Beet the System

Community Supported Agriculture as a Model for Enhancing Low-Income Food Security

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Definitions

Low-income household: A household earning less than 150 of percent the federal poverty threshold. For a family of four in 2008, this amount was \$37,200.

Locally grown: There is no generally agreed upon definition of "locally grown," but for the purposes of this paper, food grown within 100 miles of its point of purchase is "locally grown."

Sustainably grown: Food that is both locally grown and organically grown in accordance with the Organic Foods Production Act of 1990.

Executive Summary

Community supported agriculture (CSA) emerged in the U.S. during the 1980s with the goal of improving the economic standing of small farms. Instead of selling their produce on the open market, which often failed to provide the farmer with a living wage, small farms solicited the support of the surrounding community to make the farm a profitable enterprise. By joining a CSA, community members agree to share the risk and reward of agriculture with a local farmer. In exchange for payment at the beginning of the growing season, community members receive a weekly share of the farm's harvest, delivered to designated distribution sites in the surrounding community.

Fueled by rising interest in eating locally and organically grown foods, the number of CSAs has grown rapidly since its launch in the 1980s. In 1997 there were 600 CSAs in the U.S. Today, there are nearly 2700 CSAs in operation (www.localharvest.org/csa). The local and organic food movement, in which CSA plays a small but significant part, enters the national spotlight at a time when a record number of people are hungry. As of April, 2009, a record 32.2 million Americans are enrolled in the Supplemental Nutrition Assistance Program—the newly renamed food stamp program ("U.S. food stamp list swells" 2009). *Beet the System* explores a variety of issues associated with increasing access to CSAs for the 32.2 million people receiving SNAP benefits as well as other low-income households. Although CSA participation is largely seen as a middle-class phenomenon, this report found ample evidence of low-income programs designed to increase low-income participation. But even with the implementation of low-income programs, structural barriers within the CSA model make CSA a limited solution for increasing low-income food security.

Following are some of *Beet the System's* key findings and recommendations with regards to CSA as a means of enhancing low-income food security:

Findings

- CSA awareness in low-income neighborhoods is extremely low.
- Low-income CSA members take on a greater risk when joining a CSA. The greater risk is not reflected in a higher payout to lower income members. In the event that the share provides less food than expected, (or no food which is entirely possible although very unlikely) low-income households are disproportionately affected.
- CSA structure requires that low-income consumers make significant lifestyle changes. CSA will only be a worthwhile investment if low-income households: give up some freedom of choice in their diet, eat significantly more produce, eat a wider variety of produce, know how to and have the time to cook, and are willing to pick up the CSA share at the distribution site each week.

- Numerous payment mechanisms, such as sliding scales, rolling loans, staggered pay schedules, and electronic benefits transfer (EBT) have the ability to mitigate cost barriers.
- In the absence of government subsidies, strictly low-income CSAs do not exist. All low-income CSAs require some subsidies either in the form of wealthier members paying more or through programs like Maine's Senior FarmShare.
- CSA farmers are committed to operating socially just farms and have shown great interest in making their CSAs open to low-income households. However, low farmer income remains the largest farm-side barrier to low-income CSA expansion.
- CSA leadership is severely limited. With a few exceptions, the CSA model has no CSA-specific leadership at the regional or national level.
- If every CSA in the country were to dedicate all of their shares to SNAP benefit recipients, CSAs could only feed 2.1 percent of SNAP users.

Recommendations

In order for CSA to become a more viable model for increasing low-income food security, *Beet the System* recommends the following course of action:

Leadership

- With the help of a food security or sustainable farming organization (Just Food, the Community Alliance for Family Farmers, Northeast Organic Farming Association, etc.) CSA farmers should organize into regional networks of CSA farms.
- Sustainable food advocacy groups should devote a portion of their state and national advocacy capacity toward the promotion of the CSA model.
- CSAs in low-income neighborhoods should follow a sound community organizing strategy.

Farm-Side

- CSA farms should bundle their goods and partner with local bakeries, confectioners, florists, etc. to offer a greater variety for the shareholder.
- Low-income members should be able to opt out of the risk-sharing aspect of CSA
- Low-income CSAs should implement the Genosee Valley Organic CSA transitprogram in which car-less members carpool with people with cars.

Policy

- USDA's Food and Nutrition Service (FNS, the office that administers WIC and SNAP) should assemble a best practices guide of low-income CSA programs. The report should be disseminated to sustainable food groups and state departments of agriculture.
- USDA's Food and Nutrition Service and the Commission on Small Farms should recommend the expansion of Maine's Senior FarmShare to all fifty states.
- Maine's FarmShare model should expand to include a Junior FarmShare component, (for low-income school children), a Mother's FarmShare component (for pregnant or nursing mothers) and eventually a Low-Income FarmShare component for all lowincome citizens.
- USDA should raise the limit of the FarmShare share price to \$100 without income verification, or supply state departments of agriculture with the tools they need to easily verify the income of FarmShare participants.
- FNS should change SNAP rules so that low-income members can pay for their CSA share at the beginning of the season, so long as farmers are required to provide their SNAP shareholders with food even in the case of crop failure.
- State departments of social services should launch an informational campaign to raise awareness about CSA as an option for SNAP/WIC recipients to spend their benefits.

Workplace

• Explore CSA as an employee benefit. For businesses that provide health care, survey employees to see if CSA had any discernable health effect. Consult the health insurance provider to see if they are willing to offer rebates for workplace CSAs.

Introduction

"The growing income inequality that divides our world is the greatest threat to ever achieving a truly sustainable agriculture... Would we be comfortable with a dual food system in which the rich paid a premium for food produced by agronomically wholesome means, while the poor ate cheap food produced by making war on the land?" --Marty Strange (qtd. in Sharing the Harvest by Elizabeth Henderson 2007)

After years of tepid political support and scant media coverage, the sustainable food movement has moved into the national spotlight following the inauguration of President Barack Obama. First lady Michelle Obama has emerged as a vocal proponent of the sustainable food movement and recently broke ground on the White House vegetable garden. "The goal of the garden," Mrs. Obama said in a March 19th interview with the New York Times, "will be to educate children about healthful, locally grown fruit and vegetables at a time when obesity and diabetes have become a national concern" (Burros "Obamas to plant vegetable garden").

A week earlier, while helping to serve food at a soup kitchen in D.C., Mrs. Obama stressed that healthful, locally grown food is not a luxury for the wealthy but an important part of poorer people's diets as well. "We want to make sure our guests here and across the nation are eating nutritious items," said Mrs. Obama, "We can provide this kind of healthy food for communities across the country, and we can do it by each of us lending a hand" (Swarns "Michelle Obama's agenda").

Her statement comes at a time when an increasing number of people are struggling to put food on the table. As of April, 2009, a record 32.2 million Americans—roughly 1 in ten—are receiving food stamps ("U.S. food stamp list swells" 2009). Can people on food stamps and those teetering on the edge of poverty still enjoy sustainably produced food? Or are they confined to eating, in the words of Marty Strange, "Cheap food produced by making war on the land?"

The question of how to ensure the right to healthy, sustainably produced food for low-income individuals is a central issue in this report. Many agricultural models for supplying fresh food to low-income individuals have been studied (Fisher 1999; Berzins 2004) However, a broad examination of the community supported agriculture (CSA) model has not yet been undertaken within the context of the model's ability to address the needs of low-income communities. This paper aims to 1) assess the structural barriers within the CSA model that inhibit low-income participation and ultimately propose solutions to overcoming the barriers, and 2) determine the barriers that lie in the way of CSA expanding into a larger "Food for All" movement.

The CSA model made its U.S. debut in the mid 1980s at two small New England farms. Modeled after co-op farms in Europe and Japan, CSA in the U.S. was designed to strengthen the financial viability of small farms by sharing the risk (and reward) of agriculture amongst the surrounding community. "The basic intention," said CSA pioneer Robyn Van En, "is to raise the social status of farmers in a community" (Van En

1991). At a CSA farm, the consumer typically buys a "share" of the harvest through an up-front payment at the beginning of the growing season, thus becoming a "shareholder," and in return receives a weekly or bi-weekly share of the harvest delivered to designated drop-off points at the farm gate or near the shareholder. The up-front payment provides the farmer with much needed capital to finance the season's crops and grants them the security of knowing that people will buy their crops once they are harvested.

(Mechanical Note: Although CSA stands for "community supported agriculture," for brevity, a farm that utilizes the CSA model is often referred to as a CSA. Example: "There are two CSAs in Mill Valley" means there are two farms that utilize the CSA model in Mill Valley.)

CSA has grown rapidly since its introduction in the mid 1980s. The Sustainability Institute described CSA as "growing so fast that no one can keep track of it." In 1997 there were an estimated 600 CSAs. By 2004 that number grew to 995 and an estimated 2692 CSAs are in operation today (www.localharvest.org/csa).

Participation by low-income individuals in CSAs requires an analysis specific to the unique circumstance posed by limited financial resources. While low-income people have every right to nutritious, fresh food, small farmers (nearly all CSAs are located on small farms) also have the right to earn a living wage for their work—an outcome that has proven increasingly difficult in an agricultural economy unfavorable to small farms. In order for CSAs to include a low-income constituency, both farmer and consumer must enter into a mutually beneficial relationship.

Perez (2003) noted several obstacles to CSA growth, including: the limited demographics of people participating, availability of food from other sources, a culture convenience and choice, and having to spend more time preparing and eating what's seasonally available. Beet the System will explore in depth the structural barriers that the CSA model presents to the farmer and low-income consumer and propose ways in which these barriers can be overcome. Furthermore, this report will attempt to assess the merits of CSA as a potential strategy for promoting food security in low-income communities, drawing comparisons to supermarkets and farmers markets. In order for CSA to become a serious player in the "Food for All Movement" it will have to grow in size from the 2700 CSAs in existence today to a figure large enough to meaningfully assist some of the roughly 37 million Americans living in poverty (U.S. Census 2007). This report will evaluate ways that CSAs can scale up through policy initiatives and the use of innovative strategies by community organizations and farmers. As CSA expands, the CSA model as it was initially conceived may need to change to meet the needs of growing client base. CSAs are not the only strategy to address the nutritional needs of low-income communities. "Farm direct" strategies might also be available that could include farmers' markets, the best known farm direct approach.

Farmers markets in the U.S. re-emerged in the late 1970s in response to supermarkets fleeing the inner city, leaving low-income communities without a secure source of fresh food (Parsons "The idea that shook the world"). In more recent times, a renewed interest

in low-income farmers markets has surfaced—possibly triggered by the local food movement and concerns about access to healthy food in low-income neighborhoods. The 2007 Census of Agriculture estimates 4,700 farmers markets in the U.S.—one of the fastest growing sectors in the food industry. In 1997 Andy Fisher from the Community Food Security Coalition published "Hot Peppers and Parking Lot Peaches: Evaluating Farmers' Markets in Low-income Communities." His study explored numerous issues associated with farmers markets in low-income communities.

Fisher noted certain barriers that hinder the success of low-income markets, such as: the discrepancy between the price the buyer can afford to pay and the price the farmer needs to make a decent wage, low vehicle ownership rates making the market inaccessible to the intended community, time constraints for people working more than one job, and a produce assortment that fails to meet the cultural tastes of the community. Interestingly, Fisher discovered that while middle-class patronage is important for a successful farmers' market, some farmers' markets run the risk of becoming a niche market for the wealthy, thus alienating the intended low-income community for whom it was intended to benefit. To ensure the market carries out its purpose of providing food to low-income residents, Fisher noted that successful low-income farmers markets utilized community organizing strategies, thus giving the local community a sense of ownership over the market. *Beet the System* builds on Fisher's study of farmers' markets by investigating many of the same questions as they apply to CSA.

Beet the System should be considered within the broader context of the sustainable food movement. Focusing on the CSA model, this report examines ways to include low-income people in the sustainable food movement—a movement that's often characterized as a niche market for wealthier individuals (Berg 2009). That assumption, however, stands in contrast to the aims of the sustainable food movement (Henderson 2007). The core research question then is whether and how to overcome the notion of a "dual food system" and bring the local food movement one step closer to providing healthy food access to low-income communities across the country.

Research for this report included interviews with government officials, farmers, community organizers, and various members of community organizations. The research also includes an extensive literature review on the subject, two case studies on successful models of low-income CSA promotion, and a query sent out to the Community Food Security Coalition's Comfood listsery. The report concludes with a list of policy recommendations for strengthening and scaling up CSA across the country.

Chapter 1: CSA from Past to Present

This chapter traces the evolution of CSA from its beginnings in Europe and Japan to its arrival and rapid expansion in the U.S. Special attention will be paid to themes of social justice that arose during the development of CSA since these themes may inform present-day CSA expansion. Different approaches to CSA farming are discussed, followed by a section that describes the average CSA farm, farmer, and shareholder. Drawing from surveys of CSA shareholders, the descriptive section provides the statistical rationale for this report—namely, that CSA in its present form has failed to include low-income individuals and instead represents a niche market for wealthier people.

History of Community Supported Agriculture

CSA in Japan

There are many historical examples of farmers growing food for specific non-farm entities. Such examples include: the medieval manor (by means of forced labor), the Soviet system of linking farms to factories, and Cuban laws requiring all institutions to be self-sufficient in food (Henderson 2007). However, the precise origins of CSA as it is known today is not entirely clear. Most sources point to the cooperative movement in Japan in the mid-1960s and the development of "Seikatsu Clubs" as the first manifestation of a CSA type agricultural model. Japan has a long history of cooperative production, with the first cooperatives dating back to 1893 (University of California Santa Cruz *CSA History 4.1*).

Following WWII, Japan's economy entered a period of rapid industrial growth. Mass production and consumption quickly became the norm and the Japanese environmental and economic landscape began to change—in many ways for the worse. In the agricultural arena, food imports rose, pesticide usage increased, farmland turned into factory-land, and small farmers were driven to the cities seeking employment (Van En 1995, Asia DHRRA 2006). The Chisso Corporation, a chemical company on the banks of the Minimata Bay, played a large part in sparking the Japanese environmental movement. From 1932 to 1968, the chemical company dumped 27 million tons of mercury waste into Minimata Bay—the same bay where fishermen caught fish. Nearly 3,000 people were poisoned as a result. (University of California Santa Cruz *CSA History 4.1*).

Troubled by the events in Minimata Bay, housewives from Tokyo's Setagawa ward came up with a solution of their own for ensuring local food safety. They formed Seikatsu, or buying clubs, and used their collective buying power to establish relationships with local farmers. (Seikatsu literally means "partnership" but is colloquially defined as, "putting the farmer's face on the food.") By establishing a direct relationship with a local farmer, the housewives would the origins of their food and growing practices of their farmer. Literature on the subject offers differing accounts of exactly how the Seikatsu clubs came to be. Grubel (2004) claims that young environmental activists organized the women into buying clubs in 1965. Van En (1995) asserts that the housewives organized themselves

into the buying clubs without the help of student activists. Henderson (2007), in her book, "Sharing the Harvest," writes that farmer Yoshinori Kaneko was the first Japanese farmer to utilize the CSA model. According the Henderson, he recruited local housewives through reading circles, after realizing that his family farm could feed additional families. Topics in the reading circles included subjects such as, "The Oneness of Body and Environment." In 1975 he and the housewives agreed to a contract whereby he would provide rice, wheat, and vegetables in exchange for money and their help on the farm.

