A Food Systems Overview

Date of Publication: September 30, 2011

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Introduction

It's a dynamic time to be looking at food issues. From the White House vegetable garden to urban rooftop farming, from the rediscovery of heritage seeds to rural communities reviving the vitality of their agricultural history as a source for a thriving future, food is not just what's for dinner.
All across the country, food system stakeholders are working to develop healthy food systems. Only recently have some of these stakeholders started considering using CDFI financial products and related technical assistance to accomplish their goals. At the same time, CDFIs are working to develop the economic vitality of underserved communities. Now, some are considering supporting healthy food enterprises with their financial products and services.
Healthy food access is not just about increasing food retail, though that is a critical component. It is also about creating and supporting the food production, processing and distribution infrastructure necessary to get healthy food to the places where it can't currently be found. Within the food system, there is a great variety of enterprises with a wide spectrum of capital and technical assistance needs. Enterprises all along this continuum need access to the right match of capital and related technical assistance.

Just as healthy food system enterprises are wondering how to understand and access capital and related technical assistance, CDFIs are wondering what healthy food systems are and how to go about financing them.

This Chapter Presents:

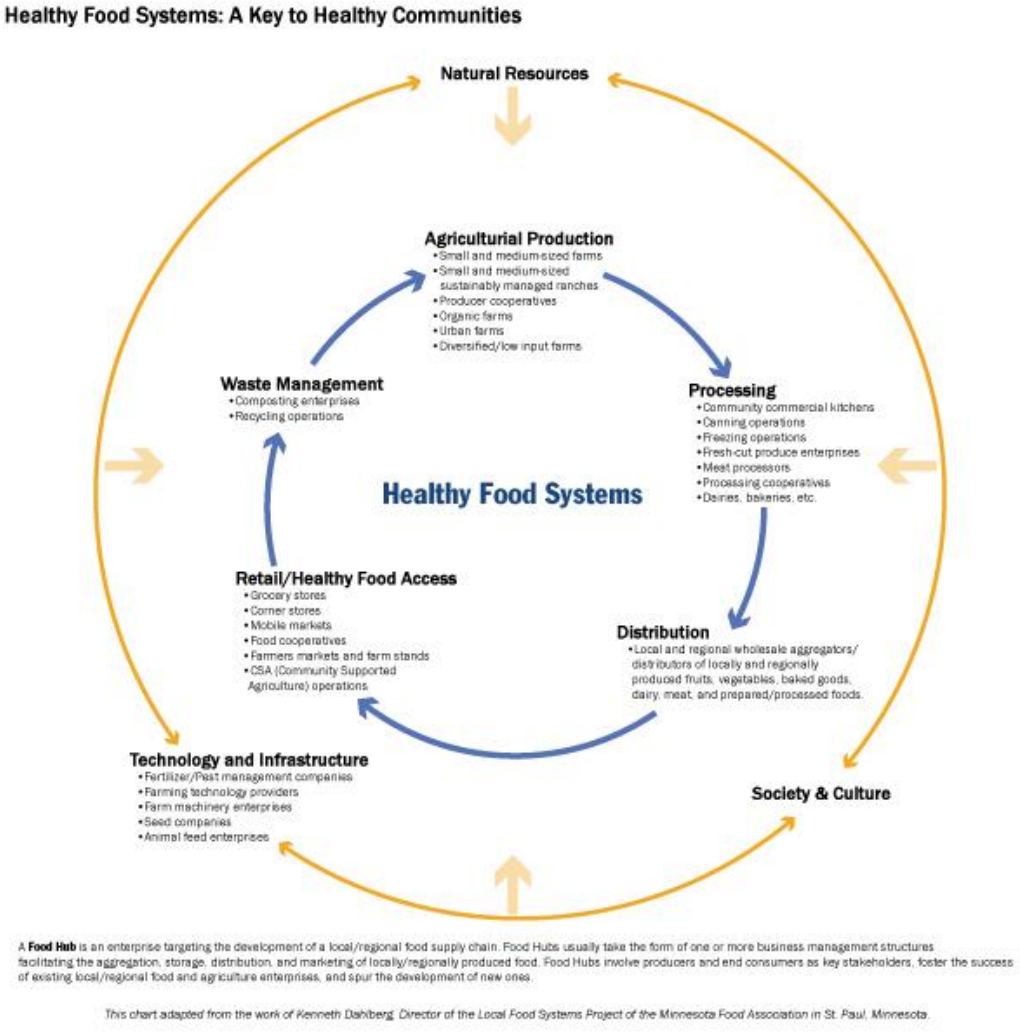
- An introduction to the food system;
- An outline of unintended consequences of the current food system;
- A primer on successful financing of healthy food systems;
- Five case studies of food system enterprises that work to grow, process, aggregate/distribute, and/or retail healthy food in low-income communities;
- A sector-by-sector analysis of food sector capital needs and interdependencies; and
- An introduction to Food Policy Councils.

An Introduction to the Food System

To begin, we need to answer the question: what is a "food system?"

A food system consists of the processes and infrastructure needed to grow, process, aggregate, distribute, market, and sell food. It also includes the inputs needed at each stage of the chain, and the management of waste at the end of the chain. But this description does not get at the heart of why developing a healthier food system is so important. Developing a healthy food system is important because it means that everyone has access to fresh, nutritious, affordable food. It also means that people are participating in all parts of the food system, from production to consumption and beyond, in a way that respects the principles of social justice and environmental sustainability.

Figure 1: **Healthy Food Systems: A Key to Healthy Communities**



The food system is a closed loop (fig. 1). It is depicted here in the form of two concentric circles: the Inner Circle and the Outer Circle, an inner circle of food system activities and an outer circle of the environmental factors which enable them. CDFIs working to developing a healthy food system can start anywhere: work at any point in the system will make an impact on the system as a whole.
The Outer Circle consists of three essential requirements for food production: Natural Resources, Technology and Infrastructure, and Society and Culture.

- **Natural Resources:** Food systems depend upon natural resources. In particular, healthy soil, water, plant and animal diversity, vegetation cover, renewable energy sources, climate, and ecosystem services are essential for the functioning of healthy agricultural systems. In a healthy food system, natural resources are used in a manner that benefits soil, water, air, plants, and animals, and helps increase productive agricultural lands.

- **Technology and Infrastructure:** Food production requires a number of technological and infrastructural inputs. Most notably, these include fertilizers, pesticides, farm machinery, refrigeration, and transport. These inputs are used to maximize production and enable food processing, distribution, and retail. In a healthy food system use of non-renewable inputs (e.g., petrochemicals) and energy is minimized.

- **Society and Culture**: Without culture, we would have no agriculture. The social science lens allows an understanding of food systems and issues that can be applied to the governmental arena, where public policies can be designed to support healthy food system development. In a healthy food system, social and cultural characteristics of communities are allowed to help shape the way food is grown, processed, aggregated, distributed and sold.

In the Inner Circle, there are five main categories of activity: **Production**, **Processing**, **Distribution**, **Retail/Healthy Food Access**, and **Waste Management.**

- **Food Production:** Food production, or agriculture, is the process of growing cereals (grains and legumes), vegetables, fruits, meat, and other edible products through the cultivation of specific plants and the raising of specific livestock animals. In the US, on-farm employment decreased from 3.7 million in 1982 to 3.1 million in 2002 (the last year for which data is available) according to the USDA Economic Research Service. This reflects a loss of 600,000 jobs in rural communities across America.

- **Processing:** Food processing, or manufacturing, is the process of transforming raw ingredients into prepared food products. Food processing takes raw cereals (grains, legumes), vegetables (including nuts and seeds), fruits or animal products (meat, eggs, dairy), and utilizes methods and techniques including washing, cutting, cooking, freezing, and other methods of preparation to develop marketable food products. In the U.S., processing employment decreased from 3.8 million in 1982 to 2.5 million in 2002, according to the USDA Economic Research Service. This 1.3 million job loss reflects consolidation and increased mechanization in the industry.

- **Distribution:** Distribution is the process of aggregating and distributing fresh and processed food. Distribution creates a bridge between production and consumption, enabling the delivery of food products in the form, place, and time preferred by consumers. Some larger retailers

vertically integrate distribution, while smaller retailers often use independent distributors. Agricultural wholesale and retail jobs (which are combined in this dataset) increased from 10.4 million in 1982 to 16.8 million in 2002. This reflects the rise of the global food system, in which food products take longer and more complex journeys to reach consumer shopping bags.

