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Buying into Community Supported Agriculture: Strategies for Overcoming Income Barriers

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ABSTRACT. Community-supported agriculture provides benefits to members, including improved nutrition, economic savings, increased food security, and knowledge about the source of one's food. Unfortunately, membership may seem out of reach for limited-resource consumers because a lump sum membership fee is generally required at the beginning of the season. This article examines the strategies being used by CSA farms to help potential limited-resource members overcome income barriers. Those strategies include acceptance of government food assistance, payment plans, working shares, subsidized low-income shares, low-cost shares, transportation assistance, bartering, outreach efforts, and connections to emergency food assistance.

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INTRODUCTION

Community-supported agriculture (CSA) is a food marketing and distribution model in which consumers pay a membership fee to a farm at the beginning of the growing season in return for a weekly share of the harvest.¹ Members therefore become “shareholders” in the CSA. The money generated early in the season helps cover food production and distribution costs while providing a living wage for the farmer. CSA members share risk with the farmer, having no guarantee of a certain amount of produce. Many CSAs also provide eggs, dairy products, flowers, or fruit to their shareholders, in addition to vegetables. CSA is a relatively recent development in the food system of the United States. The Indian Line Farm in Massachusetts and Temple-Wilton Community Farm in New Hampshire have been credited as establishing the first CSA programs in the United States, both around 1986. The inspiration for CSA is said to have come from the biodynamic farming tradition in Europe, even though there were similar community food programs in Japan and South America in the 1960s and 1970s.²

Shareholder benefits include improved nutrition, economic savings, increased food security, and knowledge about the source of one’s food, among other benefits. In a study comparing dietary intakes between CSA members and non-members, members had higher intakes of fiber and vitamin A than non-members, as well as a slightly lower intake of saturated fat.³ In a separate study, CSA members consumed more dark green and yellow fruits and vegetables, as well as fiber and vitamin A.⁴ Speaking generally, vegetables and fruits contain high amounts of antioxidants and phytochemicals—substances that have been shown to protect against many cancers. Foods with modest to high levels of anticancer activity include vegetables that are often part of a CSA share such as carrots, parsnips, onions, broccoli, cauliflower, tomatoes, peppers, and cabbage.⁵ Furthermore, unlike produce bought in a supermarket that may have traveled more than 1000 miles and stored for a significant period of time, produce received in a CSA box is very fresh, often harvested the same day the consumer receives it.¹ Although studies of declining nutritional value in stored produce are lacking, one analysis determined particular nutrient losses of 30 to 50% in fruit and vegetables 5 to 10 days after harvest.⁶

Even though membership fees may appear expensive, a study comparing CSA share prices with the retail value of equivalent amounts of produce showed significant savings for the shareholder. For the 3 CSA farms evaluated, the retail value of the produce received was 120, 160, and 250% of the cost of the share price. Even when share price was compared with conventional produce, the CSAs still provided substantial savings and better value. CSA members saved \$44.54, \$227.47, and \$334.62, respectively. The differences in savings reflect different farm sizes, CSA philosophy, and the composition and amount of produce received.⁷

Another benefit of CSA membership is greater access to fresh produce. Several studies have found that lower-income urban neighborhoods have considerably fewer supermarkets and chain stores than higher-income suburban areas.⁸⁻¹¹ In comparison, one study found 3 times as many supermarkets in wealthier neighborhoods in several areas across the country.⁸ Many retail grocery stores avoid or even vacate densely populated urban areas citing the difficulty in acquiring enough land for the building and parking, and higher costs of operating due to crime, an unreliable work force, and higher insurance premiums.^{12,13} Therefore, residents of inner-city neighborhoods are left to shop primarily at convenience stores, liquor stores, food bodegas, and small, independently owned grocery stores, where fresh produce is significantly less available and prices tend to be higher.⁹⁻¹¹ The CSA model of agriculture can contribute significantly to community food security by offering a non-emergency source of fresh produce, and perhaps other high-quality foods, at below retail prices and in areas that may lack reliable sources of nutritious foods.¹⁴

CSA shareholders also benefit from knowing the source of their food. Learning and appreciating where food comes from and how it is produced is generally lost within an industrialized food system that relies on importation, transportation, and processing.

