

Squaring Farm Security and Food Security in Two Types of Alternative Food Institutions*

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ABSTRACT Even though both farmers' markets and community supported agriculture were first developed to provide markets for farmers, recently the goals of food security have been attached to these market-based alternative food institutions, based on their potential to be "win-win" economic solutions for both small-scale farmers and low-income consumers. This article reports on survey and interview research conducted in California during 2004–2005 designed to examine to what extent CSAs and farmers' markets are addressing food security in both concept and practice. Findings show that managers of these institutions generally support the idea of improving the affordability of the food they provide, and most have made an effort to do so, although these efforts vary with institutional capacity. Still, some hedged their interest in supporting food security goals with countervailing concerns such as the need to support farmers first. It is ironic, then, that the way that private CSAs and farmers' markets achieve some elements of food security is by virtue of the support of public food assistance programs.

In the face of an increasingly consolidated, industrialized, and often faceless food system, many researchers and activists have looked to alternative food institutions (AFIs) as partial solutions. A variety of formats come under this rubric, including urban gardens, food policy councils, and alternative education programs (Allen et al. 2003). Farmers' markets and community supported agriculture (CSA) are of particular interest, however. This is because many perceive them to be win-win for both producers and consumers, even though they were originally developed to provide markets for the increasingly belea-

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guered small-scale and family farmers. Farmers not only gain more stable access to buyers, many of whom are quite knowledgeable about and committed to alternative modes of farming and food delivery, but with fewer market intermediaries, these arrangements enable farmers to retain a greater share of the food dollar. Meanwhile, consumers have more personalized relationships with those who produce their food and obtain access to seasonal, fresh, and often more sustainably-grown fruits and vegetables (Feenstra 1997; Kloppenberg, Hendrickson, and Stevenson 1996; Lyson 2004).

Recently the goals of food security have been attached to these AFIs.¹ At least since the 1995 Farm Bill discussions, the community food security and sustainable agriculture movements have made a strategic alliance, combining the goals of farm security and food security in their platforms and projects (Allen 2004). Among their strategies for achieving these goals is the continued development of alternative agrifood institutions (AFIs). Their hope is that by eliminating market intermediaries, both small-scale farmers *and* low-income consumers will have improved outcomes over the conventional food market.²

Despite this hope, some scholars have questioned whether farm and food security are compatible goals, given that the need for cheap food seems at odds with the need for favorable farm incomes (Allen 1999a; Hinrichs and Kremer 2002). They point out that this contradiction has been at the core of much agricultural policy historically. Indeed, one of the major rationales for the continued industrialization and consolidation of the American agrifood system is the need to provide low-cost food in order to keep wages low for industrial workers. Today, as real wages continue to decline and eligibility levels for public food entitlement programs have become more stringent (Cancian, Meyer, and Wu 2005), many consumers depend on cheap food. At the same time, many critics of the existing food system reject the premise that food should be cheap. Noting the ecological and social costs of the industrialization of American agriculture, they argue that food prices should reflect the true costs of a more ecologically sustainable and socially just food system—including better remuneration for small-scale and/or family farmers (Allen et al. 2003). Yet, if these real costs are paid

¹ A parallel concern with alternative food networks and short supply chains exists in Europe although it appears to have a different valence. The European literature on this topic emphasizes the importance of maintaining rural spaces by capturing value for rural producers (e.g., Renting, Marsden, and Banks 2003); local food security is rarely discussed in that literature. A much different literature that considers questions of national food sovereignty is far afield from the concerns of this paper.

² This construct, of course, discounts the potential losses of other actors in the system, namely market intermediaries and those they employ.

by individual consumers rather than by public subsidies, food costs will rise for everyone, including the low-income consumers who already spend a disproportionate share of their incomes on food. Without such subsidies (or lower profit margins in the marketing sector), these twin goals in essence pit family farmers against low-income consumers.

Is it possible to simultaneously make fresh, nutritious food affordable to low-income people while providing a decent return to small-scale, sustainable farmers through farmers' markets and CSAs? To date, no empirical research has been conducted that directly addresses the supposition that these twin goals can be accomplished through market-oriented AFIs. The goal of the research on which this paper reports, therefore, was to see how and to what extent CSAs and farmers' markets are addressing food security in both concept and practice. We focused our research on these two types because they most instantiate the idea of an economic "win-win" situation for farmers and consumers. Also, unlike farm-to-school programs and community gardens, which tend to operate as public-private partnerships, farmers' markets and CSAs operate more fully under the constraints and opportunities of the market. In choosing these two types as our object of study, we recognized that they employ distinct forms of distributing food, and therefore may have different degrees of efficacy in generating participation among low-income people. We also recognized that significant heterogeneity exists within these institutional forms having to do with geography, ownership, organizational form and mission, scale, and individual leadership and initiative, any of which could significantly affect if and how food security is addressed. Therefore, the study was designed to draw out variations within and between the two types of institutions. Our findings show that while they can in some ways meet the twin goals, they are in no way a solution to the problem of food insecurity faced by low-income people, thereby casting doubt on the "win-win" that has been taken up by the community food security movement.