The Seikatsu clubs are based on the principle of *sanchoku*, or "direct from producer," whereby club members join hands and enter into direct contractual relationships with local farmers (Asia DHRRA 2006). The basic organizational unit of Seikatsu club is the "han"—a group of seven to ten households who place one big order from the associated farm. Food is pre-ordered monthly and delivered bi-weekly by truck to each han. Ada (2005) asserts that the goal of the clubs is to support local farmers and to ensure that food is affordable and produced in a environmentally sustainable manner. To attain this goal, every farm growing food for Seikatsu clubs utilizes organic production methods.

From the very beginning, Seikatsu was a woman-powered movement. Shunned from traditionally male jobs, Japanese women looked to social activism as a means to create new forms of power. Many women in Japan are strongly connected to family and household duties like food procurement (Evanoff 1998). Their social activism dramatically changed the way consumers relate to farmers by rejecting the globalized food system in favor of a buy local, consume local, approach. Today women make up over 80 percent of the Seikatsu Club Consumer's Cooperative Union (SCCU) elected governing body and compose a majority of the union's 300,000 members (http://www.seikatsuclub.coop/english/).

Today's Seikatsu clubs have branched out from their agrarian roots, utilizing their existing organizational infrastructure to further social and political goals. Funded by monthly contributions of 1,000 yen per person (approximately \$10) as well as various SCCU businesses, the SCCU has initiated several projects to promote social justice and environmental sustainability. According to the 1992 Annual Report of the Tokyo Seikatsu Club Consumers' Cooperative, Seikatsu sees itself as "working to change Japan's welfare policy from an attitude of 'welfare as charity' to the attitude of 'welfare as a human right which meets basic needs" (qtd. in Evanoff 1998). The "Ability Club," a mutual assistance network launched by the organization in the early nineties, had the goal of "realizing the full integration of the aged and the disabled into society." Another initiative, the "Stop GM Rice Cooperative Network," has lobbied hard against GM food, sending club representatives to lobby the Codex Ad Hoc Intergovernmental Task Force on Food Derived from Biotechnology. The club submitted a petition signed by 600 other organizations demanding increased regulation of genetically modified food (Asia DHRRA 2006).

CSA in Europe

CSA in Europe is believed to have evolved independently, although at approximately the same period in history, as CSA in Japan. No definitive link between CSA in Japan and Europe has been established, but Yoshinori Kaneko, one of the first farmers utilizing the CSA-model in Japan and author of *Farm with a Future* (2004), has pictures in his book of westerners visiting the farm (Henderson 2007). Perhaps the visitors took the idea back to Europe. The resolution of this mystery is outside the scope of this history. Most sources trace the European origins of CSA back to the biodynamic farming principles devised by Rudolf Steiner, the Austrian philosopher, playwright, artist, architect, social critic, and founder of the Waldorf School (McFadden 2003; Garner "Who was Rudolf Steiner.")

Troubled by successive years of declining crop yields, a group of Polish farmers approached Steiner in the 1920s for his advice. With no formal training in plant science, he responded with eight lectures on agriculture, delivered in 1924 in Koberlink, Poland. The lectures laid the groundwork for the future of biodynamic farming—the oldest chemical-free agriculture movement (University of California Santa Cruz *CSA History 4.1)*. In his lectures Steiner (1924) faulted synthetic agrichemicals as the culprit behind "the impoverishment of the soil." He wrote:

"Mineral manuring is a thing that must cease altogether in time, for the effect of every kind of mineral manure, after a time, is that the products grown on the fields thus treated lose their nutritive value. It is an absolutely general law."

He recommended several steps to take to improve soil quality. One of the steps is to treat the farm as one complete organism that functions with minimal external inputs. Other steps include synchronizing farming activities with planetary and cosmic events, and concocting preparations in a prescribed manner. For example:

"Pick the beautiful delicate little yellow-white heads of the flowers, and treat them as you treated the umbels of the yarrow. But now, instead of putting them in a bladder, stuff them into *bovine intestines*. You will not need very much. Here again, it is a charming operation. Instead of using these intestinal tubes as they are commonly used for making sausages, make them into another kind of sausage — fill them with the stuffing which you thus prepare from the camomile flower...I know perfectly well, all this may seem utterly mad. I only ask you to remember how many things have seemed utterly mad, which have none the less been introduced a few years later." ("The Agriculture Course" 1924)

It is common practice for modern CSAs to utilize organic or biodynamic production methods. Many biodynamic CSA farms of today still adhere to Steiner's crop "preparations." Although biodynamic farming has a mystical side to it, the production practices are still organic.

Perhaps more influential than the concept of biodynamic farming, especially with regards to the future formation of CSA, was Steiner's description of "associative economics." In an associative economy, producers, distributors, and consumers are organized on associative terms. Instead of a competition for who can supply the cheapest bushel of strawberries (which in a globalized economy often results in food traveling around the globe to reach the consumer), a local consumer will agree with a local producer to fix the price and exclude competition (Groh & McFadden 1998). Gary Lamb of the Hawthorne Valley Farm in Columbia County New York aptly describes the associative approach to farming and how it differs from a capitalistic approach. "Most people, being so deeply immersed in the mainstream capitalistic economy, can only see farming—or any related activity—from a market perspective. They are basing everything on market forces, supply and demand, the invisible hand, and all that. They don't have the concept, the basic concept of associative economy: of collaborating together in a conscious way to find out what should be produced, and how much—as opposed to what you can make money producing."

In Germany, associative economic ideals led farmers Trauger Groh and Carl-August Loss to establish Germany's first community land trust, Gemeinnutzige Landbau-Forschungsgesellschaft (LBG), in 1968. Funded through personal donations, the objectives of LBF were:

- To hold the title to agricultural lands and make them permanently available for lease to organic farmers.
- Level the power-dynamic between land owner and farmer.
- Protect agricultural lands from development
- Encourage equitable and cooperative partnerships between producer and consumer. (Adapted from CSA History 4.1, University of California, Santa Cruz)

The principles of associative economies laid the groundwork for the first European farms that operated under a recognizable CSA model. The exact origin of CSA in Europe is difficult due to limited documentation of producer-consumer agricultural relationships. Les Jardin de Cocagne, a farm in Geneva, Switzerland is recognized as one of the first producer-consumer food alliances in Europe. The founder of this specific farm also drew inspiration from the Chilean co-op movement during Salvador Allende's administration (1970-73). The farm delivered weekly boxes of organic produce to 550 people at a cost of \$500 per year (Vandertuin "Vegetables for All").

CSA in the U.S.A.

After working several food service and farming jobs and becoming disillusioned with the U.S. food system, Jan Vandertuin, a young American farmer, set out for Europe to search "for a new agricultural form." "Again and again," wrote Vandertuin in an article for Organic Gardening (1989), "Agriculture had proved to be both an economic and social morass. I needed to find a situation that gave more recognition to the value of

agricultural work." His search ended when he came across Swiss producer-consumer associations like Les Jardin de Cocagne.

Vandertuin spent some time in 1982 working at Topinambur, an organic farm in Zurich. The farm delivered its fresh produce and milk to 400 people. Out of concern for environmental pollution, Topinambur used bicycles to distribute the food.

Upon returning to the U.S. in 1985, Vandertuin visited Robyn Van En's Indian Line Farm in South Egremont, Massachusetts. He was eager to spread the word of what he had taken part of in Switzerland. After talking only a few minutes, Vandertuin and Van En decided to try the same model of community supported agriculture at Indian Line Farm (Van En qtd. in Henderson 2007).¹

Vandertuin, John Root Jr. (co-director of Berkshire Village, a group home for handicapped adults situated a mile from Indian Line) and Van En introduced the idea of CSA in the autumn of 1985. They started by growing apples. Community members paid Indian Line at the beginning of the apple season for a share of the future harvest. Next season, the farm started growing vegetables, and community members were willing to pay for those at the beginning of the season, before the first seed was planted, as well. The goals of the venture, according to Van En were, "(to grow) local food for local people at a fair price to them and a fair wage to the growers. The members' annual commitment to pay their share of the production costs and to share the risk as well as the bounty set this apart from any other agricultural initiative" (Henderson 2007). Within four years, Indian Line farm went from 30 to 150 members.

Indian Line farm is often credited as the first CSA-type farm in the U.S. although Steven McFadden and Trauger Groh, authors of Farms of Tomorrow Revisited (1998), disagree. In 1985 Groh moved from Germany to New Hampshire and brought with him a CSA concept based in Steiner's associative economy and biodynamic production methods. The CSA model at Temple-Wilton Farm used a different pay structure. In a gesture of fairness toward the diversity of economic backgrounds in the surrounding community, the farm asked members in the community for a pledge rather than setting a fixed price for a share of the harvest. Every year the farm presents a budget and members renew their support. Most CSA models today do not follow Temple-Wilton's "community farm" model. Most farms are hybrid-CSAs, with the CSA being one of the many ways that a farm markets their products.

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¹ A side note on the name "community supported agriculture." In the introduction to "Sharing the Harvest: A Citizen's Guide to Community Supported Agriculture," Van En describes why she named the new agricultural model "CSA". In her own words: "We finally decided on CSA, which could be transposed to Agriculture Supported Communities and say what we needed in the fewest words. CSA to ASC was the whole message. We knew it was a mouthful and doesn't fit easily into conversation or text, but to this day I can't think of a better way to name what it's all about. I found obvious discomfort with the word community when I tried to explain the concept in the former Soviet Union. People have problems with supported, too. Please know that each word was chosen after lengthy consideration. I personally was adamant about using the word agriculture rather than CS farms, because I didn't want to exclude similar initiatives from taking place on a corner lot in downtown Boston."

From the beginning, Robyn Van En envisioned CSA as means of feeding the poor and disenfranchised. In an interview in 1991, she said, "Ten years from now I think they're going to be everywhere—I mean, really everywhere. Every prison should have a CSA feeding the prison and community around it. Every housing development should have a CSA" (Van En 1991). Although nothing about CSA mandates low-income participation, there seems to be an ethic of including people of all economic backgrounds. In a 2004 survey by the Hunger Action Network of New York, 28 out of 41 surveyed CSAs had some strategy to increase low-income participation. Due to the complexity of running a CSA and various structural barriers, institutional support (prisons, schools, hospitals), has been slow to catch on. *Beet the System* will explore these barriers and how they can be overcome throughout the paper.

The CSA concept spread quickly from New England to the west coast. Most CSAs are concentrated in New England, the Twin-Cities and upper Mid-West, and in the Bay Area. Estimates for the total number of CSA farms in the country vary wildly. Localharvest.org lists 2,692 CSAs in their database. The 2007 USDA Census of Agriculture reports that 12,549 farms market their products through CSA although the number has been challenged by community food advocates as too high (Comfood List Serv March, 2009). While the number of CSAs listed in Maine (159) is probably accurate, listings for Oregon (311) and Missouri (450) are overstated. Localharvest.org lists 56 in Missouri and 98 in Oregon. Possible explanations for the inaccurate data include improperly extrapolated data or a misunderstanding of the survey question.

Variation within the CSA Model

CSA is a general term covering a variety of relationships between producers and consumers. What all CSAs have in common is a mutual commitment between farmer and community member. CSA pioneer Robyn Van En described the concept as, "Food producers + food consumers + annual commitment to one another = CSA and untold possibilities" (qtd. in Henderson 2007). The USDA's definition of CSA is similar: "A community of individuals who pledge support to a farm operation so that the farmland becomes, either legally or spiritually, the community's farm, with the growers and consumers providing mutual support and sharing the risks and benefits of food production" (http://www.nal.usda.gov/afsic/pubs/csa/csadef.shtml).

So long as the mutual commitment is present, the CSA model affords plenty of wiggle room to tailor each individual CSA to the climate constraints of the region as well as the needs of the farmer and supporting community. Although no two CSAs share the same genesis story, CSAs can be categorized according to the way in which they are organized.

Subscription (farmer-driven): A subscription CSA puts most of the decision making power in the hands of the farmer. In addition to assuming most of the on-farm roles, farmers have to assume many non-farming responsibilities to make the CSA function, such as advertising, bookkeeping, and other administrative jobs. Since CSA in the U.S. started with the goal of improving the financial standing of small farmers, it comes as no

surprise that subscription CSAs are the most popular type, constituting approximately 75 percent of all CSAs (National Sustainable Agriculture Information Service 2006). Although CSA members often have the option to volunteer on the farm, they are generally not required to work as part of their commitment to a subscription CSA.

Shareholder (consumer-driven): Consumer-driven CSAs are initiated by a core group of committed non-farm individuals who assume most of the organizational responsibilities necessary to form and maintain a CSA. The core group recruits members and then establishes a relationship with a farm. The core group is almost always composed of community members. Just Food, a non-profit in New York City, assists low-income communities in forming core groups and matching them with rural farms to start a CSA. (See Case Study 1)

Farmer co-operative: In a farmer co-op, farming risk is largely transferred from the shareholders to a group of farms. The Rolling Prairie Farmer's Alliance in Lawrence, Kansas is made up of six small family farms providing shares for 330 families. In the event that a hail storm or pest infestation knocks out the crops on one farm, chances are the other farms will be able to compensate (Henderson 2007). This model stands in contrast to the farmer- and consumer-driven CSAs where the shareholders assume a larger portion of the risk during a crop failure.

Farmer-consumer co-operative: In addition to the financial commitment, a farmer-consumer co-op requires a time commitment as well. At the Genesee Valley Organic CSA in Rochester, New York, full-share members are required to work 17 hours per season in order to keep costs low. Jobs include picking vegetables and manning share distribution sites.

CSAs have devised a variety of ways for distributing the shares to their shareholders. Some CSAs opt to sort the shares at the farm and then bring the pre-sorted shares to one or more distribution sites near to where their shareholders live. For an additional price, CSAs like Fully Belly Farms in Guinda, California will make home deliveries. Distribution sites range from member's garages, community centers, farmers markets, or the farm gate. Finding a convenient drop off site is an important consideration, especially for low-income shareholders who may not have access to a car or for elderly people who are limited in their mobility.

The Food Bank Farm of Western Massachusetts requires shareholders to come to the farm to pick up their shares. Instead of pre-sorting shares into boxes, the Food Bank Farm fills bins with bulk produce and gives each shareholder a bag which they can fill up to a certain point with whichever produce they like. This method resolves issues associated with a lack of choice in belonging to a CSA—a frequent reason listed for not renewing CSA membership (Perez 2003).

Profile of a Modern CSA

CSA Farm and Farmer

The 2001 National Survey of Community Supported Agriculture (The Lass Survey) provides important data for characterizing CSA farms and farmers (Lass et al. 2003). (This survey informs the entire "CSA Farm and Farmer" section unless otherwise noted.) Their survey of 354 CSAs found that the retention rate for the CSA operation is very high. Only 5.4 percent of farms that used the CSA model in 2001 planned to discontinue their CSA programs in 2002, resulting in a retention rate of nearly 95 percent.