The CSA model reconnects consumers and food production; it can protect consumers as well, as demonstrated by the *E. coli* outbreak in September of 2006. Spinach grown in California was contaminated with *E. coli* from cattle feces and caused more than 200 illnesses in 26 states and one Canadian province. Three deaths were attributed to *E. coli* intoxication.¹⁵ All bagged spinach and products containing raw spinach were pulled from supermarket shelves. In outbreak situations, consumers who rely on local food systems including CSAs have a distinct advantage in knowing where their produce came from. CSA members could still enjoy their locally grown spinach in spite of the national scare.¹⁶

Given the value of CSA membership in terms of nutrition, economics, food access, and food safety, it seems important not to limit membership to certain populations. Studies have shown that CSA members are typically Caucasian, younger, and better educated than the general population, although no significant difference in income between members and non-members has been demonstrated.^{3,17} Still, consumers with limited resources may have difficulty participating in CSAs. Results from a study of a low-income neighborhood with an urban CSA suggested that cost was a major barrier for residents who chose not to participate.¹⁸ For many limited-resource families, budgets are already stretched thin, and making a \$300 to \$600 payment for membership is not feasible. Many farms have begun to address this problem by introducing strategies for making CSA membership and associated benefits a reality for limited-resource consumers. These innovative strategies will be the focus of this article.

METHODS

The authors used a variety of methods to gather information including literature review, direct contact with CSAs through both electronic mail correspondence and personal interviews, and an inquiry posted to the electronic Listserv of the Community Food Security Coalition with follow-up communication, and a review of related Internet Web sites.

Existing literature on CSAs is limited. Reports from the Hunger Action Network of New York State proved most relevant to this research. Internet Web sites of various organizations and CSAs currently running or developing programs that improve limited-resource consumers' access to membership provided a substantial amount of information.

The authors established direct correspondence with CSA managers through a survey sent via electronic mail to CSAs listed on LocalHarvest.org, chosen to represent different states and geographical areas. In addition to obtaining a broad perspective, the same survey was sent to all 6 of the CSAs currently located in the state of Montana. The authors then posted an inquiry to the Community Food Security Coalition Listserv. Responses came from CSA owners as well as other knowledgeable individuals. The primary author conducted 2 personal interviews. The results of the interviews were consistent with the previous information collected. Further interviews and personal contacts were discontinued given that no new information had been provided. A total of 17 CSA operators provided data for this study.

The authors manually sorted data from personal interviews, electronic correspondence, relevant Web sites, and existing literature into categories. Each category represented a strategy to provide opportunities for limited-resource families and individuals to enjoy CSA membership.

RESULTS

Government Food Assistance

One strategy CSAs use to make participation more feasible for limited-resource consumers is to accept government food assistance in the form of food stamps, WIC coupons, and Farmers Market Nutrition Program (FMNP) vouchers. In the past, CSAs have not been allowed to accept food stamps, because paying for food before it is harvested is considered speculating on the food rather than purchasing it.¹⁹ Regulations vary by state and some CSAs have become authorized to accept food stamps. New York State, for instance, established that food stamps or WIC coupons can only be used to pay in biweekly installments for a CSA share, instead of the typical preseason one-time payment.²⁰ To overcome this barrier, some New York CSAs have created revolving loan funds (discussed under Payment Plans), so that they are able to accept food stamps and provide the farmer with money at the beginning of the season simultaneously. Another example is Washington State, where regulations stipulate that the value of the produce received must meet the value of the food stamp vouchers redeemed, even in the event of crop failure.²¹ Further potential barriers to accepting government food assistance are the amount of paperwork required on the part of the CSA to become certified to accept stamps and a lack of the appropriate equipment—an Electronic Benefits Transfer (EBT) Point of Sales (POS) device, along with access to a standard 110-volt power source and a telephone line.^{21,22} Wireless technology might facilitate expanded use of government food assistance for CSA membership fees.