Methods

This article reports on research conducted in California during 2004–2005. The majority of our data were gathered through a survey of all CSA and farmers' market managers for whom we could find mailing addresses. CSA contact information came from a variety of online sources. Farmers' market manager contact information came from USDA, California Certified Farmers Markets, and Local Harvest websites. Managers who were in charge of multiple markets received

multiple questionnaires.³ Thirty-seven CSA questionnaires were returned of 111 sent. For farmers' markets, 157 questionnaires were returned by 101 managers, 35 percent of 443 questionnaires sent to 294 managers. We conducted interviews with a purposive sample (selected to capture a broad range of organizational characteristics) of CSA and farmers' market managers during May through August 2004. To gain more background on the use of entitlement programs by AFIs, we also interviewed key individuals with the USDA's Food and Nutrition Service and one non-profit group involved with managing and promoting entitlement programs for farmers' markets.

Both questionnaires addressed background information about farmers' markets and CSAs (e.g., years in operation, organization type, profitability), and farmers and customers (e.g., income level, ethnic background). We also asked managers how important they considered addressing food affordability issues, and how willing they were to employ strategies that other markets/CSAs had adopted to serve low-income populations. Both questionnaires included short answer, multiple choice, and Likert scale questions. Quantitative responses were analyzed both as continuous variables and transformed into ranges and analyzed as categorical variables. Responses to key qualitative questions were coded and grouped. Quantitative answers were analyzed using descriptive statistics, independent sample *t*-tests, and one-way ANOVAs to test for differences in means and correlations.

While our sample is limited to California, and may therefore reflect particular regional sensibilities, it nevertheless captures a broad range of the possible configurations and characteristics of CSAs and farmers' markets in the United States as a whole. True, California has a longer growing season than most other states, and the population is more ethnically diverse than most (but certainly not all) other regions. However, our sense is that CSAs and farmers' markets tend to develop and thrive in particular socioeconomic environments that are likely to be very similar from place to place. For example, most CSAs in California are close to university towns, a pattern that seems to hold throughout the United States. We can at least say that our data is representative of the diversity of CSAs and farmers' markets in California. Our CSA respondents came from the major, highly

³ Farmers market data analysis is more complicated than CSA data analysis because of the fact that many managers run multiple markets (which may have different demographics and at which managers may use different strategies). We requested that managers respond to questions that were not specific to a particular market only once. Responses to these questions were compared to averages among a particular manager's markets rather than to each market individually.

regionalized pockets of CSA activity, and farmers' markets respondents came from 41 of California's 58 counties, including counties in all major regions of the state.

The range of the structural characteristics of the CSAs and farmers' markets in our study may also argue for generalizability outside of California. The number of shares⁴ sold by CSAs ranged from 2 to 3,546 shares (median=50) at prices that varied from \$7.50 to \$30 per week (mean=\$18.50). CSA farm size ranged from 2 to 600 acres in production (median=12), and gross annual CSA income ranged from \$350 to \$350,000 (median=\$40,000). Most surveyed CSAs (25) were run by single families or individuals. Others were run by non-profits (5), government institutions (4), a non-family partnership (1), and a co-operative (1).⁵ They had been operating from between a few months and 17 years (mean=6.9 years). There was similar variation among farmers' markets. The farmers' markets in the study had between one and 100 farmers (median=20), and an estimated 18 to 9,000 customers (median=600). The estimated amount spent at markets ranged from \$38 to \$75,000 per day (median=\$5,000). Surveyed markets had been operating between several months and 33 years (mean=10.9 years). Of the managers who answered our question about the type of organization that runs their market, a large majority indicated that they were run by non-profits (71); others were run by government institutions (14), chambers of commerce (13), private businesses (13), or private individuals, groups of growers, and other miscellaneous institutions (29).

Farm Security and Food Security in Farmers' Markets and CSAs: Existing Evidence

Direct marketing opportunities like farmers' markets and CSAs can be economic lifelines for small-scale growers, particularly those using sustainable farming practices. Not only do direct markets enable growers to avoid transactions with middlemen and sell products at retail prices (Griffin and Frongillo 2003), they also often provide the only space through which small-scale farmers with limited production can enter the market. Several studies have documented the benefits of direct markets to small-scale farmers (Andreatta and Wickliffe 2002; Feenstra et al. 2003; Govindasamy et al. 2003). Low-income consumers

⁴ A share represents the number of participants in a CSA. Participants agree to purchase a box of food on weekly, bi-weekly, or seasonal basis.

⁵ Not all CSA managers (or farmers market managers) answered our questions about organizational type.

Table 1. Manager Perceptions of Customer Income Categories in CSAs (*n* = 30) and Farmers’ Markets (*n* = 133)

Income category	Mean percentage of customers identified as belonging to income category	
	Farmers’ markets	CSAs
High income ^a	23.92%	33.17%
Middle income	53.03%	57.00%
Low income**	24.22%	9.83%

^a*p* ≤ 0.10; ***p* ≤ 0.01 (Significant differences based on two-tailed *t*-test.).

may benefit less, however. While the data are scanty, it appears that few of those who are eligible for federal food assistance programs participate in these market-oriented AFIs. In 1998, less than 25 percent of food stamp recipients reported shopping at a farmers’ market, and food stamp redemptions at farmers’ markets accounted for only 0.02 percent of overall redemptions (Kantor 2001; Ohls et al. 1999). In the case of CSA, a number of studies have found that CSAs primarily serve members with high incomes (Cohen et al. 1997; Cone and Myhre 2000; Festing 1997; Hinrichs and Kremer 2002; Lawson 1997; Perez, Allen, and Brown 2003).

