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Corbin Hill Road Farm Share: A hybrid food value chain in practice

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Abstract

Food value chains consist of food producers, processors, third-party certifiers, distributors, and retailers working together to maximize the social and financial return on investment for all participants in the supply chain, including consumers. This paper presents a case study of Corbin Hill Road Farm Share, a newly created hybrid food value chain that engages nonprofit strategic partners to provide locally grown and affordable produce to low-income residents of New York City's South Bronx while also enabling Farm Share members to become equity owners of the farm over time. The case study shows that the involvement of community-based nonprofits is key to creating a food production and distribution system

that engages a wide range of stakeholders, fosters shared governance and transparency, empowers consumers, and benefits regional farmers.

Keywords

civic agriculture, community supported agriculture, Farm Share, food sovereignty, governance, value chain

Introduction and Literature Review

The value chain model, popularized by Porter in the 1980s (Porter, 1985; Porter & Kramer, 2006) and subsequently elaborated on by scores of management theorists, has been adopted by food systems scholars and practitioners as a framework to help expand what has been variously described as alternative food networks (Renting, Marsden, & Banks, 2003), rural and regional agri-food webs (Marsden, 2010), foodsheds (Kloppenburg, Henrickson, & Stevenson, 1996), and civic agriculture systems (Lyson, 2004). Food value chains consist of food producers, processors, third-party certifiers, distributors and retailers working together, often in a web rather than a linear chain, to maximize the social and financial return on investment for all participants in the supply chain,

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Disclosure: Dennis Derryck is the president and founder of Corbin Hill Road Farm.

including consumers (Bloom & Hinrichs, 2010; Stevenson, 2009; Stevenson & Pirog, 2008, p. 120).

This article presents a variation on the value chain model, described in the social entrepreneurship literature as a *hybrid* value chain (Drayton & Budinich, 2010), as a framework for investigating the roles that community-based nongovernmental organizations (NGOs) play in the food value chain to create food systems that simultaneously address the needs of farmers and low-income consumers. Through a single case study of the Corbin Hill Farm Share, it demonstrates how the hybrid features of the value chain model are key to engaging low-income individuals who typically have the least amount of agency within the conventional food system.

Food Value Chains

Food value chains are often *values*-based because they involve higher levels of trust, transparency, cooperation, and a commitment to the welfare of humans and nonhumans (e.g., livestock, the land) involved in the chain of production, compared to conventional supply chains. The term value also refers to the fact that such chains seek to maximize the intrinsic value of products and the ability of producers to extract financial value from intermediate and final consumers down the line, by highlighting distinctive characteristics such as local provenance, using sustainable production techniques, maintaining high ethical standards, and incorporating into the production process other elements that consumers increasingly associate with quality.

The idea of a food value chain, in which small and medium-scale farmers and low-income consumers are able to gain power and extract more value from the food system, is consistent with Lyson's (2004) concept of civic agriculture and various efforts to support alternatives to the conventional food system. Civic agriculture systems comprise a network of smaller-scale, local, flexibly organized farms and food producers who reject conventional production-oriented, mechanistic models of food and farming (Feagan, 2007; Lyson, 2004). They include community supported agriculture pro-

grams, farmers markets, cooperative production facilities and cooperative retailing businesses, all of which decrease the physical distance between producer and seller and reduce the intermediaries that capture profits from farmers and increase costs to consumers, with resulting economic, social, and environmental benefits (Renting et al., 2003). These businesses tend to be rooted in particular places, aim to be economically viable for farmers and consumers, use ecologically sound production and distribution practices, rely on the knowledge of individuals who live in a particular place, and attempt to enhance social equity for all members of the community (DeLind & Bingen, 2008; Feenstra, 1997).

While the food value chain model may serve as a guide to increasing the market share and profitability of small and medium-scale farms by capturing the value of small-scale sustainable food production that is otherwise lost in the conventional food system, the model may be less relevant for addressing the needs of very-low-income, minority consumers. The kinds of businesses typically associated with a food value chain, and a civic agriculture network, have tended to be oriented towards middle- and upper-income consumers who can afford the added value of locally sourced, humanely raised, organic, fairly produced food (Guthman, 2008; Hinrichs and Kremer, 2002). In addition, these alternative food projects often are designed and located to ensure financial profitability for farmers rather than to address the needs of *both* farmers and consumers, particularly those consumers who lack the resources and infrastructure to procure fresh vegetables at all, let alone food with specific quality, environmental, or ethical characteristics (Allen, 2004). Guthman (2008) adds that farmers' markets and community supported agriculture (CSA) programs tend to locate or distribute to areas of relative wealth and are also often culturally coded as "white spaces." Consumer-based local food efforts, including food value chains, "are difficult to extricate from the dominant political economy," work against historical forces of injustice, and may "inadvertently reproduce extant social privileges" (Allen, 2010, p. 305).

