# Community Supported Agriculture Entering the 21<sup>st</sup> Century: Results from the 2001 National Survey

Daniel Lass University of Massachusetts Amherst Department of Resource Economics

Ashley Bevis University of Massachusetts Amherst Department of Resource Economics

G.W. Stevenson University of Wisconsin – Madison Center for Integrated Agricultural Systems

John Hendrickson University of Wisconsin – Madison Center for Integrated Agricultural Systems and Kathy Ruhf The New England Small Farms Institute

Contact information: Dr. Daniel Lass, 211 Stockbridge Hall, University of Massachusetts, Amherst, MA 01003; or by email at *dan.lass@resecon.umass.edu*.

#### Abstract

A comprehensive set of descriptive statistics and distributions are presented characterizing more than 300 Community Supported Agriculture (CSA) farms that responded to a mail survey. The respondents were distributed across 43 different states; the greatest numbers in the West, Northeast and the North Central regions. CSA farmers are youthful and highly educated and the farms are typically small producing organically or biodynamically (96 percent). Median farm size was just 15 acres operated with 7 acres of cropland. Twenty three percent of the farms did not own the land they operated making other land-use agreements very important. The typical CSA farm had about 7 acres under such agreements, a majority with private landowners. The CSA operation was just one of several enterprises - farmers markets, direct marketing to restaurants and retail stores, roadside stands and on-farm sales were popular additional marketing methods. A diverse combination of labor was used including principle farmers, hired workers, family, interns, apprentices and shareholder labor.

Physical land measures place most CSA farms fit into the "small farms" category. However, these CSA farms typically had higher gross farm income compared to the value of farm sales for *1997 Agricultural Census* farms. The typical CSA farm provided 24 weeks of produce to their shareholders earning an average (median) income of \$33,541 (\$15,000). The CSA organization was a small part of total farm activity for many farms. These farms may be experimenting with CSA or may find limited demand for their CSA shares, but also represent potential expansion of the CSA concept. CSA farmers appear to be less reliant on non-farm income than U.S. farmers. While, the CSA farms surveyed are faced with challenging financial situations, we found that smaller percentages of farmers were unsatisfied than were satisfied with their ability to cover farm costs, their level of stress and quality of life, workloads for them and their workers, and community involvement. Greater percentages were dissatisfied with their compensation and financial security, but these farmers felt the CSA operation helped improve their situation. CSA is an important farm enterprise for these farmers both for financial and psychic reasons.

# **Executive Summary**

The following document provides fairly detailed descriptions for a sample of Community Supported Agriculture (CSA) farms that operated in 2001. It was our goal in this survey to continue the work we began with our 1999 survey of CSA farms and farmers; these results create a second statistical snapshot of CSA farms that operate throughout the U.S.<sup>i</sup> There have been few comprehensive efforts to characterize CSA in the U.S. and it is our hope that these survey results help to fill the void that exists in the amount of objective information available about CSA.

The CSA farms that responded to the mail survey were distributed across 43 different states in the U.S. However, the greatest numbers of CSA farms are found in the West, the Northeast and the North Central states. Urban centers in these states provide strong demand the food CSA farms produce. The retention rate for CSA farms is high. Considering the CSA farms that operated in 2001, we found that just 5.4 percent (17 farms), planned to discontinue their CSA operation. Thus, we estimate the retention rate for CSA farms to be over 94 percent based on this sample of CSA farms (p. 1).

CSA is a grassroots movement that relies heavily on members of the CSA community to extend knowledge. We found that the CSA farmers surveyed represent a tremendous pool of talent willing to extend the CSA movement. 94.1 percent of the CSA farms surveyed responded positively to at least one of the five questions asked about their willingness to help strengthen the CSA movement (p. 3 and table 2).

CSA farmers can be characterized as youthful and highly educated. The median CSA farmer was just 44 years old with 10 years of farming experience and 5 years of experience as a CSA farmer (tables 7 and 8; figures1 and 10-13). We found that 51 percent of CSA primary farm operators (listed as Farmer A on the survey) were younger than 45 years of age compared to just 27 percent of all U.S. farm operators in 1997. Only 12.5 percent of CSA farmers were age 55 older compared to 48.4 percent for U.S. farm operators. Most CSA farmers had completed a 4-year college degree. More than 74 percent of the principle CSA farmers had a college degree and 23 percent had graduate degrees.

CSA farms are typically small farms producing organically. Virtually all farms surveyed (96 percent) practiced some form of organic or biodynamic production. The median farm size was just 15 acres as measured by the number of acres operated (table 4). Over 72 percent of the CSA farms operated 49 acres or less, compared to less than 30 percent for all U.S farms as reported in the *1997 Census of Agriculture* (figure 2). The amount of cropland for CSA farms was typically about half the number of acres operated (table 4, figures 3 and 4). A number of CSA farms, 23 percent, indicated they did not own the land they operated. As expected, other land-use agreements were important with 70 percent of the CSA farms indicating they had other land-use agreements (figure 7). A typical CSA farm might have about 7 acres under such agreements and 68% of these agreements were with private landowners (figure 8).