Our research, though limited on this question, does little to contradict these findings. Since it was impractical to collect data from individual participants due to the size of our sample, we instead asked farmers’ market and CSA managers to estimate the percent of their customers they thought were high income, middle income, or low income (totaling to 100%). Both farmers’ market and CSAs managers estimated that about half of their customers are middle income, but estimates of the percentage of customers in the low-income category differed significantly between the two AFI types (Table 1). Farmers’ market managers estimated that about a quarter of their customers were low-income, while CSA managers estimated that 10 percent were low-income.

Our study thus starts from the premise that rates of participation by low-income people are fairly low, both for farmers’ markets and CSAs. It seems clear that direct marketing does not in and of itself create an economic win-win, and that bringing the goals of farm security and food security into congruence requires additional directed effort.

Following the Manager: Intent, Effort, Capacity

It is therefore critical to look at the intent, efforts, and capacity of the managers of these institutions to operationalize these goals. Our study

Table 2. Manager Perceptions of Importance of Addressing Issues of Food Security through CSAs (*n* = 35) and Farmers' Markets (*n* = 97)

	Percentage of managers rating access and affordability as important	
	Market managers	CSA managers
1-3 (Not important)	18.6	22.9
4-6 (Important)	81.4	77.1
Mean rating	4.59 ± 1.463	4.46 ± 1.442

Note: 1 = not at all important; 6 = extremely important.

is premised on the idea that managers have a keen eye to the constraints under which they operate; at the same time, their intentions, decisions, and practical efforts do shape the ways and degree to which food security is addressed in these institutions.

Importance of Food Security Issues to CSA and Farmers' Market Managers

We asked CSA and farmers' market managers to rank on a 6-point scale how important they thought it was for their AFI type to address issues of food access and affordability for low-income people. Among both CSA and farmers' market managers, there is wide agreement that these institutions ought to be paying attention to issues of food security. Eighty-one percent of farmers' market managers and 77 percent of CSA managers considered it important to extremely important (Table 2). We further asked if they would be willing to employ strategies that other farmers' markets or CSAs had used to serve low-income people. We found significant support for the idea of trying out new strategies to reach low-income people (Table 3). Ninety-one percent of CSA managers and 83 percent of farmers' market managers said they would or might consider employing additional tactics to serve low-income people. These data suggest a strong commitment among managers to improving food security through farmers markets and CSAs as a broad concept.

Table 3. Manager Willingness to Consider Using New Strategies to Serve Low-Income People in Farmers' Markets (*n* = 86) and CSAs (*n* = 31)

Willing to consider using new strategies?	Percentage of market managers	Percentage of CSA managers
Yes	72.1	64.5
Maybe	10.5	25.8
No	17.4	9.7

Table 4. Manager Perspectives on Who Should Subsidize the Cost of Produce for Low-Income Customers in Farmers’ Markets (*n* = 101) and CSAs (*n* = 37)

AFI type	Percentage of managers who indicated source of subsidy		
	Government (general)	WIC(FMNP)/food stamps	CSA members/farmers’ market customers
Farmers’ Markets	37.6	15.8	1.0
CSAs	33.3	13.9	22.2

Note: Percentages do not equal 100 because the question was open-ended and not all managers answered it.

In addition to asking managers about their interest in improving affordability, we posed an open-ended question and coded the responses about who should pay for the difference between the cost of produce and a person’s ability to pay. Similar percentages of farmers’ market and CSA managers pointed to the government and entitlement programs as appropriate sources of subsidy. Still, CSA managers were much more likely to mention an internal source in addition—their members. Twenty-two percent of CSA managers mentioned that higher-income customers should subsidize share costs for lower-income participants, while only one farmers’ market manager mentioned that higher-income market customers should subsidize lower-income market customers (Table 4). A small percentage of managers from both categories did not support the idea of redistribution at all.

Manager Efforts to Serve Low-Income Consumers

We wanted to learn what strategies are used to serve low-income people, especially in light of strong support for the goal of inclusion. On the questionnaires we listed several possible strategies for reaching low-income consumers and provided space for respondents to write in strategies of their own. These data demonstrate that a tremendous amount of effort has been devoted to working to address both access and affordability. Among CSAs, 83 percent of respondents had attempted at least one strategy to attract low-income people (Table 6); among farmers’ markets, the figure was 87 percent (Table 5). In coding responses, we organized these strategies into four categories: direct outreach, discount, food recovery, and entitlement. The strategies and categories for both CSA and farmers’ markets are found in Tables 5 and 6.