The Hybrid Food Value Chain

Elements that distinguish hybrid food value chains from other food value chains and conventional food supply chains include strategic partnerships, including with NGOs that contribute social capital, the co-creation of value by all the links in the chain, and transparency and shared governance throughout the chain that includes sovereignty for each link. But the notion of hybridity in the value chain is not new. Prahalad (2004) and others have argued that cross-sector partnerships can enable corporations to provide needed products and services to low-income consumers by developing innovative products and services as well as appropriate delivery models (although the so-called “base of the pyramid” literature has been criticized for its focus on consumption rather than on strategies to boost the income and agency of the poor). In recent years the literature on the importance of mutually beneficial relationships among NGOs and businesses has grown (Kourula & Laasonen, 2009), as has the number of cross-sector partnerships in which NGOs join with businesses to address a wide range of social issues (Selsky & Parker, 2005).

Strategic partnerships

Nonprofit organizations are one important element of hybrid value chains, particularly those value chains aimed at meeting the needs of low-income consumers. Nonprofits bring to the value chain social capital that comes from the networks, mutual goals, trust, and beliefs that nonprofit organizations share with their members and stakeholders (Bryce, 2006). This social capital, the ability to engage community members, raise funds, disseminate information, and reduce transaction costs, has significant financial value.

Nonprofits can help companies to aggregate and channel demand, lowering transaction costs (Weiser, Kahane, Rochlin, & Landis, 2006, p. 23). Their staff members often have organizing skills that enable them to reach out to and attract customers. Nonprofit partners may provide critical insights into the needs and constraints of low-income consumers that they have relationships with as clients, employees, or community stakeholders, and through this knowledge can help in

the maintenance of a customer base. Nonprofits also tend to be located within the communities they serve and so have a first-hand understanding of the logistical issues associated with local business development.

Co-creation of value

A hybrid food value chain model stresses the collaborative role of value creation by consumers, farmers, for-profit ventures, nonprofit community-based organizations, patient investors interested in social as well as financial returns on their investments, and consumers, all working closely together for mutual benefit. Simanis and Hart (2009) describe this as “business intimacy,” the process by which the private sector co-creates value with nontraditional actors, building connections as companies and communities view each other interdependently, developing mutual commitment to each other’s long-term growth. And because the needs of the community are part of their mission, businesses and nonprofits are particularly knowledgeable about those needs and can help customize products and services.

These partnerships can also provide concrete value-adding services: identifying consumers; developing customer trust; communicating effectively with community members about their needs; and identifying innovative ways to address the limited purchasing power of individual consumers (Budinich, Reott, & Schmidt, 2007; Reficco & Marquez, 2009). Hybrid value chains also help to create business models that span various customer bases (Reficco & Marquez, 2009). If a business can develop a value chain to provide products and services to lower-income customers, it can often provide those products and services to higher-income customers as well, making the model replicable and scalable.

Transparency and shared governance

Unlike the conventional food system, the food value chain model treats producers and food processors as partners with consumers (Stevenson & Pirog, 2008). But doing so successfully requires procedures to ensure that all parts of the value chain have trust in the fairness and predictability of

the partnership through greater transparency than many businesses are willing to provide. Because of the engagement of community-based organizations committed to structural changes that empower the community members they serve, hybrid food value chains are often focused on transforming the food system rather than merely improving its efficiency or increasing access to healthy food. In many cases the idea of transformation involves creating new enterprises that are inclusionary, participatory, or even co-owned by members. This is the kind of “builder work” that Stevenson, Ruhf, Lezberg, and Clancy (2007) argue is a promising arena for changing the agri-food system.

Community Supported Agriculture

As noted above, community supported agriculture programs are one type of food value chain. The idea of community supported agriculture, in which a group of individuals buys shares from a farmer for an expected harvest, originated in the 1960s in Japan and Switzerland, and spread to the United States following the creation of CSAs by Jan Vander Tuin and Robin Van En (Farnsworth, Thompson, Drury, & Warner, 1996; Lang, 2010). The number of CSAs in the U.S. has grown from two in 1986 to more than 2,000 today; they are concentrated in the Northeast, areas surrounding the Great Lakes, and coastal regions of the West (Adam, 2006; Local Harvest, 2010).

One of the goals of the CSA model is for consumers to support farmers by paying them in advance, sharing the risk of large or small harvests. But CSAs have been established to advance political aims as well. CSAs promote the formation of direct ties between people and farmers in part to disengage from the global food system and support local economies (Guthman, 2004; Henderson, 1999; Schnell, 2007). Many individuals helping to organize direct marketing food initiatives such as farmers’ markets and CSAs are also working to solve social justice problems in their localities (Allen, 2010). Research in California found that many farmers’ market and CSA managers prioritized food security for low-income people and used strategies to try to meet the needs of low-income consumers (Guthman, Morris, & Allen, 2006).

CSAs vary in their structures and business models, including size, cost of membership, growing methods, member involvement and the food that they provide (Feagan & Henderson, 2008; Lang, 2010; Martinez et al., 2010; Schnell, 2007). Since CSAs are highly local creations, they attempt to forge relationships between consumers and farmers that reflect unique conditions and needs (Groh & McFadden, 1997). For example, although CSAs traditionally required a one-time payment at the beginning of the season for a weekly share of produce, many now offer a range of payment plans and other logistical arrangements, including various selection and pickup methods (Woods, Ernst, Ernst, & Wright, 2009). Some accept SNAP benefits and/or Women, Infants, and Children (WIC) payments, offer free shares to needy families, and offer half shares to keep the cost to the members manageable (Lang, 2010).