Payment Plans

One way CSAs help ease the financial burden of an initial one-time payment is to offer the choice of making smaller, multiple payments throughout the season. Some CSAs extend a 2-installment payment plan, while others offer monthly or even weekly options.

Many farmers rely on membership fees at the beginning of the growing season in order to cover production expenses. Allowing payments in

smaller installments can create a financial deficit for the farmers. At Future Farm in New York, the farmer has outside employment, and thus more capital to rely upon.²⁰ Others have created a revolving loan fund, in which the farmer uses the fund money (generated from grants and donations) for initial costs, while monthly payments received later in the season replenish the fund. Both Chelsea CSA and Canticle Farm in New York established revolving loan funds using grants from the Hunger Action Network, a nonprofit organization.²⁰ Similarly, The Partner Shares Program of the Madison Area Community Supported Agriculture Coalition (MACSAC) raises money for a revolving loan fund through fundraising events and community donations. People with limited financial resources can borrow money from the fund to pay for membership in any of several participating CSAs. The Partner Shares Program requires that half of the money borrowed be paid back, in addition to allowing monthly payments from the limited-resource shareholder. Thus, the shares are subsidized as well.²³

Working Shares

Another commonly cited method for making CSA membership more feasible for limited-resource families and individuals is working shares. In exchange for a discount on the share price, members donate work time on the farm. Gallatin Valley Botanicals, located in Belgrade, Montana, offers members an option of working one 4-hour shift per week for 15 out of the 18 weeks of their growing season in return for a 50% discount (M. & J. Rothschilder, oral communication, April 2006). This provides a considerable price reduction; from \$360 to \$180. Many farms offer similar programs. Some, like Homestead Organics Farm, Inc., in Hamilton, Montana, extend free shares to people who commit to work (L. Garber & P. Madeen, oral communication, October 2006).

There are considerable limits to how much a working share could help a limited-resource family or individual become a CSA member. Working members must have transportation to the farm, be able to perform physical work, and have the time available to dedicate to the task. Low- and middle-income individuals and families often have too many demands on their time between work and household duties to allow participation in additional activities.¹⁹ The time commitment required by Homestead Organics Farm, Inc., is 4 to 6 hours per week for the 20-week season. Of the 4 families who chose this option during a recent season, only 2 families finished the work commitment. The other 2 families bought their way

out, having underestimated the amount and intensity of the physical labor (L. Garber & P. Madeen, oral communication, October 2006).

As an alternative to a physical work requirement, Angelic Organics, a CSA in the Chicago area, gives a \$100 discount to members willing to provide their garage or shed as a pick-up location for their neighborhood.¹ Administrative work is another way for members to contribute, especially if they have physical limitations.²⁴

Subsidized Low-Income Shares

Several CSAs across the country have discovered ways of offering subsidized low-income shares by using one or more of the following methods or sources: a sliding scale payment system, grants, donations, or collaboration with community organizations.

A sliding scale system operates by allowing those who earn less to pay less for a share and requiring those who earn more to pay more. Therefore, the higher priced shares subsidize the lower priced shares. At some CSA farms the price difference between the lowest and the highest price is less than \$125 (S. Schlotzhauer, written communication, April 2006).²⁰ However, Homestead Organics Farm, Inc., operates on a sliding scale system in which the CSA member chooses the price he can afford given the options of \$300, \$500, or \$1000 per share and then receives a box size determined solely by the number of people in his household. A limited-resource family of 6, for instance, may only be able to afford \$300, yet they still receive the amount of food determined for 6 people. Alternatively, a couple will receive a 2-person-sized box regardless of whether they choose to pay \$300 or \$1000 (L. Garber & P. Madeen, oral communication, October 2006).