It stands to reason that those managers who put the most effort into strategies to serve low-income people would be those for whom this

Table 5. Farmers' Markets: Percentage of Markets Using Strategies to Improve Food Access and Affordability ($n = 157$):

Category	Strategy	Percent
Direct outreach	Any direct outreach strategy	28.0
	Market is located in low-income neighborhood	14.5
	Did outreach in low-income communities	20.1
Discount	Any discount strategy	21.7
	Encouraged growers to offer discounts	16.4
	Subsidized growers to offer discounts	8.2
Food recovery	Any food recovery strategy	52.2
	Encouraged growers to donate food from the market	44.7
	Solicited donations for emergency food programs	22.0
	Allowed gleaning at the market	17.6
Entitlement	Any entitlement strategy	82.2
	Accepted WIC/FMNP	78.0
	Accepted food stamps	44.7
	Accepted EBT	22.6
Other		13.2
Any strategy		87.3

issue is most important, and this is borne out by our findings (Table 7). Farmers' markets managers' ratings of the importance of access were significantly correlated with the average number of strategies they had used ($R=0.452$, $p=0.000$). For CSA managers, the correlation between

Table 6. CSAs: Percentage of CSAs Using Strategies to Improve Food Access and Affordability ($n = 37$)

Category	Strategy	Percent
Direct outreach	Any direct outreach strategy	16.7
	Did outreach in low-income communities	8.3
	Provided delivery sites in low-income neighborhoods	16.7
Discount	Any discount strategy	50.0
	Offered lower-price shares	25.0
	Offered sliding-scale shares based on income	8.3
	Deferred payment	22.2
	Raised funds from organizations to subsidize share costs	5.6
	Solicited donations from individuals to subsidize share costs	25.0
	Trade for labor*	5.6
Food recovery	Any food recovery strategy	61.1
	Allowed gleaning at the CSA farming site	22.2
	Donated food from the CSA	61.1
Entitlement		0
Other		11.1
Any strategy		83.3

* Trade for labor was not included as an option on the original survey.

Table 7. Comparison of Mean Number of Strategies Used Based on Farmers' Market Managers' Rating of Importance of Food Access and Affordability (n=79)

Strategy type	Mean number of strategies	
	Access and affordability not important (1-3)	Access and affordability important (4-6)
Total strategies***	1.300	3.328
Direct outreach strategies*	0.144	0.404
Food recovery strategies***	0.222	0.865
Entitlement strategies**	0.824	1.496
Discount strategies***	0.000	0.320

Significant differences based on two-tailed *t*-test.

* $p \leq 0.05$; ** $p \leq 0.01$; *** $p \leq 0.001$.

the importance of addressing access and the use of discount strategies was not statistically significant ($R=0.299$, $p=0.081$); the lack of significance might result from the lower number of CSA respondents (results not shown).

Yet, it is not so much the number but the types of strategies that may be the more important factor in improving affordability. Here we note substantial differences between farmers' markets and CSAs, with farmers' markets relying most on the use of entitlements and CSAs relying most on food recovery. As shown in Table 5, 82 percent of farmers' markets have used at least one entitlement tactic, dwarfing the other strategies by a considerable margin. Use of Farmers' Market Nutrition Program (FMNP) coupons accounted for the largest percentage of entitlement strategies by far; 78 percent of markets indicated that they accept FMNP coupons.⁶ On the other hand, none of the CSAs we surveyed use entitlements. We will elaborate on the challenges of entitlements in a later section.

Instead, as our results indicate, CSAs most frequently look to food recovery as a means to serve low-income consumers, with 61 percent of CSAs having attempted at least one food recovery tactic, usually food donations. Indeed, some CSA managers see the willingness of some low-income customers to accept produce that is not as cosmetically perfect as an example of a "win-win" for farmers and CSA participants. According to a CSA manager who provides less aesthetically pleasing boxes of produce at lower cost, "There is no loss. There is only gain. The farmer is not subsidizing a lower-income share if they can just put

⁶ According to Patty Blomberg, coordinator for FMNP in California, this is an underestimate of the percentage of California markets actually accepting FMNP benefits.

Table 8. Farmers' Markets Institutional Capacity: Significant Correlations between Number of Strategies Used and Scale-Related Variables (n=155)

Scale-related variable	Number of strategies used	Food recovery strategies used	Entitlement strategies used
Years operating	$R=0.236^{**}$	$R=0.280^{***}$	$R=0.267^{***}$
Money spent daily	$R=0.171^a$	$R=0.264^{**}$	
Number of farmers	$R=0.364^{***}$	$R=0.448^{***}$	$R=0.384^{***}$

^a $p \leq 0.10$; * $p \leq 0.5$; ** $p \leq 0.01$; *** $p \leq 0.001$.

a different grade of food in the box... the grower is simply selling more food.”⁷

Capacity

Some farmers' markets and CSAs have gone much farther than others in increasing access and affordability. Not surprisingly, we found that expending extra effort is closely related to institutional capacity. We define this capacity in two overarching senses: the scale of operations and the type of institution.

Scale. In general, a positive correlation exists between the scale of operations and use of strategies to improve access and affordability. For farmers' markets, we saw statistically significant correlations between the number of years markets had been operating, money spent daily at market, the number of farmers, and the number of strategies employed (Table 8). Still, these data indicate that larger, more established markets with more revenue have the cushion to experiment with such ventures. We found significant positive correlations between operational scale and strategies employed for CSAs, as well. For example, we saw correlations between the number of discount strategies used and the number of years CSAs had been operating ($R=0.471$, $p=0.004$) and between the number of food recovery strategies used and gross CSA income ($R=0.328$, $p=0.048$). In addition, CSA managers who indicated that they believe improving access is important reported an average gross income of \$113,706, while those who do not consider it important reported an average gross income of \$24,321 (two-tailed *t*-test; $p=0.000$), suggesting that larger operations may place higher priority than smaller ones on serving low-income customers, if only because it is more possible for them to do so.⁸

⁷ Expressing a different perspective, another CSA manager pointed out that part of the reason for such limited CSA participation by low-income people may be that CSA boxes might “feel like something they get from a food bank.”