Many types of collaborations occur between CSAs and other farms and community organizations. For example, Hassanein (2008) describes a farm run by the University of Montana that collaborates closely with a nonprofit community group that manages the farm’s operations and the distribution of fresh produce to area food pantries, and also markets its produce through a CSA. Along with increasing varieties of payment plans and business arrangements, CSAs are offering a larger range of products, including eggs, meat, and flowers, often partnering with producers of other local products to offer a wider range of value-added items (Schnell, 2007; Woods et al., 2009).

Methods

This paper is a single case study of Corbin Hill Road Farm Share (CHRF), an example of a hybrid food value chain designed to supply fresh, regionally grown produce to extremely low-income consumers in New York City. A single case study design was deemed an appropriate method of analysis for this paper because our interest is in understanding the case at hand with the goal of generalizing within, rather than from, the case. Through a detailed description of CHRF, the paper outlines how it functions as a hybrid food value chain. Case study is an ideal methodology when a

holistic, in-depth investigation is needed (Feagin, Orum, & Sjoberg, 1991). Single cases are also appropriate methods to confirm or challenge theories, and to represent a unique phenomenon where an observer may have access to information that is otherwise inaccessible (Yin, 2009).

The data for the case study were from two principal sources. First, semistructured interviews (using two interview protocols) were conducted in June and July 2010 with three Farm Share members and three farmers supplying produce to CHRF to obtain feedback on their participation in the venture. Interviewees were asked to describe their roles with respect to CHRF, their experiences participating in the Farm Share, and their thoughts on the impacts of the Farm Share on their own lives. These interviews were recorded, the responses were transcribed, and the transcripts were categorized and then organized by theme for inclusion in the case study. A second source of data was the business plans, project descriptions, and other CHRF business documents, including a list of partnerships.

There is a potential researcher bias from the selection of a single case and the use of a small number of key informants. Furthermore, one of the article's co-authors, Dennis Derryck, was the founder of CHRF and has been involved in developing the business since its genesis. The co-authorship by Dr. Derryck introduces the possibility of researcher bias, though we have used other key informants and documentation to avoid bias to the extent possible.

Results

Project Background

Corbin Hill Road Farm (CHRF) was started in 2009 as a 96-acre for-profit farm in Schoharie County, New York. Its core business is supplying fresh, locally grown produce to low-income residents living in communities that have limited availability of healthy food. To do so, CHRF aggregates produce from seven nearby farms (though the number of produce suppliers is expected to in-

crease in the coming seasons), and sells it directly to individuals and organizations in New York City.

The mission of the company is much broader than selling food, however.¹ CHRF aims to bring food security, justice, improved health, as well as eventual economic equity ownership of the farm to the target market communities, increasing value to all participants in the food supply chain. CHRF's business model grew out of a sense that, as successful as conventional CSAs are at distributing food directly from farm to consumer, the structure of a CSA is not typically geared toward the financial and logistical needs of very-low-income individuals.

While the basic structure of CHRF operates like a community supported agriculture program, with customers paying in advance for weekly shares of produce delivered to a pick-up location, the business differs from a conventional CSA in several respects in order to address the needs of low-income individuals. One fundamental difference is that CHRF is designed to make Farm Share members, also called Shareholders,² farm *owners* over time, solidifying their relationship to the farm, providing them with greater control over the production of their food, and fostering stewardship of the farmland. CHRF's business plan provides that Shareholders or target market subscribers will be able to own shares in CHRF, though the mechanism for this transfer is being developed (as discussed below).

Business Structure and Financing

CHRF is organized as a limited liability company (LLC) incorporated in the state of New York. The decision to seek private financing and operate as a for-profit venture reflected the challenges of an environment in which few foundations were interested in providing start-up funding for new business entities. CHRF's partners also considered but rejected the creation of a nonprofit with a for-

¹ See <http://www.corbinhillfarm.com/about/vision.html>

² Corbin Hill Road Farm capitalizes "Shareholder" as a stylistic choice to distinguish its members from conventional equity shareholders.

profit subsidiary, given the mixed experience of these hybrids.

CHRF's business plan sought US\$1.2 million to capitalize the social venture. The initial equity for CHRF came from 11 investors who provided a total of US\$565,000 (with 72% of the equity coming from African American and Latino individuals and 50% from women). Capital and operating loans of US\$350,000 came from Farm Credit East³ with additional low-interest loans from the New York State Energy Research and Development Authority (NYSERDA). The second round of financing has amounted to US\$450,000 in a combination of equity and loans.

Short-term financial data for a start-up can be misleading and therefore is typically best viewed in the context of the investor pro forma that illustrates the expected financial performance over a longer period. CHRF's revenues after its first full year of operation were approximately US\$79,000.

Revenues are projected to rise in its second year of operation to US\$580,000 as a result of the growth in the number of Farm Share members to 1,500 and a modest increase in the cost of partial and full shares. CHRF projects revenues to grow to US\$1.3 million two years hence, and to reach US\$3.8 million by year eight. A positive net income is projected in two years (with a return of 8%, rising to 25% to 30% in years seven and eight). For each year of operation, CHRF projects that its cash flow will remain positive, with a low of US\$330,000 three years from now, growing to US\$1.5 million in year 10. This cash flow will enable CHRF to start paying dividends to the social investors in two years and to finance its own internal growth. The internal rate of return over 10 years, discounted at 10%, is projected to be 23%.