In spite of concerns about an aging U.S. farm population (Mitchel et al. 2008), CSA farmers tend to be young. According to the U.S. Census of Agriculture, the average age of a "principal farm operator" (the Census only counts one farmer per farm) has increased from 52 in 1987 to 55.3 in 2002. The Lass Survey found that on average, a CSA farmer in 1997 was ten years younger than the average farmer.

CSA farmers are also highly educated. The Lass Survey found that more than 74 percent of CSA farmers had a college degree and 23 percent had a graduate degree. According to the USDA, only one quarter of average farmers have a college degree which is roughly equal to the national average (http://www.ers.usda.gov). The relative youth and high education levels of CSA farmers augurs well for the future of the CSA movement and its ability to lead the way in devising creative solutions for expanding access to the poor.

CSA farmers are willing to play an active part in advancing the CSA movement. When asked if they were willing to help strengthen the CSA movement through participating in future research, providing technical assistance to nearby farms, or public speaking about CSA, 94 percent of farmers said, "Yes."

CSA farms are comparatively small and nearly all of them practice sustainable farming methods. The median farm size is 15 acres, with over 72 percent of CSA farms operating 49 acres or less. By comparison, only 39 percent of farms nationwide operate on 49 acres or less. 96 percent of farms use either biodynamic or organic farming practices.

The average number of shares in a CSA was 56.2 but the median was lower at 30 shares. (A few large CSAs skew the data.) The median price of a full share in a CSA is \$400 and \$250 for a half share, providing a median CSA income of \$15,000. However, gross farm income exceeded \$20,000 in 63 percent of CSA farms, compared to 38.5 percent for all farms in the 1997 Census of Agriculture. CSA proves to be a profitable marketing method because the middle-man is largely cut out of the process. The farmer receives retail prices by selling directly to the consumer, as opposed to wholesales prices when selling to a wholesale distributor. (Personal Interview with Michael Doctor March 20, 2009).

The top farmer motivations for starting a CSA operation are, in descending order of importance: increasing their farm's economic viability, educating the public, fostering

connection, and being environmentally responsive (Perez 2004). Prior to starting a CSA, farmers biggest economic concerns were: problems marketing through wholesalers, financially difficult due to extreme competition, low prices, uncertainty, and the lag time between delivery and payment. CSA offered a potential solution to these problems.

CSA is largely seen as focused on small farmer goals because it enables farmers to cordon off a small section of the market and negotiate a better price for themselves. CSA is one bright spot in a business environment that is extremely unfavorable to small farms. Small farms are understandably hesitant to concede any ground in setting their CSA share price.

Most CSAs dedicate a portion of their total cropland to the CSA operation. About 27 percent of the respondents used less than 10 percent of the land they operated for the CSA. Only 15 percent of CSAs are dedicated entirely to the CSA operation. The relatively low percentage of cropland dedicated to CSA could indicate a lack of demand for CSA produce or farmer desire to maintain some diversity in their marketing strategies. Considering that 73 percent of respondents said that CSA improves or greatly improves their ability to meet operating costs and farmer compensation, CSA expansion would seem to be a profitable move.

However, a 2005 survey (Tegtmeier & Duffy) of CSA farmers in nine Midwestern states found that farmers could only cover operating costs with CSA income and couldn't cover labor. Only 43 percent felt that their share price provided a fair wage, 87 percent were not completely satisfied with CSA operation, high number of work hours, feeling underpaid, and a low net return. However 84 percent were satisfied most of the time leading the authors to conclude CSA must offer "intangible benefits" to the farmers.

CSAs offer several social and educational events to bring the shareholder in closer contact with the farm. 73.5 percent of farms offered some kind of social or educational event such as potluck dinners, farm tours, special events for children of shareholders, cooking classes, and U-pick days where people can pick their own share. Furthermore, 56 percent of the surveyed farms offer payment methods and programs designed to make CSA more accessible to low-income community members. Examples, (which will be explored in greater detail in Chapter 3) include scholarships, weekly payments, sliding payment scales, donating shares to food banks and community organizations, trading work for shares, accepting food stamps, and other federal benefits.

CSA Shareholder

CSA members are characterized by above average income (Ostrom 1997). A 2003 survey of 274 CSA shareholders living in California's central coast counties found that CSA shareholders tend to be Anglo (90 percent), highly educated (81 percent have a college degree or greater), and in the middle to upper income bracket (66 percent of members have a household income of \$60,000 or more) (Perez, 2003). These indicators are unrepresentative of the central coast population where only 51 percent of the population are Anglo and the median income is below \$45,000.

A 1996 study of 62 CSA shareholders in the upper mid-west found that every shareholder had a college degree, with 60 percent of shareholders completing some postgraduate work (Cone & Myhre). The income distribution of shareholders in this study is skewed towards the upper income brackets. 11 percent of shareholders earned below \$25,000, 33 percent earned between \$25,000-\$50,000, 18 percent between \$50,000 and \$74,000, and 24 percent were above \$75,000. Another study of CSA shareholders belonging to Troy Community Farm in Madison, Wisconsin noted that shareholder's income was higher than non-shareholder income in the surrounding area (Russell & Zepeda 2008). A 1997 survey of New York residents found the median household income of CSA shareholders to be 30.7% higher than the average New York household (O'Hara & Stagl 2002).

Economists Stagl and O'Hara (2002) determined conditions for participating in CSA. People who buy some of their food in health food stores, food coops, or farmers' markets are much more likely to become CSA members than people who shop exclusively in supermarkets. If someone engages in volunteer work, the probability of becoming a CSA member increases by nearly 40 percent. A strong preference for buying locally increases the probability of joining a CSA by 30 percent. They found the effect of income to be moderate: if annual income of a household is \$1000 above the mean, the probability of becoming a member increases by five percent. Younger people are also more likely to join a CSA. Every year in which age was above the mean had an effect of decreasing the probability of becoming a member by three percent. However, Stagl and O'Hara's study is geographically limited to areas in and around Schenectady, New York.

CSA Participation as a Middle-Class Phenomena

Participation in CSA across economic strata does not appear to be equal. CSA members are indeed wealthier individuals. Cone and Myhre (2000) noted other characteristics of CSA members which are often ascribed to middle- and upper-class lifestyles. "Despite the egalitarian vision—to become a healthy food source for all—the farms in this research served members who had the education to spark their interest, the income to support their membership, and to a large extent, an adult householder who could devote the necessary time, energy, and flexibility to sustain the ideological commitment." To have the extra "time, energy, and flexibility," to take part in CSA suggests that CSA is not a working-class phenomena, but rather a niche market for wealthier individuals (Farnsworth et al. 1996). Joel Berg, one of the nation's leading anti-hunger advocates, said that the only thing that poor people have less of than rich people, aside from money, is time (Personal Interview, April 3, 2009).

The sustainable food movement, in which CSA is a small but noteworthy player, has occasionally been labeled an "elitist" movement (Berg, 2009) (Pollan "Why eating well is elitist"). As mentioned earlier, CSA members tend to have middle-class incomes and are well educated. But these traits, in and of themselves, do not directly translate to elitism. Although two small studies have shown CSA to provide food at lower cost than supermarkets, in general organic food costs more and CSA gets lumped in by association (Forbes 2007, Brown & Miller 2008). The extra income required to purchase organic

food is paying for a social and environmental cause, not a basic necessity. That which a poor person needs to survive, yet is struggling to provide for their family transforms into the subject of a wealthier person's privileged social agenda. From the poor person's point of view, this may seem to be a demoralizing and stunning affirmation of the growing divide between rich and poor.

Pollan counters the elitism argument by claiming that cheap, conventional food is artificially cheap as a result of government subsidies and externalizing production costs by exploiting workers and the environment. Sustainably grown (which does not mean fairly treated workers) food is therefore closer to the real price borne by society.

Berg charges the "foodie crowd," like Michael Pollan and Alice Waters, with indiscriminately picking food as the one area where poor people need to change their habits. "There's this irony that you have to grow your own and cook your own food. It's the one thing they've picked out. They're not saying that poor people should smelt their own iron ore and make their own cars, or grow their own cotton and weave their own shirts. There is a great irony for me in someone using a computer built in Asia to type out a screed saying that you shouldn't buy food produced far away."

The most fervent charges of elitism arise when people in the sustainable movement suggest that poorer people should sacrifice what little they have to receive a seemingly intangible social and environmental benefit (Berg 2009). Alice Waters caused a stir in the sustainable advocacy community, when in a recent 60 Minutes interview, she said, "We make decisions every day about what we are going to eat. And some people want to buy Nike shoes, two pairs. And other people...want to nourish themselves." In fact, the desire to join a CSA is income indifferent (O'Hara & Stagl 2002). Both lower and higher income people value fresh food the same, but other factors like accessibility and cost hinder poorer people from enjoying the same food.

Ch.2 Lit Review

Social Justice in Sustainable Agriculture

Miller (2001) defines social justice as: "How the good and the bad things in life should be distributed in a human society." In reference to Marty Strange's opening quote at the beginning of this report, the distribution of sustainably and unsustainably produced food throughout society is undoubtedly a question of social justice. However, media coverage of the local food movement most often frames the issue in terms of economic growth and environmental sustainability in lieu of invoking the interests and experiences of low-income people (Allen 1993).

Early literature on CSA and farmers' markets projected a good chance of success in balancing social inequities present in conventional food and agricultural systems (Kloppenburg 1996, Feenstra 1997). Although CSA has grown rapidly in its 30 year existence, more recent literature projects limited potential of CSA to achieve sizable social justice aims. (O'Hara & Stagl 2002) Studying "alternative" supply channels and the concept of fair trade, Jaffe (et al. 2004) concluded that fair trade in the U.S. tends to emphasize the economic improvement of family farming and environmental sustainability, with little focus on social justice.

Hinrichs and Allen (2005) examined the mission statements of 18 Buy Local Food campaign websites looking for mentions of social justice. They found that mission statements referred to economic objectives (keeping money in the community and supporting local businesses) three quarters of the time. References to social justice (improving the life situations of disadvantaged consumers, farm workers or farmers) were not mentioned. Citing the uneven distribution of purchasing power required to participate in "buy local" campaigns, Hinrichs and Allen concluded that "buy local" campaigns are an ineffective strategy for realizing social justice. However, they neglect to mention any of the programs employed by CSA farms or the federal government that aim to lower the cost barrier of entry.

Joel Berg argues that sustainable agriculture must be viewed within the context of poverty in order to adequately address social justice. According to Mr. Berg, there are "three legs to the stool of understanding sustainability in agriculture and social justice. First, it's got to be economically affordable, second, physically available, and third, they have to exercise their free will to eat it. Without the ability to afford the stuff, or if it's not in your neighborhood, no one should be fooled into thinking local or organic food is part of the solution to hunger." As Berg points out, there are several barriers—most of which are economic—preventing low-income people from eating sustainably grown food.

CSA and The Social Economy

Sociologist Anthony Giddens (1991) proposed several problematic aspects of modernity: capitalism, industrialism, the discontinuous separation of space and time, and abstract and

expert systems that require a "leap of faith." All aspects are present to a greater or lesser extent in the dominant agricultural paradigm. Tomatoes are available all year round at any supermarket in the country, thanks to globally sourced, industrial-scale production and refrigerated transportation. Commercial fruits and vegetables are grown and harvested for long distance shipment and shelf life, not taste and nutritional value (Lass 2001). What was once an agricultural act requiring responsible stewardship of the land has been substituted by an industrial onslaught of chemical and technological processes with the goal of generating commodities destined for further "value-enhancing" processing, packaging, and marketing. Berg (2009) argues that this isn't necessarily bad since it makes food cheaper for poor people. But regardless of income, these aspects connect one's choices in personal life with social consequences felt on the national and global scale. The result is what some economists call "disembeddedness"--whereby people lose their connection to the land, their food, and a sense of self-identity.(Cone & Myhre 2000, Hinrichs 2000).

In this context, CSA can be viewed as a way to "re-embed" people in time and place by linking them with a piece of land and an awareness of the seasons. Judith Redmond, coowner of Full Belly Farms in Guinda, California, indirectly refers to CSA as a means of "re-embedding" people in their localities. "We like this idea of regional identity, it makes people eat what's in season in their region" (Personal Interview March 1, 2009). By joining a CSA, one gains knowledge of where their food comes from, who grows it, and how they grow it—qualities that remain a mystery for most store-bought food. In theory, CSA brings people together in a "community of eaters" with a stake in the long term survival of their "family farmer" (Cone & Mhyre 2000). By taking responsibility of food production away from distant factories, O'Hara and Stagl (2001) assert that "externalities lost in the large scale/long term feedback loops of global food systems are therefore re-internalized in the more direct time/space demands of local producer and consumer activities."

CSA has the potential to minimize the need for "externalized" systems of "expert production" and reestablish the expertise of local farmers. Van En (1991) foresaw self-sufficient communities as key to human survival. In an interview with Mother Earth News, she said, "The only way we're going to survive in the future is as united communities. If they shut off all the power tomorrow, where are you? You've just got your immediate community to work with. If there's no more gas? You've got your neighbor. And you'd better know who your neighbor is and what you can do for each other." Kunstler (2008) has made similar arguments about the need for self-sufficient communities. Access to food is at the very core of self-sufficiency.

Economist Karl Polanyi is credited as the first to identify the social economy. "The human economy," wrote Polanyi, "is embedded and enmeshed in institutions, economic and non-economic" (qtd. in Hinrichs 2000). In other words, it's not just about the vegetables. Other "intrinsic properties" make CSA an attractive option. The relationship with the farmer and the sense of well being attained by purchasing local and sustainably grown food provides additional value, although this may or may not be reflected in the taste or appearance of the produce (Russell & Zepeda 2008).

The data on consumer motivations in joining a CSA confirm Hinrichs (2000) and Russel and Zepeda (2008). People join CSA largely for social objectives. "Standard economic objectives played a relatively minor role" concluded Farnsworth et al. (1996) in a study of the Prairieland CSA in the Champagne-Urbana area of Illinois. The most popular reasons for joining were: source of organic food, relationship with the farmer, and reestablishing an urban-rural link. In a study of CSA on the central coast of California, the most important reasons for joining the CSA were: access to organic produce, buying local, and access to fresh produce (Perez 2003). O'Hara and Stagl (2002) found that concern for the environment, and the existence of local food production were prime motivations. Lastly, in a study of eight CSAs near Minneapolis, the top three reasons shareholders cited for joining were: concern for a healthy environment, source of organic produce, and a source of fresh produce (Cone & Myhre 2000)

Community organizers from Just Food and the Hunger Action Network of New York State, organizations working to connect low-income neighborhoods with CSAs, report that many of their low-income constituents used to eat farm fresh food as a child. "A lot of the people I've worked with had parents or grandparents who were sharecroppers or had gardens at their homes in the south," said Just Food's Farmer Outreach Associate Jennifer Griffith. "They know what it's like to eat fresh food and a lot of them hate the stuff they find in the grocery store. They like finding fresh food that fits into their budgets."

