Business Structure and Operations

Organizational Structure

Minnesota Food Association is registered as a 501(c) (3) nonprofit organization; Big River Foods was established as a formal program under MFA's organizational umbrella. MFA is overseen by a community board of directors and an executive director, Glen Hill. At present, the Association also has four additional paid staff members, which include a director of programs, a farm manager, a training coordinator, and a production coordinator.

When BRF was initially established, MFA's three programs—the CSA farm, NIAP, and its distribution business—were less integrated with each other. The bulk of production, marketing and distribution logistics rested squarely on the BRF manager's shoulders. More recent changes in MFA programmatic operations have alleviated many of these early challenges. In the spring of 2008, MFA made the strategic decision to integrate its three programs into "Big River Farms," a comprehensive sustainable-agriculture production, training, educational, and distribution program.

Several positive outcomes have emerged from the consolidation of these programs. BRF and the CSA now share the two harvesting sheds and coolers. Farmer participants now have the option of selling their produce either through the CSA or through the wholesale market channels offered by BRF. The BRF farm manager and training coordinator work more closely together with the farmer participants in preseason planning, production practice learning, developing marketing strategies, and handling of distribution logistics and buyers' relationships. Locating all activities

under a single farm management program also streamlined the process for enabling the entity to acquire organic certification and Good Agricultural Practice (GAP)-certified status for member farmers as needed.

Distribution Activities

All produce is sorted, graded, packed, and stored on-farm by the growers with assistance from the BRF manager. Growers are also required to carry their own liability insurance. BRF offers twice-a-week deliveries to its buyers. For small orders, BRF delivers the produce in its air-conditioned van, usually coordinating this with its CSA drop-off routes. BRF uses Edina Couriers (a company offering distribution and warehousing services) to deliver larger orders to its buyers' distribution centers. The partnership with Edina Couriers has also been advantageous because it has given BRF the option of shipping produce in refrigerated trucks that track fluctuations in storage temperature, a service that BRF cannot provide with its van deliveries and one of the conditions of sale for one of BRF's former food service customers.

To cover its logistical and marketing costs, BRF places a 25-percent markup on the products it sources from the training program growers. While MFA relies on external support (e.g., Federal and State grants, foundation and individual donations) to cover some of its staffing and farmer training costs, the distribution arm of the nonprofit has operated since its inception as an essentially break-even business.

Operational Restructuring

In 2008, along with combining its program operations under Big River Farms, MFA also made the strategic decision to limit its scope of activities as a distribution business, essentially scaling back the number of wholesale accounts it would serve. MFA began



The winter weather may limit local supply, but not Big River Farms' commitment.

to realize that its role as a wholesale market distributor was having an adverse effect on its immigrant farmer training program. Instead of training and supporting new farmers, MFA staff persons were becoming "enforcers," spending much of their time ensuring that products grown by BRF trainees were meeting wholesale buyer specifications. By cutting back on both the number of accounts and large volume orders, MFA was able to refocus on the core purpose of its program—to provide practical training and education.

BRF has now positioned itself to be a "relationship broker" between its growers and buyers. While it still provides some distribution services for its growers, it mainly uses its more limited wholesale accounts as a hands-on training tool to teach interested participants the requirements of selling through a variety of marketing channels. In the role as a "relationship broker," BRF still actively pursues new markets (e.g., schools, grocery stores, restaurants) for training purposes and will refer other buyer inquiries to both more experienced trainees and training program graduates to handle on their own.

Production Planning and Marketing

Preseason Planning and Market Development

Planning for the next market season begins in the fall with the BRF farm manager and training coordinator contacting their current market buyers, as well as potential buyers, to determine their needs for the following year. BRF tries to negotiate a price that provides a fair price to its farmers and covers its distribution costs. In order to sell to BRF's wholesale customers, the farmers must complete at least 1 year of the training program and demonstrate both a commitment to the program and a capacity/knowledge to grow products that will meet the quality standards and volume demands of their buyers. The final negotiation between BRF and the buyers is agreed upon with set terms for volume, quality, and delivery. With the exception of Chipotle, which required a written contract, BRF makes only "handshake" agreements with its wholesale buyers.

Evolution of Market Development

In its first year of operation, BRF successfully brokered deals and distributed to one regional and two local supermarket chains operating in Minneapolis/St. Paul and the surrounding area. This included selling several tomato varieties (grape, slicer, heirloom) to Lunds and Byerly's (a high-end supermarket with 21 locations), Kowalski's Market (a supermarket chain with 8 locations and a focus on organic and natural foods), and Cub Foods (a regional supermarket chain with 84 locations in the Midwest). Along with the grocery stores, BRF sold heirloom and grape tomatoes to the Wedge in Minneapolis, one of the largest food co-ops in the country, and green peppers to several of Chipotle's restaurants serving the Twin Cities area. BRF also opened accounts and sold a variety of produce to a local food cooperative and several local restaurants.

In order to sell green peppers to Chipotle, it was necessary for BRF's growers to be GAP-certified. Before its first sales season in 2007, MFA put together Standard Operating Procedures for Food Safety that followed GAP protocols and trained all its growers (whether or not they intended to sell green peppers to Chipotle) on these food safety procedures. To be part of its training program, MFA also requires that participant growers apply sustainable production practices. By 2008, the entire MFA farm was USDA Certified Organic.

By 2008, BRF added several more accounts, which included the Whole Foods Market in St. Paul (for green beans) and a couple of restaurants in Minneapolis. It also sold a variety of produce (mainly summer squash, zucchini, and cucumbers) to the Emergency Food Shelf Network, a nonprofit food bank based in Minneapolis that distributes food to hunger relief organizations.

At the end of the 2009 season, MFA took a long hard look at the costs of maintaining GAP certification. While GAP certification enabled BRF to sell green peppers to Chipotle, it became increasingly clear that the direct and indirect costs of maintaining certification were beginning to outweigh the market benefits. Direct costs included not only auditor expenses, but also the cost of renting portable toilets for 5 or 6 months of the year and the need to maintain separate coolers, tarps, and harvesting crates for the exclusive use of GAP-certified produce. Furthermore, these direct costs did not factor in the amount of time required for BRF staff to do the necessary record-keeping and constant followup with growers to ensure that GAP protocols were being followed properly, which began to undermine the staff's ability to carry out its primary educational mission. As explained by Glen Hill:

We talked about doing the whole farm as GAP-certified, but we want to focus on training farmers, and with only a few staff and working with new immigrants, doing all this GAP really affects our focus and confuses the farmers when we become insistent on all these practices. I have many amusing stories about us trying to "enforce" the GAP procedures with our farmers over the course of the season. And when our farmers had family members come out once or twice to help them harvest at critical moments of the season, it is really uncomfortable and awkward for staff to raise the issue that "Hey, have they been through the GAP training and read the manual?"

While BRF continues to hold trainings on GAP and food safety protocols, it decided not to seek GAP certification for its green pepper production. Although it was a decision that was not made lightly because it cost the loss of the Chipotle account, Glen says the "staff feel like a huge burden has been lifted, and we have new energy to focus on what we really want to do—train and support new farmers."

Challenges and Solutions

While BRF has achieved a fair amount of success in a short period of time, it has faced a number of challenges in starting a distribution enterprise:

Lack of Capital

While an initial lack of funding was actually a good thing for BRF in some ways—it required the organization to start small and be smart about using the limited funding it had available—the continued lack of capitalization has been a major impediment in enabling BRF to acquire the necessary infrastructure to grow its wholesale marketing and distribution business. Some of its immediate needs include a larger cooling facility, hoop houses, and a refrigerated truck. Aside from its reluctance to take on additional debt burden, BRF would be hard-pressed to find a financial institution willing to provide them with loans at low interest rates in a tight credit environment. So, for the interim, BRF is relying to a greater extent on Federal assistance and local support (individual donations and foundation grants) to expand the business and training operations. Two of BRF's participant farmers recently received SARE grants to build hoop houses, which have been used to start seedlings and plants earlier in the season and to produce better quality produce during the normal growing season.

Management Capacity

During the first year of operation, the BRF manager not only managed all the distribution logistics and marketing, but was also heavily involved in production and postharvest handling. She needed to ensure that all products sold met quality standards and were cleaned, stored, and packed correctly. MFA has helped solve most of this problem by merging its CSA farm program with its immigrant program—which means the farm manager of the Big River Farms is expected to devote more time to working with the immigrant farmers on the production and postharvest handling side of the business.

Lack of Producer Ownership

In the beginning, many of the participant farmers were not fully vested in the enterprise. Part of this might be explained by the fact that the participant farmers use land they do not own. They turn to the MFA staff to solve more problems than they would if they owned the farms. In one instance, a participant farmer approached the BRF manager with a question, as well as a subtle demand: “Hey, I am having a problem with cutworms, what are YOU going to do about it?” This same lack of ownership also relates to postharvest activities. Many of the participant farmers were not spending enough time sorting and packing the produce correctly. Even after providing the participant farmers with careful instructions, the BRF manager still needed to go through every packed box to ensure the quality and size standards were met.

Steep Learning Curves and Cultural Challenges

Particularly at the initial stages, many of the immigrant farmers did not understand why the BRF manager rejected some of their produce. They would say, “I grew this, I know it is



Big River Farms' workers check produce for quality assurance. Quality control is of the essence to the Big River Farms brand.

high quality, what's the problem?" It was necessary for the BRF manager to spend a great deal of time explaining that retail and foodservice customers use other types of indicators to decide which products are acceptable. Most of the organization's more commercial farmers were primarily accustomed to selling their goods at farmers markets, where variation in product appearance and condition is generally tolerated by customers. Consequently, there was a substantial learning curve for them when it came to understanding product specifications for the retail and foodservice market and recognizing that their product not only had to be sorted by size and quality, but also needed to be cleaned, stored, and packed according to the buyer's preference. There was also difficulty in getting the farmers to conform to MFA's farm value system. MFA is committed to growing sustainable

food systems, and as such, they require that produce on its farm be grown organically. Some of the immigrants with a farming background have a history of using synthetic fertilizers, commercial pesticides, and other non-organic inputs on their crops and it was initially challenging to get them to conform to a different way of farming. MFA now believes that, since 2009, the core of its growers are fully committed to sustainable production practices, taking pride in growing quality product in an ecologically sound manner.