<sup>&</sup>lt;sup>i</sup> See: Lass, Daniel, G. W. Stevenson, John Hendrickson and Kathy Ruhf. *CSA Across the Nation: Findings from the 1999 Survey*. Madison, WI: Center for Integrated Agricultural Systems, 2003.

The CSA operation is typically just one of several enterprises on the farm. Nearly 27 percent of the respondents used less than 10 percent of the land operated for the CSA operation. However, 30 percent of the farms used at least half of their land for the CSA operation and 15 percent used between 90 and 100 percent of their land operated for the CSA operation. Comparing cropland use illustrates that many CSA farms are devoting a large share of their cropland to the CSA enterprise. Nearly 36 percent of the CSA farms use 90 percent or more of their cropland for the CSA operation and over 55 percent of the CSA farms used more than 50 percent of their cropland for the CSA operation (figures 4 and 5).

The land use statistics indicate that CSA is just one way these farmers market their products. Farmers markets and direct marketing to restaurants and retail stores were popular marketing methods used by CSA farms, both used by 53 percent of the farms. Roadside stands (14 percent of farms) and on-farm sales (35 percent of farms) were also popular methods used to sell directly to consumers (figure 6).

CSA farms use a diverse combination of labor including principle farmers and hired workers as well as family, interns, apprentices and shareholder labor (table 5). Nearly 68 percent of the farms that responded used between one and four workers, about half were paid a wage. Other forms of compensation included room and board and educational experience. Members also represent a sizeable labor resource for some farms contributing as many as 3,000 hours. It is difficult to assess accurately the amount of labor used for the CSA operation; the amounts of labor are difficult to evaluate using a survey questionnaire.

The business organizations found on CSA farms differ from what is typically found on U.S. farms (figure 9). Most CSA farms - about 63 percent - were individual operator/sole proprietorship farms, but this is low compared to 86 percent for all U.S. farms. We found greater percentages of CSA farms that were partnerships, corporations and other forms of organization such as not-for-profit and cooperative businesses than were reported for all U.S. farms in the *1997 Census of Agriculture*.

Most CSA farms fit into the "small farms" category by physical land measures. However, comparing the CSA farms' gross farm income to the value of farm sales for all 1997 Agricultural Census farms shows that these CSA farms typically had greater gross farm income than most U.S. farms (figure 18). Nearly 63 percent of the CSA farms had gross farm income that exceeded \$20,000 compared to 38.5 percent for the Agricultural Census farms. Two measures of farm income were compared, gross farm income and CSA income. These two incomes were positively associated; however, comparing the two distributions showed that CSA income is more densely clustered in lower income categories (figure 17). About 58 percent of the farms had CSA income of less than \$20,000, while only 37 percent of the farms had gross farm income less than \$20,000. There are a number of farms for which the CSA organization represents a small part of total farm activity as seen in the land-use measures. These farms may be experimenting with CSA or may find limited demand for their CSA shares. These farms may also represent the potential for future expansion of the CSA concept.

CSA farms earned income from a variety of sources as noted above. Our interest was in the CSA enterprise. The typical CSA farm provided produce to their shareholders 24 weeks per

season. Mean and median CSA income were 33,541 and 15,000, respectively (table 9). The typical CSA farm is best characterized using the median to avoid the pronounced effect that large farms have on the mean. Shares are sold in a variety of ways. Full shares are most common and typically serve 2 - 5 people. The median number of full shares sold was 30 at a price of \$400. The median number of half shares sold, which serve 1 - 3 people, was 22 at a price of \$250.

Many CSA farms – 73.5 percent of the farms that responded - organized social and educational events for their shareholders and their communities. These events included potluck dinners, farm tours, events for children of shareholders, educational programs for the community and local schools, and many other innovative events to bring the community closer to the farm. 56 percent farms responding indicated that they offered low-income programs for their communities. These included donations of unclaimed shares, organizing donations from shareholders, donating a portion of the harvest to food banks, scholarships and many others. Perhaps the most popular form of low-income program was to trade shares for work or barter.

It is common in U.S. agriculture for farmers to rely on off-farm income and the proportion of farm household income from non-farm sources has increased over time. But CSA farmers appear to be less reliant on non-farm income. The greatest percentage of all CSA farmers had non-farm income of less than \$1,000 and nearly 58 percent of the individuals listed as "Farmer A" had non-farm income less than \$10,000 (figure 19). Considering all CSA farmers ("Farmers A, B and C") who responded to this question, just over 55 percent had non-farm income of less than \$10,000.