- **Retail/Healthy Food Access:** The nation's 210,000 traditional food stores sold $548 billion of retail food and nonfood products in 2009 (USDA Economic Research Service, 2009). At the same time, the USDA Food and Nutrition Service operates five food assistance programs and 10 food distribution programs that work to ensure access to adequate food for low-income American children, pregnant women, elderly and families. A record enrollment of one in seven Americans (44 million people) received Supplemental Nutrition Assistance Program (SNAP, formerly called the Food Stamp program) aid in March 2011 (Food Research and Action Center). As mentioned above, agricultural wholesale and retail jobs (which are combined in this dataset) increased from 10.4 million in 1982 to 16.8 million in 2002.

- **Waste Management:** Composting and recycling are methods of breaking down waste products for re-use. Compost is organic material that can be used to enrich soil and grow plants. Compost is created by combining organic wastes like yard trimmings, food waste, and livestock manures and bulking agents (e.g., wood chips) in a way that accelerates the breakdown of the organic materials. Yard trimmings and food residuals together constitute 23 percent of the U.S. waste stream, according to the Environmental Protection Agency. Composted material is a valuable input to agricultural production. Recycling is the process of turning waste into new products. Recycling prevents potentially useful materials from entering landfills and incinerators, while reducing consumption of raw materials, energy, air pollution and water pollution. Food system enterprises can recycle waste such as greenhouse film, nursery pots, plug trays, and flats, packaging waste, and delivery boxes. In addition, food waste can itself be recycled into marketable products. One example of this is the lobster shell golf ball, which was developed by the University of Maine for use on cruise ships. These biodegradable golf balls are made from crushed lobster shells from the lobster canning industry, which usually end up in landfills.

There are financeable enterprise opportunities for CDFI investment in both the Inner Circle and the Outer Circle. The nature of these financeable enterprise opportunities is the focus on this chapter, and indeed the focus of the Financing Healthy Food Options Capacity Building Initiative.

Unintended Consequences of the Global Food System

The food system we have today is global. We understand this on a personal level when we walk through the grocery store in midwinter and are able to choose grapes from Chile, lettuce from Italy, potatoes from Israel, and olive oil from Greece. We understand it from a community development perspective when we learn that that ten largest U.S.-based multinational corporation's account for 60 percent of the food and beverages sold in the country (Lyson, 2007). This global system has created enormous efficiencies and conveniences. It has also created a number of **unintended consequences**.

a) Health

The rise of highly processed, refined food has led to a general decrease in health among all income levels and socioeconomic groups in the U.S. Obesity is now so common that it is the most significant contributor to ill health in the U.S. If current trends continue, 43 percent of U.S. adults will be obese by 2018, and obesity-related health care expenditures will exceed $344 billion (Thorpe, 2009). Obesity is related to many diseases, including diabetes, heart disease, and stroke. In 2008, CDC estimated that 23.6 million Americans, or 7.8 percent of the population, had diabetes and another 57 million adults had pre-diabetes. Based on current upward trends, CDC projects that as many as 1 in 3 U.S. adults (33 percent) could have diabetes by 2050. The poor are disproportionately impacted by obesity and related diseases: research has shown that the average user of food stamps had a Body Mass Index (BMI) 1.15 points higher than the average non-user (Zagorsky, 2009).

b) Economy

Food industry consolidation has also had a direct effect on loss of local food infrastructure that used to turn livestock and crops into the foods we buy at the grocery store. The meat industry provides an example of this effect. The expansion of beef and pork production in the US has been accompanied by consolidation. As of 2005, four companies controlled the processing of over 80 percent of the country's beef and three of these same four companies, along with an additional fourth, process over 60 percent of the country's pork (Hendrickson, 2007). As a result of this concentration, many local and regional meat processing facilities have gone out of business, taking jobs and economic opportunity with them. Likewise, the loss of small-scale, independent canneries, grain mills, and food processing plants has meant lost jobs and fewer economic opportunities in rural communities. According to the USDA Economic Research Service, the U.S. lost 600,000 on-farm jobs and 1.3 million agricultural processing and marketing jobs between 1982 and 2002 (the most recent year for which data is available).

c) Environment

Conventional agriculture uses water, energy, and chemicals with economic efficiency in mind, but often without accounting for long-term adverse effects to soil and water quality, or water conservation. Unfortunately, this means that soil is being depleted, chemical herbicides and insecticides are accumulating in water supplies, and chemical fertilizers are running off agricultural fields into lakes, rivers and streams. Of particular concern is surface runoff. Agricultural chemicals like pesticides and herbicides enter water through surface runoff when chemical use is excessive or poorly timed with respect to high precipitation. This causes an environmental threat to downstream ecosystems. Roughly 85 percent of global pesticide consumption is used in agriculture. A study published by the National Science Foundation's Center for Integrated Pest Management estimates that 1.2 billion pounds per year of pesticides

were applied in the U.S. during the 1990's. The USDA National Agricultural Statistics Service Agricultural Chemical Use Database indicates that 396 different chemicals were applied to crops in the U.S. in 2006 (the most recent year for which data is available).

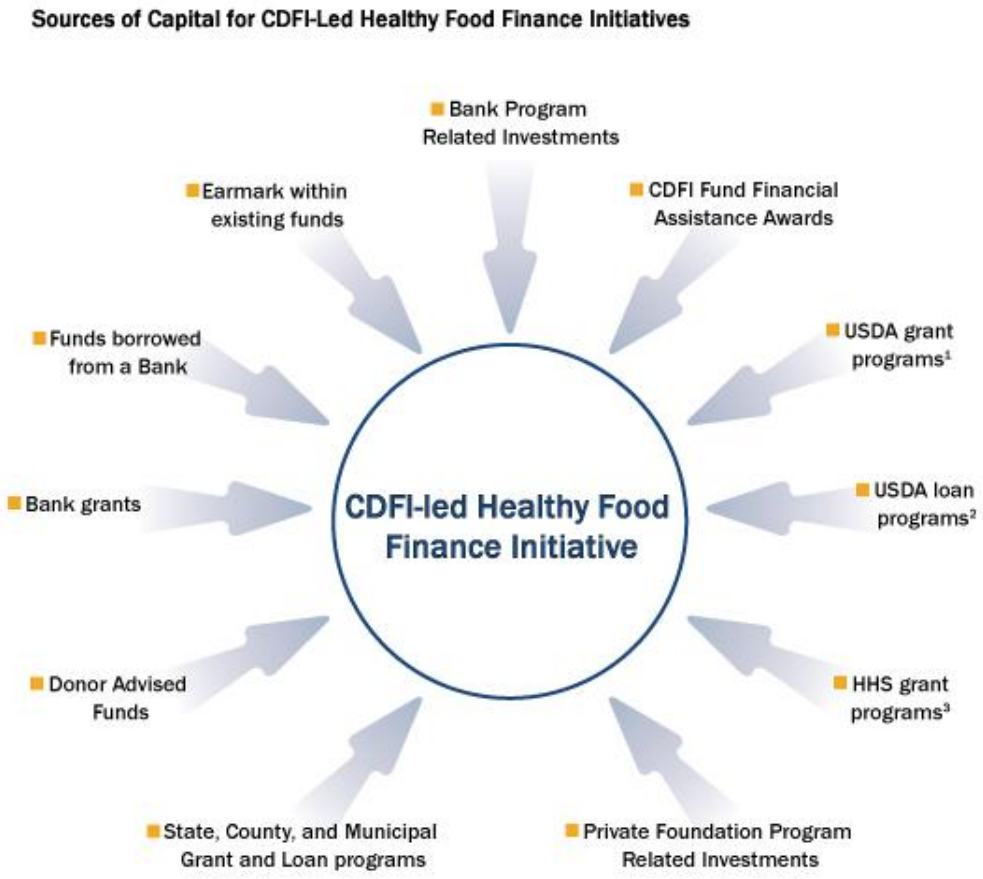
d) Energy

Agriculture uses energy directly for operating machinery and equipment on the farm and Indirectly in the fertilizers and pesticides produced off the farm. In 2005, USDA estimated that energy-related expenses accounted for 14 percent of total farm cash expenses, or $27.4 billion, including expenses of $12.8 billion for fertilizer, $11.2 billion for fuels and oils, and $3.4 billion for electricity. Energy is also used in other parts of the food system, most notably in food distribution. Energy usage in the food system contributes to ozone pollution, global warming and associated environmental problems. The USDA's U.S. Agriculture and Forestry Greenhouse Gas Inventory reports that almost one quadrillion BTU of energy was used for agriculture in 2005. Understanding how energy is used in the global food system may provide insights to how food can be provided in a way that optimizes energy efficiency.