Organizing Farmers To Meet Buyer Demand

While BRF has made great strides in getting its farmers to work together to meet the volume and quality standard requirements of retail

buyers, it is a constant challenge for the organization to effectively match the needs of its diverse growers, who speak different languages and have different levels of experience in farming and different motivations for farming—some are commercially oriented and others more home-consumption oriented—to the demands of the wholesale market. Although they plan in advance who will grow what, when, and how much, inevitably farmers produce too little or fail to meet the quality needed. Concern about fulfilling delivery orders and losing buyer confidence causes constant worry.

Successes

BRF is currently assessing the long-term impact of its training program, but it has been challenging to track down previous trainees because of the mobile nature of many immigrant populations. That said, BRF can say with confidence that since 2005, 80 immigrants have directly benefited from its training program, and that all training participants since 2007 are still growing produce in some capacity and, most notably, two have become full-time commercial farmers. One of BRF's most noteworthy successes in mentoring new commercial farmers actually occurred when it decided to stop supplying product to Chipotle. BRF worked closely with one of its most entrepreneurially oriented farmers, Rodrigo Cala, who had graduated from BRF in 2008, to take over this account. Shortly after finishing BRF's program, Rodrigo purchased a 40-acre farm in Wisconsin, about 2 hours from the Twin Cities. With assistance from BRF, Rodrigo was able to get his farm GAP certified and, by partnering with another farmer in the training program who owns a refrigerated box truck, he was able to meet Chipotle's temperature verification requirements. Rodrigo and his partners successfully set up a contract account with Chipotle and began to sell green peppers to them in 2010.

Lessons Learned

Even though BRF ultimately scaled back its distribution operations, it can provide a number of lessons about starting a nonprofit distribution business. BRF entered the distribution business knowing full well that the demand for locally grown food would be higher than its production capabilities. Nevertheless, it had a successful start by sticking to some core marketing principles:

Produce for the Market Rather Than Trying to Market What You Produce

BRF contacted many retail buyers to find out what products were in highest demand. By matching its production capacity to retail buyer needs, BRF initially found a lucrative market for tomatoes and green peppers.

Develop a Brand Identity That Reflects the Core Values of the Company

The BRF logo effectively and simply states that its products are “Fresh. Local. Honest.”

Live by the Standards Espoused in the Brand

For BRF, this meant ensuring that all its farmers follow stringent food safety procedures, carry liability insurance, and grow their produce using ecologically sound practices.

Ensure Credibility With Retail Buyers

Know every intimate detail about the products being sold. BRF made a conscious decision to initially limit its sales to tomatoes and green



Hmong are part of the New Immigrant Agriculture Project.

peppers. The BRF team knew every aspect of production and postharvest physiology and handling for these two products. When speaking with retail buyers, BRF could confidently answer any of its questions concerning production capacity, handling, storage, and delivery mechanisms.

Start Small; Don't Overwhelm Your Current Production Capacity

With limited cleaning facilities and cold-storage capacity, focusing on the production and processing of two products, tomatoes and green peppers, was an appropriate decision for BRF. Cleaning, grading, and packaging could all be done on-farm, and the farmers were comfortable with and capable of growing tomatoes and green peppers at a level that met the quality standards expected from retail buyers. BRF has now been able to expand its production capacity to include green beans, onions, beets, carrots, and broccoli based on building a credible reputation for quality and good communication with its buyers.

Communication, Communication, Communication

Cultivating a strong relationship with a retail buyer requires constant communication. This starts by finding out how the buyer prefers to communicate—by fax, phone, or email. Then it means communicating regularly with the retail buyer, from ensuring the buyer that product quality and handling standards are being met to updating the buyer on orders and delivery dates.



"Graduates" of BRF's New Immigrant Agriculture Project, like Juan Carlos (right) train other farmers.

The final lesson that MFA learned as a nonprofit organization was that even with the allure and market potential of having a robust and scaled-up distribution operation (as originally envisioned with Big River Foods), it began to run counter to one of the core functions of its organization: to train a new generation of immigrant farmers in sustainable agriculture methods and farm business management. Although they have not completely abandoned their distribution and marketing services, MFA and Big River Farms now have a more balanced approach; they restrict their market development

functions to that of a "relationship broker," which relieves them of the responsibility of being the main handler and logistics coordinator for their farmers. BRF's remaining accounts are used as a means to provide hands-on training on how to sell to a variety of wholesale market channels, all of which can be done without the pressure of meeting volume demands from large retail and food service buyers.

Appalachian Harvest: Nonprofit-Driven Model #4



Appalachian Sustainable Development's Appalachian Harvest is a nonprofit-driven distribution model located in Abingdon, VA, that has been selling organic produce to regional supermarket chains and specialty grocery chains in the Southeast and Mid-Atlantic regions for 10 years. This organization works with more than 50 farmers, ranging from market gardeners with less than an acre to commercial farmers with more than 200 acres, providing technical assistance, farmer mentoring, and aggregation services. Appalachian Harvest distinguishes itself from California organic produce with its local origin and short field-to-shelf time: "48 hours fresh."

Background: Changes in Tobacco Country and the Role of Social Networks in Fostering Economic Development

Developing Sustainable Economies

Appalachian Sustainable Development (ASD) was officially established as a nonprofit organization in 1995 (with the help of a grant from the Appalachian Regional Commission) to develop new economic opportunities for local farmers in the heart of southwestern Virginia—many of them small farmers needing to transition out of tobacco production or conventional logging operations. A guiding principle was to create jobs while conserving the region's natural resources. Anthony Flaccavento, former ASD executive director and co-founder, characterized this initial vision as follows:

There was a general frustration with how frequently it was either/or. It was either a factory or environmental conservation. It seemed like we had it particularly acute . . . in Appalachia. So back in the early 90s a group of us got together and we said . . . can't we create an economy that's better for people and better for the environment. That was sort of the clarion call for ASD.



Appalachian Harvest packing house and distribution center in Duffield, Virginia.

Rather than simply promote the idea of sustainable development, Flaccavento decided to start an action-oriented organization that would demonstrate the compatibility of environmental sustainability and financial viability. Flaccavento's prior involvement in community affairs and deep awareness of local economic conditions gave him the unique capacity to translate a vision of sustainable development for Southwest Virginia.

He first came to the Abingdon area in 1985 as an employee of the Richmond Catholic archdiocese and served as coordinator of the archdiocese's Office of Justice and Peace (OJP), which, among other objectives, sought to alleviate poverty through "practical" and "responsible" communal action.⁴⁹ Towards the end of his tenure at OJP in the mid-1990s, he worked with about 20 local activists, community leaders, and economic development

49 <http://www.richmonddiocese.org/ojp/>, accessed November 22, 2010.

officials in the Abingdon area to plan the development of new business enterprises that would demonstrate the economic benefits of environmentally sustainable agricultural and timber production. To show the potential for sustainable resource-based local industries, two initial demonstration projects were created in 1995: a solar-powered timber drying kiln and an organic produce cooperative with a handful of local farmers who sold to area restaurants.⁵⁰

These demonstration projects lasted for 5 years and evolved into what became ASD's primary vehicles for stimulating economic development for a decade:



Organic vegetable farm belonging to member of Appalachian Harvest Network.

Appalachian Harvest, an organic produce distribution company, started in 2000 and Sustainable Woods, an environmentally responsible wood manufacturing enterprise, started in 2001 (but recently shut down in the face of a severe downturn in business with the onset of the recession). Without the initial involvement of the church and the willingness of church employees such as Flaccavento to devote resources to starting up the enterprise, it is unlikely that ASD would have existed at all, because it was these experimental projects underwritten by the church, and their demonstration of profit-making potential, that helped generate a critical mass of support for ASD's creation.

Cultivating Support for the Farm Network

The initial participants in Appalachian Harvest's farmer supplier network were comprised primarily of young, idealistic "back-to-the land" organic growers, market gardeners, and some members of the local Amish community. However, Appalachian Harvest has managed to persuade many former tobacco farmers or people with a tobacco farming family background to take up organic farming and sell through the Appalachian Harvest network as a source of supplementary income, or, in a few cases, as an alternative form of full-time farming. Former tobacco growers currently represent about three-quarters of the 60 farmers involved in the Appalachian Harvest Network.

The socio-cultural environment in which Appalachian Harvest operates was not ideally suited for the creation of a flourishing cooperative network of organic vegetable producers in several ways. Few farmers in the area had any experience growing organic vegetables, and many of them (former tobacco farmers) were new to vegetable farming generally. Furthermore, sentiment against participating in a conventional agricultural "cooperative" ran particularly strong because of a well-known case of cooperative mismanagement and eventual failure in nearby Hiltons, VA.

Faced with this resistance, the founders of Appalachian Harvest decided to form a loosely connected marketing "network," that would enable farmers to distribute, market, and transport goods in a cooperative

“Notably, Appalachian Harvest never formally takes ownership of incoming product but merely serves as the sales and marketing agent for the members of its supplier network.

manner, but would not require them to make the financial and legal commitments necessary in a formal cooperative arrangement—nor expose them to the same level of legal liability. In Anthony Flaccavento's words:

Our thought was — can we come up with a model that gets the best of cooperatives without some of the cumbersome things of cooperatives. We looked at this network approach . . . the basic notion is that people come together to meet a market cooperatively that they cannot meet on their own . . . they don't have to otherwise embrace and endorse some kind of cooperative spirit. They're just there so long as the market needs them to be there. It's really a much more fleeting and kind of individualistic model. What we found though, what's so interesting, is that if people stick with it for more than a year they, in fact, become very cooperative. They become very brotherly and sisterly and fatherly.

Unlike most agricultural cooperatives, individual members of Appalachian Harvest are not liable for the debts incurred by the parent organization. Moreover, while they have the opportunity to sell much of their production through the cooperative's channels if desired, they are not obligated to commit all their production to the cooperative. This gives them flexibility in their marketing choices, enabling farmers to take advantage of higher prices when the opportunity arises.

Network members did not fund initial infrastructural investments nor have they been tapped to fund ongoing improvements, as would usually be the case with a cooperative. The result, though, has been that members of the Appalachian Harvest network work together in much the same way that members of an agricultural cooperative would, without the formal organizational structure of a cooperative.