The issue of scaling for social impact is not typically a primary goal of CSAs, but it is a major goal of the Farm Share model. CHRF exceeded its first year goal of 175 Farm Shares by 16 members. Throughout the 2010 growing season, enrollment continued to increase, eventually reaching 281

Shareholders, and additional partner sites were added throughout the summer. CHRF is projected to grow to 1,500 Farm Shares for the 2011 season. CHRF's goal is to have 3,000 Shareholders within three years and 5,000 within the next 10 years.

Strategic partnerships

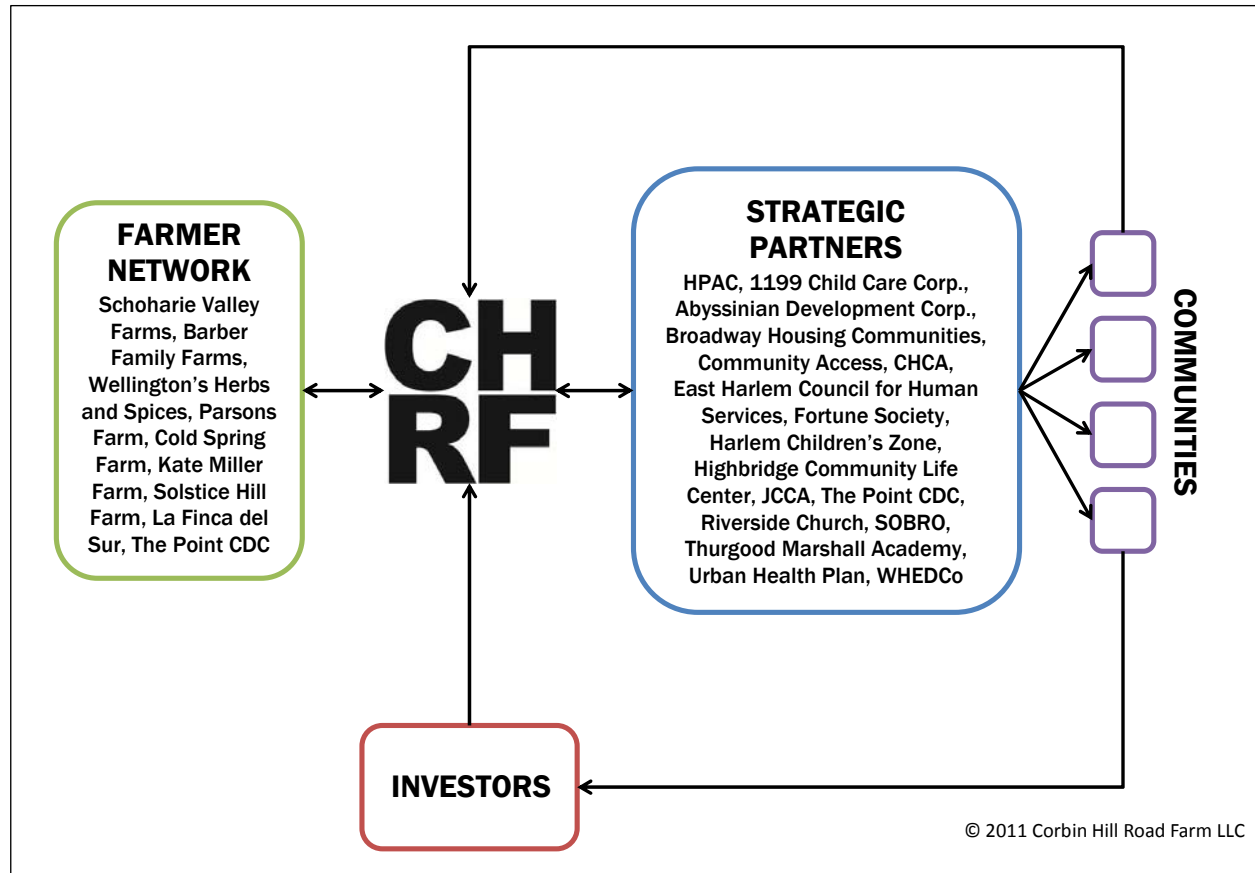
Strategic partnerships enable CHRF to offer a range of produce from various farms and to access its target communities of Shareholders. CHRF unites two clusters of strategic partners: groups of farmers in rural Schoharie County, and community partners within New York City and the Shareholders they represent. CHRF acts as the hub for each cluster and coordinates them so that the two clusters can function simultaneously. See figure 1.