Further methods of subsidizing low-income shares are perhaps best described by example. The Full Plate Collective of Tompkins County, New York, involves 4 farms working with Cornell Cooperative Extension to enable the CSAs to offer a small number of subsidized shares. The program is in its first year, so details are still solidifying. Already, though, the Ithaca Health Alliance and the United Way have agreed to subsidize 5 shares each. The Health Alliance will recruit participants through its free health clinic, while the United Way plans on recruiting people through WIC clinics. Limited-resource participants will receive the shares at almost half price and be allowed a weekly payment plan at \$10 per week for the 12-week trial season this summer. The Full Plate Collective also offers approximately 150 regular CSA shares. On the sign-up form for the

regular-priced shares there is the option of paying more than the required price, the extra money going to fund the low-income shares (L. S. Gerhart, written communication, April 2006). Sometimes referred to as a scholarship fund, several other CSAs also make use of member donations to support subsidized shares.

A program that specifically targets limited-resource seniors is the Senior FarmShare program, a project operated by Community Involved in Sustaining Agriculture (CISA) of South Deerfield, Massachusetts. Senior FarmShare offers fully subsidized shares for qualifying seniors. The program runs for 10 weeks in the middle of the growing season, so the shares are only partial, yet seniors are still able to receive \$100 worth of fresh produce over the course of the program. CISA relies on donations from the community and grants from more than 7 different agencies.²⁵ The Northeast Organic Farming Association of Vermont (NOFA-VT) runs a program nearly identical to the one operated by CISA. The Senior Farm Share of NOFA-VT has more than 500 limited-resource seniors participating in the program and connects senior housing sites to specific farms.²⁶

In 2004, CISA and NOFA-VT were 2 of several nonprofit organizations to receive a Community Food Project Grant, funded by the US Department of Agriculture and administered by Cooperative State Research, Education, and Extension Service.^{27,28} The grants support projects that help to increase food security with awards of \$10,000 to \$300,000 for 1 to 3 years. Each year, a few more of these grants are being given to CSA-related projects (E. Henderson, written communication, April 2006). The Community Food Project Grants seem to be the greatest source of funding from the federal government associated with low-income access to CSAs.

One example of cooperation between community organizations and CSAs is a project called “That’s My Farmer,” which John Pitney coordinates in Eugene, Oregon. Fifteen faith communities and 11 local CSA farms participate in the program. Ongoing donations from the faith communities help pay for shares for those who cannot afford the full price at any participating CSA. In addition, proceeds from a large fundraising event are donated to a low-income fund for the CSAs. In 2006, CSAs received approximately \$3000 from the fund (J. Pitney, written communication, April 2006).

Holcomb Farm in Granby, Connecticut, is fundamentally different from previous examples because instead of taking an existing farm and making it more available to families and individuals with limited

resources, the farm was founded with the purpose of including people with lower incomes into the membership along with regular paying members. The farm developed a model in which participating community organizations buy CSA shares and then distribute them to the low-income residents of Hartford. The organizational shares are heavily subsidized through support from the Hartford Food System, a nonprofit organization itself, as well as through a slightly higher regular member price. As of 2005, 30 to 40% of the farm's harvest was going to people of lower incomes.¹³

Low-Cost Shares

Future Farm in Chemung County, New York, established a unique program called Solidarity Food Network, with the exclusive mission to offer low-cost shares to the working poor. Although the program is currently aided through subsidies, the ultimate goal is to use low-input, sustainable, minimal-labor agricultural practices to eliminate the need for a high membership fee. For example, the farm relies on a compost-heated greenhouse, bio-diesel for all equipment, free fertilizer from a cooperating local horse farm, and raised beds for increased productivity. Plenty of volunteer assistance also contributes to the low share price of \$200 for 26 weeks.²⁴

Transportation Assistance

The issue of a lack of transportation is primarily dealt with through offering several different pick-up locations. Some CSAs offer home delivery but usually charge a significant fee for the service, thus eliminating any real benefit for people with limited resources.