Business Structure and Operations

Business Structure

Appalachian Sustainable Development is a nonprofit corporation governed by a board of directors and employs 26–30 full-time and seasonal employees. This includes an executive director that oversees strategic planning and fundraising, a sales manager that finds markets for incoming produce, a farm relations director that oversees mentoring and training for farmers in the Appalachian Harvest network, 10–14 seasonal workers that grade, clean, and pack produce in the packing house, and other program staff that oversee programs run by Appalachian Sustainable Development, including a farmers market, nontimber forest products development, and a food donation program that purchases seconds from farmers that do not meet retail store buyers' requirements and donates them to food banks in the Abingdon area.

Appalachian Harvest staff are responsible for making sales to retail and wholesale buyers, working with farmers to ensure that supply matches demand, and training farmers in areas

such as organic farming methods, quality control, and food safety practices. The farmers supplying product to Appalachian Harvest are not formally associated with one another; they form an informal association that fosters cooperation amidst considerable autonomy. Notably, Appalachian Harvest never formally takes ownership of incoming product but merely serves as the sales and marketing agent for the members of its supplier network.

Funding for Appalachian Harvest's education, training, operations, and infrastructure needs comes from trading income and from government and private philanthropic sources. ASD received several hundred thousand dollars over its first 8 years from the Virginia Tobacco Transition Fund, which was set up to assist former tobacco farmers find alternative livelihoods after the tobacco quota system, which provided secure livelihoods for tobacco farmers, was dissolved. Additional funds have been obtained from USDA and private foundations, with a total of 20 grants providing support to ASD's activities in 2010.



Appalachian Harvest helped farmers convert tobacco fields like this one into vegetable rows.



Appalachian Harvest trucks at loading dock in Duffield, Virginia.

Transportation and Packing Infrastructure

To handle the majority of its transportation needs, Appalachian Harvest owns and operates a fleet of four refrigerated trucks. Currently, it ships most of its orders via four weekly truck shipments with its own trucks to retail chain distribution centers, stand-alone stores, and brokers. To process incoming produce from farmers, grade according to size and quality, pack into boxes, and load into trucks, Appalachian Harvest uses a 15,000-square-foot packing facility in Duffield, VA. This facility was built from scratch and opened in June 2008, replacing a prior facility in Stickleyville, VA, that started out as a tobacco barn and was modified and expanded several times before

burning down in an electrical fire in May of 2007. Insurance funds and grants were used to build the new Duffield facility.

The packing house's remote location in southwest Virginia, far from metropolitan areas, makes it impractical to contract with trucking companies to pick up loads. When it has solicited bids, they have been considerably more expensive than using its own trucks. Compounding its remoteness is the small volume of produce it handles. With \$400,000–\$600,000 a year in product being shipped to Georgia in the South, Tennessee to the west, and Maryland to the east, it is difficult to fill up trucks, not making it particularly attractive to trucking companies, which want large volumes to make the best use of their trucking capacity. Running its own fleet of trucks gives

Appalachian Harvest more flexibility, but also presents a challenge in terms of making the best use of this infrastructure capacity. Many truckloads do not have a backhaul, and quite often truckloads go out less than full.

However, in the last 3 years transport efficiency has improved considerably through creation of cross-docking arrangements and hauling produce on behalf of other customers. In 2008, Leading Green, a small organic and natural foods distributor in Asheville, NC, began picking up produce in Asheville that was dropped off by an Appalachian Harvest truck and taking it to restaurants, the Atlanta distribution center for Whole Foods, and a few independent grocery stores in Georgia.

In 2010, Appalachian Harvest started buying and selling conventional produce and serving as a transporter for Produce Source Partners, a large produce broker based in Richmond, VA, that has been a customer of Appalachian Harvest's organic produce for years, servicing several regional grocery chains. Appalachian Harvest began buying, selling, and transporting conventional produce because it needed more product to fill trucks that took very small loads—one or two pallets—from Duffield to Produce Source Partners (PSP) in Richmond, then picked up small amounts of organic produce from a couple of Lexington, VA, growers on the way home. Both legs of the trip were too small to justify the expense, but Appalachian Harvest was committed to serving the Lexington growers so it worked with PSP to come up with a mutually satisfactory solution. PSP now pays Appalachian Harvest to ship conventional produce from Virginia Produce, a produce aggregator based in Hillsville, VA, along with organic produce grown by Appalachian Harvest network members, to PSP's Richmond warehouse. Appalachian Harvest also buys conventional produce from

Virginia Produce and a Southwest Virginia mid-sized farmer and sells it to Ingles and PSP. With the advent of these arrangements, about three-quarters of the trips to Richmond have backhaul. The Virginia Produce product is already graded and packed and goes straight from the receiving dock to the loading dock. The product from the Lexington Growers is mixed with other incoming product to fill orders for Appalachian Harvest-branded organic produce. Setting up these cross-docking and backhauling arrangements saves Appalachian Harvest fuel, labor, and wear on its trucks. Its partners benefit from convenient and affordable transportation services.

Quality Standards and Grading

The quality specifications for the products are decided by the buyers and, to a lesser extent, by USDA standards. A detailed set of standards for each crop is assembled and distributed to farmers to guide them in their growing, harvesting, packing, and grading to ensure they get the best return possible for their labor. Farmers in the Appalachian Harvest network are given financial incentives to pre-grade their produce on their farms. Farmers who do not pre-grade their produce are charged an 8-percent grading fee to cover labor and equipment costs incurred by Appalachian Harvest on top of the 27-percent commission for packing, sales, and transportation services. Desirable fruit is separated from undesirable produce at the organization's packing, grading, and shipping facility. In the past, more than 65 percent of incoming produce was pre-graded, but this has declined to only 15–20 percent because of stringent food safety protocols. The protocols, which include steps such as testing bleach levels in wash water, deter farmers from pre-grading. Notably, the biggest grower in the network grows tomatoes,

and all of his produce comes in pre-graded; this grower's product accounts for most of Appalachian Harvest's pre-graded supply.

Finding Markets for Off-Grade Product

To create economic value for seconds—produce that does not meet retail quality standards—Appalachian Harvest has developed a couple of alternative market channels. It encourages farmers in its supplier network to sell at farmers markets to get good prices for produce that does not meet supermarket requirements for size or appearance but is acceptable to farmers market customers. Some off-grade produce is also sold to grocery chains and food manufacturers for use in

prepared food and value-added products like tomato-based salsa. Additionally, ASD uses donations from community members to buy seconds from its farmers and donate them to food pantries in the Abingdon area through its Healthy Families, Family Farms program.

Cash Flow, Financing, and Profitability

Appalachian Harvest has been successful in acquiring large chains as buyers and has rapidly increased the number of supplying farmers. Many existing farmers have increased its acreage devoted to organic production, creating more supply for Appalachian Harvest. However, costs have persistently exceeded revenue.



Before assembling shipments, packing house workers grade produce brought in by farmers to make sure it meets buyers standards.

A concerted effort is made to avoid having a disproportionate share of the most profitable crops being grown by a small number of farmers so that the profitability of the enterprise is shared by as wide a group as possible.

Of Appalachian Harvest's \$600,000 in revenue from selling produce and eggs in 2010, it kept approximately \$200,000 through its commissions charged to farmers for marketing their produce and delivery charges paid by buyers. Total costs for the Appalachian Harvest operation are more than \$600,000. Much of this gap between trading revenue and costs is due to Appalachian Harvest's extensive outreach, education, and technical assistance work that would not normally be part of a food distributor's portfolio. However, even the food-distribution side of the organization required subsidies greater than \$90,000 in 2009 if the portion of ASD staff salaries attributable to running Appalachian Harvest is not counted.

Funding from private foundations, government sources, and the Virginia Tobacco Commission fills in the gaps. Accessing such funding on an ongoing basis is difficult; funders, especially private foundations, like to fund new and innovative projects that will eventually become self-supporting, rather than continuing to fund operational costs for the same project.

Producer Relationships

Production Planning/ Planting for the Market

Central to the network's collaborative spirit is the pre-production planning and crop selection process that takes place in the winter. Sales and marketing staff for Appalachian

Harvest meet with potential customers during the offseason to gauge demand and to estimate acres of production required for each of 20 or so different crops. This off-season demand measurement establishes a baseline figure for the minimum quantity that buyers expect to buy during the upcoming growing season. These provisional agreements are not contracts, so there is significant room to adjust quantities of product for sale depending on how things go during the growing season, but they form the basis for the development of crop planning for the next year's growing season.

From these "handshake" agreements with buyers, a spreadsheet (see table 2) that estimates demand for each of the crops based on what buyers said they would purchase each week is created. Estimates of weekly demand are translated into annual gross production figures. Using data on local organic produce yields, these annual crop totals are then translated into acres of production for each crop. At winter crop-planning meetings, Appalachian Harvest staff discuss the upcoming season with farmers and talk about who the buyers will be and estimated demand. In the past, the entire projected demand for the upcoming season would be parceled out among the network's growers at these meetings, with an eye toward matching supply and demand and minimizing shortfalls and surpluses. Now, this parceling out process occurs through one-to-one meetings between the farmer relations manager and each farmer in order to facilitate more candid discussions about what is feasible given each farmer's capacities. A few larger farmers supply the majority of

Appalachian Harvest's produce; these farmers also sell significant portions of their crops to other markets, both wholesale and direct. The majority of the network's farmers are quite small and sell almost their entire production through Appalachian Harvest.

The parceling-out process considers two factors that bear on the group's ability to meet customer demand while maintaining togetherness and goodwill among group members. First, crops considered more difficult to grow organically in the region, such as tomatoes, are generally assigned to more experienced growers, while newer growers are asked to focus initially on easier crops such as peppers or squash and then gradually transition to more difficult crops as they gain experience (see table 3). Second, a concerted effort is made to avoid having a disproportionate share of the most profitable crops being grown by a small number of farmers so that the profitability of the enterprise is shared by as wide a group as possible.