Successful Financing of Healthy Food Systems

Successful healthy food systems require adequate capitalization. There are capital needs and finance related technical assistance needs throughout the food system. These needs vary widely in terms of risk and type of capital required. CDFIs have an important role to play here: much of the work of developing healthy food systems is often done by small-scale enterprises operating in distressed communities. Some have little or poor credit history which may limit their access to traditional sources of financing, or operate in communities with limited or predatory banking coverage. Others are operating using innovative, unusual, or poorly understood business operating procedures. A look at potential sources of capital available for successfully financing healthy food options provides a clearer picture of how CDFIs can get involved.

Figure 2: **Sources of Capital for Successfully Financing Healthy Food Options**



[1]Risk Management Agency Community Outreach & Assistance Partnership Program, Rural Micro-entrepreneur Assistance Program, Community Food Projects Grant Program, Value-Added Producer Grant Program, and many more. Please refer to the Resource Guide for a full listing.

[2]Rural Development Business and Industry Loan Program, USDA Rural Development Intermediary Re-lending Program, and many more. Please refer to the Resource Guide for a full listi

[3]Community Economic Development Program, Assets for Independence Grant Program.

As illustrated above (fig. 2), there are many potential funding sources for successfully financing healthy food options. These include:

- Earmarks within existing funds;
- CDFI Fund Financial Assistance Awards;
- USDA grant programs (e.g., Risk Management Agency Community Outreach and Assistance Partnership Program, Rural Micro-entrepreneur Assistance Program, Community Food Projects Grant Program, Value-Added Producer Grant Program);

- USDA loan programs (e.g., Rural Development Business and Industry Loan Program, USDA Rural Development Intermediary Re-lending Program);
- Department of Health and Human Services grant programs (e.g. Community Economic Development Program, Assets for Independence Grant Program);
- Private foundation Program Related Investments (PRIs);
- Donor advised funds;
- Bank PRIs;
- Bank grants; and
- Funds borrowed from a Bank for re-lending.

It is important to note that grant or subsidy funding often plays a role in healthy food enterprise development. This funding may be required for predevelopment activities such as feasibility studies and business plan development. It may also be needed on an ongoing basis for complementary services such as nutrition education and cooking classes targeting low-income consumers.
In addition to traditional grant funding sources, new Internet-based "crowd funding" capital campaigns such as Kickstarter are developing with strong food-related project areas. As of May 2011, Kickstarter was raising funds for 67 food-related enterprises. These included:

- *The Tillian Farm Development Center* in Ann Arbor, Michigan. This Center is a USDA Natural Resources Conservation Service-funded program that is working to break the barriers new farmers have to starting their farm businesses. Their goal is to raise $12,000 to pay for compost, a walk-behind tractor, deer fencing, a tool shed, and volunteer tools.

- *Cambridge Community Kitchen* in Cambridge, MA. This Center will promote food education and business development in an area where no existing USDA-certified facility can be rented or shared. This project will provide community food security and promote economic sustainability through certified, shared-use kitchen facilities, event space and a retail marketplace.

- *Seedfolks Seed Library* in Oakland, CA. The Seed Library would be the first in Oakland, CA. It would provide a variety of resources including non-hybrid vegetable, herb, and flower seeds; seed saving materials such as jars, labels and envelopes; and a small horticultural reference library. It would also offer one-on-one help from experienced seed savers, host seed swaps, and garden education mentorships for community members.

CDFIs have the potential to become catalytic new partners in the process of social engagement and exchange taking place around critical issues of obesity, hunger, and food access in America through engagement, education, and collaboration with food system stakeholders.

A significant percentage of food system stakeholders are non-profit organizations. They view themselves as being continually dependent on competitive grant funding for project development and organizational sustainability. This persists although many are now effectively operating as industry members.

To catalyze change in this sector, CDFIs can:

1) **Engage** with the food system stakeholders to learn about their missions, objectives, strategic plans, assets, and needs;

2) **Educate** food system stakeholders about the goals and objectives of CDFIs and community development finance, and provide appropriate technical assistance needed to facilitate lending;
3) **Collaborate** with food system stakeholders to identify opportunities for them to use CDFI financing and technical assistance to safely and effectively meet their missions.
4) **Finance** enterprises that provide access to fresh, nutritious, affordable food to all people, and enterprises in all food system sectors that work, from production to consumption and beyond, in a way that respects the principles of social justice and environmental sustainability; and
5) **Support** borrowers with technical assistance during the span of the loan from application, through underwriting, on-going monitoring, and if needed, restructuring and work out of a loan.

Food System Case Studies: Successful Healthy Food Enterprises at Work

There are hundreds of healthy food enterprises and organizations doing inspiring work in communities across America. Each one of them partners with a set of key organizations – industry members, staff of governmental agencies, non-profit organizations, educational institutions, and foundations. In this chapter we present five Case Studies to illustrate the breadth of opportunity and the nature of the challenges inherent in developing healthy food systems.

Enterprise	Location	Description
Farm Fresh Rhode Island	Pawtucket, Rhode Island	A non-profit organization with headquarters in a low-income urban community. Operates 12 farmers' markets that accept EBT. Aggregates/distributes fresh, healthy local food from 40 small and medium-sized farmers to 60 customers including restaurants, school districts, hospitals, and grocery stores.
Oneida Nation Farm and Tsyunhehkwa Project	Oneida, Wisconsin	The Farm is a for-profit enterprise owned by the Oneida Tribe. The Farm cultivates 6000+ acres of commodity and specialty crops. It also runs a large apple orchard and a cattle and bison ranch. The Tsyunhehkwa Project is a non-profit owned by the Tribe. The Project runs farming and canning programs geared toward maintaining and sharing indigenous food knowledge.
New North Florida Cooperative	Marianna, Florida	A farmer-run cooperative with predominantly low-income, African-American members. Operates as a non-profit corporation. Grows, processes, and distributes produce from over 150 producers to over 50 school districts in six states, many of them in low-income communities where a significant percentage of students receive free or reduced price lunches.

Enterprise	Location	Description
Greensgrow	Philadelphia, Pennsylvania	A non-profit organization in a low-income urban community. Runs a thriving diversified urban farm on a formerly vacant city lot. Operates a successful 500-share Community Supported Agriculture (CSA) operation which aggregates and distributes food from 80 local and regional farms to urban Philadelphia residents, including 40 low-income federal nutrition benefit recipients.
Taos Food Center	Taos, New Mexico	A Community Development Corporation (CDC). Provides local, small-scale food enterprise incubation facilities and services to over 40 food community food enterprises. Operates a mobile meat processing facility that has served over 75 small ranchers. Runs successful business and financial training programs. Most of the people they train to be food entrepreneurs are limited resource individuals.

Sector-by-Sector Analysis of Food Industry: Capital and Technical Assistance Needs

In the following section, we provide a basic introduction to the capital needs of the main food system industry sectors: Food Production, Mid-Tier Food Value Chain (including Processing, Distribution, Waste Management, and Technology/Infrastructure), and Retail/Healthy Food Access. These sectors are all explored in more detail and with more technical complexity within the Implementation Handbook chapters that follow. CDFIs can successfully finance low-income entrepreneurs, locally-owned enterprises, and healthy food producers, processors, distributors and retailers in order to increase healthy food access in low-income communities.

Food Production Sector: Challenges and Opportunities

The food production sector encompasses a huge variety of enterprises from small organic vegetable farmers who sell directly to consumers at farmers' markets, to large corporate farms that have a national or international scope.

Small and medium-sized farms and ranches present unique challenges to CDFIs. Many do not understand how to approach CDFIs or how to pitch their ideas. Many do not know how to write business plans. They usually have little collateral and tight cash flows that are constrained by the growing season.

Even in the best of circumstances, investments in this sector cannot expect a high rate of return, a quick rate of growth, or a large margin. Lending into this sector requires an understanding of farm businesses, including those small and mid-sized farms that do not conform to primary agricultural business models. Other Implementation Handbook chapters provide both information and industry standards needed to

benchmark agricultural businesses profitability, and background needed to analyze loans to agricultural enterprises.

The job of CDFIs entering this sector is twofold: (1) to make financial products (e.g., working capital tied to seasonal needs) available to food production enterprises; and (2) to offer technical assistance to production sector food system stakeholders and producers themselves in order to help them understand how CDFIs can finance them at their current size and stage of operation (e.g. business planning seminars, market analysis preparation workshops).

To make sure that needs are met, it is prudent to work with those entities that already provide technical assistance to farmers and ranchers. This may include USDA Cooperative Extension Services, Rural Development Offices, state Departments of Agriculture, Producer Non-Profits, and Producer Co-operatives. Understanding how these groups help producers can help CDFIs offer appropriate products and services.