Breaking down barriers that prevent lower income people from buying sustainably grown food is a wide-ranging issue of social justice. By denying lower income people the right to enjoy sustainably produced food, they are implicitly forced (and if they had a choice, perhaps against their will) to pursue the unsustainable option which worsens the problematic aspects of Gidden's modernity. Industrial agriculture, like many other industrialized processes, creates cheap goods at a great cost to the natural world.

CSA and the Global Food System

Pollan ("Farmer in Chief" 2009) argues that supermarket prices are artificially low, leaving the external costs of industrial agriculture to be absorbed society. Supermarket prices are unrealistically low because they don't take into account the cost of waste disposal, biodiversity loss, soil erosion, groundwater contamination, transportation and pesticide pollution, and fair wages for farm workers.

After WWII, agriculture in the U.S. assumed more of an industrial form. Factories that used to make gunpowder and explosives reconfigured their production line to make nitrogen fertilizers for agriculture. Scientists that used to design chemical weapons for the war effort found new work in waging chemical warfare against agricultural pests (McIlvaine-Newsad et al. 2004). Farms started behaving more like factories—requiring more and more chemical inputs in order to boost production past natural biological limits.

The average farm in 1940 required 2.3 calories of fossil fuel energy for every calorie of food energy produced. Today it takes 10 calories of fossil-fuel energy to produce a single calorie of conventionally grown food (Pollan 2009). Fossil fuel has found a way into every step of food production and distribution. Pesticides, fertilizers, crop dusters, tractors, food processing, packaging (which alone accounts for 6.6 percent of the energy used in the food system and accounts for the largest source of waste in the country (EPA 2005)) and distribution (with the average distance produce travels from farm to plate ranging from 1,100 to 1,700 miles) all require significant fuel inputs. The food system represents 19 percent of U.S. oil consumption—second to only to automobiles. One study found that the U.S. food system emits 37 percent of the nation's green house gases. (qtd. in Pollan 2009)

A centralized food system also poses health and safety risks. Former Health and Human Services Secretary Tommy Thompson issued this warning about our food supply: "I, for the life of me, cannot understand why the terrorists have not attacked our food supply, because it is so easy to do" (qtd. in Pollan 2009). Smaller, regional food networks would provide immunity to a terrorist, or even an E.coli attack on our food system (Forbes & Harmon 2007). In 2006, Californian spinach contaminated with E.coli from cattle feces caused 200 illnesses and three deaths in 26 states. More recently, in January of 2009, salmonella-tainted peanut butter from the Peanut Corporation of America killed eight and sickened 500 people in 43 states. The salmonella outbreak illustrated the complexities of the industrial supply chain since the source of the company's peanut products were in hundreds of grocery items and largely untraceable (Moss "Peanut case shows holes in safety net").

CSA represents an entirely different approach to agriculture. Forming part of a local, decentralized local food system, CSA offers greater transparency in its production and distribution methods. Unlike the Peanut Corporation of America, if a CSA were to be selling tainted peanut butter, the source of the peanut butter would be easily traceable and the product would be going to no more than a few hundred shareholders, as opposed to thousands of people as was the case with the poisoned peanut butter.

There are many environmental benefits to the CSA model. Most importantly, CSA is fueled by sunshine, not fossil-fuels. By definition of a CSA, the produce travels very short distances from farm to plate. Perez' (2003) survey of California central coast CSA members found that on average CSA members lived 19 miles from the farm, with 45 percent of members living less than three miles from their pick-up site. Nearly all CSAs use organic or biodynamic production methods (Lass et al. 2001). By growing a wide variety of crops (46 different crops on average) CSA is able to replenish the soil of vital nutrients and avoid the environmental pitfalls of mono-cropping (McIlvaine-Newsad et al. 2004). Most CSAs also re-use their delivery boxes, thus minimizing the need for costly and wasteful packaging. (Personal Interview with Judith Redmond)

The State of The Small Farm

While CSA has much to contribute to sustainable food systems, its original intention was to provide a means for small farmers to earn a living wage (Van En 1991). The reasons why small farms are dwindling in numbers is not the subject of much debate. The unofficial farm policy of the U.S. government, starting with the Nixon Administration was to "Get big or get out" as farmers were urged to reconfigure their farms for mass mono-crop production. (Pollan 2009)

In 1997 Secretary of Agriculture Dan Glickman appointed a 30 member National Commission on small farms to examine the state of small farms and to recommend policies for the USDA that will, "recognize, respect, and respond," to the needs of small farmers. Their findings are published in a report titled, "A Time to Act." The report debunked a major myth of small farming—that small farms are less efficient—and even found evidence that small farms are more efficient. The report also found that:

- Large agricultural conglomerates pass risk and cost of operation on to farmers or to society in the form of water and soil pollution and increased federal assistance to rural communities.
- Major processors and retailers set prices under monopoly conditions, bankrupting farmers and buying out their competition, thus resulting in a greater concentration of agricultural ownership.
- USDA farm programs have historically been biased toward benefitting the largest farms. Farms are paid for how much they produce which puts more money into the pockets of big farms. (According to the House Appropriations Committee, mandatory spending on farm subsidies was \$7.5 billion compared to \$15 million for programs for organic and local foods. (Martin "Is a food revolution now in season?"))
- As farm size and concentration of ownership increases, the social conditions in the surrounding community deteriorate. Communities surrounding large farms consist of a few wealthy elites, a majority of poor laborers, and no middle class.

The farming industry has consolidated with such great speed, McMichael (2000) reports that 95 percent of American food is a corporate product. In 1980 the farmer received 37 cents of every consumer dollar spent on food. In 2003, the farmer received 23 cents of every consumer dollar spent on food (Henderson 2007). During that same period, four firms went from controlling 36 percent of the beef slaughter to 83.5 percent of the slaughter. Farmers are also receiving less for supplying their goods. From 1910 to 1990 the share of the agricultural economy received by farmers dropped from 21 percent to five percent (USDA 1997). At the same time, the prices farmers pay for seed, equipment, and other supplies has risen 23 percent since 1950. (Henderson 2007)

The economic situation of small farmers is important and should remain at the forefront of discussions on the expansion of CSA, especially as it applies to low-income constituents. Even with the best intentions, past policies have put small farmers in a situation where they don't have the economic capacity to assist low-income people on their own. In the words of one CSA farmer working with Just Food in New York City,

"The farmer can't be subsidizing the impoverished in America, as much as we would like to. We're only a step away from impoverishment ourselves."

CSA Leadership

Although CSA is often referred to as a "movement," CSA-specific leadership is scarce and limited in scope (Henderson 2007). Existing CSA organizational infrastructure is focused on developing the economic viability of CSA farms on a regional basis, by connecting consumers with nearby CSAs. Two national CSA directories, one at localharvest.org and the other at the Robyn Van En Center of Wilson College (http://www.wilson.edu/wilson/asp/content.asp?id=804), assist consumers in finding a CSA near them. The directories are incomplete since they rely on farmers submitting their farm's information to the websites.

Just Food, creators of the popular CSA in NYC Program, has a Food Justice Program which advocates for sustainable agriculture, although their advocacy is rarely CSA specific. In 2007, Just Food lobbied nine state representatives in an effort to secure funding for the Community Food Projects (CFP) grant program. Just Food has used CFP grant money in the past to fund low-income CSAs in NYC. In 2007, Just Food led a letter writing campaign in an effort to see the New York State Office of Community Gardens fully staffed and funded. In the same year, Just Food held a summit on food, farms, and community which was attended by 500 farmers, educators, food advocates, students, and community members. Should Just Food decide to develop a CSA-specific advocacy arm, they seem to be in the best position to do so.

The Madison Area Community Supported Agriculture Coalition (MACSAC) appears to be the most comprehensive CSA-specific organization. 35 member farms form the coalition and through member fees, provide funding for office space and a staff. MACSAC holds educational events for farmers and shareholders and coordinates a few fundraising drives every year for their Partner Shares Program which provides half-price shares to low-income residents. MACSAC also has an innovative partnership with three local health insurance providers, in which policy holders receive a rebate from the insurance company for joining a MACSAC-member CSA.

In general, CSA is subsumed within the larger organic and local food movement. The Northeast Organic Farming Association (NOFA), a non-profit organization of 5,000 organic farmers and consumers, engages in some CSA promotion at the state-wide level. NOFA is divided into seven chapters in Connecticut, Massachusetts, New Hampshire, New Jersey, New York, Rhode Island, and Vermont. In 2008, NOFA-New York organized five regional meetings with the goal of developing a statewide support network for CSA farms. NOFA-VT organizes and administers the Vermont Farm Share program—an effort to subsidize CSA shares for 800 low-income individuals. All NOFA organizations engage in farm policy advocacy but a search for mentions of CSA within the advocacy sections of the state websites came up empty.

With only 2700 small family farms and uncoordinated organizational resources, CSA is yet to develop an advocacy arm. Unlike the National Farm to School Network, or the Organic Trade Association, CSA advocacy is confined to individual farms. A possible reason why farmers have not organized is that small farmers are very independent and maintain a strong sense of pride in their own crops. Vanessa Zajfen, a retired CSA manager now working for Occidental College's Center for Food and Justice, contends that CSA farmers are "not a collaborative bunch" as a possible reason why CSA farmers are yet to join hands in a large-scale organizing effort (Personal Interview February 2, 2009).

A more likely reason for the absence of CSA leadership is the nature of CSA farms. CSA farms are small and the farmers are very busy people. It is unrealistic to assume that CSA farmers have enough resources to both farm and advocate. They are focused on the local community, not a national audience. When asked about hiring a national CSA coordinator, Judith Redmond of Full Belly Farms replied, "You'd probably have to pay someone to do that."

Nutritional Disparities and Food Security

The USDA (2007) defines "food insecurity" as "the lack of access to adequate food because of insufficient money and other resources for food." In 2007, 13 million households were food insecure per the USDA definition. The Community Food Security Coalition (CFSC) takes the USDA definition one step further by placing household food security in a community context. Based on Hamm and Bellows (2003), the CFSC defines community food security as: "a condition in which all community residents obtain a safe, culturally acceptable, nutritionally adequate diet through a sustainable food system that maximizes community self-reliance, social justice, and democratic decision-making." While data on food secure communities is harder to gather, a review of the literature indicates a lower prevalence of community food security in lower-income communities.

Low-income neighborhoods have less access to fresh fruits and vegetables than higher-income neighborhoods. Analyzing census tract data, Morland (2002) found three times as many supermarkets in wealthier neighborhoods, and four times more supermarkets in white neighborhoods than in black neighborhoods. Not surprisingly, her study found that lower fruit and vegetable consumption was associated with limited access to supermarkets and transportation. In addition to a dearth of supermarkets in low-income neighborhoods, a quarter of low-income households lack access to an automobile and public transit systems are not designed to meet urban shopping patterns (Gottlieb et al. 2002). Inner-city residents are often left with liquor stores, food bodegas, and small grocery stores to meet their dietary needs, where fresh produce is scarce and often more expensive (Forbes & Harmon 2007).

A study of Berkeley residents found that the desire for fresh produce is relatively income-indifferent (Treiman 1996). But due to access issues, this desire does not result in income-indifferent fruit and vegetable consumption. On average, Americans consumed 1.03 cups of fruit and 1.58 cups of vegetables per day in 2004. (NHANES 1999-2004).

Low-income individuals (defined by participation in the Supplemental Nutrition Assistance Program—the newly renamed Food Stamp Program) at even less—0.96 cups of fruit and 1.43 cups of vegetables. Low-income people are also more likely to eat canned or dried fruit and less likely to eat raw vegetables. An analysis of declining nutrient content in fruits and vegetables determined particular nutrient losses of 30 to 50 percent in fruit and vegetables 5 to 10 days after harvest (Forbes & Harmon 2007).

The declining quality of the American diet has disproportionately affected low-income people. Studies have shown a significant link between overweight and obesity and being poor. The highest rates of obesity in the U.S. occur in communities with the highest poverty rates and the least education. While the obesity epidemic has taken its toll on wealthier people as well, the burden of disease remains highest in low-income communities. A diet low in fruits and vegetables also puts one at risk for diabetes—a disease that has unfortunately become a defining public health characteristic of impoverished communities (Sutton 2005).

CSA as a Means of Community Building: Fact or Fiction?

Inherent in the CSA name is the notion of a community uniting around food. To some extent CSA is indeed a community effort. Shareholders give up some control over their buying habits and purchase food in a collective fashion. "Collective activity," as discussed by DeLind and Ferguson (1999), has the potential to build "interpersonal trust and a sense of community rooted in place." However, the literature on CSA gives mixed reviews for its capacity to strengthen communities. DeLind's study of the community aspects of CSA (2003) found CSA to be a successful marketing tool for small farmers and "conscientious consumers," but concluded that its goal of building community, "may exist more as a metaphor than a fact."

In a five year study of eight CSAs, Cone and Myhre (2000) noted that the community aspect of CSA was a low priority for joining. Although many CSAs offer their members the opportunity to work on the farm or visit the farm, half of the members in Cone and Myhre's study only engaged with their respective farms by picking up their share at the drop off point. The "community" aspect of CSA often refers more to a community of interest than to a community built on "mutual relationships of rights and obligations, on reciprocity" (Cone & Myhre 2000). When asked to share a social experience they had with another CSA member, the majority of participants had no stories to tell. Other studies have found low rates of shareholder participation in on-farm activities (Perez 2003).

Household composition of subscribers is a major variable influencing the degree to which shareholders participate in community building activities. Single person households and households without children who are new to the area are more likely to participate in onfarm activities. Households with children who have lived in the area longer than a year tend to have their CSA share delivered to their home (Russel & Zepeda 2008). These households have already situated themselves within a pre-existing community and are also busy with child-rearing activities.

Some CSA farmers, like Michael Doctor of the Food Bank Farm of Western Massachusetts prefer that the farming be left up to them. "We invite volunteers to come and work on the farm, but for a farm like ours it's not a good business decision. We don't want to be so inefficient as to bring people onto the farm who have no farm skills" (Personal Interview March 20, 2009).

Full Belly Farm in Guinda, California has Open Farm Day in June and other festivals throughout the year to attract people to the farm. But getting people to work on the farm is another story. "The original idea of CSA is for the shareholders to work part of the time," said co-owner Judith Redmond. "But they don't want to work on the farm, they're busy. If they come they want to relax."

A more accurate name for CSA might be CFA, or community funded agriculture. Supporting a farm outside of paying for the share is a rare outcome in modern CSAs. While some CSA arrangements require a work commitment as part of membership, CSA is trending towards a more transactional, cash-for-produce kind of relationship. It is entirely possible that the notion of re-embedding people within their local contexts through relationships with each other is passé. However, the seasonality of CSA and the environmental benefits remain intact.