No contracts are made with either the customers or the farmers regarding promised levels of sales or production, and this informal planning system has largely met the needs of the producer network and its chain store buyers. However, sometimes individual growers unilaterally decide to plant more acreage for a particular crop, based on its sense of the market or weather conditions. In one case, a farmer decided it looked like a good year to plant eggplants, and he planted several more acres than he agreed to plant during the pre-season crop-planning bidding process. Consequently, at harvest time there was a surplus of eggplants, and the

Table 2: Appalachian Harvest Demand Chart, 2011

Organic Crops	Standard Packaging	Harvest	Lancaster	Whole Foods Market Mid-Atlantic	Whole Foods Market Southeast	Martin/Produce Source Partners	Ingles	Horton Fruit	Earth Fare	Custom Pak 2010	Alberts 2010	Est. Weekly Totals
Green Cabbage	50# boxes	Late spring & fall	30	0	30	30	40	0	20	0	50	200
Red Cabbage	50# boxes	Late spring & fall	20	0	10	0	20	0	0	0	25	75
Green Leaf Lettuce	24 count	Late spring & fall	0	0	40	0	20	0	30	0	25	115
Red Leaf Lettuce	24 count	Late spring & fall	0	0	60	0	20	0	10	0	25	115
Romaine Lettuce	24 count	Late spring & fall	0	0	40	0	20	0	40	0	25	125
Slicing Cucumbers	1/2 bu. box - 18, 24 or 32	mid-June - Sept.	100	50	30	20	50	0	0	0	40	290
Squash, Green Zucchini	20# box	mid-June - Sept.	60	30	40	40	120	60	10	0	40	400
Squash, Golden Zucchini	20# box	mid-June - Sept.	0	20	20	0	20	0	20	0	0	80
Red Grape Tomatoes	12 count flats	July, Aug., Sept.		100	0	0	80	150	0	0	25	355
Red Slicer Tomatoes	20# - double layer boxes	July, Aug., Sept.	64	25	50	TBD	100	100	0	0	100	439
Carolina Gold Tomatoes	20# - double layer boxes	July, Aug., Sept.	0	30	10	20	20	0	0	0	0	80
Heirloom Tomatoes/variety	10# boxes - single layer	July, Aug., Sept.	0	30	30	20	50	0	0	0	12	142
Roma Tomatoes	20# boxes	July, Aug., Sept.	64	0	50	0	30	64	30	0	0	238
Carmen Red, Italian Pep.	10# box	July, Aug., Sept.	0	20	5	28	20	0	20	0	0	93
Green Bell Peppers	1 1/9 bushel boxes/25#	late June - Oct.	80	20	20	40	0	60	0	0	40	260
Red Bell Peppers	11# box/23-26 ct.	July, Aug., Sept.	0	0	50	0	20	0	25	0	5	100
Yellow Bell Peppers	11# box/23-26 ct.	July, Aug., Sept.	0	0	30	0	20	0	15	0	5	70
Banana Peppers	10# box	July, Aug., Sept.	0	0	0	0	15	0	5	0	0	20
Eggplant	25# box	late June - Oct.	50	30	30	30	0	0	0	0	8	148
Seedless Watermelons	6 or 9 count box or bins	mid-August	32	30	30	30	20	0	0	0	0	142
Standard Watermelons	3,4 & 5 count boxes	mid-August	32	0	30	30	10	0	0	0	0	102
Cantaloupes	9 count	mid-August	50	0	30	0	0	0	0	0	0	80
Butternut Squash	1 1/9 bushel boxes	Sept., Oct., Nov.	50	50	20	28	15	0	20	0	15	198
Acorn Squash	1 1/9 bushel boxes	Sept., Oct., Nov.	50	50	10	28	15	0	20	0	15	188
Delicata Squash	1/2 bushel box	Sept., Oct., Nov.	10	20	5	20	0	0	20	0	10	85
Broccoli	14 count bunches (20#)	Oct., Nov., Dec.	48	50	0	28	100	0	0	0	50	276
Jalapeno Peppers	10# box or clamshells	late June - Oct.	0	15	5	20	50	0	0	0	0	90
Yellow Straight Neck Squash	20# box	late June - Sept.	40	30	40	40	120	60	0	0	40	370
Blue Lake Green Beans	1 1/9 bushel boxes/25#	June - Sept.	0	0	10	0	25	0	0	0	50	85
1/2 Runner Green Beans	1 1/9 bu. Boxes	June - Sept.				150	20				0	150
Greasy Beans	1 1/9 bu. Boxes	June - Sept.				20	20				0	20
Yellow Wax Beans	10# box	June - Sept.	0	20	0	20	20	0	0	0	2	42
Pie Pumpkins (2 - 3.5#)	30-35# box	Sept 15th - Nov.	0	maybe	TBD	0	TBD	0	0	0	0	0
Spaghetti Squash	20# box	July, Aug., Sept.	24	35	10	20	0	0	0	0	10	99
TOTALS			804	555	835	472	1210	494	285	0	764	9288

Table 3: Appalachian Harvest Crop Guide, 2011

Crops	Risk Factor	Financial Value	Amount of Crop Care	Good for Beginner	Seed (S) or Transplant (TP)	Days to Harvest	Harvest Frequency	Harvest Duration	Irrigation?
Tomatoes	high	high	high	no	TP	75 - 80	3-4x / wk	5-7 weeks	yes
Zucchini	medium	high	low	maybe	S or TP	48 - 50	daily	4-5 weeks	yes
Winter Squash	low	medium	low	yes	S	90 - 100	1 big pick	1-2 weeks	no
Peas	low	medium	medium	maybe	S	70	daily	4-5 weeks	no
Peppers	medium	high	medium	yes	TP	62	2x / week	5-7 weeks	yes
Cucumbers	medium	high	low	maybe	S	52	daily	4-5 weeks	yes
Eggplant	high	high	medium	no	TP	70	2x / week	5-7 weeks	yes
Melons	medium	high	medium	maybe	S or TP	80	2x / week	2 weeks	yes
Cabbage	medium	medium	low	yes	TP	85	2x / week	3 weeks	no
Lettuce	medium	medium	low	maybe	TP	55	2x / week	2-3 weeks	yes
Collards / Kale	medium	medium	low	maybe	TP or S	60	2x / week	4-5 weeks	no

* Start up costs assume purchased transplants @ \$0.35 each (except seeded crops and melons and zucchini)

sales staff of Appalachian Harvest had to unload large amounts of eggplant at low "fire sale" prices as Appalachian Harvest's market position dramatically shifted towards that of price taker.

Farmers who break the rules on crop selection get negative feedback from Appalachian Harvest staff regarding how such behavior not only hurts the overall operation, but ultimately is

not good for that particular grower as it depresses the price they receive for their produce. However, perhaps due to the fragile condition of its supplying farmers, its self-perceived role as patron and protector of its farmers, and the need to remain in their good graces to satisfy future orders, Appalachian Harvest has not taken a harsher position of refusing

outright incoming orders that fall out of the crop-planning and selection process undertaken in the off-season. In some cases, however, it has had to sell surplus organic produce on the conventional market so as to not negatively impact other producers in the network; the conventional market is much larger and can easily absorb the surplus.

Pricing and Marketing

Price Negotiation and Pricing for Stability

Appalachian Harvest tries to minimize price fluctuations during the growing season, even if it means accepting slightly lower prices than the market will bear when supply is short and prices are high. It provides a price floor when supplies are more ample and prices are low, while also sending a signal to buyers that they will not be gouged when supplies are short. Moving beyond spot pricing towards season-long pricing helps farmers plan ahead, estimate what their income will be relative to their expenses, and avoid making rash decisions out of fear of the unknown.

On the other side of the coin, Appalachian Harvest's retail buyers are willing to participate in these arrangements because they receive a price break when supplies are tight, earning Appalachian Harvest a great deal of goodwill with its customers. This effort to move beyond the vagaries of the market and work to optimize "partnership" qualities among buyers and sellers is indicative of the overall philosophy of cooperation governing Appalachian Harvest's operations. ASD wants to develop strategic partnerships such that stakeholders work together to advance their mutual interests, rather than constantly jockeying for position against each other.

Marketing to Buyers

Appalachian Harvest markets the produce grown by its network members as locally grown and organic to three wholesalers, four retail grocery customers, and a handful of independent grocery stores and restaurants in the Mid-Atlantic and Southeast regions of the United States. For the most part, Appalachian Harvest is the only locally grown certified organic option available to retail and

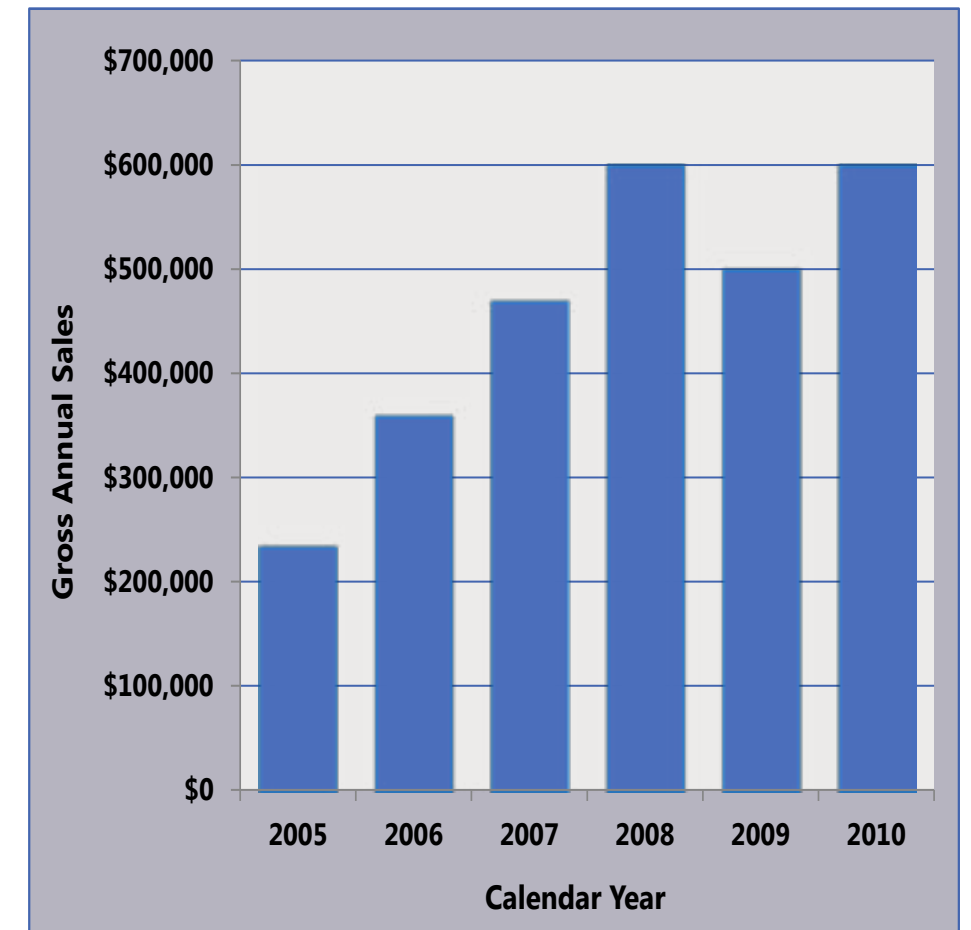
wholesale produce buyers in this area. Consequently, the organization has been able to use the uniqueness of its product line to its advantage in gaining access to local retail markets and negotiating reasonable prices for its growers.