Genesee Valley Organic Community Supported Agriculture (GVOCSA) in Rochester, New York, a particularly socially conscious farm, developed a "buddy" system to accommodate members without transportation. The farm has a member work requirement to keep share costs low, but acknowledging that this may prevent people without reliable transportation from joining the CSA, they created a program where a new member without transportation is paired with a seasoned member. The seasoned member familiarizes the new member with the CSA and can provide rides to the farm.²⁰

Bartering

Bartering is an innovative strategy for increasing access to fresh, high-quality food for those with limited resources. At a barter-based CSA in

Portland, Maine, members can pay for shares in Time Dollars rather than cash. Time Dollars are a sort of currency earned by providing services to others. Nearly any type of helping counts toward Time Dollars—babysitting, providing transportation for a neighbor, etc.—with 1 hour of service equaling one dollar.²⁹ When an individual enrolls in a Time Bank, a computer program tracks the Time Dollars he earns and generates monthly statements. Participants can spend Time Dollars on goods and services from participating programs in the Time Bank network, such as Cultivating Community, the nonprofit group responsible for managing the CSA in Maine. The potential for low-income involvement in CSAs thus increases significantly since people are able to exchange their time and effort, instead of money, for a CSA share. Efforts to start up more time bank programs are being seen in many states in the United States as well as in several foreign countries.²⁹

Outreach Efforts

Many CSAs serve as innovative models for increasing access to membership by limited-resource individuals and families. Yet because most CSAs market themselves simply through word of mouth, potential participants are unaware of their existence. Several strategies have emerged to address this situation. At Canticle Farm in New York, an outreach coordinator position recruits families to join the CSA, especially those with limited resources who can take advantage of Canticle's revolving loan fund and working share options. The coordinator creates informative materials and uses local newspapers, television stations, and community groups to publicize the program and increase participation.²⁰ Some CSAs strategically place limited advertising, thus increasing its effectiveness. Leonard Pollara, operator of a CSA in New York, advertises in blue-collar community advertising periodicals, through different churches, and posts flyers on the street in urban neighborhoods (L. Pollara, written communication, April 2006).

Just Food, a nonprofit organization in New York City, works to connect CSA farms in the region with city groups and low-income neighborhoods. For example, Just Food partnered Norwich Meadows Farm with the nonprofit organization Common Ground, whose goal is to solve homelessness. Together they established a CSA program for the residents of The Prince George Hotel, a supportive housing development. Residents of The Prince George gained access to fresh, organic produce that is otherwise difficult to find in the city, and the CSA boxes were delivered

directly to the housing development. Common Ground is responsible for recruiting members from the neighborhood, setting up the weekly share distribution at a central neighborhood site, and communicating with the farm. Many other similar programs have been established with the help of Just Food. Payment options vary from program to program but include most of the strategies already discussed.³⁰

Connections to Emergency Food Assistance

Several CSAs across the country make significant contributions to their area food banks. The Food Bank Farm in Hadley, Massachusetts, has over 600 CSA shareholders and donates 40 to 50% of its produce to the Western Massachusetts Food Bank. Over one million pounds of produce have been donated since 1992.^{31,32} Although food bank clients do not receive a full share or membership in the CSA, the donations effectively increase access to fresh, quality produce for families and individuals with limited resources. Waterpenny Farm in Rappahanock County, Virginia, not only donates extra produce to the Food Bank but provides CSA shares to selected Food Bank clients and for use in the Food Bank's education outreach programs.³³ The Gazy Brothers Farm in Oxford, Connecticut, also gives shareholders who go on vacation the option of donating their share to a food bank for that particular week (L. Gazy, written communication, December 2006).