Farmers

CHRF is connected to a network of farms and farmers in Schoharie County who supply produce for the distribution services. Based on CHRF's growth projections from 281 Farm Shares in its first year to 1,500 Farm Shares for the 2011 season, Cornell University Cooperative Extension convened a meeting of 12 farmers in February 2011 to help them develop a harvest plan to meet the Farm Share needs for CHRF. Ultimately, nine farmers agreed to participate. A manual was prepared based on data from the first year, defining the conditions for participation and identifying the types of produce, quantities, and specific weeks they had to deliver produce for each of the 23-week growing season. An agreement was reached about the growing capacity of each farmer and the quantities that could be grown and delivered on specific dates. The latter was important given the different soil conditions and altitudes that exist in Schoharie County that could result in early and late crops of the same produce. The mix of participating farmers included two large growers (with more than 100 acres), several smaller growers (under 20 acres), and smaller specialty farms who chose to concentrate on new produce not currently grown by the other farmers that would meet the cultural needs of the communities served by CHRF, such as okra and tomatillos. A full-time produce manager has been hired to coordinate this harvest plan.

³ <https://www.farmcrediteast.com/>

Figure 1. Corbin Hill Road Farm Share Hybrid Food Value Chain



Target Shareholders

CHRF has focused on the South Bronx neighborhood of Hunts Point, whose residents are extremely poor and lack healthy food options. The Bronx as a whole has been ranked the unhealthiest county in New York state (Robert Wood Johnson Foundation, 2010), but South Bronx residents face particular challenges. For example, a national food hunger survey of U.S. congressional districts found that nearly 37% of residents in the 16th congressional district, which encompasses the South Bronx, said they lacked money to buy food at some point in the previous 12 months, a higher percentage than in any other congressional district in the country and twice the national average (Food Research and Action Center, 2010). In addition, per capita fruit and vegetable consumption in this community is significantly below the level in the city as a whole and far below the USDA-

recommended five daily servings (see table 1), and residents are more likely to be overweight or obese (see table 2). Hunts Point has been designated by the Department of City Planning as a community

Table 1. Fruit and Vegetable Consumption (Age Adjusted), 2009 South Bronx and New York City (in percentage reporting fruit and vegetable consumption in the previous day)

	Responses to "How many total servings of fruit and/or vegetables did you eat yesterday? A serving would equal one medium apple, a handful of broccoli, or a cup of carrots."		
	None	1-4	5 or more
South Bronx	24.5%	69%	6.5%
New York City	12.4%	76.5%	11.1%

Source: NYC Department of Health and Mental Hygiene, Bureau of Epidemiology Services. NYC Community Health Survey 2009. Accessed at <https://a816-healthpsi.nyc.gov/epiquery/EpiQuery/CHS/index2009.html>

Table 2. Body Weight (Age Adjusted), 2009, South Bronx and New York City (in percentage normal or underweight, overweight, and obese)

	Underweight or normal weight	Overweight but not obese	Obese
South Bronx	29.7%	38.2%	32.1%
New York City	45.2%	32.8%	22.0%

Source: NYC Department of Health and Mental Hygiene, Bureau of Epidemiology Services. NYC Community Health Survey 2009. Retrieved from <https://a816-healthpsi.nyc.gov/epiquery/EpiQuery/CHS/index2009.htm>

with a lower-than-average ratio of supermarkets to people, with poor access to large grocers even via transit routes (New York City Department of City Planning, 2008).

Community partners

CHRF's Farm Share defines community not just by geography but also by the different populations served by its nonprofit partners. CHRF's business model relies heavily on the strategic community partners in the Bronx who serve the population CHRF is targeting, in order to access and organize community residents and to form the foundation of a distribution network. Shareholders enroll in the Farm Share program through one of CHRF's strategic partners. Table 3 in the appendix describes the strategic partners and the different populations they serve, from mothers at the Harlem Children's Zone Baby College and early childhood and Head Start programs, to ex-offenders and formerly homeless individuals affiliated with the Fortune Society and Broadway Housing Communities, to Bronx-based healthcare workers at Urban Health Plan.

CHRF's marketing strategies include four basic approaches: (1) It directly organizes residents within a specific neighborhood; (2) CHRF works directly with a strategic partner's employees and clients (for example, Broadway Housing staff helped to enroll the formerly homeless residents in one setting and the mothers of children in the Head Start program that is also operated by Broadway Housing in another facility); (3) CHRF works to sign up workers and the staff of an

organization; and (4) CHRF recruits staff members in some organizations, such as WHEDCo, to introduce CHRF to the organization, build credibility, and demonstrate that it can deliver quality produce on a regular basis as a precondition to accessing program participants.

Distribution Logistics

CHRF coordinates the logistics of ordering, packing, and distributing the Farm Share produce. At least three days in advance of a distribution day, the produce manager submits orders for produce to the farmers, enabling them to plan for the quantities of produce to be harvested for the coming week. These "pick orders," which compose the combined orders of the Shareholders, consist of 10–12 produce items and always include a fruit.

All items are harvested on Monday, are washed, cooled, boxed, and refrigerated in a cold storage facility located on one of the farms. On Wednesday morning, they are packed into a refrigerated truck that travels to New York City for a mid-afternoon arrival in Hunts Point. The produce is then sorted at The Fulton Fish Market (a night market that is empty all day) by CHRF's founder, the driver, a helper, the Farm Share coordinator, and two or three volunteers, according to produce type and share, and is packed onto labeled pallets for each distribution site. The pallets are stored overnight on CHRF's refrigerated truck. (One of the community partners installed electrical outlets that enable CHRF's refrigerated truck to park in an enclosed and locked parking lot each Wednesday evening.) CHRF's driver and helper deliver the produce beginning at 8 a.m. on Thursday, and site coordinators (volunteers from the staff of the strategic partners) provide the set-up (in a farmers' market style) and distribute the produce during hours that each determines to be convenient for their Shareholders. These coordinators collect funds, sign up new Shareholders, and record any changes in the Shareholder status.