Mid-Tier Food Chain Sector: Challenges and Opportunities

The "Mid-Tier Food Chain" Sector includes enterprises involved in Processing, Distribution, Technology/Infrastructure, and Waste Management. Community commercial kitchens, fresh-cut fruit and vegetable operations, food canning and freezing facilities, dairies, meat processing facilities, local food aggregator/distributors, composting enterprises, and seed companies are all examples of Mid-Tier Food Chain enterprises. This sector offers a wealth of opportunities for CDFIs.

This sector presents a wide range of financing needs from micro-loans to loans of over $100,000. The Distribution sector in particular presents some unique challenges. These center around the proliferation of innovative business structures such as hybrid for-profit/non-profit entities, internet-based local food sales platforms, and food processing/distribution cooperatives. These innovative forms impact grant availability, internal decision-making processes, and other important business functions.

The role of CDFIs entering this sector is twofold: (1) to offer appropriate finance products that are structured in size, duration and repayment terms to fit the needs of Mid-Tier Food Chain enterprises (e.g., working capital and equipment financing) and (2) to provide technical assistance to Mid-Tier Food Chain operators, similar to that provided to small and medium sized businesses but tailored to the food industry, in order to help them understand how CDFIs can finance them at their current size and stage of operation (e.g. feasibility study workshops, and market analysis preparation seminars).

To make sure that needs are met, it makes sense to identify and partner with existing successful industry members, and with those entities that already provide technical assistance to Mid-Tier Food Chain enterprises. This may include recipients of Community Development Block Grant Programs that provide small business technical assistance, Small Business Administration Offices, State Departments of Economic Development, USDA Rural Development offices, State Departments of Agriculture.

Retail Sector: Challenges and Opportunities

Retail food enterprises take many forms. The most common forms of food retail are conventional store-based businesses. These include "big box" stores (e.g., Walmart, Target), supermarkets, grocery stores, and corner stores. "Natural" supermarkets and food cooperatives are other forms of store-based food

retail. Alternative forms of food retail include farmers' markets, mobile (truck-based) markets, Community Supported Agriculture (CSA) operations, buying clubs, and farm stands. These two main categories of retail – conventional and alternative – present separate sets of challenges and opportunities. Conventional stores in low-income areas sometimes face higher operating costs due to older, less efficient store designs, outdated operating practices, weak organizational linkages with suppliers, high rates of labor turnover, and/or greater losses due to theft. Alternative retail outlets operate without the benefit of set industry standards and norms, and their operations are not well understood by many in the mainstream food industry.

Communities differ in terms of healthy food retail outlet needs and priorities. Some neighborhoods will be served best by a full service grocery store. Others will be served best by a healthy corner store, a farmers' market or a Community Supported Agriculture (CSA) program. CDFIs can help develop ***community-based solutions*** for areas with inadequate food access. Communities may decide that local ownership is a priority. According to a 2009 report published in the Federal Reserve Bank of San Francisco's Community Development Investment Review, "Growing evidence suggests that every dollar spent at a locally owned business generates two to four times more economic benefit—measured in income, wealth, jobs, and tax revenue—than a dollar spent at a globally owned business" (Shuman, 2009).

Whether they choose to invest in conventional retail, alternative retail, or both, the role of CDFIs entering the retail food sector is twofold: (1) to offer appropriate finance products that will fit the needs of diverse food retail enterprises (e.g., working capital and construction loans for conventional businesses; revolving loan fund capitalization for CSAs; working capital tied to seasonal markets for farmers' markets), including collaboration with other sources of financing that may be available to the borrower (e.g., mainstream banks and public sources of funding); and (2) to provide technical assistance to diverse food retail enterprises in order to help them understand how CDFIs can finance them at their current size and stage of operation (e.g. measuring the market demand through tools such as Policy Map).

To make sure that needs are met, CDFIs can work with existing successful industry members, and with those entities that already provide technical assistance and other services to retail food enterprises. This may include grocery trade organizations, chambers of commerce, and farmers' market associations.

The Role of Policy: Food Policy Councils

Many states and municipalities have formed **"Food Policy Councils."** Food Policy Councils bring together diverse food system stakeholders to develop food and agriculture policy recommendations. Food Policy Councils convene public, private, and non-profit sector organizations to examine a state or municipal food system. Some Food Policy Councils are commissioned by a government agency; others are created and run by a non-profit organization. There are currently 96 state, County, and local Food Policy Councils listed on the North America Food Policy Council webpage (http://www.foodsecurity.org/FPC/).

Many Food Policy Councils expand their reach beyond research and policy recommendations. Some Food Policy Councils will work to:

- Develop supportive zoning and tax incentive changes promoting healthy food systems;

- Educate public officials and the general public about issues related to the food system;
- Improve coordination between government departments (e.g., healthy, agriculture, economic development, and education);
- Develop and publish local food resource guides, and market local foods;
- Create new public transit routes between low-income neighborhoods and full-service grocery stores or farmers' markets; and
- Spearhead efforts to persuade government institutions to purchase local food, create community and school gardens, and increase access to farmers' markets by low-income populations.

Food Policy Councils are becoming increasingly interested in finance. Some have successfully partnered with CDFIs. One example of this is the New York Council on Food Policy, which was commissioned by Governor Paterson in 2009 to perform research which led to the development of the New York Healthy Food Healthy Communities Initiative. This initiative has developed into a $30 million fund which is now providing loans, grants, and technical assistance to grocery stores in New York State through the Low Income Investment Fund (LIIF) (a case study of the LIIF fund is available in Implementation Handbook Chapter Two).

Food Policy Councils can be ideal partners for CDFIs in successfully financing healthy food options in the states and municipalities where they are operating.

Summary and Conclusions: A Food Systems Review

In Chapter One we have focused on introducing the food system and learning how CDFIs can successfully finance healthy food system enterprises within each part of the food system continuum. We have learned the following five Key Concepts:

1) A food system consists of food production, processing, distribution, retail/healthy food access, waste management, and technology/infrastructure. There are **financeable enterprise opportunities** for CDFI investment throughout the food system.
2) The growth of successful healthy food systems requires **adequate capital**. There are capital needs and finance-related technical assistance needs throughout the food system. These needs vary widely in terms of risk and type of capital required. Grant or subsidy funding often plays a role in healthy food enterprise development.
3) CDFIs have the potential to become **catalytic new partners** in the process of social engagement and exchange taking place around critical issues of obesity, hunger, and food access in America through **engagement, education, and collaboration** with food system stakeholders.
4) Finding the **right match of finance and technical assistance** products for the production, processing, distribution, retail/healthy food access, waste management, and technology/infrastructure sectors is the main task of CDFIs interested in successfully financing healthy food options. Some **major challenges** for financing healthy food options include:
   a. Lack of familiarity with standard finance and deal operations within some sectors;
   b. Little collateral and tight cash flows, low rate of return, slow growth, small margins and seasonal expense/income fluctuations within some sectors; and
   c. Limited information regarding replicable projects and risk profiles industry standards for some types of healthy food enterprise.

5) In many communities, state and municipal **Food Policy Councils** are operating and may be ideal partners for CDFIs in performing the necessary groundwork for development of initiatives designed to successfully finance healthy food options.

Case Studies:

Farm Fresh Rhode Island

Oneida Nation Farm and Tsyunhehkwa Project

New North Florida Cooperative

Greensgrow

Taos Food Center

GROWING A LOCAL FOOD SYSTEM: FARM FRESH RHODE ISLAND

By Nessa Richman, Brightseed Strategies

FARM FRESH RHODE ISLAND
Pawtucket, RI

SECTORS: Processing – Wholesale – Retail; "Food Hub"

GEOGRAPHY: Urban Headquarters; Programs bridging urban and rural communities

WEBSITE: http://www.farmfreshri.org

OWNERSHIP TYPE: Non-profit organization; operator of 9 summer and 3 winter farmers' markets, ebt accepted at all farmers' markets; aggregator and distributor of 40 small and medium-sized Rhode Island producers to restaurants, institutions and retail food stores; headquarters in former mill building in Pawtucket houses wholesale distribution center and winter farmers' market.

YEAR FOUNDED: 2004

SQUARE FOOTAGE: Total of 14,600 square feet, plus two loading docks

NUMBER OF STAFF: 9

TOTAL REVENUES (2010): $484,350

SOURCES OF CAPITAL (2010): A total of $484,350: $232,000 in grants; $85,000 in unrestricted donations; $89,500 in food hub sales (flat 15% of sales); $44,750 in farmers' market stall fees; $32,000 in direct food sales at farmers' markets (organization itself sells some items at its own farmers' markets); $1,100 from pilot year of Harvest Kitchen product sales.

OTHER FINANCIAL SERVICES NEEDED: Two checking accounts and one money market account with a local bank.