DISCUSSION AND CONCLUSIONS

A prominent theme from many of the CSA operators surveyed was a lack of defined programs to accommodate low-income members but a willingness to work with anyone to arrange a payment plan. This willingness was especially true of the larger, more established CSAs from which responses were received. These farms, which have been in operation for several years, already have a membership base on which to rely. A few farm operators made comments about having a profit margin that is too slim to allow for much flexibility with low-income members (M. & J. Rothschilder, oral communication, April 2006; L. Gazy, written communication, December 2006). It is important to consider that many farmers are striving to make a decent living wage from their CSA operation. Nevertheless, all but a single CSA encountered through research employed at least one strategy for making membership more economically feasible; usually by offering payment plans or working shares.

While the price of a CSA share can be a significant barrier for many individuals and families, several other factors beyond economics can also serve to dissuade people from becoming or remaining CSA members. For example, although several CSAs offer recipes or cooking classes to their shareholders, many people lack the cooking skills or knowledge about how to prepare or consume different vegetables, which could detract from full enjoyment of a CSA share. Additionally, in a study of CSA shareholders' satisfaction with their membership, many shareholders reported too much food and cited food waste as a primary disadvantage or shortcoming of CSA membership. The inconvenience of going to the farm was also high on the list of disadvantages.³ People who have limited resources may not have a reliable source of transportation, so even traveling to a neighborhood pick up location may be difficult. Furthermore, the CSA model of food marketing is a relatively new concept, with many consumers still unaware of what a CSA is and how it operates.

Membership in a CSA seems to require a certain amount of belief in and commitment to the philosophical ideals of the CSA concept. In an era when consumers can simply go to the grocery store and buy prewashed, precut, out-of-season vegetables any time they desire, it seems that members must value things other than acquiring fresh produce when buying their produce from a CSA. By being part of a CSA, a consumer supports local farmers and sustainable agricultural practices, translating into less reliance on fossil fuels, less pollution, and reduced use of pesticides, among other positive contributions. While these less tangible benefits may not motivate every CSA shareholder, many may find that these benefits outweigh the inconvenience associated with buying vegetables with traces of soil, driving out of the way to pick up a share, and spending more time in food preparation. Furthermore, eating a healthy diet is not a top priority for many consumers. Even though a CSA share offers significant savings when compared to an equal amount of store-bought produce, a person who relies primarily on convenience foods and rarely or never buys produce may find a CSA membership of limited value.

CSAs and other concerned groups have taken valuable steps in helping limited-resource families afford membership, yet much work remains to be done. Of the CSAs offering options of reduced payment or payment plans, most reported only around 5% or less of their members taking advantage of these options. Other barriers such as excessive food waste, a lack of cooking skills, or time for food preparation must also be considered when looking for ways to include consumers of all economic levels. Still, CSAs are employing a variety of methods to extend the benefits of

CSAs to limited-resource individuals and families such as acceptance of government food assistance, payment plans, working shares, subsidized low-income shares, low-cost shares, bartering, and outreach efforts. Many nonprofit organizations are creating new and exciting ways of reaching out to include people with limited resources in CSA memberships, and individuals and community organizations are donating their money and time to this effort. Perhaps additional strategies will emerge as people begin to discover and appreciate the value of community-supported agriculture.

IMPLICATIONS FOR RESEARCH AND PRACTICE

Dietetic professionals and nutrition educators will find rich opportunities related to community-supported agriculture for modeling healthy consumption of fresh produce, learning about local agriculture, connecting with local producers and the landscape, and making positive recommendations for their clients of various income levels. Community nutritionists can become involved in local efforts to increase community food security and, in particular, access to nutritious fresh foods by partnering with a CSA operator to develop programs similar to those discussed in this article.

Future research might further address the relationship between CSA membership and diet quality, stress levels related to food acquisition, attitudes about food and agriculture, and relationship to the community. Additionally, researchers can explore the impact of the growing number of CSAs on community food security and national food security, especially in light of future food production challenges that will likely result from climate change.

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