Staffing at CHRF was lean during its first year and remains so as the business implements its plans for scaling up its operation in the coming year. Operational responsibility is divided between its

founder, who manages the upstate relationships among the farmers in addition to overall management responsibilities, and CHRF's general manager, who is responsible for the New York City operation and relations with the strategic partners. A farm manager has been replaced with a produce manager. Unique to CHRF is the hiring of a community organizer to engage new Farm Share members. Seasonal positions include a Farm Share coordinator with support staff members who work directly with the strategic partners.

Co-creation of Value

To create a business that is both able to make a profit and address the economic constraints of its target market, CHRF began conversations very early on with community members in Hunts Point about the amount Shareholders would pay and the manner in which they would do so. Typical CSAs charge from US\$450 to US\$700 per share, with payments due by early April (and at times as early as January) with the first produce to be delivered in June. For residents living in Hunts Point, paying one to two or more months in advance for a share of produce was not a viable economic option, as the payment required to reserve a CSA share far exceeded their average monthly food stamp benefits of US\$300. Even if they wished to exercise this option, food stamps could not be used to pay for fresh produce delivered at some future date. When pushed to decide on an acceptable payment scheme for the fresh produce being provided, Shareholders agreed that paying two weeks in advance was fair and feasible.

Even this commitment proved to be a barrier for many, and during the summer 2010 season, the deposit was reduced to an amount equal to one week's share. For the 2011 season the deposit has been eliminated; Shareholders now pay only one week in advance. In response to Shareholder recommendations, CHRF also allows share members to give only a week's notice to put their shares on hold while away, to change from a partial to a full share or from full to partial share, and to rejoin after leaving. Shareholders who do not use their funds are given a refund. Some shareholders

are able to pay through after-tax paycheck deductions managed by their employer.

Shareholders have a set number of produce items delivered each week for the 23-week growing season. The amount and variety of produce each shareholder receives weekly depends on what is being harvested at any point in the growing season. Partial shares have included 7 to 9 types of fruits and vegetables in a quantity sufficient for a household of 3 to 4 people. Based on feedback from Shareholders who participated in the 2010 season, the per-week prices for the 2011 season were set at US\$20 for a large share, US\$12 for a medium share, and US\$5 for a sampler share that consists of 3 to 5 items. All forms of payments, including electronic benefits transfers (EBT or "food stamps"), are accepted. A limited number of shares subsidized by 50% are available for all strategic partner sites who wish to offer them. Deliveries are made at the premises of the strategic partners, staffed by CHRF.

Potential shareholders had doubts about joining the Farm Share and sought answers to a series of questions and concerns about how to manage their own risks of participating. Questions included: "What is this Farm Share?" "What produce am I really going to get?" "How good will the quality be?" "Would it be sufficient to feed my family?" "Would I really be refunded if I dropped out, or would I be penalized?" For low-income residents who must manage a great deal of uncertainty and risk in their lives, part of facilitating the management of their risks entailed engaging them in the design process in which they would co-develop the rules of the Farm Share, and in effect co-create value.

Doing so required transparency and shared governance. All information, including written and online material, is produced in Spanish and English. Bilingual surveys are conducted on culturally specific food preferences, individuals are queried weekly about their satisfaction, and weekly meetings of coordinators offer another chance to assess customer satisfaction. CHRF shares how costs of goods and expectations for profits are

calculated with coordinators and Shareholders. The online Farm Share newsletter, “You Spoke, We Listened,”⁴ responds to questions.

CHRF also approaches the goal of shared governance by focusing on equity ownership. While the members of a traditional CSA model are in effect co-owners of the summer produce, for CHRF, co-ownership of the business contributes to sovereignty. One goal of CHRF is for Shareholders to become equity holders in CHRF who participate fully in decision-making about what produce is grown and how it is grown and distributed. However, the exact mechanism for shared ownership has not yet been determined. Two possibilities include creating a cooperative structure, or using program-related investment (PRI) through which the nonprofit strategic partners or even CHRF finance the purchase of shares for the community residents. The current Shareholders have indicated that they are willing to wait several years to develop a creative solution to the question of shared ownership that will address the nature of community benefits, and how profits could be used in a collective manner to meet the community’s needs for health and well-being that goes beyond the availability of fresh produce and the long-term preservation of farmland.

Impacts on Shareholders

Because the CHRF has been in operation for only one year, it is too early to measure impacts on Shareholders’ eating practices or nutritional status. However, anecdotal information from individual members suggests a high degree of satisfaction with the program and the produce. In the words of one member, “Whereas in the supermarket it will cost you more and your vegetables wouldn’t last as long, what’s good about the farm share is you get fresh vegetables constantly every week.” Members also mention trying new types of vegetables: “What’s special about the Farm Share is that you get to try every different vegetable that grows all through the season.” Anecdotal information from members interviewed suggests that they may be

increasing their consumption of fruits and vegetables. In the words of one member, “I actually lost eight pounds since I’ve been eating more vegetables and using the farm share vegetables....Within 2 months of eating with vegetables and eating healthy I’ve really knocked out my diabetes, I’m off the medication right now. We have more vegetables in our diets during the week than we’ve ever had before.”