The CSA farms surveyed appear to be faced with a challenging financial situation based on the summary statistics presented above. But, are the farmers generally dissatisfied with their financial situation and their quality of life? We asked and found that smaller percentages of farmers were unsatisfied than were satisfied with the following aspects of their farm: their ability to cover operating costs; their level of stress and quality of life; the workloads for them and their workers; and community involvement (tables 11 and 12). We found greater percentages dissatisfied with their own compensation and their financial security. But, we also found that these farmers felt the CSA operation was helping to improve their situation. Importantly, a majority of the farmers surveyed felt the CSA improved their ability to meet farm costs, their own compensation, their quality of life, their ability to maintain and improve soil quality and community involvement. CSA is an important farm enterprise for these farmers both for financial and psychic reasons.

## 2001 CSA Farm Survey Results

## Introduction

During spring of 2002, a survey questionnaire was mailed to 902 CSA farm operators. Twenty-three questionnaires were returned as undeliverable and an additional 38 individuals wrote or phoned to tell us that they no longer had a CSA operation. Of the remaining 841 questionnaires, 354 were returned complete, or at least partially so, a response rate of 42 percent.

The survey questionnaire was designed to help meet several goals. First, the survey contributes to maintaining a national listing of active CSA operations through the Robyn Van En Center. Ninety-three percent of the CSA operations indicated that they wished to have their CSA information listed on the Robyn Van En Center web site (table 1). Second, the survey contributes to maintaining a list of CSA community members willing to participate in a variety of activities that support the CSA movement. Our final goal was to gather data on CSA farm information that would allow us to characterize active CSA farm operations. The information gathered to meet our final goal included three broad categories of CSA farm and operator characteristics: General CSA and Farm Characteristics, Operator Characteristics, and Farm and Family Income. Sections below correspond to data gathered from those parts of the survey questionnaire. As an introduction to the data used in this study, we first summarize a few questions that describe the sample of CSA farms obtained from our survey. Did the farms surveyed operate a CSA during 2001? Will they continue to operate in 2002? What proportion of the CSA community members are willing to participate in or contribute to the advancement of CSA? What is the distribution of CSAs across the country?

Table 1 provides some basic information on the sample of CSA farms that responded to the survey.<sup>1</sup> Initially, respondents were asked if they operated a CSA in 2001. Of the 354 respondents, 3 farms did not respond to the question. Eighty-nine percent of the remaining 351 CSA farms did operate in 2001 (314 CSAs) and 11 percent (37 farms) did not operate in 2001. They were then asked if they planned to have a CSA operation in the year 2002. There were 349 respondents, of which 92 percent (321 CSAs) planned to operate their CSA in 2002. The remaining eight percent (28 CSAs) did not plan to operate in 2002. Of the 314 CSAs that did operate in 2001, 96% (299 farms) planned to operate in 2002 as well. Of the 37 farms that did not operate in 2001, 22 (59.5%) planned to operate in 2002. Thus, there were 15 CSAs that returned a survey but did not operate in 2001 and did not plan to operate in 2002. The respondents that did not operate their CSA in 2001 are not included in the analyses below that describe the characteristics of CSA farms and farmers for the 2001-year.

Thirty-two of the CSA farms, about 9 percent of all CSAs surveyed, discontinued their CSA operation or were planning to discontinue their CSA operation in the near future.<sup>2</sup> Various

<sup>&</sup>lt;sup>1</sup> Most farms with CSA operations employ several means of marketing their products. To keep the text concise in this report, we'll refer to these farms as "CSA farms" throughout the document regardless of whether the CSA operation represents ten percent or 100 percent of the farm's activity.

<sup>&</sup>lt;sup>2</sup> Comparison of the number of CSA farms that did not plan to operate in 2002 and the number of farms that planned to discontinue their CSA operation suggests that some CSAs were planning to operate through 2002 and then discontinue their operation.

reasons for discontinuing operation were given on the survey questionnaire as well as an openended category. The number of CSAs that chose each response are shown in table 1. The greatest proportion of the 32 farms (50 percent) cited reasons other than those given on the survey to explain why they were discontinuing or planning to discontinue their operation. Five of these 16 farms indicated they were only leaving temporarily and that they planned to start their CSA again within a year or two. An additional three of these 16 farms cited personal and environmental (weather and infestations) reasons. Insufficient income was the next most common reason for discontinuing their CSA; 34.4 percent of the farms that were discontinuing chose this reason. Lack of members and demand issues accounted for 21.9 percent of the exits from CSA and "burn-out" was the reason cited by an additional 12.5 percent of the CSAs that discontinued operating. Considering the CSA farms that operated in 2001, we found that just 5.4 percent (17 farms), planned to discontinue their CSA operation. Thus, the retention rate for CSA farms is estimated to be over 94 percent based on this sample of CSA farms.