As CSA participation trends towards a "hands off" approach, Maine's state-sponsored Senior FarmShare program stands out as an outlier. Low-income seniors in Maine are eligible for a \$50 CSA share at any participating farm. Two farmer interviews yielded positive reviews for CSA's community-building power. At The Apple Farm in Manchester (Maine), farmer Merilyn Meyerhans has developed close relationships with her Senior Farm Share participants. "They get very personally involved with the farm. A bunch of them will come in a van and make a day out of it. We get to know them quite well. They talk about the Apple Farm like it's their farm, which it certainly is...They'll start calling in January asking, 'Is it time to sign-up again?" (Personal Interview March 17, 2009). Farmer Julie Applegarth of the Rippling Waters Organic Farm in Steep Falls, Maine had a similar experience with her Farm Share members. "They like to come to the farm. They like to talk to us. We like to talk to them. It's a tough time since it's our second year and some of our members have passed away. A man came to the farm today and I got a hug from him. He had bypass surgery this past winter. It's always interesting to hear their stories" (Personal Interview March 15, 2009).

How CSA Changes Consumer Behavior

A weekly supply of fresh fruits and vegetables entering the home is bound to change consumer behavior. A study of CSA shareholders Minnesota and Wisconsin found that CSA participation led to shopping less, improving overall nutritional health, and eating more vegetables (Brown & Miller 2008). The latter observation has been reported by other studies as well (Perez 2003, Russell & Zepeda 2008). In a study comparing dietary intakes between CSA members and non-members, members had higher intakes of fiber and vitamin A and a lower intake of saturated fat (Cooley 1996). CSA members also

consume more dark green and yellow vegetables which are rich in cancer-preventing antioxidants and phytochemicals. (McCullum 2004).

In addition to eating more vegetables, CSA membership changes food preparation habits and introduces shareholders to seasonality. In many CSAs, the box of produce comes with information on what's in the box and suggested recipes (Russell & Zepeda 2008). Members who are willing to cook more and give up some freedom of choice and who believe the changes to be useful tend to be the members who are more likely to renew their membership. The relationship to the farm and farmer gains salience over time as a reason for staying on board as a shareholder (Cone & Myhre 2000).

Chapter 3: Low-Income Consumer Barriers to CSA Participation

The CSA model presents many structural barriers to low-income participation. CSA membership is a peculiar means in which to procure food. It requires shareholders to change their behavior and adapt to a new food source. But it also offers shareholders many rewards absent in traditional shopping, like a relationship with a farmer and access to fresh produce where there may not be any. What about the CSA model would make it hard for a low-income population to participate? This section examines impediments inherent in the CSA model.

Awareness

The most obvious demand barrier is low awareness about CSA. CSAs exist as a discrete exchange between farmer and shareholder. Drop-off points occur at the farm gate or at locations chosen for convenience—not visibility by the general public. Pick-up times are usually no more than two hours spots, once or twice a week which offers only a brief window for a passerby to inquire about what's happening. CSA lacks a permanent physical presence within densely populated areas. CSA visibility is much less than that of a farmers' market or supermarket. In one study, only seven out of 37 low-income people were aware of CSA (O'Hara & Stagl 2002). When asked how low-income people reacted to the CSA concept, Danielle Seidita, a community organizer for the Hunger Action Network of New York State, replied, "I usually get a blank stare on their face" (Personal Interview March 13, 2009). On the other hand, Seidita confirmed that the concept tends to be "pretty well known" in higher-income areas of New York City.

Community Organizing Hurdles

In Fisher's study of low-income farmers' markets, he found that several farmers' markets failed because the local community never assumed ownership of the project. The Van Nuys Certified Farmers' Market and the Alvarado Farmers' Market in Pico-Union failed because they were "imposed" on the community by outsiders. In the absence of indigenous leadership, CSA is subject to making the same mistake—especially since CSA is a foreign food-buying concept for many low-income people. Additionally, the language of outreach materials used to promote CSA to high-income individuals might not be as effective among a lower income constituency where education levels are lower (O'Hara & Stagl 2002).

Cost

Low-income people cite cost as major reason for not participating in a CSA (O'Hara & Stagl 2002). In the absence of low-income subsidies, full shares cost on average \$400 (2001 Natl Survey)—a prohibitively expensive price for some. In addition to the total cost, CSA as it was originally designed requires an up-front payment at the beginning of the season. Lump-sum payment at the beginning of the season, while helpful for the farmer, poses a challenge for someone living paycheck to paycheck (Chung 2005).

Government aid to low-income people in the form of Supplemental Nutrition Assistance Program benefits (new name for "food stamps") is incompatible with the traditional CSA model for two reasons. First, buying a share in a CSA is no guarantee of receiving food. A share in a CSA is an investment in a local farm (albeit a very safe one) and the USDA does not allow gambling with government money. A locust-infestation could wipe out an entire crop, leaving the shareholders with nothing. At the same time, a bountiful harvest could yield bigger than normal share sizes. Second, and stemming from the "no gambling" rule, USDA rules cap the time it takes for food to be delivered at two weeks, making an up-front payment impossible with SNAP benefits. Furthermore, if a low-income person were to be able to use their SNAP benefits to pay for a full share at the beginning of a season, they would have no SNAP benefits for the remainder of the month.

A big concept in CSA is sharing the risk associated with agriculture amongst a pool of shareholders. Sharing the risk takes a lot of weight off the farmers back. In the case of crop failure, the cost is spread out through a large group. However, low-income households are not in a good position to absorb the cost of crop failure. In the event that the share provides less food than expected, (or no food which is entirely possible although very unlikely) low-income households would be disproportionately affected. While a wealthier household could make up for a poor CSA harvest by going to a super market, low-income households are more dependent on their share. They are taking on a greater risk in joining a CSA. The greater risk is not reflected in a higher payout to lower income members.

Lifestyle Changes and Cultural Barriers

As mentioned earlier, CSA membership requires shareholders to give up some personal control over their eating habits and act as a collective group. Shareholders are not afforded a choice in what their weekly or bi-weekly share contains. But shareholders are able to seek out information about what each CSA grows before they commit. Also, nearly every CSA makes a conscious effort to solicit shareholder feedback at the end of the season to find out what people liked and did not like. Even with some feedback mechanisms, CSA shareholders sacrifice choice for a pre-selected basket of produce. This is especially true for low-income households as their remaining food budget contracts after joining a CSA.

Asking low-income people to give up their freedom to choose is a tough sale for the CSA movement. Poverty already limits one's choices. People without many resources may be unwilling to give up what choices they have left. (Johnston 2003) Berg (2009) concurs. "You're pretty prescribed [with the CSA model] in being provided what someone else picks for you. Yuppies might be perfectly willing to turn their diet upside down to do this or spend extra money to get it. The problem with poverty is that you're already eating what other people want you to eat. You're getting what you're getting in poverty." Not surprisingly, the most frequently cited reason for leaving CSA (the studies did not take into account income) is a preference for self-selected produce (Perez 2003, Russell & Zepeda 2008). Less frequently cited reasons for leaving include problems with

quantity, and cooking issues. Fears that a CSA share offered too much produce decreased the probability of becoming a member by nearly 40 percent in Stagl and O'Hara's 2002 study. Stagl and O'Hara also noted that low-income families with children frequently cited the need to know in advance which vegetables to expect before committing to a CSA.

Consumer preference in a local food system is subject to the constraints of climate and soil chemistry. CSA members show a preference for potatoes, tomatoes, corn and lettuce (Lass 1999). Sweet corn is particularly troublesome for organic farmers to grow because of numerous pests. Potatoes are hard for small farmers to grow as well since potatoes require specialized harvesting machinery (Lass 1999). Naturally, CSAs can't meet all the produce needs of shareholders. The Community Food Security Coalition describes being "food secure" as having access to food that is "culturally relevant", but a CSA in New York cannot grow plantains or bananas for the city's Ecuadorean population, thus requiring CSA members to continue patronizing supermarkets for globally sourced, yet "culturally relevant" food.

Aside from cultural relevance, the length of a growing season limits CSA to a seasonal solution to food security. The growing season in New York is six months long and in Alaska it is two months long. Some CSAs operate year round by growing winter storage crops like carrots, turnips, and rutabagas. When the CSA is out of season, people need to secure other sources of food.

CSA requires shareholders to cook more, and often with foods they may be unfamiliar with. Since CSAs grow upwards of 40 crops, shareholders are bound to receive produce with which they are unfamiliar, posing a skill and time related problem as low-income families adjust to an influx of raw produce. "The biggest problem with CSA [for low-income people]," according to Judith Redmond, "is that they don't know how to cook it and they don't feel like they have time." Cooking skills have been on the decline for decades as more women work away from home, relying on prepared and fast food to feed their families (Fisher 1999). Latino adults, men, and adults with less than a high school education are less likely to know how to prepare fruits and vegetables than other demographic groups (Fisher 1999).

Transportation

Transportation to a CSA drop-off location poses another barrier for low-income shareholders. CSAs either drop-off shares at specific drop-off points throughout the city or request that shareholders pickup their shares at the farm. In a survey of low-income residents in New York, pickup locations that were too far away from the home or workplace was frequently cited as a major reason for not joining a CSA. (O'Hara & Stagl 2002). This could be the result of low car ownership rates or additional time constraints on low-income families (Gottlieb et al. 2002). Anupama Joshi, Director of the National Farm to School Program, cited the difficulty of traveling home on public transit with a box of CSA produce as a barrier for low-income CSA participation. (Personal Interview February 13, 2009)

Strategies for Overcoming Consumer Barriers

This section looks at ways to overcome the barriers listed in the previous section.

Awareness

Kolodinsky and Pelch (1997) assert that the best way to inform people about CSA is through word of mouth. Their study found that "unusual" methods of advertising, such as posters and fliers, have insignificant and even negative impacts on raising CSA awareness. Well established CSAs like Full Belly Farm rely on word of mouth for up to 80 percent of new member recruitment (Henderson, 2007). Indeed, a recommendation from a friend is naturally more persuasive than a poster or flyer and a concept like CSA may require a human explanation.

Danielle Seidita, a former CSA coordinator for HANNYS found that a mixture of well placed oral and written communication works best. Working to start a CSA with tenants from the Queensbridge Housing Community—the largest public housing development in the country (and only serviced by one supermarket (Barry "Don't Tell Him the Projects are Hopeless))—Seidita spread the word at first by hanging up flyers around the neighborhood. When people saw her hanging up flyers, they began to ask questions. In responding, Seidita chose her words carefully. "I wouldn't even use the words CSA or community supported agriculture. I would just use words like 'fresh vegetables' to get people talking about farms and produce. Most people remember growing up when their parents or grandparents had a garden so they know about fresh vegetables." In the very beginning, getting people excited about the prospects of fresh food is likely to be a more effective outreach strategy than diving right into an explanation of the details of CSA. After sparking interest with a few community members, Seidita went to community board meetings and community organizations to spread the word.

Gender should play an important role in CSA outreach. Women initiate CSA membership 74 percent of the time and take responsibility of the increased cooking demands associated with CSA membership. Cone and Myhre (2000) suggest that outreach should focus on women due to their role initiating and accommodating CSA structure.

Community Organizing Hurdles

A sound community organizing strategy is key in starting a CSA in low-income communities. Fisher (1999) found that successful farmers' markets all employed a community organizing approach rather than a publicity based strategy. He suggested tapping into the "existing infrastructure" like schools, churches, block clubs, and tenant associations so that the farmers' market can be "their own." The same strategy applies for a successful low-income CSA.

Seidita attributed much of the CSA's initial success to receiving an endorsement from the Jacob A. Riis Neighborhood Settlement House. Backed by a respected organization,

community members gained trust in the CSA. The Riis Settlement House also offered space to serve as the distribution site for members to pick-up their shares on Wednesday evenings. Finding the site was not easy. A lot of the places she looked at were not familiar with the CSA and thought it would be more bothersome than exciting. "It was a matter of finding a place that could meet the program's needs, accessibility for the farmer, and accessibility to low- and high-income members," said Seidita. The Long Island City CSA now has 80 shareholders, half of them low-income. (80 shares feeds many more than 80 people. A full share is designed to meet the produce needs of a family of four for a week. (http://liccsa.wetpaint.com/page/Become+a+CSA+member))

One of Seidita's first jobs as a community organizer was to identify a "core-group" of local leaders who were motivated and dedicated enough to garner community support for the CSA. The "core-group" is very similar to the "indigenous leadership" that Saul Alinsky—widely considered the "godfather of community organizing"—refers to in his book, *Reveille for Radicals* (1946). The core-group ensures that the organizing effort is a grassroots movement that will stay intact long past the initial organizer's departure. In a CSA, the "core group" takes responsibility for recruiting new members and for the CSA's day-to-day operations. Members of the core group publish monthly newsletters, coordinate distribution of shares at the drop-off site, and facilitate communication with the CSA's farmer. By taking some of the administrative load off the farmer's back, the core group enables the farmer to concentrate on farming. Seidita describes the Long Island City CSA core group as "the movers and shakers in the neighborhood." One man in the Long Island City CSA core group was already active in a community garden when he was approached by Seidita. People who are already active in local politics are more likely to join a CSA, and in Seidita's case, more likely to take the lead.

The Long Island City CSA was a joint effort between HANNYS and Just Food. Just Food utilizes many of the same strategies that Seidita used in her organizing effort. To learn more about Just Food, see Case Study 1.

Cost

Like any normal good, fruit and vegetable consumption is subject to the laws of supply and demand. Using a range of price elasticities and estimates of food consumption, the USDA's Economic Research Service calculated that a 10 percent price discount at the retail level would encourage low-income households to increase their consumption of fruits and vegetables by two to five percent. A majority of CSAs have devised payment mechanisms to lower the cost and payment structure barriers of CSA membership for low-income members. Some of the most popular payment mechanisms are listed below.

<u>Sliding Scale/Scholarships:</u> Wealthier members pay more for their share so lower income members can pay less and the farmer is still able to receive their asking price. When asked about the willingness of higher income members to pay more, Paula Lukats, Just Food's CSA in NYC Program Manager, responded, "People are so generous! I think a lot of people value helping a less fortunate family eat fresh food" (Personal Interview March 15, 2009.) Funds to subsidize low-income shares are also raised through fundraisers.

NOFA-Vermont subsidizes low-income shares through their "Share the Harvest" event held annually on the first Thursday of October. Participating restaurants pledge five to 15 percent of their sales on that day to benefit NOFA-Vermont's low-income Farm Share program. Some low-income shares receive funding through grant money from antihunger groups.

Rolling Loan Fund: Created with grant money or through personal donations, the low-income member borrows money from the fund to pay the farmer in one up-front payment and then replenishes the fund with weekly or monthly payments throughout the season. Typical funds range from \$1000 for small CSAs to \$5,000 for larger CSAs. Proceeds from MACSAC's Bike the Barns fundraiser generated \$3,000 for their rolling loan fund in 2008. MACSAC only requires its members to repay half of the money borrowed from the fund, so the fund needs to be replenished every year.

<u>Staggered (or Flexible) Payment:</u> Allows the shareholder to pay in installments throughout the season, instead of a lump-sum payment at the beginning of the growing season. The farmer or the core-group will often work out a specialized payment-schedule on an individual basis to meet the shareholder's needs.