⁸ We have not included a table for the CSA data since it provides no additional information than what is stated in the text.

Table 9. Farmers’ Market Organization Type and Mean Number of Strategies Used (n = 140)

Strategy type	Mean number of strategies used by organizational type				
	Chamber of commerce n = 13	Government institution n = 14	Private business n = 13	Non-profit n = 71	Other n = 29
Total strategies**	1.31	3.29	2.77	3.69	2.34
Food recovery strategies**	0.00	0.79	0.62	1.17	0.48
Entitlement strategies**	0.85	1.71	1.15	1.73	1.10

** $p \leq 0.01$ (Significant differences based on one-way ANOVAs.).

Institution type. We also found significant differences in the use of strategies to address low-income access and affordability among the different types of institutions that run farmers’ markets. Non-profit farmers’ markets and those run by government institutions used more strategies to reach low-income consumers than did chambers of commerce or private businesses (Table 9).⁹ Being organized as nonprofits gives these organizations access to tax-exempt donations from private donors, foundation grants, and public funding, allowing them to subsidize some of their costs. In addition, as organizations with charitable and educational purposes, nonprofits are guided by missions that must have broad public benefit. For example, Harbor Area Farmers’ Markets, an association of five markets sponsored largely by the South Coast Interfaith Council, states that they exist to “encourage cross-section interaction of the population, support low-income and oppressed populations, and offer a venue particularly focused on maintaining small family farms” (Harbor Area Farmers Markets n.d.). The following comment from a nonprofit market manager illustrates that it may indeed take a different kind of mission for the goals of food security to take priority:

“Many [farmers’ markets] are being located in ‘high-end’ areas. The farmers may make more money there, and the higher income communities are ‘entertained’ by outdoor markets— *but they can also get fresh food elsewhere...* . our market charter requires us whenever possible, to locate our markets where *all income classes* can easily access them. This is not the general pattern these days!” (Emphasis in original.)

The number of CSAs surveyed was not large enough to obtain any statistically significant results based on organizational type in regard to

⁹ Significantly, these data do not include two of the largest nonprofit markets in the state, which would likely affect the results even more in this direction.

the use of strategies to address low-income access and affordability. The lack of statistical significance may owe to the fact that some for-profit CSAs have been able to negotiate grant funding, an opportunity that is generally reserved for nonprofit organizations. This anomaly, then, points even further to the importance of subsidies to address food security.

To sum up our results so far, AFI managers generally support the idea of improving the affordability of the food they provide, and most have made an effort to put their convictions into practice, although these efforts vary with institutional capacity. In other words, low participation of low-income consumers in farmers markets and CSAs cannot be attributed to lack of interest or effort among the managers of these institutions. Still, farmers' markets and CSAs employ different strategies. While both institutions rely on food recovery strategies, farmers' markets rely more heavily on government entitlement programs, and CSAs provide more discounts. This sharp difference in response between the two types of institutions is more or less in keeping with differing perspectives regarding who should pay, although whether it reflects differing institutional cultures or the practical obstacles to offering entitlement programs in CSAs is something at which our data can only hint. In other words, the smaller "communities" that make up CSAs may explain CSA managers' propensities to value the idea that participants subsidize each other, while farmers' markets managers look to outside sources of subsidy. Nevertheless, as we will discuss in later sections, some managers of both types of institutions express ambivalence about redistribution of any kind. First, however, we want to elaborate on the key practical constraints both institutions face—the limited availability of entitlements—and then return to these conceptual issues.

Practical Barriers to Increasing Participation of Low-Income People

As we have seen thus far, farmers markets seem to have better rates of participation among low-income people, and some of this can be attributed to the use of federal entitlements in such markets. Indeed, we saw a significant correlation between the use of at least one of several entitlement strategies and the percentage of low-income customers in farmers' markets ($R=0.204$, $p=0.016$). Nevertheless, even within these institutions the use of entitlements is limited by existing public policy.

The federal food stamp program is the most substantial food related entitlement program. Yet, food stamp redemptions at farmers' markets have declined during the last 10 years, having dropped precipitously

from \$6.4 million to \$3.8 between 1994 and 1998 (Kantor 2001). This decline owes much to the transition from the use of paper food stamps to electronic benefit transfer (EBT) cards. Paper food stamps were replaced with ATM-like EBT cards between 1996 and 2002 in order to reduce both fraud and the administrative costs of processing paper coupons. This transition has made it much more difficult for many farmers' markets to accept food stamps since EBT systems require both phone lines and electricity, neither of which is available at many outdoor farmers' market sites. One of the farmers' market managers in our study noted that "the new EBT program didn't consider farmers' markets when it was put together. Additional costs are involved and markets are dropping the program." According to Penny Leff, the coordinator for the California Farmers' Market EBT Implementation and Promotion Project, nearly 50 percent of California farmers' markets—at least 150 markets—previously accepted paper food stamps, but now only about 65 markets in the state accept EBT. To remedy this situation, some farmers' markets are setting up central point-of-sale (POS) devices and issuing farmers' market scrip or tokens. These systems allow EBT participants to use their benefits to buy farmers' market currency at a central location, which they can then use to buy approved foods from farmers. However, this is not typical. According to Leff, "usually only farmers' markets that have a lot of low income customers or social consciousness where it's part of their mission" will make the effort to accept EBT. Institutional scale matters too. Those markets with more vendors, for example, may have an easier time collecting sufficient fees to pay for POS machines.