All of the produce marketed by Appalachian Harvest is certified organic under a group certification done by Quality Certification Services, an organic certifier headquartered in Florida with a regional office in Virginia. The Appalachian Harvest network sells its eggs under a "free range" rather than organic label. Organic feed is very hard to find in the region and is prohibitively expensive, making it next to impossible to raise organic laying hens in the volume needed to supply buyers at a price they are willing to pay.

The number of farmers who sold products through Appalachian Harvest increased from around 35 in 2006 to 60 in 2007 and 2008. In 2009, 65 growers were signed up in the preseason crop selection period, but only 45 actually ended up selling product during that difficult year because heavy rain led many farmers to plant their crops late or avoid planting altogether. Egg production is more consistent because it is less vulnerable to weather fluctuations; as a result, the number of egg producers has held relatively steady the last 3 years at around seven.

In dollar terms, the network's annual sales of produce and eggs peaked at around \$600,000 in 2008, up from \$500,000 in 2007, \$320,000 in 2006, and were double the sales generated in 2005. Although the network's produce sales were initially expected to be stable in 2009,

Figure 5: Value of Appalachian Harvest Sales for 2005-2010



unfavorable weather and a decline in the number of farmer participants caused sales to drop sharply to around \$500,000 for the year.⁵¹ Sales have since climbed back up to \$600,000 largely on the strength of the network's new business buying and selling conventional produce and being paid to ship produce by Produce Source Partners.

The biggest challenge to increasing sales is the shortage of supply. Projected demand drives the crop-selection process, but in 2010, it was estimated that demand exceeded available supply by a factor of at least three. If Appalachian Harvest could recruit more growers—particularly some bigger ones—to transition to organic and sell through the network, or get existing growers to increase their production, sales volume sold could increase dramatically. The slowness of this increase demonstrates the challenges of convincing people to grow organic produce in a region where it is not common practice. Cultural factors may inhibit organic adoption, while distance to markets and high humidity, which fosters pests and diseases, also poses challenges.

One might imagine the supply shortage would give Appalachian Harvest greater bargaining power with its buyers, but the evidence does not support this. Appalachian Harvest is too small a player in the organic market to have much leverage with buyers. It has local or regional sourcing in its favor, as well as its promise of "48 hours fresh," meaning that, most of the time, produce will be on retail shelves within 48 hours of harvest. However, it is often not able to take full advantage of the strong demand manifest in the preseason projections made by buyers. Even these projections may be somewhat deceptive; buyers may not be willing to pay prices high enough to induce more producers to go organic or to have existing organic producers expand production.



Appalachian Harvest logo.

Appalachian Harvest ships its products to buyers within a 400-mile radius of its packing and grading facility in Duffield, VA. Its principal buyers are regional supermarket chains with stores throughout wide stretches of the Southeast and Mid-Atlantic regions: Earth Fare; Lancaster Foods; Ingles; and Whole Foods Market's distribution centers in Atlanta, GA, and Landover, MD, (near Washington, D.C.) After experimenting with various marketing strategies, the network decided it makes more sense to focus on selling merchandise to midsized regional supermarket chains with substantial buying power and the specialty natural-foods chain Whole Foods Market, which has very high organic sales and also emphasizes regional sourcing.

Experience has shown that regional chains will move more product than local restaurants or independent grocery stores, and they place more emphasis on showcasing locally and regionally grown produce than their national peers. With these chains especially committed to local and regional sourcing, their buyers are more likely to be understanding with Appalachian Harvest's difficulties in sourcing produce from a disparate group of very small organic farmers. Appalachian Harvest has built strong ties based on shared values of promoting regional agriculture and supporting farmers and rural communities through trade with some regional chains.

Challenges and Solutions

Insufficient Supply

One of the biggest ongoing challenges for Appalachian Harvest is finding enough organic farmers near its Duffield, VA, grading facility. This supply shortage makes it difficult to attract new customers and retain existing customers. The lack of adequate supply results from:

- Cultural factors, including suspicion on the part of conservative farmers about organic farming.
- Environmental factors, such as highly variable weather and a humid environment that results in severe pest and disease problems, which are difficult to control with organically approved methods.
- The small size of most of its supplying farmers.

Appalachian Harvest has been successful in overcoming some of the cultural suspicions of organic farming; 60 farmers have joined its network, most of whom had never grown vegetables, let alone organic vegetables. Through education about organic growing methods, general farmer training and mentoring, and

developing complementary markets such as farmers markets, ASD has been able to develop a sizable network of organic produce farmers despite these cultural barriers.

The environmental barriers to organic production in the region have proven harder to overcome. Because the organization purchases all of its supplies from a fairly small geographic area, Appalachian Harvest is not able to diversify its exposure to risks associated with weather. This leads to difficulties in meeting demand in years like 2009, when heavy rains were highly unfavorable for horticultural production in southwestern Virginia and eastern Tennessee. At times like these, major organic distributors are able to move in and fill the gap in supply fairly easily. They are able to draw on a large inventory of producers spread throughout diverse growing areas, which reduces the risk that they will experience production shortfalls. More importantly, about half of all produce grown in the United States, organic and conventional, originates from semi-arid and arid growing areas in California that rely on irrigation rather than rainfall for moisture.⁵² These areas are less likely to have their planting window delayed due to rain and are less vulnerable to pest and disease infestations that plague farmers in more humid regions and are difficult to address with organic farming methods.

Appalachian Harvest offers technical assistance to farmers and is extending its supply network farther east to help relieve supply shortages, but more needs to be done to meet customer demand, bring revenue more in line with costs, and create a sustainable business model. Operations manager Kathlyn Terry estimated that the current facility, with some minor reconfigurations of the coolers, could handle 10 times as much business

as it does today. With three farmers accounting for more than 80 percent of Appalachian Harvest's supply, it is imperative to find more midsized farmers who can supply substantial volumes of produce.⁵³

Related to the challenge of limited supply is the high cost of organic production. Organic pest-control methods can be more expensive and less reliable than conventional pest control. John Brittan, Appalachian Harvest's farmer outreach coordinator, works hard to educate farmers on the cost of inputs—such as transplants, water, and labor—and how to plan appropriately so as to cover costs. As new farmers gain experience with organic methods, they become more

adept at dealing with pest problems and anticipating costs, but education and experience may not be enough to put the enterprise in the black. To be profitable, farmers may need higher prices than they currently receive.

Building a Cost-Effective Distribution System

Maintaining a cost-effective distribution system has been a challenge for Appalachian Harvest since its start. It is too far from highly trafficked routes and its volume is too small to get competitive prices from trucking companies, forcing it to rely on its own small fleet of trucks. Because Appalachian Harvest often



Forklift loading pallet of produce boxes in Appalachian Harvest packing house and distribution center in Duffield, Virginia.

⁵² According to the 2007 Census of Agriculture, California growers sold \$656 million worth of organic agricultural commodities. In comparison, Virginia growers only sold \$14.6 million worth of organic agricultural commodities. <http://www.agcensus.usda.gov/>, accessed November 4, 2009.

⁵³ Personal communication, Robin Robbins, August 2009.

sends out partially full trucks on its distribution routes, its transportation costs are higher per unit shipped than other distributors that are located in more central locations or have greater volume. Robin Robbins, sales manager for Appalachian Harvest, estimates that twice as much produce could be shipped without adding any new routes by filling the trucks to capacity. Compounding the problem of partially full loads is the lack of backhaul on almost all of its trips south.

Appalachian Harvest staff have continually sought to improve transport efficiency by partnering with other distributors through cross-docking arrangements or by picking up produce from farmers along the return leg of delivery routes. In 2010, significant progress was made in reducing empty backhauls. Years of hard work building relationships with buyers such as PSP and suppliers such as Virginia Produce finally gelled, producing more than \$140,000 in additional sales, most of it from conventional produce.

New Directions

With increasing publicity given to food scares and recalls, grocery chains are looking for greater assurance that the food they are buying is safe, or at least assurance that it is grown, handled, and processed using practices designed to minimize the chance of contaminating fruits and vegetables with pathogens. In response to such concerns, Appalachian Harvest has developed its Mirror GAP program. GAP, or Good Agricultural Practices, consists of a set of farm-based food safety practices. Farmers can pay the USDA to verify their compliance. Many large

grocery chains require producers to be GAP certified, but often the steps required to be GAP compliant are difficult and expensive for small farmers to follow. The Mirror GAP program adapts principles from the Federal GAP program to Appalachian Harvest's smaller producers. As part of Mirror GAP, farmers must complete a farm safety training program and develop a food safety plan for their farm if they are to sell to Appalachian Harvest.⁵⁴ Appalachian Harvest trains farmers on how to comply with the Mirror GAP program, covering issues such as sanitation, testing of irrigation water, and organic compliance.⁵⁵

Lessons Learned

Have Sufficient Capitalization

It is critical to have sufficient capitalization from the start to enable one's business to operate and grow. Sometimes used equipment can handle the task at hand with substantial savings, but it may be more prudent in the long run to spend more initially on better equipment that will do the job well and not break down.

Anticipate Market Trends

ASD was strategic in entering the regional and organic produce markets. It found a market niche with wholesale buyers who were looking for product with these unique attributes. Furthermore, ASD's anticipation of food safety compliance as a wholesale demand indicates the organization's ability to anticipate its buyers' needs and prepare accordingly.

It's All About Logistics

Transportation is always a problem for small distributors, and Appalachian Harvest's remote location makes it even more of a problem. The lack of backhaul and half-empty trucks on many routes leads to high operational costs. Creating more cross-docking and backhaul arrangements would lower per unit transportation costs and increase overall revenue.