IMPACT/OUTCOMES: The success of Farm Fresh Rhode Island's programs has contributed to an increase in small and medium-sized farm viability in the state. The Market Mobile program has demonstrated the demand by building a functional marketplace, and growers have responded by increasing production acreage. This in turn builds the capacity/supply in the marketplace to serve low-income customers through schools, hospitals, grocers, and institutions.

Farm Fresh Rhode Island is growing a local food system that values the environment, health and quality of life of RI farmers and eaters. Their objectives are to preserve Rhode Island farmland and our agricultural and culinary knowledge, build healthier communities, increase access to fresher tastier food, improve impact of food production and distribution on our environment, and strengthen community-

based businesses. Farmers' Markets are the core of Farm Fresh Rhode Island's operations. In 2010, the organization has made $36,500 worth of fresh, nutritious produce available to over 800 low-income residents through EBT and tens of thousands of dollars to several thousand WIC and low-income senior customers at 12 farmers markets. Their farmers' markets, collectively, have the highest WIC redemption rates statewide.

Farm Fresh Rhode Island is a non-profit organization. It has five main programs, three of which generate income. Those that generate income include (1) the Mobile Market, which aggregates and distributes products from 40 Rhode Island agricultural producers and charges a 15% fee. This project generated $89,436 in 2010; (2) farmers' markets, which charge vendors a variable flat rate stall fee of between $7 and $30 per week and generated $44,750 in 2010 (plus $32,000 in direct food sales at their own farmers' markets as noted in the Sources of Capital section above) and (3) the Harvest Kitchen commercial food processing pilot program, which trains at-risk/adjudicated youth to produce apple sauces, tomato sauce, peeled peaches, and dried peaches and apples through a state-run Youth Training Program and generated $1,100 in income in 2010. Overall, the organization has created the economic equivalent of 26 new on-farm and 3 new off-farm jobs, and pays 7 part-time drivers and 1 warehouse manager.

Farm Fresh Rhode Island is headquartered in a former mill building in Pawtucket's Woodlawn neighborhood. The Woodlawn neighborhood, located in the west and central sections of Pawtucket is home to one fourth of the city's approximately 78,000 residents. 77 percent of Woodlawn residents live in low income households, earning less than 80 percent of the area median income. 55 percent of community members are from minority populations and 43 percent of households speak languages other than English.

Farm Fresh Rhode Island leases 16,400 square feet of space, including 1400 for office space, 7700 for a twice-weekly retail farmers market, 1700 for vendor storage room for the retail market, and 3800 for the Market Mobile food hub warehouse. The Market Mobile food hub warehouse includes a 300 square foot 55º room, a 200 square foot 33º room, and a 100 square foot freezer. They also use two loading docks. Costs for the build out were roughly $100,000, and included architect fees, coolers, shelves, and a conveyer belt. Rent is $35,000 per year plus electric.

Farm Fresh Rhode Island also runs two programs that are grant-subsidized. These are the Nutrition Education Program, which provides educational activities for low-income seniors, parents and children at farmers' markets focused on cooking with fresh produce, and the Fresh Bucks Program, which is a system of augmenting Supplemental Nutrition Assistance Program (SNAP, former the Food Stamp Program) funds with private foundation dollars to increase the buying power of low-income customers at farmers' markets.

The Food Hub is growing by leaps and bounds. In 2010, Market Mobile helped 40 local farms sell $685,000 of food to 152 customers, solid growth from the 2009 pilot year sales of $225,000. For 2011, the organization plans to expand the current once-weekly delivery schedule to a more regular schedule to accommodate institutional buyers and continued overall growth. While this program is not yet self-sustaining, projections show a break-even mark at the $2 million per year level, which it is likely to reach in 2013.

With this rate of growth in the Market Mobile program, and plans to build out their community commercial kitchen program to better serve their Harvest Kitchen and Open Kitchen operations, Farm Fresh Rhode Island has a number of unmet capital needs. A processing kitchen with sinks, cutting area, steam kettle and slicers would allow Harvest Kitchen operations to be integrated into Food Hub operations and allow program trainees and graduates to do the light processing of fresh products that would both create new jobs and make the fresh Market Mobile food more attractive to institutions (e.g., Harvest Kitchen staff would clean, chop and package fresh green beans for school district buyers). However, they have not explored the potential of accessing a loan through a CDFI or bank. Executive Director, Noah Fulmer, states that the main reason that the organization has not explored this avenue is a lack of understanding regarding CDFIs and loan applications, requirements, and terms.

Farm Fresh Rhode Island has several key partnerships, including the State Department of Environmental Management Division of Agriculture, which has provided grant support, connections, and technical assistance; the federal Americorps Volunteers in Service to America (VISTA) Program which has provided funding for a number of full-time year-long staff positions; myriad anti-hunger, economic development, and agricultural producer non-profits serving farmers and low-income groups in the state, Brown University, local WIC clinics, the Providence Housing Authority, and the Rhode Island Foundation.

Farm Fresh Rhode Island faces a number of challenges as it moves forward. In order to support continued growth of the Food Hub operation, they need to streamline and standardize Market Mobile deliveries from farms and beef up their delivery schedule. If they expand beyond a delivery schedule of two days per week, they may need to build out warehouse space, develop a more efficient inventory system, and acquire accompanying certifications needed to serve institutional clients. Their Harvest Kitchen program was run as a pilot in 2010. This year they hope to expand it into a more profitable enterprise through working with top graduates from the youth training program to increase production. Agricultural product and consumer demand are not limiting factors at this time.

In order for Farm Fresh Rhode Island to gain understanding of and confidence in the potential for CDFI technical assistance and financial products to serve their needs, four main needs need to be met: (1) a basic understanding of CDFIs; (2) a meaningful dialogue with a CDFI and other food system stakeholders in the target area; (3) co-creation of a healthy food finance initiative plan in which they have “a seat at the table” from the outset; and (4) appropriately targeted technical assistance and loan products, likely including grant/loan packages.

FOOD ENTERPRISES IN NATIVE COMMUNITIES: ONIEDA NATION FARM AND TSYUNHEHKWA

By Nessa Richman, Brightseed Strategies

ONEIDA NATION FARM
Seymour, Wisconsin

TSYUNHEHKWA PROJECT
Oneida, Wisconsin

SECTORS: Production – Processing – Distribution – Retail

GEOGRAPHY: Rural; Native American Reservation

WEBSITE: http://www.oneidanation.org/farm/

OWNERSHIP TYPE: The Oneida Nation Farm is a for-profit part of the Enterprise Structure of the Oneida Tribe of Indians of Wisconsin. Tsyunhehkwa is a separate non-profit part of the Oneida Tribe.

YEAR FOUNDED: The Farm was established in 1976. The Tsyunhehkwa Project and the orchard were both established in 1994.

NUMBER OF STAFF: The Farm employs 7 full-time, 2 part-time staff; the orchard employs 3 full-time, 6 part-time seasonal. The Tsyunhehkwa Project, employs 10 Staff: 4 full time, 6 part time seasonal.

TOTAL REVENUES: The Farm is not subsidized, although they do apply for project grants on occasion for special projects. The Tsyunhehkwa Project makes retail sales and obtains a small amount in grants, but is primarily subsidized through a tribal contribution.

SOURCES OF CAPITAL: Tribal contributions, International Bison Cooperative grants, USDA Farm Service Agency (FSA),USDA Natural Resources Conservation Service, USDA EQUIP and USDA Conservation Reserve Program grants.

OTHER FINANCIAL SERVICES NEEDED: Finances are managed by the Tribal Accounting Office.

IMPACT/OUTCOMES: The Farm creates employment opportunities for Tribal members while providing fresh, healthy local food to the reservation community and the nearby community of Green Bay. Low-income populations can access the Farm's products through use of WIC Farmers Market Nutrition Program coupons at both farmers' markets and retail store outlets and through the Farm's pick-your-own options. Tsyunhehkwa Project increases employment and youth opportunities, improves food security and quality, and shares indigenous food knowledge.

Oneida Nations Farm (the Farm) operates a diversified agriculture-based enterprise which is owned by the Oneida Tribe of Indians of Wisconsin. The Farm raises beef and buffalo, cultivates high quality

varieties of field crops including corn, soybean, alfalfa and winter wheat, and operates a 4000-tree apple orchard. The Farm grows a wide variety of fresh produce products such as sweet corn, squash and pumpkins. Its latest venture is a strawberries, raspberries, and blackberries operation. The first parts of the Farm were established in the mid-1970s. In the mid-1990's many expansions were made. Products of the Farm are sold through wholesale and direct marketing channels to both Native and non-Native local community residents.