The FMNP program, initiated in 1992, was designed explicitly as a dual purpose program intended both to provide fresh produce to WIC participants (and, later, seniors) and to "expand awareness and use of farmers' markets" and "increase sales at such markets" (California Department of Health Services n.d.). WIC participants and seniors whose household income is up to 185 percent of poverty level are eligible for FMNP vouchers of between \$10 and \$20 per year, which are issued by local WIC offices from May to November. In 2004, over 2.5 million WIC recipients received such benefits nationally (FNS/USDA 2006). According to Patty Blomberg, coordinator for FMNP in California, approximately 52 percent of FMNP coupons issued in California were redeemed in 2004. Because they are provided in paper form, they are relatively easy for farmers and farmers' market managers to process. Unlike food stamps, moreover, these FMNP coupons can *only* be used at farmers' markets. Yet, because they are limited in both season and amount, FMNP vouchers may serve to introduce low-income

families and seniors to farmers' markets, but they are not a substantial or consistent source of subsidy. For that matter, if markets do not or cannot accept EBT benefits, introducing low-income customers through the limited FMNP may not result in sustained participation.

The FMNP, which is relatively simple and profitable for farmers' markets to use, is not available to CSAs at all. In addition, the USDA's Food and Nutrition Service (FNS) may not allow some CSAs to process food stamps. CSAs that require an entire season's payment in advance and do not guarantee a certain amount of produce in return are considered too speculative for food stamp purchases. Many other CSAs (those that accept weekly or monthly payments) may be eligible to accept food stamps, but may not be aware that they can be authorized to accept food stamp benefits. Nor is it clear that consumers have tried to use food stamps at CSAs in California. One manager of a very well known CSA told us that the only people who have asked if they take food stamps are other researchers like ourselves. At the very least, this does suggest that means to address food security through these institutions have not fully been explored. The extent to which this reticence reflects some conceptual barriers to making food security and farm security congruent is the topic of the next section.

Conceptual Barriers to Increasing Participation of Low-Income People

In spite of the major limitations of both the current FMNP and food stamp programs for farmers' markets and CSAs, many managers of both types of AFIs pointed to entitlements as the best sources of subsidy for low-income customers. In addition, some CSA managers favored internal redistributions in the form of discounts. A few other managers expressed skepticism of any sort of redistribution, however, and several more hedged their interest in supporting food security goals with countervailing concerns. The ambivalence many managers seem to feel can be illustrated in responses to another survey question.

In this case, we asked managers to provide their own explanations for the demographics of their market or CSA. Given that existing research already shows that CSAs tend to serve a disproportionately affluent clientele, we asked CSA managers, "What do you think are some of the reasons that it is primarily affluent people who seem to participate in CSAs?" We coded the responses to this open-ended question into six categories (Table 10). More than half of CSA managers surveyed said that it is because affluent people are more able to afford produce. This result can be taken as an explicit recognition that the fundamental issue has to do with cost relative to income. At the same time, virtually

Table 10. Reasons Given by CSA Managers for Participation of Primarily Affluent People in CSA (*n* = 36)

Reason	Percent of managers that indicated reason
Affluent are more able to afford produce	55.56
Affluent are better educated	36.11
Affluent are more concerned about food quality	16.67
Affluent have more time	13.89
Affluent are more health conscious	11.11
Local demographics	1.39

Note: Percentages do not equal 100 because some managers indicated multiple reasons in response to an open-ended question.

all of the other categories of responses seemed to imply that low-income people do not participate in CSA because they are not as well educated or are less concerned about food quality or health than affluent consumers.

Farmers’ market managers had somewhat different responses to the question about the reasons for the participation of low-income people, in part because we posed the question differently. Since it is not necessarily the case that primarily affluent people seem to participate in farmers’ markets, we asked, “If people of a particular income category make up the largest percentage of your market customers, why do you think that is the case?” By far the largest percentage of managers (52%) highlighted the demographics of the surrounding community in shaping market participation (Table 11). Given that most neighborhoods in the United States remain segregated by income (Denton and Massey 1998), this is essentially a roundabout way of saying that ability to afford the produce is a determining factor in participation. Still, as with CSAs, a handful of market managers named customer character-

Table 11. Reasons Given by Farmers’ Market Managers for People of a Particular Income Category Making up the Majority of Market Customers (*n* = 157)

Reason	Percent of managers who indicated reason
Local demographics	51.57
Affluent more concerned about food quality	4.40
Affluent more able to afford produce/prices at market	2.52
Affluent more health conscious	1.89

Note: Percentages do not equal 100 because the question was open-ended and not all managers answered it.

istics such as education levels and health consciousness as explanatory factors in customer demographics.