Successes

Market to Large Buyers

Of all the distribution entities examined in this report, Appalachian Harvest has by far the widest reach in terms of where its products go because of its focus on supermarket chains as opposed to co-ops, natural foods stores, or direct market channels. This demonstrates two points: (1) small farmers, through orderly product aggregation, can access mainstream market channels that would not otherwise purchase product from them, and (2) selling to chains may be the fastest route to business growth for a group of niche producers that otherwise has very few sales outlets close to its production area. It remains to be seen whether Appalachian Harvest's model is replicable or sustainable given its high level of grant funding.

Appalachian Harvest has a continual challenge of meeting its costs in a competitive organic produce market. Its per-unit handling costs should decline as volume increases, especially as progress is made in streamlining transportation, reducing the volume of ungraded produce, and improving operational efficiencies in the grading

facility. Better enforcement of crop allowances assigned in the preseason planning to reflect anticipated demand should stabilize prices as there will be fewer instances of product coming in without a buyer.

Keep Prices Stable

The process by which Appalachian Harvest negotiates relatively stable prices with its buyers evens out the variation across periods of tight and slack demand and has the potential to create strong, enduring partnerships that benefit all concerned. If successful, such a relationship embodies how value chains can induce greater cooperation between buyers and sellers with the promise of increased gains for all the partners in the chain.

Maintain Outreach and Education Functions

The outreach and education components of Appalachian Harvest are extremely valuable in terms of enhancing grower capacity generally, and specifically with regards to organic farming. However, paying for such activities poses a continuing challenge.

Create Synergy Between Education and Distribution Functions

Another exceptional aspect to Appalachian Harvest is its organizational structure. As a nonprofit organization, it has been able to raise outside funds

from private and public sources. This allows it to go beyond the basic production, distribution, and marketing functions to public education and outreach activities, leading to a more prominent public profile. The education and distribution sides of the organization feed on each other, simultaneously increasing awareness of organic agriculture and generating business opportunities through organic agriculture.



Putting up a hoop house at a workshop for Appalachian Harvest farmers.

54 <http://www.iatp.org/iatp/publications.cfm?refid=106746>, accessed March 17, 2010.

55 Personal communication, Robin Robbins 2009.

Conclusion:



Lessons Learned From Case Studies

The case studies have looked at how a diverse range of food value chain distributors have built connections between producers and buyers, faced challenges, and seized opportunities. This chapter looks at four cross-cutting themes that provide some key lessons for value chain practitioners:

- The level of investment in infrastructure should match the organization's stage of development and marketing capacities.
- Value chain managers must ensure identity preservation from farm to market as a way to establish marketing claims and establish negotiating position with buyers.
- Distribution entities utilizing informal producer networks are well suited to meet the constantly shifting demands of diversified, niche food markets.
- Nonprofits and cooperatives can play key roles in food value chain development, but should recognize their organizational competencies and play to their strengths.

Infrastructure

Having an appropriate level of infrastructural investment, commensurate with organizational capacities and business needs, is critical to the financial sustainability of food value chains.

The level of infrastructural investment by the primary value chain manager changes both across models and within models over time. How much and when a particular distribution entity invests in infrastructure can have a critical impact on the success and even survival of the enterprise. Distribution entities need to think carefully about how much capital investment they should make, particularly in terms of storage and transportation infrastructure. The appropriate level of investment is influenced by many factors pertaining to the organization and its relationship to its operating environment.

As a retail-driven distribution model, for example, La Montanita's Foodshed Initiative benefits tremendously from maintaining its own transportation and storage infrastructure, which allows it to better serve its stores with a diverse mix of products in a timely and cost-effective manner. Furthermore, it would be very difficult for La Montanita to carry out the Foodshed Initiative without having its own warehouse and trucks to store product, pick up product from farmers, and deliver product to its own stores as well as other customers. To provide all these services on a contract basis would be infinitely more complicated, as its routes include pickups from farmers, deliveries to the Co-op's four stores and other customers, and dropping off product at the warehouse for later distribution. In essence, the Foodshed Initiative would not be feasible if La Montanita, as the manager of the value chain, did not have direct control over its distribution infrastructure.

Another benefit for La Montanita investing in wheels and mortar is the significant increase in storefront sales since the start of the Foodshed Initiative. This can largely be

attributed to the greater local food offerings in the stores made possible by La Montanita's Cooperative Distribution Center (CDC). These increases in storefront sales more than compensate for the losses incurred by the CDC, or to put it another way, co-op investments in the CDC have produced excellent returns for the stores.

However, actually owning warehouse space or trucks is less critical than having control over dedicated trucks and warehouse space. La Montanita decided to lease both trucks and a warehouse to reduce upfront capital outlays; in the case of the trucks, leasing guarantees that a working vehicle will always be available because the truck leasing company provides a same-day replacement vehicle if a truck breaks down.

Likewise, Co-op Partners Warehouse (CPW), essentially a much bigger version of La Montanita, benefits greatly from controlling its own transportation and storage infrastructure. Its 45,000 square foot warehouse has enabled CPW to expand its business substantially—to its current level of \$16.8 million—while still leaving room for growth without having to move. What began as an effort to secure better produce for the Wedge from regional producers and give it a competitive edge has turned into a medium-sized regional organic produce distributor, with only 23 percent of its sales accounted for by the Wedge in 2010, down from 80 percent in 2003. Prior to leasing its own warehouse in 1999, CPW's predecessor organization relied on other distributors to store and transport product from local farmers to the Wedge. This arrangement did not provide enough flexibility, and the Wedge signed a long-term lease and established CPW, which has now grown into a sizable regional organic produce distributor for the Upper Midwest.

Beyond just facilitating overall business expansion, having its own warehouse space has allowed CPW to operate multiple, complementary market channels. These include its primary wholesale distribution business to cooperatives, stores, restaurants, and buying clubs, and its drop-ship program, in which farmers and small food processors drop off product at the warehouse for CPW to ship to their customers. CPW charges \$20 per delivery to transport these orders; the producers invoice the customers. Additionally, CPW subleases freezer space to two chicken farmers. The chicken farmers handle all the orders and transportation, and CPW only provides a storage function.

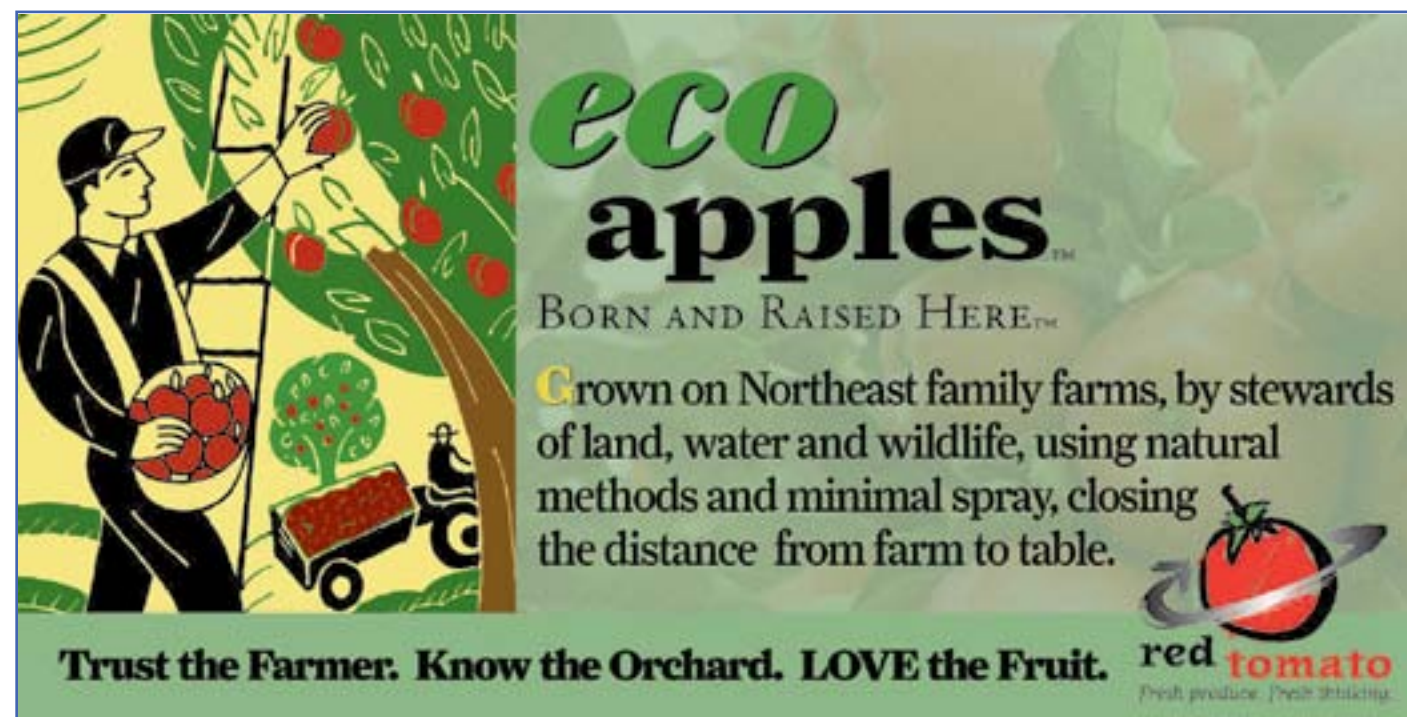
Complementing its warehouse space, owning or leasing a fleet of eight trucks allows CPW to efficiently serve its 200 customers spread throughout the Upper Midwest. The organization generates enough sales volume to pay for the fixed costs of maintaining this infrastructure. However, for a few distant customers that do not buy in large volumes and are not close to other CPW customers, it uses three contract trucking companies

with broader service coverage to accommodate small orders. Rather than dedicating one of its own trucks to inefficiently ship a couple of pallets of product to stores in Northern Minnesota or South Dakota, CPW calls up Edina Couriers, a medium-sized regional trucking firm serving small communities throughout the Upper Midwest, and arrange for the firm to take the order. The fee is minimal because Edina already has trucks servicing the area and can accommodate the extra cargo. Careful consideration of when to use dedicated infrastructure versus contracting out is critical to successfully running a food distribution business; where margins are tight, miscalculations on such issues as delivery routes can easily drive an organization into the red.