All of the finance for the Farm's operations comes from the General Tribal Council. All of the finance for the buffalo operation comes from Intertribal Bison Coop Grants. The Farm has also received funding from USDA Farm Service Agency (FSA), USDA Natural Resources Conservation Service, USDA EQUIP and USDA Conservation grants.

Commodity Crops. The commodity crops operation started in 1978. It has grown to total over 5000 acres of corn, soybean, alfalfa and winter wheat, making it one of the largest conventional cash crop farms in Northeast Wisconsin. Ten percent of field crops are used internally as feed for their own herds of cattle and buffalo, while 90 percent are sold to large area dairies and through a local producers' cooperative.

Fruits and Vegetables. In 1994, the Oneida Tribe purchased a 2,400 tree apple orchard. The apple orchard has 30 acres of original orchard and an additional 10 acres of new orchard. In all, they now tend approximately 4,000 trees. The majority of the apples are Macintosh, Cortlands, and Honey Golds with twenty other varieties also available. There is also a wide variety of fresh produce such as sweet corn, squash and pumpkins, as well as strawberries, raspberries, and blackberries. Apples, other fruit and vegetables are sold direct-to-consumers at three farmers markets and through the retail store. They are sold in a raw, unprocessed state.The berry operation is the Farm's newest venture. The first crop will come in this spring. Prior to committing to this new venture, the Farm performed a rough business plan analysis which indicated that a berry crop would have the potential to extend orchard income across more months of the year without interfering with existing crop requirements. Staff also performed a market analysis consisting of a consumer survey. The survey was sent to tribal members and provided in store to customers at their self-owned retail store. Survey findings indicated that a significant proportion of tribal members and current retail store customers had an interest in purchasing fresh berries from the Farm.

Beef and Buffalo. They maintain a 450-head herd of Black Angus cattle and a 100-head herd of buffalo. Thirty-three percent of Beef sales and 70 percent of buffalo sales occur through their self-owned retail store. An additional 33 percent of beef sales and 30 percent of buffalo sales occur through direct order from end consumers who want to buy meat in "halves" and "quarters.", Animals are processed by an outside butcher shop. The Farm also provides 33 percent of its beef to the Oneida Nation's self-owned Radisson Hotel. Some additional sales are made to retail stores in Green Bay.

Low-income populations from both on- and off-reservation communities can access the Farm's products through use of WIC Farmers Market Nutrition Program coupons at both farmers' markets and retail store outlets. The pick-your-own options for apples and berries also provide an opportunity for access to fresh lower-cost fruit. The retail store is in the process of establishing SNAP EBT capability.

The Farm works with a variety of outside collaborators, including a private crop consultant for commodity production, the USDA National Resource Conservation Service, the Oneida Conservation and

Environmental Departments, the University of Wisconsin Agriculture Extension Service and the WI Apple Association to maximize their apple orchard operations and the Black Angus Association for their Black Angus operation.

The Farm's challenges echo those of many farms. They strive to provide a consistent supply of high-quality food to their customers, and must manage flood and other natural disasters. Farm manager Jeff Scofield states that their main work at this point is building up their business with certainty that they can fulfill consumer demand. They are not making expansion plans right now, despite the fact that they have retail customers on a waitlist for their beef and buffalo products and do not have the capacity to fulfill additional restaurant orders at this time.

The Oneida Nation also operates two additional agriculture and food-related programs which are primarily educational in nature, and are separate from the Farm in terms of business structure. One is the Food Distribution Center, which provides food assistance and nutrition education. The other is the Tsyunhehkwa Project, a culturally-based agriculture program that works on education and sustainable production, processing and distribution practices. They strive to reintroduce high quality, organically grown foods to reservation residents' diets in order to ensure a healthier and more fulfilling life and encourage positive dietary and nutritional change. The Tsyunhehkwa Project consists of (1) an 83-acre certified organic farm which raises about 25 - 35 head of grass-fed cattle, diverse traditional fruit, vegetable and herbs crops, free-range chickens and (2) a cannery which processes farm products into value-added items such as dehydrated corn, corn soup, corn bread, apple products, jams/jellies, salsa, and pickles. Tilling services and community garden sites are available, as are educational workshops and hands-on activities. The Project conducts a Harvest & Husking Bee to hand harvest the 6 acres of White Corn they plant annually, a cultural practice where the community gathers to harvest their produce while building and maintaining a sense of people and place. All of the products and services of the Project can be purchased on-site or at the Oneida Nation retail store.

The Tsyunhehkwa Project works closely with several networks of Native agricultural groups. Two partners are the White Earth Land Recovery Project and a traditional food and agriculture network created by an Oxfam America grant program. They also work with a number of local enterprise areas and community commercial kitchens in their area on local and regional processing initiatives.

Jeff Metoxen, Tsyunhehkwa Project Director, states that the challenges of the Tsyunhehkwa Project include ensuring continuing support for their programs and building a network of Native communities within Wisconsin to share experience and learn from one another's projects related to sustainable agriculture, Indigenous food, food security, and food sovereignty.

FRESH PRODUCE TO LOW-INCOME SCHOOLS: NEW NORTH FLORIDA COOPERATIVE

By Nessa Richman, Brightseed Strategies

NEW NORTH FLORIDA COOPERATIVE
Marianna, Florida

SECTORS: Production – Processing – Wholesale Distribution

GEOGRAPHY: Rural

WEBSITE: NA

OWNERSHIP TYPE: Farmer Cooperative; Non-Profit Corporation

YEAR FOUNDED: 1995

NUMBER OF STAFF: Three full-time truck drivers, three "on-call" truck drivers. The Executive Director is a farmer-volunteer, as are several others who assist in the office.

TOTAL REVENUES: Total revenue is not disclosed publicly. Operating expenses generated from sales to over 50 school districts, most in low-income communities.

SOURCES OF CAPITAL: Several loans from a local bank, a loan from the Jackson County Enterprise Community, a "Lease Purchase Agreement" through the Florida Department of Agriculture "Fresh from Florida" campaign and a USDA Rural Business Enterprise Grant (RBEG).

OTHER FINANCIAL SERVICES NEEDED: NNFC maintains one checking account at a local bank. They are preparing for several new projects that will require more complex financial services needs, but are unsure of what those needs will be at this time.

IMPACT/OUTCOMES: The New North Florida Cooperative has increased the economic viability of approximately 150 rural, primarily African American, limited resource Florida agricultural producers since its inception. By entering the food processing and wholesale distribution business cooperatively, members capture more of the end consumer dollar than if they sold raw product to an outside processor or wholesaler. Their products are currently purchased by over 50 school districts across Florida, Georgia, Alabama, Arkansas, Mississippi and Tennessee, almost all of which have a high proportion of students receiving free or reduced school meals.

The New North Florida Cooperative Association Inc. (NNFC) was established in 1995 by four local limited resource farmers and a former USDA staff. They worked in cooperation with a Florida A&M University Extension Marketing Specialist. The NNFC grows and processes fresh-cut green beans, field peas, Muscatine grapes, turnip greens, strawberries, blackberries, and watermelon. They sell to almost 100 regional school districts in seven states, most in low-income counties. Their new pilot in the Miami-Dade

School District alone serves 385,000 children. They focus production primarily on fresh cut, washed and bagged greens, sweet potato sticks, and green beans. The items are incorporated into menu planning, as a side dish or with fresh fruit as a dessert. This value-added operation has increased the amount of fresh regionally-grown produce in public schools, many of which are in low-income counties (both urban and rural), and increased economic viability of approximately 150 farmers, most of whom are limited resource and African American.

NNFC initially developed a basic marketing plan and performed a rough feasibility analysis for selling to school markets. They field tested their model extensively, with the four member all-farmer Board of Directors selling to Florida school districts for five years before initiating outreach to other producers. Mr. Holmes and Ms. Richardson researched which products would be most cost competitive for local producers to sell in comparison with canned and frozen options. They then carefully chose items based on estimated profitability for farmers using an internally developed method of calculation that takes into account per serving price paid by schools, servings per bushel, and cost of production. They also factored in training for farmers and costs of processing equipment and trucks. The NNFC now has eight trucks. It is not grant subsidized and it generally works with a local bank for its financing needs.

When NNFC made a commitment to the project, it accessed funding through several means:

- In 1995 the county where the NNFPC is based was an Enterprise Zone. One of the benchmarks of the Enterprise Zone was to help displaced farmers. Through this, the NNFC applied for and received a loan of $10,000 from the Jackson County Development Council, which they used to purchase their first piece of processing equipment: a leafy green cutter.

- In 1995 they received a grant from the USDA Enterprise Community Grant Program (now called the Community Food Projects grant program) for additional processing equipment.

- In 1997 the Florida Department of Agriculture “Fresh from Florida” program provided a lease purchase agreement for processing equipment upgrades.