Working Shares: Shareholders trade their labor on the farm for a free or reduced price share. Gallantin Valley Botanicals in Montana has a working shares option where members can work a four hour shift per week for 15 weeks out of the 18 week growing season and receive a 50 percent discount. The price drops from \$360 to \$180 per share. That works out to three dollars per hour—10 cents less than the minimum wage in 1980. Homestead Organics Farm in Hamilton, Montana offered a working share option in which four members agreed to work four hours per week for the 20 week season. All four families dropped out before the growing season ended (Forbes & Harmon 2007). Working shares might work for people who have copious amounts of free time (which most-low-income people do not), place a high value on the social characteristics of CSA membership, and who are physically able to withstand the demands of manual farm labor.

Electronic Benefits Transfer (EBT)/Supplemental Nutrition Assistance Program (SNAP) benefits: CSAs usually need to change their payment structure in order to meet federal EBT/SNAP laws. Instead of paying for the entire CSA share at once, EBT/SNAP regulations require that the shareholder pay on a weekly or bi-weekly basis. (To clarify: one uses an EBT card to spend their SNAP benefits.) EBT/SNAP can be used in conjunction with a rolling loan fund so that the farmer can still receive the pre-season payment, thus preserving the original intention of CSA.

State regulations add an additional layer of obstacles for low-income CSA programs. In Washington State, for example, regulations stipulate that the value of the produce received must meet the value of the SNAP benefit transfer, regardless of a low-yield harvest on the farm. This makes sense for SNAP user, but not the farmer who exposes him or herself to a greater amount of financial risk to grow for the SNAP user.

Chrystine Goldberg and Brian Cambell of Uprising Organics in Bellingham, Washington reported that setting up EBT payments for their CSA was a simple process. Listing their CSA as a "seasonal farm stand," they sent in an application to the USDA and Washington State Department of Social and Health Services. Once approved, JP Morgan Chase provided them with an EBT card-swiping machine free of charge, with the pre-condition that they process at least \$100 worth of EBT transactions each month. (Lyons "Food Stamp CSA opens access to the freshest food.")

The People's Grocery CSA in Oakland, California accepts SNAP benefits without an EBT machine. They use a voucher and phone system to process the SNAP benefits. The customer fills out a form with their EBT account number and the amount they want deducted from their account and then the farm calls the transaction in to the bank for the funds to be transferred.

Fisher (1999) noted one danger with farmers' markets that were overly dependent on government subsidies. At Greenmarkets Farmers' Market in the Bronx, 70 percent of sales were through the Farmers Market Nutrition Program—a government voucher for low-income people to spend at farmers' markets. Since the farmers knew that their customers had vouchers that were only good at farmers' markets, they raised their prices. The same type of price-gouging could theoretically occur in a government subsidized CSA, although there have been no reports of such activity in the Maine Senior Farm Share Program.

Maine Senior Farm Share: Funded through a grant from USDA's Senior Farmers' Market Nutrition Program, Maine's Senior Farm Share Program is the only government program geared directly toward CSA. Low-income seniors receive a \$50 credit at any participating CSA in Maine. (See Case Study 2)

See Table 1 on Page 37 for a summary of payment mechanisms.

The Long Island City CSA's sliding scale looks like this: (Note how it incorporates more than one low-income payment mechanism. http://liccsa.wetpaint.com/?t=anon))

- Income above \$50,000
 - Full Share = \$545, Half Share = \$275
 - Membership requires a 10% minimum deposit. Must pay in full by April 15
- Income between \$50,000 and \$35,000
 - Full Share = \$500, Half Share = \$260
 - Membership requires a 10% minimum deposit. Must pay in full by April 15
- Income below \$35,000
 - Standard Full Share = \$420 Full, Half = \$210

- Membership requires a 10% minimum deposit. Must pay in full by April 15
- Program A Full Share = \$210, Half Share = \$105
 - Requires additional volunteer hours (all members must volunteer at least 4 hours per season) or pay for 50% of share with food stamps.
 Weekly payment with food stamps. Membership requires a 10% minimum deposit on cash portion.
- Program B Full Share = \$100, Half Share = \$50
 - Requires additional volunteer hours and 100% payment with food stamps. Weekly payment with food stamps. No deposit required.

What is it?	Stiding Scale/Scholarships	Rolling Loans	Staggered Payment (No Loans)	Working Shares	Payment with EBT/SNAP	Senior Farm Share
	-Payment system in which wealthier	-Loan fund pays farmer full price at	-Instead of paying one lump-sum,	-Shareholder works on farm in exchange	-Shareholder pays with EBT/SNAP	-Gov. funded, \$50 CSA credit for low-
	members pay more	start of season, low-	shareholder pays	for decreased share	instead of, or in	income seniors,
. 1	and lower income members pay less.	income person pays back in installments.	weekly or monthly installments.	price.	addition to paying with cash.	good at any participating farm.
- Effect	-Increased	-Circumvents lump-	-Circumvents lump-	-Increased	-Significantly	-Low-income
	affordability for	sum payment barrier	sum payment barrier	affordability for	lowers cost barrier	seniors eating
51	shareholder	-Enables farm to	for shareholder	shareholder	to joining CSA	healthier.
		receive full payment	only.	-Shareholder comes	-Government now	-Increases market
		at the beginning of		in more contact with	supporting CSA	size for CSA
		the season.		farm.		farmers.
- Challenges	-Someone (farmer,	-Funding for rolling	-Increased	-Serious time	-Farmer barriers to	-\$50 does not
	community	loan fund must be	administrative cost	commitment for	setting up EBT	provide much food.
	organization,	provided by	of receiving	shareholder.	payment system	-Not enough CSAs
	charity, wealthier	community org,	numerous payments.	-Remuneration for	-USDA rules on	to meet demand.
31	shareholders) must	grants, or wealthier	-Decreased income	labor very low	paying prior to	-Administration is
31	subsidize the cost.	shareholders.	security for CSA	(equivalent to \$3/hr	receiving food;	relatively costly.
•	-Creating and	-Fund is limited in	farmer.	in some cases).	shareholder must	-Subject to
	enforcing payment	how many people it			pay in installments.	fluctuations in
	brackets	can accommodate.				tederal funding.
How Payment -	-None, in fact	-None, stays true to	-No longer "true"	-Original CSA	-USDA rules	-Farmer plays no
Mechanism	closely resembles	CSA model in	CSA because the	intended for	eliminate chance of	role in setting a
	historic Temple-	which farmer gets	farmer is not	shareholders to pay	up-front payment to	price that guarantees
nal" CSA	Wilton CSA where	money at the	receiving up-front	for share and	farmer.	them a living wage.
Model	community	beginning of season	payment. More like	occasionally work		-Farmer required to
1	members would pay	to cover initial	"subscription	on farm.		deliver \$50 worth of
.,	according to their	costs.	farming."			produce, even in
	means and receive					case of crop failure.
Domilority	Seconding to necus.	Not listed in	Most nominar form	Donkad third in	Donted fourth in	Not listed in
, t	Scoular form of	Survey but common	of low-income	nopularity in	nopularity on	enexesy but utilized
VeV	popular romin or	in many Inst Food-	navment method	HANNYS Survey	HANNYS SIITVEV	by 15 000 Maine
	payment method.	initiated programs.	raymon monog.			seniors.

Lifestyle Changes and Cultural Barriers

Fisher (1997) found "basic foods at affordable prices" to be the "lifeblood of low-income markets." But with any CSA, shareholders are bound to receive a few vegetables they have never seen before and do not know how to prepare. They may have second thoughts about paying for items with which they are unfamiliar. Perez (2003) found that 50 percent of members reported throwing away more produce after joining a CSA. "CSA does require that you're willing to be challenged a little bit," said Paula Lukats. "Chances are you're going to get a few things you haven't seen before." While it may be a good idea to actively seek out members who fit the "willing to be challenged" profile, CSA education programs aim to generate excitement about eating new vegetables and teach people how to cook with their CSA produce.

Full Belly Farm used to offer cooking classes for its CSA members. Working in conjunction with Sur La Table members could pick up their share at a drop-off point in front of the store and head on in for cooking demonstrations. Sur La Table may be a good venue for cooking demonstrations but high-end kitchenware stores may be an unwise choice of location for low-income cooking classes. Full Belly Farm discontinued their cooking program since members could attend cooking classes at numerous Bay Area locations. Many CSAs, Full Belly Farm included, provide recipes in each box of weekly produce.

Although the ingredients may be foreign, the time commitment required to cook raw produce many not be as big a barrier to CSA participation as Berg (2009) asserts. A 1988 study by Nickie Charles and Marion Kerr concluded that women's employment outside of the home does not affect the amount of time spent in the kitchen. Women who stayed at home and those who worked spent roughly the same amount of time in food preparation.

CSAs have developed strategies to offer more types of produce than they are able to grow on the farm. Doing so enables the CSA to provide their shareholders with more choice. In the summertime, Full Belly Farm and other local farms rent a big truck and drive down to the San Francisco wholesale dock to load up on items that they cannot grow in the summer. Other CSAs "bundle" their CSA boxes with goods from other specialty farms. For an additional cost, shareholders can supplement their standard produce shares with a dairy share, meat share, or fruit share which is supplied by another farm.

Fisher (1999) noted a strong sense of ethnic loyalty in low-income farmers markets throughout California. The presence of Lao, Hmong, and Vietnamese growers helped to bridge the language and cultural barriers at San Francisco's "Heart of the City" Farmers' market. When a black farmer first opened up shop at the Richmond Certified Farmers' Market, black customers flocked to his stand to scoop up his fresh black-eyed peas. Many of his black patrons reported that they had not seen fresh black-eyed peas since they were children.

Transportation

Fisher (1999) recommended that low-income farmers' markets develop transit programs to assist car-less people. The Genesee Valley Organic CSA in Rochester, New York has a transit program to assist car-less folks in picking up their shares. Their "buddy system" pairs members without cars with people who have cars. Seidita chose the Jacob A. Riis Settlement House partly for its proximity to the constituency being served, thus limiting the need to travel long distances for share pick-up.

Chapter 4: Farmer Barriers to CSA Participation

Consumer desire to participate in a CSA is only half of the equation. Farmers face barriers of their own in starting a CSA and in supplying low-income shareholders. Balancing the needs of both low-income people and CSA farmers is key to the future success of CSA. Some of the on-farm barriers are discussed here.

Economic Situation of Small Farmers

The biggest barrier to incorporating low-income programs into a CSA is the economic situation of the farmer. In the words of one farmer who was trying to initiate a low-income component for his CSA, "I am the most low-income person I know"(qtd. in Perez 2004). He mentioned one of his shareholders who was better off than he was and still received their share at a discounted rate. Small farmers are not in a good position to make charitable concessions. Many small farmers have to take jobs off the farm just to make ends meet. "It's really hard for us to consider dropping our prices when we're basically right at the poverty level ourselves," said one CSA farmer from California's central coast (Perez 2004). If wealthier members are willing to pay the highest price on a sliding scale, the farmer might be tempted to sell all of their shares at that price so long as the demand is there. Former CSA manager Vanessa Zajfen emphasized the real priorities of small farmers. "The farmer's job isn't to 'feed the world' as some might suspect. They're running a business. Their job is to make a living."

It is rare to find a CSA that services only low-income members. Fisher discovered that it was unrealistic to expect a low-income farmers market to carry its own weight financially. In an ideal situation, the low-income market should be considered as a community service by the host organization or by other more profitable markets (Fisher 1999). In subsidizing low-income shares, farms are also at a disadvantage to community groups when it comes to fundraising. Community groups are accustomed to fundraising while farms are not.

Wearing More Than One Hat

The CSA model often requires farmers to take on new responsibilities. In the absence of outside assistance, the farmer must spend more time doing administrative work. "By eliminating the middle man," said one Santa Cruz CSA farmer, "you become that and so you are in charge of everything from marketing, outreach, getting the membership, signing them up, being in charge of their money, doing the newsletter, and doing the farming." This is the danger associated with trying to do everything by themselves and not asking shareholders to play a larger role in making their local food system a reality.

Labor Intensive Operations

As a result of government policies that reward farms for the amount, as opposed to the variety, of crops they grow, most big farms specialize in one or two cash crops. Small CSAs do not have this luxury, and most people do not consume enough corn to make a

corn-only CSA worthwhile. Planting and harvesting more than thirty crops requires a significant quantity of labor. Once harvested, crops must be washed, divided into shares, and packed into boxes before they are distributed to shareholders. This process is also very labor intensive.

Overcoming Farmer Barriers to CSA Expansion

Judith Redmond from Full Belly Farm believes that social and environmental justice and economic success are interdependent goals for a CSA. Speaking about the beginning stages of her farm, she said, "Staying afloat can't just mean being economically successful. Thinking about your farm labor and your community and taking care of the soil and environment is part of succeeding economically. If the thinking was that we'll deal with the thorny issues once we were viable than we would have never gotten to them. There's synchronicity in taking care of the soil and the water...all those things add to your economic success." Full Belly Farm has been donating five CSA shares per week to the Charlotte Maxwell Complementary Clinic. The clinic provides alternative cancer treatments to low-income women with cancer. Full Belly Farm has been no less successful as a result of their generosity; they host a year-round, 800 member CSA.

The size of Full Belly Farm is uncharacteristic of the average CSA whose size is about 40 shares. Since Full Belly Farm already serves several wealthy cities in the Bay Area, they should be in a good position to open their CSA to more low-income members. Fisher (1999) noted that successful low-income farmers markets draw upon an even mixture of low- and higher-income members. To attract wealthier members, he recommended that farmers' markets locate on the fringes of low-income communities so higher-income people can easily access, and thus subsidize the lower-income market. Such a strategy has the potential to cause transportation difficulties for the less mobile lower-income community, but was essential for the longevity of the farmers' markets in Fisher's study.

The same income-mix strategy is also important for CSAs. Half of the Long Island City CSA members are paying full-freight and the other half pay a subsidized rate. When Seidita from the Hunger Action Network of New York State set up the Long Island City CSA, she first negotiated with the farmer to determine a target price and number of shares for the entire CSA and then went about finding members to reach the targets. "The goal is to not bother the farmer with the price," said Seidita. In order to not bother the farmer with the price, higher-income members pay more. The goal in setting up a low-income CSA, which most often takes the form of a mixed-income CSA, is to find the right balance between low and high income members to meet the objective of solving low-income food insecurity and making the CSA a valuable business for the farmer.

Since the farmer is most likely unable to farm and knock on doors to recruit members, a core group can step in to fill the leadership vacuum. According to one survey of CSA operators, the biggest barriers for reaching out to low-income members were "economic difficulties" and "lack of a core group" (Donaker & Shute 2004). Data from the 1999 National CSA survey (Lass et al. 1999) compared farms that use the core group managing model and those that do not, and found that core group CSAs had higher

incomes and share prices, hired more workers, and engaged in more social events and low-income programs. The core group makes a serious contribution to the "community supported" aspects of CSA.