Unlike these two retail-driven models, Red Tomato, as a nonprofit-driven model, has evolved toward a very lean brokering organization with no trucks or warehouse space of its own. It reached this position after operating an infrastructure-laden produce distribution business in the Northeast, replete with trucks and a warehouse, and learning after 3 years that it

made much more sense to manage the supply chain rather than operate it. Given the abundant trucking and cold storage capacity available on its suppliers' farms and near its office outside of Boston, Red Tomato's management team ultimately decided that it did not make sense to invest directly in wheels and mortar. As an honest broker, developing profitable market channels for midsized growers through creative marketing and development of advanced IPM standards with third-party certification for apple growers, Red Tomato did not need to directly own or operate the infrastructure to perform its mission. It added value through its marketing and branding efforts, and did not have the operational scale to justify running the distribution part of the chain.

In contrast, Appalachian Harvest, another nonprofit model, has found it necessary to maintain a fleet of tractor-trailers and a warehouse because of its remote location in southwest Virginia. Being far from metropolitan centers makes it expensive to arrange regular pickups from trucking companies to haul its produce to customers. Furthermore,



Eco Apple marketing materials tell buyers where, how, and by whom Eco Apples are grown.

its farmers are not equipped to aggregate and ship product on their own to the widely dispersed customer base because of their small volume and the distance to most of their market outlets.

These locational factors have led Appalachian Harvest to invest heavily in infrastructure to carry out its mission of creating market opportunities for former tobacco growers through organic production training and marketing, melding environmental protection with economic development. However, it is not yet clear how financially sustainable its business model is. Appalachian Harvest benefited from tobacco transition money to start its operations but has yet to find a clear path to running a financially self-sustaining food distribution operation from its remote location. It still relies heavily on outside funding to maintain its existing operation. One of the major challenges it faces is the lack of backhaul on many of its distribution routes. Significant progress has been made in the last year in addressing this problem by hauling conventional produce for produce brokers and wholesalers in Virginia on the return leg of deliveries to Richmond, as well as creating cross-docking arrangements with a



Mixed fruit branded with the Buy Fresh, Buy Local logo.

North Carolina distributor to shorten its truck routes and hence the length of empty backhauls. However, it needs to do a great deal more to reduce its transportation costs in order to reduce the group's reliance on external funding to support trading operations.

In contrast to these two nonprofit models, Growers Collaborative (GC) represents a third path for nonprofit distributors. Community Alliance of Family Farmers (CAFF) established Growers Collaborative as a full-service distributor for small farmers in Northern and Southern California, selling fruits and vegetables to schools, colleges, and hospitals. Growers Collaborative demonstrated the feasibility of marketing source-identified, family farm produce to large institutional buyers, but was unable to secure the high volume orders necessary to maintain the costs of running an aggregation and distribution operation. CAFF has now removed itself from the aggregation, distribution, and sales components of the value chain, licensing small distributors to run independent "dba (doing business as) Growers Collaborative" food aggregation hubs in different regions of California. Each GC food aggregation hub markets its produce to mainline distributors such as SYSCO or ARAMARK for sale as Buy Fresh, Buy Local produce to institutions in their service areas. Under this nonprofit-driven model, CAFF provides support services to farmers and does soft marketing with buyers to build demand for Growers Collaborative product (e.g., table tents distributed at hospitals promoting the benefits of local food), but no longer moves or sells produce. This transition is still underway as new GC hubs are being formed, but other nonprofit distributors located in areas with dense populations and abundant food distribution resources would be well served to observe and learn from this shift from operating the value chain to facilitating it.

Combining some elements from the retail-driven models and nonprofit models, the consumer-driven model⁵⁶ exemplified by the Oklahoma Food Cooperative has shifted from having no infrastructure (renting a building 1 day a month and trailers for delivery day) to buying trailers and establishing a long-term lease on a 12,000-square-foot warehouse. From its start, OFC established a very conservative business model. Rather than consistently writing and getting large grants to subsidize continuing operations, the Oklahoma Food Cooperative has largely operated within its means from the start, only seeking outside funding as it grew substantially and could benefit from owning more infrastructure. Shifting to a permanent warehouse and purchased trailers has been very helpful in reducing logistical hassles and improving the flow of operations, thus facilitating more growth. However, the move was not absolutely necessary; if the funds were not available the co-op would have still carried on successfully, just at a lower level of activity.

Whether it makes sense for value chain managers to invest heavily in infrastructure depends on the scale of their operations, proximity to customers and availability of existing distribution assets, their overall financial capacity, and their ability to capture value added throughout the supply chain. The four nonprofit distribution models we examined have tended to overinvest in infrastructure because they were able to solicit grants and donations and because of their tendency to focus on needs in the community rather than assets that can be mobilized. On the other hand, the four cooperative distribution models we examined were much more conservative: they only invested in infrastructure in tandem with business growth and needs.

Identity Preservation

Value chain managers must ensure identity preservation from farm to market as a way to establish marketing claims and establish negotiating position with buyers.

Food value chains require some type of product differentiation—product origin, unique varieties, or special production practices such as organic or Integrated Pest Management. To ensure the integrity of product differentiation, food value chains must have a robust identity preservation system. Identity preservation refers to the segregation of a particular lot of a particular crop or processed food item from an individual farm or group of farms to the consumer. Preserving the identity of farm products through the distribution process has been critical to driving buyer and consumer demand and allowing the more successful food value chains to flourish. The different food value chain models examined in this report use varying degrees of identity preservation to differentiate their products, which are largely dependent on their level of interaction with farmers, retailers, and individual consumers.

In the consumer-driven model we studied, the Oklahoma Food Cooperative (OFC), identity preservation is maintained at a very high level, as consumers are able to buy products with the farmer's name on the label, read about the farm and the farmer—and even the farm animals—on the farmer's website, and perhaps even meet the farmer at delivery day. The high degree of identity preservation attached to individual farmers is a very effective tool for binding

farmers and consumers together economically and socially as both groups work together to operate the co-op and advance its mission of a more just, environmentally sustainable, and financially viable regional food system.

Red Tomato, a nonprofit-driven model, also maintains a high level of identity preservation; its Eco Apple brand of apples is packaged in personalized bags, with each bag containing apples from a farm that is prominently mentioned and described on the package. Other product packaging used by Red Tomato also identifies the supplying farmer through a sticker, stamp, or twist tie, though the packaging design is less elaborate because the lower sales volumes make it cost-prohibitive to create customized packages for these products.

In the case of the retail-driven distribution models, lower levels of identity preservation are sufficient because there is a high level of preexisting trust manifest in the value chain. La Montanita uses in-store signage and product labeling to designate regionally grown products supplied by the Foodshed Initiative, and uses its newsletter and other media to profile the farms and producers in its Foodshed network. La Montanita also carries out periodic farm visits to ensure that Foodshed Initiative products are produced using sustainable farming practices. There is little need for a third party to verify locally grown product attributes since the co-op, as an institution, carries forward a high level of legitimacy to its member-consumers. When consumers see a particular "Foodshed Initiative" labeled product, they can be assured that the stated values of the Foodshed Initiative—agricultural sustainability, promoting healthful food, supporting local economies, and enhancing small farm viability—are being upheld.

Co-op Partners Warehouse, on the other hand, does not attach its own brand to products it distributes. Some of its local products feature in-store displays with the farmer's name, and it sells a considerable amount of produce with a label identifying the grower-shipper that sold it to Co-op Partners, (e.g., Cal Organics or Taylor Farms). With Co-op Partners, identity preservation is largely a function of its being an organic produce distributor. The system of standards and third-party certification governing organic produce requires a very high degree of segregation of organic produce from non-organic produce throughout the supply chain. Trust in the USDA organic label exists apart from Co-op Partners, and thus mitigates the need for a distinct Co-op Partners brand.

Similarly, a producer-driven distribution model may not need high levels of identity preservation because the company is closely associated with the producers. The producer-driven model we examined, New North Florida Cooperative (NNFC), makes no explicit reference to the specific farmers in its cooperative. Rather, it educates buyers—school food service directors—about product quality, how it represents a healthy part of the school menu, and how small farmers supply the product. The



An example of identity preservation through the use of in-store signage at the Wedge Co-op.

⁵⁶ It is referred to as consumer-driven because it was started by consumers, with producers coming to play a greater role in the cooperatives management through the years. See http://www.communityfoodenterprise.org/case-studies/u.s.-based/oklahoma-food-cooperative/casestudy_history, accessed April 22, 2011.

emphasis on small farmers invokes concern for a socially marginalized group and thus provides justification for buying NNFC's produce. This message is conveyed in several ways—through slogans on NNFC apparel, the product packages containing the phrase “small farmer cooperative,” and through verbal exchanges between food service directors and NNFC representatives about the nature of the enterprise and those involved in it. One food service director in Dothan, AL, pointed to NNFC's support for small farmers as the primary reason she decided to purchase its collard greens. All things being equal, food service directors may be more sympathetic to a cooperative of small farmers than a produce company that has a more arms-length relationship with its supplying farmers.

Identity preservation is ultimately a bond between the producer and the consumer. The distribution entities in our study use packaging, communication strategies, and farm inspections to establish this bond. The level of trust and connection between value chain partners (from farmer to consumer) influences the need for verification of production practices and specification of product origin (e.g., locale, farm, or farmer). When there is a great deal of preexisting trust between consumers and the selling entity, as in the cases of La Montanita and Co-op Partners Warehouse, there is less of a need to specify which farmer produced the item or to create a unique third-party certification scheme. However, when there is less trust or social connection between consumers and selling entities, as is the case with retailers carrying Red Tomato Eco Apple products, creating a unique third-party certification system can help establish credible marketing claims and better position products in a competitive selling environment.

Farmer Coordination

Value chains involve high levels of coordination between producers and distributors. Our findings suggest that distribution entities using informal producer networks are well suited to meet the constantly shifting demands of diversified, niche food markets.