- In 1999 they were awarded a USDA Rural Business Enterprise Grant (RBEG) Program grant of $325,000 which funded additional trucks and equipment.

- In 1996 they were awarded a USDA Agricultural Marketing Service (AMS) Cooperative Agreement of $40,000 to perform a feasibility study of small scale farmers selling to school districts, which resulted in a USDA publication on this topic.

- All along the way, the NNFC worked closely with a local bank, where the Executive Director had a personal relationship with a loan officer. They used their first bank loan of $6,000 for a green bean cutter.

This grant and loan funding allowed the NNFC to make the necessary equipment purchases for automating the job of cleaning, and processing, packaging and storing fresh products and providing value-added products.

NNFC marketing and planning is done centrally. Lead organizers work a full year in advance to recruit school districts and select products. Prices are set in coordination with the school districts’ per serving

feeding costs. Products must meet certain cost of production, production volume and price requirements needed to ensure that farmers can make a profit and remain competitive with canned and frozen substitute items. They use their contracts for the coming year to estimate the necessary product volume and then translate backwards to calculate acreage requirements. Once acreage estimates are settled, lead organizers match producers with production needs. Most producers start out small, with just ½ acre to 5 acres. The largest acreage per farmer is estimated to be 15. In addition to school districts, sales are also made to about 30 independent grocers in Florida, Georgia, and Alabama.

The Executive Director estimates that nearly 100 percent of their producers live in low income communities and says that all of them are small farmers with less than 50 acres. He also states that the majority of the schoolchildren receiving their product come from low income communities, both urban and rural. Most of the schools they work with have free and reduced lunch rates exceeding 50 percent. In fact, it is part of their business model to work with schools that have high free and reduced lunch rates in order to sell more product.

Key partners for the NNFC have included Florida A&M University Cooperative Extension and Heifer International. Florida A&M University Cooperative Extension has provided educational support for participating farmers in product and market development. NNFC and FAMU have collaborated on numerous projects and activities to assist limited resource farmers in the Southeast. Heifer International is a well-established international non-profit organization that works with communities to end hunger and poverty and to care for the Earth by giving families a source of food rather than short-term relief. Heifer International supported a program in the area that worked with low-income people to improve their economic condition through providing training in agricultural production and agricultural development. Along with other Heifer International supported groups, NNFC formed a network and received useful production and development training.

The NNFC faces three main challenges: (1) a lack of financial record keeping experience on the part of its producer-participants. This is exacerbated by a culture in which sharing financial information is not the norm; (2) the cooperative model itself. Many of the farmers they work with, especially the older farmers, do not like the cooperative model. They have worked to overcome this challenge by reaching out to local farmer groups in their states of operation, and through a youth entrepreneurship training program. About 13 local high school age men have participated in this program; and (3) increasing fuel costs. To assist with this last challenge, they are working to access the existing infrastructure of the state commodity programs. This will allow them to turn over some of their distribution.

The NNFC is a national leader in meeting demand for healthy, locally grown food in public schools. NNFC leadership believes that the current federal focus on increasing farm-to-school sales has had a major impact in the state of Florida. In Extension Marketing Specialist Vonda Richardson's estimation, "Florida has finally jumped on the bandwagon and there is a huge opportunity to be a frontrunner to provide for this demand. If we can get more school districts to participate, we can overcome the apprehension that exists for some school food buyers, especially in larger school districts."

URBAN FARM BENEFITS LOW-INCOME CONSUMERS: GREENSGROW

By Nessa Richman, Brightseed Strategies

GREENSGROW
Philadelphia, PA

SECTORS: Production – Processing – Distribution; "Food Hub"

GEOGRAPHY: Urban; Programs linking urban and rural communities

WEBSITE: www.greensgrow.org

OWNERSHIP TYPE: Non-profit Organization

YEAR FOUNDED: 1998

NUMBER OF STAFF: 6 full-time, 23 seasonal part-time

TOTAL REVENUES (2010): $1.1 million

SOURCES OF CAPITAL: $977,200 in farm revenue; $81,000 in grants; $17,000 in Community Commercial Kitchen revenue; and $42,800 from special events. The Reinvestment Fund (TRF) CDFI provided a revolving working capital loan of $18,700 which enabled a program of Community Supported Agriculture (CSA) enrollment for low-income residents in the community surrounding their urban farm.

OTHER FINANCIAL SERVICES NEEDED: Two bank accounts at a local bank.

IMPACT/OUTCOMES: Greensgrow has increased economic viability of 80 small and medium-sized farms in Pennsylvania while bringing fresh, healthy food to urban Philadelphia residents through its successful Community Supported Agriculture (CSA) and Farm Stand operations. It has increased access and affordability of fresh, nutritious, local food for low-income people by accepting SNAP and WIC . Greensgrow also provides nutrition education and healthy cooking classes to low income populations, as well as opportunities for small food entrepreneurs and organizations through its Community Commercial Kitchen.

Greensgrow began as an urban farm on an abandoned lot in 1997 and quickly emerged into a successful urban agriculture business. It now operates a thriving Community Supported Agriculture (CSA) which sells 500 shares of food from 80 Pennsylvania farms to urban Philadelphia residents, including 40 shares to low-income residents who may purchase specially sized and priced shares using their SNAP benefits through its *Local Initiative for Food Education* (LIFE) program, which was initiated in 2010 in partnership with The Reinvestment Fund (TRF).

Greensgrow is a federal 501(c)(3) nonprofit organization dedicated to promoting economic growth and development in economically distressed neighborhoods through the creation and operation of a socially conscious and sustainable agri-business enterprise. Greensgrow is in its 14th year of operation, and in addition to its successful CSA program, it owns and operates a commercial farm, a retail nursery, and a food distribution business specializing in locally-grown and produced products. It also operates a shared-use commercial kitchen, which it built at a nearby church. The kitchen is used both by Greensgrow to produce value-added foods from farm fresh produce for its CSA shares, and by community food entrepreneurs and organizations. Greensgrow also provides technical support and business consultation to various organizations, municipal governments, and other urban-agricultural enterprises that want to replicate the "Greensgrow Model."

Urban agriculture is at the heart of Greensgrow. Each season the organization grows over 20 different types of vegetables, totaling over 2000 pounds of fresh produce for their farm stand and CSA. Due to the toxic nature of the existing soil on the site, they use large raised beds for their growing system. They have also instituted production in hydroponics, containers, green roofs, and off-site farms. They have increased their growing season by building high tunnels (inexpensive greenhouse structures) where they can grow greens year-round. They employ up to 23 part time seasonal workers, as well as 6 full time staff.

Greensgrow farm production, however, is not nearly enough to satisfy customer demand. Thus, Greensgrow purchases food from 80 Pennsylvania farms to split into shares and distribute to their shareholders. Their CSA season is 25 weeks long, beginning mid-May and ending early November. Shareholders pick up their food on a specific pickup day each week. Any share items that are not picked up by a certain time are donated to a local anti-hunger organization. Each week, the share includes a seasonal assortment (5-8 items) of locally grown, freshly picked vegetables from their own urban farm and the rural farms they work with, 2 types of fruits, a locally-produced cheese, and an additional dairy option (e.g. Yogurt, butter, eggs, or tofu). Occasional items of special interest are also included, such as fresh bread, mushrooms, apple cider, and honey. Full shares cost $775 ($32.30/week). Payment is due prior to the market season, to cover expenses.

To target low-income communities, Greensgrow launched its new *Local Initiative for Food Education* (LIFE) program in 2010. This program expands the ranks of its CSA with more low-income families and individuals who may pay for their CSA memberships using SNAP cards. The use of SNAP cards to pay for CSA shares has been approved by the USDA, under the conditions that pre-payments only cover two weeks' worth of CSA deliveries – rather than paying for an entire seasonal subscription as is typically done in a traditional CSA. To overcome this obstacle, Greensgrow worked with TRF to create an innovative revolving loan fund that provides the program its working capital and is replenished every two weeks by LIFE member SNAP payments.

Greensgrow is committed to financially sustainable entrepreneurship. With a budget of nearly $1.1 million in 2010, $81,000 was grant revenue and enterprise operations earned $977,200. Revenue details are shown in the chart below. The profits, about $150,000 per year, are used to subsidize their other programs. Their community kitchen is not yet breaking even. It earned $17,000 in 2010 and was mainly used to process farm products for distribution in CSA shares. However, several food entrepreneurs and non-profits use their kitchen space as well, and Greensgrow plans to increase this

activity. Greensgrow also operates fully grant-funded nutrition education and cooking programs which specifically target low-income populations, including LIFE program members.