In addition to the core group managing model, new marketing models have the ability to increase CSA profitability. Gary Lamb, Assistant Director of the Hawthorne Valley CSA in Columbia County, New York, believes that the future of CSA lies in moving away from traditional subscription-CSAs and towards a new hybrid retail model. "When you have a CSA," said Lamb in *Farms of Tomorrow: Revisited (1998)* "it supports one specific farm. There is a place for a store that supports a number of farms and a variety of goods." By purchasing food in a retail store, the original concept of a CSA is lost. But the store can serve as a showcase for all of the CSAs that contribute. The store would put the farmer (so long as a CSA farmer is present) into direct contact with consumers which would give the two parties a chance to develop a relationship. "From there the relationship might evolve," said Lamb. "The consumer might have some land, or some money they want to invest; or they might come to support you more directly, as with the CSA movement."

Similar initiatives have been taking place in Austria during the last decade. In Erzeuger-Verbraucher-Initiativen (EVI), (producer-consumer-initiatives) farmers supply a store which also sells other products like processed food and household goods. This type of supermarket-model overcomes the lack of choice in a traditional CSA and opens up new revenue streams for small farmers (Stagl & O'Hara 2002). Interestingly, the largest share of the EVI's revenues are from processed food and household goods.

The Food Bank Farm of Western Massachusetts has had success with their on-farm retail store. The farm sells scrip in 20 dollar increments which members can spend on baked bread and eggs from other local farms and bakeries as well as the same produce that is normally included in the CSA box. To make the transactions simple, everything is sold in dollar increments. The Food Bank Farm donates half of their harvest to the Western Massachusetts Food Bank, so the better the farm's CSA and store perform, the more food is grown and donated to low-income individuals.

Comfood Posting

In order to learn more about low-income CSA programs, I submitted a query to the Community Food Security Coalition's listsery, COMFOOD. The listsery is subscribed to by people who are highly involved in the local and sustainable food movement. I asked about what kind of programs exist that work to make CSA shares accessible to low-income people. Certain programs received more mention than others which could indicate a program's impact within food activist circles or recent press coverage. I also kept track of program location to discern which states have the most CSA activity within the sample. 31 responses were received. The responses are tabulated in two tables below:

Program/Organization Name	Mentions	City, State
Just Food	5	New York City, NY
People's Grocery	5	Oakland, CA
Uprising Organics	3	Bellingham, WA
Northeast Organic Farming	3	(Statewide), VT
Association, Vermont Chapter,		
Senior Farm Share		
Madison Area Community	2	Madison, WI
Supported Agriculture Coalition		
Local Food Connection	2	Iowa City, IA
Dancing Roots Farm	1	Portland, OR
Hartford Food System	1	Hartford, CT
Greater Grand Rapids Food	1	Grand Rapids, MI
Systems Council		
Groundwork Farms	1	Millheim, PA
Homeless Garden Project	1	Santa Cruz, CA
Bushwick CSA	1	New York City, NY
Ten Speed Farm	1	West Brattleboro, VT
New York City Coalition	1	New York City, NY
Against Hunger		
DC Produce Cooperative	1	Washington D.C.
Maine Senior Farm Share	1	(Statewide), ME
Head Start Food Program	1	Kalamazoo, MI
Sellwood Garden Club	1	SE Portland, OR
Phillies Bridge Farm Project	1	New Paltz, NY
Intervale Community Farm	1	Burlington, VT

Just Food in New York City and the People's Grocery in Oakland received the most mentions. Just Food is a well known name in the CSA community. They have been connecting community groups with farms to form CSAs since 1994, and put on a well publicized (in food circles) CSA in NYC convention every year. The People's Grocery in Oakland was the subject of a CNBC special on "Greening the Economy" in 2008 and stories about the organization have appeared in Mother Jones and many other food justice periodicals. The People's Grocery has a hybrid-CSA model in which wealthier members subsidize the cost of a box of vegetables (called a "Grub Box") for lower-income West Oakland residents to pick up on a weekly basis. The mentions of Uprising Organics, a small farm run by a couple in Bellingham, Washington, could be attributed to a recent article on the Rodale Institute's website, titled "Food Stamp CSA opens access to the freshest food." Their CSA has 10 members, all of whom pay with food-stamps.

State	Number of Programs
	Mentioned Within the State
	(Repeats Not Counted Again)
New York	4
Vermont	3
Oregon	2
California	2
Michigan	2
Wisconsin	1
Washington	1
Connecticut	1
Pennsylvania	1
Washington D.C.	1
Maine	1
Iowa	1

The results of the COMFOOD query reflect pre-existing data about the geographic concentration of CSAs. CSA is strongest in New England, the upper Mid-West, and the coastal regions of the west coast.

Chapter 5: Case Studies

Case Study 1: Just Food

Just Food started their first CSA in New York City in 1996. Since then they have facilitated the launch of 61 additional CSAs in the city, 40 of which have some component to increase low-income participation. Just Food addresses hunger in NYC from a holistic, community food security perspective. Their mission is to, "Develop a just and sustainable food system in the New York City region by fostering new marketing and food-growing opportunities that address the needs of regional, rural family farms, NYC community gardeners, and NYC communities" (www.justfood.org). With a staff of 16 and an annual budget of \$760,000, Just Food works to fulfill their mission through five major programs: CSA in NYC, The City Farms, Community Food Education, and the Food Justice Program.

Just Food chose to pursue the CSA model as a means for enhancing community food security because of the benefits it offers local farmers and the ease with which the model could be replicated. By guaranteeing local farmers a steady market for their goods, city residents would also be guaranteed a source of fresh, healthy produce. Just Food believes that the future of local farms depends on developing strong connections with city residents. Paula Lukats, Just Food's Director of CSA in NYC, believes that in contrast to farmers markets, the CSA model offers more opportunities for community members to develop connections with a specific farmer. In addition, CSAs avoid bureaucratic and legal hurdles associated with securing a farmers' market permit. CSAs only require a single distribution site within the community, which often consists of no more than a few foldable tables in a garage.

In developing secure sources for fresh food, Just Food is careful to not do for communities what the communities can do for themselves. They carefully avoid making the mistake of pretending to know what is best for the communities they work with. "We don't start CSAs," said Lukats. "It has to be community initiated." The process of CSA creation begins when a community group, organization, or even an active community member approaches Just Food and asks for their help. Once the relationship is initiated, Just Food acts as support network, using their experience to guide their clients from the beginning to the end of the CSA creation process. Although Just Food encourages their clients to include low-income members, there is no requirement to do so. If the client believes that low-income shares are necessary to meet the needs of the community, Just Food will assist them in developing affordable payment methods. The most commonly used payment methods, according to Lukats, include: fundraising, sliding scales, rolling loan funds, and EBT payment systems.

Just Food is best known for their ability to tap into existing community institutions to facilitate the start of a CSA. Instead of scouring the city for low-income people to take part in a CSA, Just Food develops relationships with community organizations that are already involved in working with low-income populations. Just Food is currently involved in establishing a CSA in Boreum Hill, a rapidly gentrifying neighborhood in

Brooklyn. After an active community resident contacted Just Food seeking help in starting a CSA in her neighborhood, CSA Development Coordinator Jennifer Griffith struck up a relationship with the local YMCA (Personal Interview March 21, 2009). The YMCA endorsed the idea and even offered to be a distribution site for share pick-up. Locating a convenient distribution site is a key factor in the success of a low-income CSA, according to Griffith. Just Food has not yet begun signing up members for the Boreum Hill CSA.

Just Food relies on AmeriCorps "VISTA" volunteers to perform much of the community outreach necessary to form a core group and recruit members. Before becoming CSA Development Coordinator, Griffith was a VISTA volunteer. To garner community interest in CSA, Griffith sought out different segments of the community. She posted flyers in Laundromats, spoke at tenant association meetings, and was able to have flyers sent home with school kids by getting the permission of the board of education of one NYC school district.

To ensure that Just Food's CSA partners are committed to providing quality products, Just Food carefully selects farms that participate in their CSA in NYC program. In order for a farm to participate, the farm must pass through a screening process. The process consists of a 20 page application, followed by an on farm visit by Just Food staff and Cornell Co-op agents. "What we're looking for is a familiarity about how CSAs work, that they've done it before, that they're growing a wide enough variety, and that they can put it together in a share." In 2007, Just Food added three new farms to its network and received eight applications from eight new farmers interested in participating. They currently have 18 farmers in the network serving over 2,000 low-income members in NYC.

To address the limited variety of food that a CSA can provide its shareholders, in 2007 Just Food initiated an Additional Product Provider program. Since all of Just Food's CSAs are produce-only, members can now supplement their shares with meat, coffee, dairy and other food from non-CSA farmers outside of Just Food's CSA network. One or two CSA members, usually from the core group, collect and place the orders for the entire CSA and arrange for a convenient delivery time.

Just Food compliments their CSA in NYC program with the Community Food Education program which is designed to provide people with the skills needed to prepare fresh food. In 2007, 19 community members took place in a two day "Training of Trainers" program and a four week "Community Chef" training program. The community chef's conducted 200 cooking demonstrations throughout NYC.

Case Study 2: Maine Senior FarmShare

The USDA established the Senior Farmers' Market Nutrition Program (SFMNP) in November 2000 as a pilot program. SFMNP was intended to complement the Women, Infant, and Children's (WIC) Farmers Market Nutrition Program (FMNP) which assists young mothers and children in buying farmers' market produce through a voucher system.

The intended audience for the SFMNP was elderly, low-income citizens. Funded with \$15 million from the Commodity Credit Corporation, (a government entity responsible for stabilizing commodity crop prices) the SFMNP began as a competitive grant process for interested states, territories, and tribal organizations (FarmShare Program Analysis 2008). The United States Department of Agriculture (USDA) encouraged states to look beyond the traditional coupon/voucher model, giving additional consideration to states proposing new ideas for SFMNPs. The USDA's request for proposal indicated that the intended purpose of SFMNP was two-fold: to serve as a nutritional program for low-income, senior citizens while also expanding direct-market sales for farmers.

The Maine Department of Agriculture (MDA) created an interdepartmental working group to explore options for creating a SFMNP in Maine. At first they considered the WIC FMNP model since the infrastructure to implement a coupon program model already existed, but coupon programs were known to have high administration costs and low redemption rates—often below 70 percent. In addition, the USDA grant did not have an administrative allowance, all grant funds had to be paid to farmers for their produce.

Several members in the working group were CSA members. They suggested that CSA might offer the best way to integrate the two grant objectives of senior nutrition and small farm development. The working group needed to determine how share size, share allotment, and farmer-senior matching would work in the program. They settled on \$100 per individual, and \$200 per couple, believing that this amount would be large enough to make a difference in seniors' diets and stimulate the small farm economy. To limit administrative costs, seniors and farmers would for the most part be left on their own to find each other. Maine's Area Agencies on Aging provided a hotline to help seniors find a farm near them. To ensure that farmers did not become over-dependent on the program, the working group limited a single farm's participation to no more than 10 shares per acre of mixed produce and no more than 25 percent of a farm's gross income. They also set a 200 share per season limit to any one farm so more farmers could participate.

The working group's proposal allowed for flexible produce selection and delivery methods for produce. Farmers could deliver the produce directly to seniors, or they could have seniors come to the farm, or to a farmers market, or to a drop-off point and choose the produce they want. Every time the senior purchases food, the farmer would deduct from the senior's remaining balance until the \$100 is gone. At the Rippling Waters Organic Farm in Steep Falls, Maine, seniors procure their produce in a variety of ways. Some seniors travel to the farm to pick up their shares and others will pick up their share

at the farmers market in Portland. For seniors who do not have a means of transportation, Julee Applegarth, the head farm operator, makes deliveries to senior centers and drops off one share at the home of someone who lives on her way home from work.

In the working group's proposal, they also included a "bulk-share" component. Bulk shares are available to low-income seniors through food pantries, community meal sites, Meals on Wheels, and senior housing sites. The working group believed the bulk-shares component would benefit thousands of seniors who would not have benefited form the individual share program. In 2004, 20,000 low-income seniors received bulk shares and 7,500 received individual shares. The MDA allocates bulk share contracts to Maine's nutrition organizations for use in senior food programs. The nutrition organizations determine which farms to contract with based on offerings, delivery or pick-up services offered, quality, and proximity to the participating organization.

The working group dubbed their program "Maine Senior Farm Share" (FarmShare) and submitted their proposal to the USDA in the winter of 2001. A few months later, the MDA received a \$770,000 grant from the USDA to launch the FarmShare program. The working group morphed into an "advisory committee" and began administering the program.

Starting in late winter, the MDA invites program applications from produce farmers across the state. The advisory committee allocates shares based on: available funds, individual farm sales, positive references, history with the program, location, farm size, and variety of produce. In the early spring, the MDA allocates shares. Farmers then work independently or with community organizations, churches, or senior advocacy groups to find low-income seniors interested in participating. The farmers and seniors have to discuss share pick-up arrangements and sign agreement forms. MDA uses an honor system to verify a senior's "low-income" status. According to Debbie Everett, FarmShare's Project Manager, "There's no stigma involved in being part of FarmShare. It's like 'You've got it, I want it'" (Personal Interview March 10, 2009).

The farmer receives \$100 per enrolled senior and must provide \$100 worth of produce during the upcoming season, even in the case of a poor crop yield. "That's the reason I have two farms," said Merilyn Meyerhans from the Apple Farm in Fairfield, Maine. "One farm will probably do alright and I can take the products from one farm to the other farm." The up-front payment arrives in early spring and the farmer must ensure that the \$100 benefit is used. If the senior does not use their benefit for any reason (death, illness, change of residence) the farmer is required to find someone else to receive the benefit or return the money to the state. Based on these stipulations, FarmShare represents a modified CSA-model in which the farmer receives the benefit of a pre-payment and a known market for their produce, but does not receive the benefit of risk-sharing inherent in traditional CSAs.

In 2007 the USDA took issue with FarmShare's honor system for verifying a senior's "low-income" status. In order for FarmShare to continue paying \$100 in benefits per individual, the USDA wanted MDA to prove the income of FarmShare members with a

tax return or other official documentation. In the absence of proof of income, the maximum benefit amount would have to be cut in half, from \$100 to \$50. Since the grant never included an administrative allowance, MDA could not afford to verify the income of the program's 7,500 members and was left with no choice but halve the benefit amount. Debbie Everett noted a general dissatisfaction among participants when the program switched to \$50 shares.

Each year the MDA conducts two surveys on the FarmShare program. One of the surveys attempts to determine the economic benefits of the program for the participating farmers. From 2001 to 2004 (the \$100 benefit years), 90 percent of farmers said that FarmShare was "good for business" (FarmShare Program Analysis 2007). The other 10 percent chose to stay on board even though the program was not profitable because of the "community aspects of the program." Farmers are also enlarging their operations to accommodate increased demand for their produce. From 2001 to 2004, 40 percent of farmers responded that they had increased crop plantings specifically for the FarmShare program. Farmers found the pre-payment of FarmShare to be especially helpful. The pre-payment provided "money to pay bills at the beginning of the season" and gave farmers adequate resources to refrain from borrowing money or using credit to cover early season costs. Farmers also recruited new members as an indirect result of publicity for the FarmShare program.