Like the participants in micro-financing programs, there has been peer pressure among the Shareholders to remain involved in the Farm Share. To date fewer than 10% of those who signed up and paid for one week in advance ceased participation before the end of the 23-week season. Preliminary data indicate that the average participation rate was 18 weeks, including those who joined in mid-season. To the members, governance is an important aspect of the Farm Share, as well as the prospect of co-ownership. One member noted: “The real connection that we have to the farm right now is that we will own part of the share.”

The farmers interviewed indicated that they were pleased with the ability to increase their market and help low-income customers eat healthy, fresh produce. The relationship appears to be mutual and value-adding for both the producers and the consumers. In the words of one farmer,

Working with Corbin Hill Road Farm is a wonderful thing because it allows us to broaden our customer base. When Corbin Hill doesn’t have enough of a particular vegetable, we may have that overflow, and here on the farm we grow over 90 different varieties of vegetables so we have quite an array, but the fact that we could send good nutritious food down to the Bronx, what an unbelievable opportunity for us.

The relationship between the farmers and consumers has grown beyond a mere financial connection. One farmer noted:

⁴ See the online newsletter at
<http://www.corbinhillfarm.com/yswl.html>

It's more of a relationship opportunity for us....Here I was born and raised in this valley and I have all this wonderful produce available to me every day of the season and I think sometimes, my neighbors and myself included happen to take that for granted. Being able to send produce to an area where some people, maybe even my same age, have never seen something as fresh and wonderful as we can raise here...and to hear the feedback that we get from those people when they receive their shares, that's the biggest reward for me.

Being part of the Farm Share project has also encouraged the farmers in Schoharie County to explore new, value-added crops. According to one farmer,

[CHRF] offers a unique opportunity for us to explore new crops to grow. When we learn more about communities that we're helping to feed it will allow us to grow new and exciting crops which also may be well received in areas closer to home for us here, expanding our local markets as well.

The farmers recognize the importance of the NGO partners in the Bronx as well. One farmer noted: "This model...is really dependent on the people that are spending so much time down in the Bronx, on the ground, getting people interested."

The farmers in Schoharie communicate weekly with CHRF's produce manager to discuss what produce is abundant that week and what the Shareholders may like. As one farmer described the interaction:

She may ask "what's new or what's interesting?," "what do you maybe need help with moving?" And I will give her a rundown of suggestions and she will see what fits into their budget and what she feels their shareholders may be...excited about.

Discussion and Conclusions

This paper discussed the concept of a hybrid food

value chain and used this framework to examine the role of nonprofit partners in adding value and fostering transparency within a food supply chain. The Corbin Hill Farm Share functions as a hybrid food value chain and in so doing has the potential to open up new markets for a cluster of small to medium-size farms within the New York City metropolitan area, while simultaneously supplying very-low-income residents of the South Bronx with fresh, locally grown produce, ultimately fostering food sovereignty.

As the case study illustrates, the robust network of nonprofit partners that transformed a simple supply chain into a hybrid value chain was essential to getting CHRF up and running by engaging shareholders and providing critical support services, which ranged from facilitating the payments of certain shareholders to providing a physical storefront to distribute produce. One factor that enables the hybrid value chain to work is that the nonprofit partners selected for this project all have missions that include improving the community's health and nutritional status, and educational programs to engage members of the community in discussions about health. CHRF carefully chose partners that were working in these areas so that the organizations would not only take a strong interest in the project but also would be able to link their educational efforts to Farm Share so that learning about and practicing healthy eating were mutually reinforcing.

Relatively little time had to be spent formalizing the network of NGO strategic partners. Each organization was familiar with the other groups and had opportunities to meet, they shared a common understanding of the problems facing the South Bronx communities, and there was little debate about CHRF's goals and objectives. CHRF has treated each NGO as an equal, allowing each organization to individually design programs as it sees fit. This policy has also been applied to the individual Shareholders, who helped to shape Farm Share to meet their unique needs and constraints. And without a strong hybrid network of NGOs, there would be little financial incentive for the farmers in Schoharie County to seek out an

individual organization within the South Bronx and attempt the time-consuming and difficult process of building trust and forging a business relationship that might be insufficiently large to yield an economic return.