At the core of any successful distribution model serving smaller scale producers is the ability to effectively coordinate production and aggregate products in a way that can satisfy a buyer's volume requirements, quality standards, and need for consistent and timely deliveries. Historically, agricultural cooperatives have played a major role in coordinating the production, aggregation, and marketing of their members' products.⁵⁷ While many agricultural cooperatives continue to function successfully in this capacity, new models of producer coordination are emerging that offer alternatives to the more formalized and restrictive structure of cooperatives (Hogeland, 2006). Several of the distribution models in our study have shown how the establishment of informal farmer networks can be an effective strategy for meeting the rapidly changing demands of the local food market. Unlike many cooperatives that require a major share, if not all, of a member's products to be sold through the cooperative, farmer networks have the benefit of allowing greater flexibility in deciding what to sell into the network. Farmers benefit from a more diverse market channel mix by balancing risk and not “putting all their eggs in one basket.” In turn, the distribution entities are not obligated to take all of their members' production.

In the case of Red Tomato, suppliers are encouraged to sell no more than 40 percent of their production through Red Tomato as a hedge against a major downturn in Red Tomato's business. Suppliers benefit from selling directly through Red Tomato while retaining other accounts, or they benefit indirectly from their Red Tomato connection by selling Eco Apple-branded apples on their own to grocery store buyers.

Alternatively, with Appalachian Harvest, a conscious decision was made by the founders to not form a cooperative because of a high level of distrust of cooperatives in the area, due in part to the well-publicized failure of a produce cooperative in a nearby town several years prior to Appalachian Harvest's start. It made more sense to create an informal network that in many ways functions as a cooperative, with its members closely coordinating production, while maintaining the option to sell to other wholesale channels or direct marketing outlets such as farmers markets.

Furthermore, the network model is highly suitable for a situation in which most of the growers are too small to adequately serve wholesale markets on their own, and the distributor plays a major role in providing production training and business development services to its new suppliers, as is the case with Appalachian Harvest. In a formal cooperative, such an arrangement might prove to be more difficult, as new entrants to farming are unlikely to receive the same level of production and marketing assistance that they would from a nonprofit entity whose express mission is to develop new farmers. An agricultural producer cooperative is a business model that is set up to serve its farmer members, not to create new farmers. Additionally, the very ability to support such outreach

and educational activities is more challenging given that cooperatives generally have less opportunity than nonprofits to access private grants and donations.

Our research also shows that informal farmer networks seem to be particularly appropriate for marketing a range of diverse products, like fruits and vegetables, and that the more formal cooperative structures may be more appropriate when dealing with single, uniform products (Hogeland, 2006). When a diverse range of commodities are marketed through a cooperative, each with different costs of production, processing requirements, and prices, it is difficult to fairly allocate costs across commodities, and hence producers (Sexton, 1986).

Organization Forms: Creating Opportunities, Presenting Challenges

Our study of four nonprofit and four cooperative distribution models indicated there is a significant relationship between legal structure and value chain development. Recognizing how particular organizational forms tend to foster certain competencies can inform the development of mutually beneficial strategic partnerships with complementary organizations. Each organizational form and structure has its unique strengths and weaknesses.

Organizational form has a tremendous impact on how food value chains operate, including their funding mechanisms, investment in infrastructure, and propensity to run financially self-sufficient operations.

Cooperatives are organized as business entities with the purpose of serving their members' needs (Hogeland, 2006), whether that be more orderly marketing of their farm produce or having improved access to healthy food. The members own the cooperative, and any profits earned by the cooperative are either reinvested in co-op operations or returned as dividends to the members.

In contrast, nonprofits are established to pursue a public purpose, are accountable to independent boards of directors, and receive significant amounts of funds on an ongoing basis from private foundations, government grants, and individual donors. Their tax status makes them eligible for a much wider variety of grants and donations than cooperatives.

The ability of nonprofits to raise significant outside funds in turn affects how they approach risk. Compared to the retail, producer, or consumer-driven cooperative distribution models, the nonprofits relied much more heavily on outside grants and donations to fund startup and ongoing operations, thus reducing how much risk they took on as a business entity. Nonprofits do not have to pay back grants nor distribute dividends, while cooperatives are much more likely to rely on member equity and bank loans, increasing their exposure to risk. Given this dynamic, the nonprofits are able to absorb more of the downside risk faced by farmers and/or retailers than the cooperatives we examined. This can be highly advantageous, allowing nonprofits to experiment with new models without the restrictions of traditional short-term profit/loss business parameters.

However, this propensity of nonprofits to experiment in ways that cooperatives or investor-owned firms are unlikely to do can lead them to run their distribution operations at a loss so farmers and buyers can get “good” prices. An essential role for a food value chain is to redistribute economic value among supply chain



John and Trudi Kretsinger of KW Farms promoting their grass-fed beef products in one of La Montanita's stores.

actors (Bloom and Hinrichs, 2011). While some nonprofit-driven value chains do this, several described herein use external subsidies to absorb distribution costs, allowing them to offer higher prices to farmers without passing on these costs to retailers. Ultimately, the grant-giving entities that fund such operations may end up creating market distortions, with retailers developing unrealistic expectations about price, thus putting other growers who are not part of the subsidized food value chain at a disadvantage.

The long-term viability and replicability of these nonprofit distribution models is in doubt when ongoing subsidies are required to maintain trading operations. These high subsidy levels are justified in part by the grower training, standards development, and public education activities these organizations engage in, going beyond the scope of what traditional distributors do. This caveat aside, the nonprofits we studied, except for Big River Foods, seemed to be on more precarious ground because of their dependence on grants and donations to run trading operations. Red Tomato, for example, has been doing well as measured by sales and budgets, with sales growing 500 percent from \$500,000 to \$2.8 million between 2003 and 2010. Nonetheless, 60 percent of its budget still comes from grants and donations.

⁵⁷ http://umanitoba.ca/afs/agric_economics/ardi/history.html

In contrast, the cooperatives we studied have not depended on outside funding for the most part, choosing to take a more gradual approach, expanding operational expenses in concert with trading income. Even the New North Florida Cooperative—the one cooperative studied that has received fairly significant grant funding over the last 15 years, totaling approximately \$500,000—has received 90 percent of its income over the last 10 years from trading activity.

The basic structure of a cooperative facilitates a more bottom-line orientation, which is more likely to align social mission with business objectives from the start. With Red Tomato, ASD, and Growers Collaborative a social mission was developed, funds were raised to advance the mission, and a trading operation was developed

to manifest the mission. In order to serve their mission, both Red Tomato and Growers Collaborative created infrastructure-laden trading operations that were impossible to sustain, ultimately leading to complete reversals in how they operate; ASD is still working on reconfiguring its operations to be more financially viable. In contrast, La Montanita and Co-op Partners Warehouse developed their distribution enterprises to simultaneously facilitate regional food system development and to further the business success of their retail arms. The mission and the business goals had to be in balance from the start, and the leadership was acutely aware of this fact. Both retail-driven models relied on internal, member capital to develop their distribution operations. The mission of the Oklahoma Food Cooperative to help farmers secure better markets for

their products and help consumers gain access to regionally produced, sustainably grown food manifested in a frugal, self-sufficient trading operation from the start. And while the New North Florida Cooperative did use its social capital to mobilize outside financial support in its early days, it only did so to get its trading operation up and running, after which it has largely been self-sufficient.

Nonprofits interested in developing local/regional food distribution entities can learn from the experience of cooperative distributors and take more of an assets-based approach (Stoian & Donovan, 2010). If nonprofits want to foster the creation of new food distributors that promote local purchasing and sustainably grown foods, it is critical they inventory existing assets that potential value chain partners have that could be used for distribution purposes. For example, if farmers have trucking capacity, storage space, or family labor that could be used for product grading, aggregation, and distribution, this should be considered first before seeking funding to purchase or lease trucks, lease warehouse space, or hire new employees. Not only does such an approach reduce up-front capital requirements, it may lead to more economic benefits accruing to those ostensibly intended to benefit from the enterprise in the first place.

In addition to taking an assets-based approach, nonprofits would be well served to appreciate their unique capacity to play key roles in the development of value chain enterprises such as:

- **Matchmaker:** Connect key stakeholders through short-term or one-off engagement. As public interest brokers, nonprofits can bring unlikely partners together to create value chain collaborations.

- **Facilitator:** Be actively involved in building longer term relationships among food value chain actors by helping to establish effective communication channels, ensuring values are articulated and shared, and fostering a trusting environment.
- **Third-party certification:** Establish a program whereby producers receive independent verification of their adherence to a certain set of standards. Such programs help to differentiate products and build demand in the marketplace.
- **Educator:** Provide marketing and educational support, such as branding that reinforces the values and “tells the story.” Education can raise consumer awareness and ultimately drive sales for food value-chain products.
- **Catalyst/innovator:** Test out innovative business models. Through grants and donations, nonprofits can take financial risks that would be more challenging for a for-profit business.
- **Resource prospector:** Identify and pursue resources, such as grants, loans, and service providers, to support value chain collaborators as they develop their enterprise(s).

As nonprofits and cooperatives engage in value chain activities, they should consider what roles are most appropriate given their organizational capacities and recognize how their limitations can be mitigated through building strategic partnerships with other value chain actors. Cooperatives may benefit from partnering with nonprofits for training, education, and resource prospecting purposes, while nonprofits may find it worthwhile



Michael Rozyne of Red Tomato speaking with John Lyman of Lyman Orchards in the Connecticut River Valley.



Distributor picking up produce from a Growers Collaborative farmer.

to partner with cooperatives or investment firms to provide infrastructure support or supply chain management services. Simply put, find out what you are good at, find out what you are not so good at, and then get the right people to help you.

Concluding Remarks

While our findings do not necessarily apply to the full range of extant cooperative and nonprofit food value chains given the case study approach employed, they do provide valuable insights for organizations currently engaged with or intending to be involved in food value chain practice. All food value chains must

contend with the issues raised in this paper—the appropriate level of infrastructural investment, the most suitable structure to coordinate farmer production, techniques for identity preservation, and how best to manage supply chain logistics—in order to build financially sustainable organizations that can meet the rapidly changing demands of consumers and bring higher returns to producers. No report of this nature can provide the specific answers on how exactly to run a food value chain, but looking at what is working and what is not can shorten the learning curve for new value chain entrants and help existing food value chains grow and prosper.



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La Montanita: Retail-Driven Model #1

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Co-op Partners Warehouse: Retail-Driven Model #2

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Oklahoma Food Cooperative: Consumer-Driven Model

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New North Florida Cooperative: Producer-Driven Model

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