The second survey judges the nutritional benefit of FarmShare. Data averaged from 2001 to 2004 indicates that 93 percent of seniors "ate more fruits and vegetables due to the FarmShare Program." 90 percent of seniors indicated they were receiving good quality and a good variety of produce. Money that low-income seniors do not have to spend on food is money they can spend on other necessities. One senior in the survey wrote, "Having diabetes, this program is a godsend—it helps to stretch the SSI check so I am able to pay for my medication."

It is not uncommon for a FarmShare farmer to go above and beyond their duty as a farmer to make sure their seniors get the full benefit of their share. "We'll call them up on a regular basis to remind them they still have money left, we'll pick people up, and we'll deliver [the shares] to some people. I want them to get their \$50," said Marilyn Meyerhans of the Apple Farm. If Meyerhans can get her seniors to the farm stand, she can help them maximize their \$50. "I can sell a utility grade apple for a quarter of the price than the grocery store. They can take that \$50 and turn it into \$400 if they're really careful and if they buy seasonally directly from the producer." Meyerhan's magnanimous character and that of many other farmers like her has lead to a loyal following of seniors.

Many seniors have developed a strong connection to their farm. They visit the farm frequently and have become loyal customers. According to Debbie Everett, "Most of the farmers have been with the program from the beginning, and trust me, you don't mess with their seniors."

Maine FarmShare has proven a success on many fronts despite recent cuts in share allotment. FarmShare improved the economic viability of farms, the nutritional habits of participating seniors, and brought back some of the community spirit that CSA intended to revive. FarmShare shows that the CSA share can be small and still have a positive effect and that the original CSA model can be modified to meet the circumstances without losing sight of its intended purpose.

Chapter 6: CSA Expansion through Institutions and Public Policy

Institutions like schools and workplaces are in a unique position to support low-income CSA expansion. Utilizing their purchasing power, institutions can provide CSA produce to low and upper-income employees (or in the case of a school to the students) as an employee benefit. Instead of a gym membership, how about a weekly box of vegetables? CSA membership could be an employee perk, or in the case where the institution has a vested interest in healthy employees and patrons, a commonsensical health care solution.

Farm-to-School

During the 2002-2003 school year, the Center for Food and Justice, Los Angeles Unified Nutrition Network, and Tierra Miguel Foundation embarked on a joint venture to bring CSA into the classroom. The Tierra Miguel Foundation leases 87 acres of certified organic farmland in the Pauma Valley in North San Diego County. Dubbed the, "Fresh from the Farm Pilot Project," Tierra Miguel's CSA delivered weekly boxes of organic fruits and vegetables to participating low-income LAUSD Nutrition Network schools. The produce was used for both educational activities and tasting, introducing kids to fruits and vegetables they may be unfamiliar with as well as environmental issues surrounding agriculture. During five months of operation, the program served a total of 993 classrooms at 41 schools, reaching an estimated 19,860 students. (Azuma et al. 2004) The pilot program eventually folded since the issue of paying in advance for the food was something the school district was not willing to take on (Anupama Joshi Personal Interview February 13, 2009).

Farm-to-Firm

In 1996, Communities Involved in Supporting Agriculture (CISA), a western Massachusetts based organization working to promote local agriculture, received a USDA Community Food Project grant to explore a "Farm to Firm" model (Farm to Firm 2008). One of their early successes was a workplace CSA partnership between Baystate Medical Center and Mountain View Farm. At the time, Baystate was the largest employer in western Massachusetts, employing nearly 9,000 people. Mountain View Farm was looking for new areas to expand into and Baystate's home in Springfield provided an untapped market for CSA. Baystate offered the workplace CSA as an employee benefit, one of many that focused on employee health and wellness. The program served 85 shareholders in its first year.

As a large employer, Baystate's Human Resources Department had the capacity to assume responsibility for publicizing the program and enrolling shareholders. A key feature of Baystate's CSA program is the payroll deduction option for share payment. Employees may opt in to the year-long payment plan which takes \$24 out of each biweekly paycheck. "I think we'd have about four employees enrolled in the program if it wasn't for payroll deduction," said HR director Anne-Marie Szymt. ("CSA in the Workplace" 2007).

While Baystate's workplace CSA is not directly targeted to lower-paid employees, through proper outreach and low-income payment mechanisms (or maybe through the benevolence of the employer) workplace CSAs can accommodate janitors as well as executives.

Other health insurance companies are providing incentives for their customers to eat healthier. Recognizing CSA as a good way to get vegetables into the hands of their customers, three Madison area health insurance companies have teamed up with MACSAC to provide rebates for customers who join a CSA. The rebates range from \$50 to \$200 and are one of many rebates that customers can earn by engaging in health promoting activities.

Public Policy

MACSAC is not the only group looking at the intersection of health care and healthy food. Secretary of Agriculture Tom Vilsack was recently quoted in the New York Times saying, "Agriculture and food policy should fit into the Obama administration's planned overhaul of health care, by encouraging nutrition to prevent disease." While health care reform has not yet hit the national stage, several existing USDA policies address CSA as a means of achieving low-income food security through competitive grants.

Grants

Community Food Project Grant (CFPG): The CFPG provides \$10,000 to \$300,000 to fund projects with the dual goal of increasing low-income food security and improving the economic condition of local farms. Authorized by the Farm Security and Rural Investment Act of 2002, CFPG receives \$5 million in yearly funding. In 2003 Just Food received \$200,000 to stimulate CSA growth in low-income New York City neighborhoods. Their "CSA in NYC Toolkit," a guide for starting a CSA in the city, was created with funds from a CFPG.

With the stated goal of combating diabetes and obesity among the Hopi people in Hotevilla, Arizona, the Natwani coalition received a CFPG to restore the local food system through expanding a CSA program. (http://www.csrees.usda.gov/fo/communityfoodprojects.cfm)

Sustainable Agriculture Research and Education Grants (SAREs): Administered by the Cooperative State Research, Education, and Extension Service, SAREs are good for \$1,000 to \$15,000 producer grants and \$30,000 to \$300,000 for education and research grants. In 2004, eight farms in Concord, New Hampshire shared a \$7,200 SARE grant to assist the farmers incorporate as a cooperative, establish co-op rules, and promote CSA in the Concord community. The co-op arrangement allows farmers to bundle their goods together and offer the community members a greater variety within the CSA share. (http://www.sare.org/grants/)

Fruit and Vegetable Program Specialty Block Grants: Administered by the Agricultural Marketing Service, the Specialty Block Grants aim to incentivize farmers to grow "specialty crops," (fruits and vegetables) and encourage the local community to consume more specialty crops. In Indiana, the Michigan City Mainstreet Association used part of the state's block grant to introduce a "Buy Fresh-Buy Local" marketing campaign to raise awareness among low-income families about the benefits of buying and eating fresh, locally-grown produce.

The Minnesota Grown Promotion Group, Inc. used part of Minnesota's block grant to improve the online Minnesota Grown Directory and increase the number of consumers who utilize the directory. The Grown Promotion Group also partnered with a biostatistics company to document the impact of CSA membership on member health.

The West Virginia University Extension used part of their state's block grant to develop a television advertisement campaign promoting CSA and eating locally to rural residents. (http://www.ams.usda.gov/AMSv1.0/getfile?dDocName=STELPRDC5072701)

The Stimulus Bill

One of the barriers of current farm to school programs has been the lack of fresh food preparation equipment in school cafeteria kitchens. The American Recovery Investment Act of 2009 provided \$100 million for food service grants which would enable schools to purchase adequate fresh food-prep equipment. An additional \$1 billion of stimulus money was for child nutrition programs like the school lunch program. Currently the food service directors of each school district have, on average, two dollars to spend on food per student which leaves the food service director with little freedom to assemble a healthy lunch, let alone one that includes locally grown fruits and vegetables (Debra Eschmeyer Personal Interview February 24, 2009). Child nutrition programs currently receive \$9 billion (including the \$1 billion yearly increase from the stimulus) per year. Any policies at the federal level that provide higher reimbursements for school lunches could provide schools with the budgetary freedom to explore a CSA option.

\$21.8 million in the stimulus package was designated to modernize the EBT system. August Schumacher, former director of the USDA's Farm and Foreign Agricultural Service from 1997 to 2001, indicated in an interview that some of this money could be used to implement wireless technology so that CSAs (or farmers' markets) can swipe EBT cards without the need for an internet connection (Personal Interview March 3, 2009). Mr. Schumacher also pointed to \$20 million from section 4141 of the Farm Bill that was allocated for improving the diets of SNAP benefit recipients. This money could be used to establish more programs similar to Maine's Senior FarmShare.

When asked about altering the SNAP benefit rules to better accommodate the CSA model, Schumacher replied, "We're not trying to change the rules."

Chapter 7: Findings and Recommendations

Findings

CSA faces an uphill battle in becoming a widely adopted strategy to increase low-income food security. The CSA model improves the viability of small farms by shifting cost and risk along to the consumer. While this may not represent a problem for wealthier individuals, additional cost and risk are undesirable ingredients in a recipe for increasing low-income food security. Indeed, small farmers are struggling to earn a living wage but making low-income consumers even more low-income to make the farmer better off does little to solve hunger issues.

CSA structure requires that low-income consumers make significant lifestyle changes. Most other food procurement methods do not necessitate big lifestyle changes. In the words of Paula Lukats, "It's a strange way of buying vegetables." In most cases, CSA requires a consumer education component to explain why buying produce in this manner is a good thing. CSA takes a very simple concept for most people—grocery shopping—and turns it into a life altering event. On top of the up-front payment, CSA demands that low-income consumers: give up some freedom in choosing which produce they want to eat and when they want to eat it, eat a large quantity of produce, eat a wide variety of produce, know how to and have the time to cook with the produce, and travel to the weekly distribution site to pick-up their share. To successfully sell the CSA concept to a low-income consumer, one must make the case that these lifestyle changes are worth making and sustaining.

To be sure, CSA has demonstrated some potential to enhance low-income food security. The numerous payment mechanisms, government policies, and farmer initiatives discussed in *Beet the System* have the ability to mitigate some of the demands that CSA places on the low-income consumer, thus making CSA a more attractive and viable option in low-income communities. It is important now more than ever that low-income communities have access to fresh, healthy food as they confront rising obesity and diabetes epidemics. CSA farmers are committed to opening the doors of their CSA to low-income people, so long as the farm can afford to do so. The CSA model has clearly shown the ability to have a socially just component, albeit limited in scale.

With increased demand for CSA produce, the number of CSAs will rise in the future. Since a large majority of CSAs have low-income components, the growth of CSA need not be low-income specific in order to have a positive effect on low-income food security. Promising results from Maine's Senior FarmShare and Just Food's work in New York City show that with increased funding and support, the CSA model has proven avenues of growth. But the current state of CSA in the U.S. shows an extremely limited capacity for reaching low-income consumers.

Let's do some math to come up with a conservative estimate of the maximum number of low-income people that CSAs could feed. Let's say there are 3000 CSAs (Localharvest.org counts 2,692) in the country providing 56.2 shares on average. Since

the average share is enough produce to supply a family of four for a week, that means that CSAs are feeding, at most, 674,400 people per week. As of April, 2009, there are 32.2 million people receiving SNAP benefits. Therefore, CSAs could only feed 2.1 percent of the people receiving SNAP benefits (for part of the year) if CSAs only served low-income households. There are several steps that CSAs must take and several policies that must change in order for CSAs to be able to feed more than 2.1 percent of the people on SNAP benefits.

Recommendations

Leadership

- With the help of a food security or sustainable farming organization (Just Food, the Community Alliance for Family Farmers, Northeast Organic Farming Association, etc.) CSA farmers should organize into regional networks of CSA farms.
- Regional networks should work towards the creation of a national leadership office based in Washington, D.C. The national leadership office should establish direct lines of communication with USDA and sympathetic members of congress.
- Sustainable food advocacy groups should devote a portion of their state and national advocacy capacity toward the promotion of the CSA model.

Policy

- USDA's Food and Nutrition Service (FNS, the office that administers WIC and SNAP) should assemble a best practices guide of low-income CSA programs. The report should be disseminated to sustainable food groups and state departments of agriculture.
- USDA's Food and Nutrition Service and the Commission on Small Farms should recommend the expansion of Maine's Senior FarmShare to all fifty states
- Maine's FarmShare model should expand to include a Junior FarmShare component, (for low-income school children), a Mother's FarmShare component (for pregnant or nursing mothers) and eventually a Low-Income FarmShare component for all low-income citizens.
- USDA should raise the limit of the FarmShare share price to \$100 without income verification, or supply state departments of agriculture with the tools they need to easily verify the income of FarmShare participants.
- FNS should change SNAP rules so that low-income members can pay for their CSA share at the beginning of the season, so long as farmers are required to provide their SNAP shareholders with food even in the case of crop failure.
- State departments of social services should launch an informational campaign to raise awareness about CSA as an option for SNAP/WIC recipients to spend their benefits.
- State legislatures should include an allowance for secretaries of agriculture to expand CSA in low-income communities.
- FNS should set aside funds for the establishment of rolling loan funds in each state with low-income CSAs
- FNS should provide funding for community groups like Just Food to conduct outreach to low-income communities.

<u>Workplaces</u>

- Explore CSA as an employee benefit. For businesses that provide health care, survey employees to see if CSA had any discernable health effect. Consult the health insurance provider to see if they are willing to offer rebates for workplace CSAs.

Farm side

- Low-income members should be able to opt out of the risk-sharing aspect of CSA
- CSA farms should bundle their goods and partner with local bakeries, confectioners, florists, etc. to offer a greater variety for the shareholder.
- Low-income CSAs should implement the Genosee Valley Organic CSA transit-program in which car-less members carpool with people with cars.

Conclusion

Beet the System investigated numerous issues associated with CSA and its ability to enhance low-income food security. The report explored barriers to low-income CSA participation from the consumer side and from the farmer's perspective. The report offered examples for overcoming these barriers through a literature review and two case studies and ultimately offered recommendations for advancing low-income CSAs.

The future success of low-income CSAs is dependent on three factors. The biggest factor is raising awareness about CSA. The fact remains that CSA is a largely unknown concept in low-income (and even many higher-income) communities. If no one knows about CSA as a possibility of securing fresh produce, it will never expand. Without any serious local, regional, or national CSA leadership, community organizations and food justice groups will have to take the lead on raising CSA awareness. On the consumer side, low-income communities will have to mobilize to get better fruits and vegetables into their communities. Organizing a low-income CSA is an easier task than starting a farmers' market or coaxing a super market chain to open another store. But farmers are not going to find low-income consumers at a rate that will make a significant contribution to low-income food security. Low-income communities will have to find them. Lastly, CSA farmers must remain open to altering the CSA model to meet the needs of lowincome consumers. In order to alter the CSA model to focus a little more on low-income consumer needs, the small farm economy will have to improve. Farm policy must be reoriented towards preserving small farms and rewarding farmers for responsibly stewarding the land and for providing food security for the surrounding community.

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