The leadership among the farmers in Schoharie County, a closely interconnected community characterized by third- to sixth-generation farmers who are often linked through family ties, provides significant social capital that extends from the township to county and state level. Their choice to work together on this project was the result of the initiative of a couple of the farmers within the county who were successful at encouraging others to work with CHRF. The Farm Share model may in the future offer the participating farmers the ability to expand their production to serve even larger markets. There are more than 1,000,000 residents living in neighborhoods poorly served by food retail establishments in the South Bronx and Harlem, a very large potential market. And there are many nonprofit organizations in these neighborhoods who could serve as strategic partners.⁵

Because CHRF is a recent startup, it faces numerous financial and logistical challenges. As it strives to break even, it must maintain a delicate balance between keeping prices affordable to the community it is serving and, to be financially sustainable, reaching a scale of 3,000 Shareholders within a reasonably short period. CHRF also faces the risk of being among the first social ventures in a newly defined space. The business model assumes that CHRF will attract social investors who understand the nature of the “slow money” challenge (c.f. Tasch, 2010) and will risk investing in this venture over a longer period of time. CHRF has thus far received round 2 loans and equity to launch its expansion. Those who have participated have taken a long-term perspective that is associated with such food ventures, and have been willing to accept a low return on their investment. Personal guarantees have had to be provided for all loans. The strategy of seeking patient investors

represents for CHRF a more stable approach over the long run than seeking to build a venture dependent on grants from foundations or the government, but it remains a challenge nonetheless.

Another major financial issue will be managing CHRF’s costs. Produce purchases make up some 65% of the cost of goods and can be controlled through efficiencies in packing and using reusable packaging. The same cannot be said for transportation costs, which now make up 19% of the cost of goods of each share and will rise if fuel prices continue to escalate. Controlling transportation costs, along with the added expenses of establishing and maintaining refrigeration, represent formidable challenges that CHRF will need to address in the coming year.

CHRF also faces complexities that require the design of systems that will accommodate the flexibility it seeks in responding to Shareholder needs. To remain nimble while scaling up to 1,500 Shareholders in the second year and then to 3,000 in the third year, CHRF expects to maximize its use of technology for its internal management and has outsourced its registration of Shareholders to Farmigo, an organization that serves CSAs. It is also in the process of outsourcing its trucking operation to a firm that can respond to and accommodate CHRF’s projected growth. CHRF’s staffing has been able to remain lean since it provides a toolkit to its strategic partners who do the organizing and recruitment of Shareholders.

CHRF’s long-term profitability depends on the ongoing coordination of hybrid networks of producers, nonprofit intermediaries, and Shareholders, a constant challenge for a business that aims to provide high-quality food at a low cost while attempting to ensure fairness to everyone in the value chain. If CHRF succeeds, the hybrid food value chain may be an important strategy for increasing the participation of low-income citizens in the food system, expanding economic empowerment, fostering stewardship, and providing new markets for the small and mid-size farm sector.

⁵ See http://www.nycnonprofits.org/exec_summary/h1.html

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Appendix

Table 3. Corbin Hill Road Farm Share Strategic Partners, 2010–11 (partial list)

Strategic Partner	Mission	Community
Hunts Point Alliance for Children	Builds collaborative relationships that sustain and nurture neighborhood families and children	Parents of the children belonging to the HPAC community and community residents in general.
Broadway Housing Communities (BHC)	Broadway Housing's supportive housing is distinctive for its integration of the healthy and disabled, the young and elderly, the employed and dependent.	Parents of children in the Head Start Program operated by BHC along with tenants include those with mental disabilities, HIV/AIDS and other chronic health conditions, and many who are in recovery from addiction.
Fortune Society	To support successful reentry from prison and promote alternatives to incarceration, thus strengthening the fabric of our communities.	Residents of The Fortune Academy (a.k.a. "the Castle") and Castle Gardens in West Harlem. Castle Gardens is a 118-unit residence with 63 supportive-housing units for Fortune Society clients, all of whom used to be incarcerated and homeless.
Community Access	Assists people with psychiatric disabilities in making the transition from shelters and institutions to independent living.	Homeless individuals, HIV/AIDS patients, veterans. Individuals struggling with substance abuse. Formerly incarcerated individuals, and youth aging out of foster care
Women's Housing and Economic Development Corporation (WHEDCo)	Seeks to make the Bronx a more beautiful, equitable, and economically vibrant place to live and raise a family.	Residents living in supportive housing; parents of children in WHEDCo's Head Start program and WHEDCo's certified day-care providers.
Jewish Child Care Association (JCCA)	Meet the child welfare and mental health needs of all children and their families in the New York metropolitan area.	JCCA's goal is to serve foster care parents.
South Bronx Overall Economic Development Organization (SOBRO)	Enhance the quality of life in the South Bronx by strengthening businesses and creating innovative economic, housing, educational, and career development programs for youth and adults.	Residents of the South Bronx and economic, workforce, and community development professionals working in the area.
Cooperative Home Care Associates (CHCA)	South Bronx-based owner home care agency anchoring a national cooperative network generating over US\$60 million annually in revenue and creating over 1,600 quality jobs.	Health care workers and administrators.
Riverside Church	An interdenominational, interracial, and international congregation with 2,400 members and affiliates. Its members come from more than 40 different denominational, national, ethnic, and cultural backgrounds.	Members (many from upper Manhattan) who are interested in food justice and living a healthy lifestyle.

Harlem Children's Zone (HCZ) (<i>New partner for 2011</i>)	Breaking the cycle of generational poverty for the thousands of children and families it serves.	The Baby College, for parents of children ages 0–3 and all-day pre-kindergarten
Urban Health Plan (<i>New partner for 2011</i>)	Continuously improve the health status of underserved communities by providing affordable, comprehensive, and high-quality primary and specialty medical care and by assuring the performance and advancement of innovative best practices.	Health care workers and administrators.