Revenue Sources (2010)	Amount of Revenue (2010)
Community Supported Agriculture (CSA) Operation	$466,400
Farm Stand	$129,600
Plant Nursery	$304,700
Direct-to-Restaurant Sales	$76,500
Community Kitchen	$17,000
Grant Revenue	$81,000
TOTAL REVENUE (2010)	$1,075,200

Several key partners have joined with Greensgrow on the LIFE project including TRF and Philadelphia Coalition Against Hunger. TRF committed funds from the Pennsylvania Fresh Food Financing Initiative (FFFI) to create the revolving loan fund and the Philadelphia Coalition Against Hunger provides support to families and individuals who are eligible for SNAP benefits but have not yet entered the program. This year membership was limited to 25 families. In 2011, the membership will be opened up to a total of 40 subscribers. The long-term goal is to build the membership of low-income neighborhood residents to parity with the "traditional" CSA membership of middle and upper income participants. The food provided in the LIFE CSA shares is in no way subsidized and each basket contains a portion of fresh fruits and vegetables equal to the market value of the cost of each LIFE share (which is currently $22/week).

Greensgrow also has key partnerships with the Delaware Valley Regional Planning Commission, a greater Philadelphia region quasi-governmental organization which has a Food System Stakeholder project funded by the William Penn Foundation, and St. Luke's Church, which houses the community commercial kitchen where they process raw farm products. The USDA Community Food Projects Program provided grant funding and connection with national networks, and the USDA's state Rural Development Office provided business planning and other related technical assistance.

Greensgrow is now working to open a second food hub in the low-income city of Camden, New Jersey. The goal of the Camden project is to establish a financially sustainable enterprise that increases the availability of affordable, fresh and healthy foods to low-income families who lack access to supermarkets or grocery stores that provide healthy food choices, and connects the area's rural food producers to urban consumers thereby increasing the economic viability of New Jersey farmers providing direct sales of fresh produce to urban markets. The Camden project will aid the local community by offering fresh, locally-grown produce through a CSA program and a farm-stand. It will also provide

education and training in the selection, preparation, and cooking of CSA foods. This ambitious effort faces many challenges, both financial and logistical. The organization is working closely with TRF and Cornerstone Ventures, a consulting and development company which specializes in the development of sustainable Social Enterprises that can demonstrate the ability to profitably integrate social purpose into their product and mission.

FOOD ENTREPRENEURS IN RURAL NEW MEXICO: TAOS FOOD CENTER

By Nessa Richman, Brightseed Strategies

TAOS FOOD CENTER
Taos, New Mexico

SECTORS: Processing; also involved with Distribution and Wholesale Marketing

GEOGRAPHY: Rural

WEBSITE: http://www.tcedc.org/TFC.html

OWNERSHIP TYPE: Non-profit cdc

YEAR FOUNDED: 1986; kitchen project developed in 2000; mobile slaughterhouse project developed in 2007.

NUMBER OF STAFF: 6 full-time, 5 part-time

TOTAL REVENUES (2010): $340,000 (down from $500,000 in previous years). Approximately 1/3 foundation grants, 1/3 revenue, and 1/3 government grants.

SOURCES OF CAPITAL (2010): For programs, funding was sourced from the USDA Outreach and Assistance for Socially Disadvantaged Farmers and Ranchers program grant, local foundations, county and town grant program funds. Food center fees were also paid. For business park development, a loan was secured from a regional bank and tenant rental income was paid.

OTHER FINANCIAL SERVICES NEEDED: Checking account at regional bank, loan secured from a regional bank. Two New Mexico CDFIs provide financial technical assistance in partnership with the Taos Food Center to food enterprises.

IMPACT/OUTCOMES: The Taos Food Center provides local, small-scale food enterprise incubation facilities and services to over 40 food community food enterprises. They also operate a mobile meat processing facility. Most entrepreneurs are limited resource community members. TCEDC's Value-Added Learning Center classes are available to groups around the country interested in the model and the organization performs outreach nationally to other organizations working to develop community food systems.

The Taos Food Center, which is a project of the Taos County Economic Development Corporation (TCEDC), operates in a historic, semi-isolated, rural community which is comprised of Native Pueblo, Hispanic, and Caucasian residents. The Taos Food Center was founded over 19 years ago in order to lead community development efforts to address the economic challenges faced by the area.

TCEDC has a 25 year history in Taos, where it has incubated dozens of businesses, provided in-depth training for over 600 individuals and organizations wanting to get into the commercial food sector, established a nationally recognized commercial kitchen with supporting services that currently serves 50 clients, and has recently established a mobile slaughterhouse ("Matanza") and meat processing facility to serve low-income ranchers so they do not have to sell their cattle on-the-hoof at pennies a pound. The centerpiece of TCEDC is the modern, fully equipped, regulation commercial kitchen and the support services TCEDC provides to prepare individuals for the demands of becoming an entrepreneur in the food sector. This includes the Food Sector Opportunity Program (FSOP) which introduces students to the regulations governing the food business, the sourcing of ingredients, the bio-chemistry of cooking in bulk, how to develop a business plan, and label design and product marketing. TCEDC has offered the FSOP™ course twice a year for over twelve (12) years and has provided technical assistance to organizations looking to model TCEDC in developing food systems in their community, farmers and ranchers looking to produce for markets and find a way to benefit economically and those interested in working in the food sector. They also run a successful peer mentorship program with Native and Land-Based communities.

TCEDC operates a 24,000 square foot business park and community center, which includes a 5,000 square foot commercial food processing facility, the Taos Food Center. The Center is a commercial kitchen which provides comprehensive equipment, services, and support to food industry entrepreneurs. Over 40 local food businesses currently work out of the Taos Food Center, making everything from fresh salsa to baked goods. Equipment available in the facility includes: dry storage, a large walk-in cooler, walk-in freezer space, convection ovens, fryers, steam kettles, a vacuum sealer, two commercial fruit presses, a flash-pasteurizer for juice, and a semi-automatic canning line that includes a filler and capper.

They work with entrepreneurs who want to start their own specialty food businesses, as well as with more established entrepreneurs who want to reach new markets and access expert advice to expand their food businesses. They also support local growers by connecting them with food businesses, and by assisting producers and processors with purchasing, marketing and shipping networks for food products. TCEDC specialists also offer on-site start up business assistance, marketing assistance, business management, financing assistance, and joint purchasing and marketing networks. The Center breaks even financially, but does not turn a profit.

Co-director Pati Martinson states that enrollment in the core class is steadily increasing, and that the failure rate of new food enterprises is low. However, she is seeing a longer lag time between completion of the class and enterprise start-up. She attributes this to the poor economy, and estimates an average financial barrier to entry of $500-1000 for start-up expenses. The Center does not provide direct financial assistance. However, TCEDC does work with two CDFIs: Women's Economic Self-Sufficiency Team (WESST) CDFI and New Mexico Community Development Loan Fund (both in New Mexico) in providing technical assistance to clients. The Food Center would be interested in working with a CDFI to set up a revolving loan fund or seed fund for their clients. TCEDC would also be interested in exploring improvements to the current commercial kitchen with a CDFI, as the current kitchen is unable to serve successful enterprises that want to expand beyond the capacity of a shared-use 5000 square foot kitchen.

The TCDEC "Mobile Matanza" is a mobile slaughterhouse unit and meat processing facility, which was initiated in 2007 with a $200,000 appropriation from New Mexico's Governor. A Capital Outlay

Appropriation of $100,000 from the New Mexico legislature followed. This project works to assist limited-resource ranchers in northern New Mexico with accessing commercial markets for their livestock. By bringing the slaughter services to the producer and then providing processing, cut and wrap, and marketing assistance all under USDA Inspection, this unit assists many limited resource ranchers economically. From 2007-09, 443 animals have been slaughtered using the unit, over 90 ranchers have been served, and an estimated $794,095 has been retained in the local economy. The original business plan indicates breakeven status in five years.

The Center also initiated the "Oso Good Foods" logo with labels, and marketing material, for the Food Center's cause marketing label. TCEDC provides nutrition classes to WIC recipients with over 200 WIC participants attending the child nutrition and food preparation demonstrations at the Taos Food Center. TCEDC's program includes diabetes prevention nutrition and luncheon classes. Other grant-subsidized programs include community gardening and food preservation classes.

Co-director Pati Martinson states that "hardships continue in accessing appropriate and substantial financial resources for programs and administrative costs," and makes the point that "increases in utilities and insurance continue to affect TCEDC as we struggle to keep pace in an economically challenged economy, as do costs of repairs and upgrades of TCEDC facilities." The TCEDC has made slight price increases for services due to increased fuel and personnel costs, but plan to stay on target with prices for the coming year.