The highlighted role of lower education levels and lower health consciousness as factors in the low participation of low-income people points to other possible incongruities in bringing together food security and farm security. Indeed, several themes emerged in the questionnaires' qualitative responses that suggest a deeper resistance among AFI managers to balancing the needs of farmers and low-income consumers. For example, a pervasive notion in the alternative agriculture movement is that "if people only knew" more about food, they would certainly seek organic, healthy, and local food.¹⁰ This was certainly echoed in our survey when one CSA manager wrote that increased diversity in these institutions "can only happen when people understand the true costs, not the costs they pay for the food they eat." Likewise, in a study of California AFI leaders several made the claim that if people knew more about food, they would be willing to pay its "true price," thus enabling small-scale farmers to be more economically viable (Allen et al. 2003). These ideas also surfaced in our study when several CSA managers seemed to reject the idea that income could be a limiting factor in CSA participation. One CSA manager wrote, "Targeting those in our communities that are ethnic or low income would show a prejudice we don't work within. We do outreach programs to reach everyone interested in eating locally, healthily, and organically," again implying that CSA participation is a choice for those with certain values, regardless of income. Another CSA manager wrote, "I believe that the food is affordable to all; it's just a matter of different values and priorities... Education and outreach are the only hope I have of interesting more low income people."

While many CSA and farmers' market managers expressed conceptual support for the role of AFIs in increasing food security, they expressed at least equivalent concern with farmer income. As one CSA manager said, "although I want low income families to participate, our costs and labor are also high, keeping us on the balancing edge of low-income ourselves!" Another CSA manager emphasized that "we are by far the lowest income people in our CSA." Farmers also reported that farming itself is a big enough job, without also trying to provide special programs. As stated by one CSA manager, "Until we can run our farm and pay bills it is very challenging to put the extra effort required for

¹⁰ One of the authors of this paper, who teaches food politics at the University of California at Santa Cruz, notes that every term several student papers begin with this claim.

these programs, although we wish we could.” According to another manager, “A program like the WIC/FMNP would be great. Small family farmers need to get a good price for their produce. We are not in the position to pick up the difference. If we can make enough money, we also need and want to pay our field workers a good wage.” Since the role of the CSA manager is to ensure the viability of the CSA business, it makes sense that they are reluctant to try new programs that could put the CSA at economic risk.

Farmers’ markets, on the other hand, are most often run by non-farm organizations and in their role as brokers arguably have to balance the needs of both producers and customers. The degree to which farmers’ market managers echoed the belief that farm income takes precedence was thus striking. According to one market manager, “While the issues of social justice, diversity, and multiculturalism are very dear to my heart, our main concern to date is the economic sustainability of the farmers.” Another manager said that farmers should not have to make their produce more affordable since they “are often without farm or medical insurance and deserve a decent price for the work they put into it.” Still another cautioned, “Let’s not forget that farmers themselves are an extremely at-risk minority of the population. Farmers’ markets give them a chance to remain on their farms.”

In some cases, support for farmers was accompanied by explicit resistance to redistribution programs to assist the poor. One market manager, noting that local demographics and economies determine markets’ ethnic and income base, said that, “One cannot change that artificially with government bureaucrats. California’s economy is too weak to have subsidization of anything.” Another said in response to who should pay to help low-income people participate in farmers’ markets, “*No one*. Most low-income people receive help in obtaining food at the stores with food stamps (cards). I think it would be detrimental to farmers’ markets.” A response from a CSA manager suggested that poor people were themselves a problem: “I’m not sure that I agree that subsidy is the best route. In my experience, the subsidy customers are the least committed/reliable.”

A final theme that emerged was that it may be asking too much of these institutions to suggest that CSAs and farmers’ markets could do more to serve low-income people. Indeed, one striking aspect of our findings was the resistance some respondents expressed to questions on our questionnaire. As said by one CSA manager: “I think it is an admirable goal to try to get our customers to be more diverse, but I feel a bit troubled by all of this. I sometimes feel pressure to be perfectly politically correct as well as just accomplish the very challenging task of

farming. I wish we could elevate the farmers first, then it might be easier to bring the rest of the world along.” Another respondent was more strident and stated that our study had a slant of “political correctness.” She wrote, “We are set up for our community. We don’t deliver and we work with those who may want to set up something other than conventional CSA.” These sentiments were not unique to CSAs. One farmers’ market manager pointed out that, “We do not lobby Safeway [a large grocery store/supermarket] to lower their costs so that poor people can buy more of their produce.” Another, who characterized his market as one that caters to “high income consumers seeking quality and freshness” said that “low income people shop elsewhere unless they are given freebies like WIC” and that he would not want to use strategies to attract low-income consumers because those strategies “may discourage the high end consumers that we cater to.”

While many other respondents were less strident in their comments, with many expressing frustration that they could not afford to do more to encourage low income participation, we wonder if the forthright expression of what could be construed as hostile sentiments symptomizes an environment that may be inhospitable to low-income people. To be conclusive on this point, and to document the extent to which such attitudes are more broadly held than we report here, would require more fine-grained qualitative research. For the purposes of this study, however, the presence of such attitudes even among a minority of respondents casts doubt on the ability to meet these twin goals—farm security and food security—when doing so is left to individual initiative, as is necessarily the case with market-based approaches. This leads us to the clearest conceptual problem—and that is the unresolved question of who should pay.

Who Should Pay—Redux

Alternative agrifood movements reject the cheap food argument and want farmers, in particular, to receive a decent income. There is also broad support for having more low-income people participate in these markets, although there is less clarity as to how that might happen. As we have demonstrated, some AFI managers think that education and outreach should suffice, and many more suffice with low-effort food recovery-type strategies, such as allowing gleanings or providing excess produce to food banks. Yet, food recovery cannot by itself solve food security problems. As Poppendieck (1998) argues, this sort of food assistance is saddled by the “seven deadly ins,” among them insufficiency, inappropriateness, instability, and inefficiency. In fact,

because food insecurity is primarily a function of insufficient and irregular income, food charity may actually be at odds with food security, dependent as it is on the whims and largesse of donors and volunteers. The use of discount and entitlement strategies by AFI managers points to recognition that serving low-income consumers through farmers' markets and CSAs requires redistribution. As with farmers, these redistributions can take the form of state entitlements, indirect state subsidies through tax breaks to nonprofits which then are distributed through grants, or even internal redistributions among communities of shared interests.

A number of examples of internal redistribution exist in CSAs and farmers' markets. Indeed, the idea of having a community or organization cross subsidize (i.e., an internal redistribution), was, actually, the original vision of CSA. As one CSA manager put it, "the CSA community commits to financially supporting the farm ... and everyone gets together in a room, the farm budget is shared, and people go around and pledge what they can afford;" but as she noted, it was unlikely to work as a business model in the United States. As an implicit operationalization of this sort of subsidy, half of those CSA managers surveyed have offered discounts of some kind, as illustrated in Table 6, although to our knowledge, none at this point, have implemented the strong form of redistribution mentioned above. While the analog of this sort of redistribution was not mentioned by our farmers' market respondents, there are examples of between-market redistribution. For example, the Victory Park market in Pasadena, CA was set up specifically to help subsidize growers selling at the lower-income market in nearby Villa Park; growers cannot sell produce at Victory Park without selling at Villa Park as well. The San Francisco Heart of the City's Wednesday farmers' market, which draws hundreds of office workers, subsidizes its Sunday market, which draws many more low-income Asians, Latinos, and African Americans from the Tenderloin neighborhood (Fisher 1999).

We also note some success with the indirect subsidies of the nonprofit sector. So, for example, Tierra Miguel CSA, a nonprofit, uses grant funds to supply shares to low-income diabetics through the Indian Health Council and funding from the Los Angeles Unified School District's Nutrition Network to deliver boxes of produce to nearly 1,000 Los Angeles classrooms. Full Belly Farm CSA, a for-profit partnership, provides donations of produce to a Sacramento area shelter and food kitchen, which are subsidized by a local church congregation. The fact that markets run by nonprofits (which are effectively subsidized by both private donors and public agencies)

employ more food security practices than other types of organizations (and that government-run markets used nearly as many) is significant.

Our data suggest, however, that the biggest success in bringing in low-income people has been through the use of entitlements. That farmers' markets have been relatively more successful in bringing in low-income people owes a lot to the widespread use of entitlement programs such as FMNP in these markets. Even then, as we have noted, FMNP provides vouchers for only \$20 per year—designed to bring people to markets, but not provide sustained subsidies. Nevertheless, the crucial role of entitlements exemplifies a circularity. Some within the Community Food Security (CFS) movement, including many of the managers surveyed in this study, continue to advocate for entitlement food programs such as food stamps. At the same time, CFS organizers have looked to market-based approaches to food security problems both as insurance against the vagaries of changes in food assistance programs and as a mechanism to make people less dependent on charity (Allen 1999b). It is ironic, then, that the way that private CSAs and farmers' markets achieve some elements of food security is by virtue of the support of public food assistance programs. That this is so demonstrates that AFIs are not and cannot be substitutes for state entitlements in meeting the food security needs of low-income people.

Conclusions

Alternative agrifood movements have looked hopefully toward AFIs such as farmers' markets and CSAs as institutions that can help address the growing problem of food insecurity in the U.S. What we found, though, is that while most managers of such institutions express general interest in questions of food security, their actual practices to further these ends are constrained by both practical issues and perspectives about low-income assistance, including some skepticism of redistributive models. As a rule, farm security trumps food security, even though farmers' markets and CSAs are often described as "win-win" opportunities for both producers and consumers. When consumers are affluent, CSAs and farmers' markets may truly be "win-win." Consumers get fresh produce, and farmers retain a larger share of the food dollar. However, it is not clear that these AFIs can provide an easy win-win solution for lower income consumers. Understanding who is included in and excluded from the circle of winners and under what circumstances is crucial to understanding the potential of AFIs for meeting farmers' and consumers' needs. AFIs can provide fresh produce and conviviality, but they are not currently positioned to meet the goal of food security.

Despite the incompatibility between food and farm security in AFIs evidenced in this study, there are important exceptions and visionary ideas. A number of AFIs have both institutional missions and capacities to address these issues. In many cases it is the subsidies of the nonprofit sector that makes the work of these AFIs possible. We applaud these efforts, yet see them as inevitably ephemeral, for they are subject to the vagaries of philanthropic priority changes, the volatility of the stock market that determines foundation resources, and the presence or absence of effective leaders. The key to meeting food security needs remains public entitlement programs. While our study highlights some of the limitations of current CSAs and farmers' markets for low-income consumers, it also points to important areas for federal and state policy change. For example, if the USDA and FNS provided more substantial and sustained funding for the FMNP program and EBT infrastructure, and if these programs were expanded to more easily address the needs of CSAs, farm security and food security might not be so at odds in these AFIs. Still, as many within the CFS movement recognize, in order to provide food security for low-income people, entitlements must be exactly that—things that are *guaranteed*.

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