% of Total	Number	
93.4	346	Do you wish to have your CSA farm information listed on the Robyn Van En Center web site?
89.5	351	Did you have a CSA operation in 2001?
92.0	349	Will you have a CSA operation in 2002?
/?	ration, why?	If you have discontinued, or are planning to discontinue, your CSA ope
	32	Total number of respondents: <sup>a</sup>
3.1	1	Health reasons
34.4	11	Insufficient income
21.9	7	Lack of members/demand
9.4	3	Relocated
12.5	4	Burned out
6.3	2	Retired
50.0	16	Other
	16 me responde	Other <sup>a</sup> Note: Frequencies do not sum to 32 and percentages do not sum to 100 as so than one reason for discontinuing.

# Table 1. CSA farms operating and reasons for having discontinued or planning to discontinue CSA operation.

We also wanted to assess the willingness of respondents to participate in or contribute to extending the CSA concept. All 354 respondents are included in this appraisal of resources available from the CSA community. Table 2 shows the number of CSA farmers responding and the percent of farms that said "yes" to questions about their willingness to engage in future activities that support CSA. One form of support would be for the CSA farms to provide valuable information for research on CSA operations and their activities. Most farmers who responded to this question, nearly 94 percent, said they would be willing to participate in future research and information gathering activities. The survey respondents represent a sizable group of CSA farmers from across the country who would be willing to provide technical assistance to CSA farms in their region -67 percent of those that responded (n = 333) would do so on a volunteer basis, 15 percent would do so for a fee. An even greater percentage (nearly 88 percent) would be willing to be a speaker or be interviewed about CSA. CSA farmers also expressed interest in participating in another survey assessing how CSA enhances their farm's viability, with 87.8 percent willing to do so. In fact, nearly all CSA farmers were willing to offer assistance of some form. Of the 354 respondents, 333 or 94.1 percent responded positively to at least one of the five questions shown in table 2. The CSA farmers represent a tremendous pool of talent willing to extend the CSA movement.

Table 2. CSA farmers willing to help strengthen CSA.		
Survey Question	Number Responding (n)	Percent "Yes"
Are you interested in participating in future research and information collection activities related to CSA?	344	93.6
Are you interested in providing technical assistance to CSA farms in your region?	333	
Yes, on a volunteer basis.		67.3
Yes, for a fee.		14.7
Would you consider being a speaker or being interviewed about CSA?	338	87.6
Are you interested in participating in research by completing an additional survey?	337	87.8

Nearly all CSA farms (353 of the 354 farms) provided information on their location (table 3). The survey respondents are distributed across 43 different states. New York had the greatest number of CSA farms responding (32), representing about 9 percent of the total number of CSA farms that responded. Pennsylvania and Wisconsin followed with 24 CSA farms each. California, Massachusetts and Washington all had 23 CSA farms that responded. Oregon (18), Minnesota (17), Iowa (14), and Colorado, Connecticut and Ohio, each with 12 respondents, rounded out the "top twelve" states for number of CSA farms in the data set. These twelve states represented 234 CSAs, 66.3 percent of the total. If we include Vermont (11 CSA farms), we have nearly 70 percent of the respondents. It is difficult to know whether the distribution of farms in our CSA data set is representative of the population of CSA farms across the U.S., because there is no comprehensive census that has been conducted to use in comparisons.

These introductory statistics included all respondents to the 2001 national CSA survey. The analyses below provide a summary of the CSA farms that operated in 2001; the data used in further analyses will be reduced to the 314 farms that operated in 2001.

Table 3. States represented by CSA farms surveyed.										
State	Number of Farms	State	Number of Farms	State	Number of Farms	State	Number of Farms			
NY	32	OH	12	TN	5	GA	2			
PA	24	VT	11	FL	4	IL	2			
WI	24	MI	8	IN	4	ND	2			
CA	23	NH	8	RI	4	AZ	1			
MA	23	VA	8	ID	3	LA	1			
WA	23	MD	7	KS	3	MT	1			
OR	18	ME	7	NM	3	NV	1			
MN	17	МО	6	TX	3	SC	1			
IA	14	NJ	6	AK	2	UT	1			
CO	12	KY	5	AL	2	WV	1			
СТ	12	NC	5	AR	2					

# **CSA Farm and Operator Characteristics**

One of our primary objectives in conducting the CSA survey was to collect and summarize general information about CSA operations. The information gathered from survey respondents is summarized below in three sections for CSA farms that operated in 2001. In the first section, summary statistics are provided for general CSA farm characteristics. The second section provides summary statistics on the CSA farmers. The third section creates a picture of CSA farm and off-farm income.

#### **General CSA Information**

A number of general characteristics of CSA operations are summarized in table 4. In presenting summary statistics, we try to characterize CSA operations by providing a picture of how the values for variables that describe CSA operations are distributed. The most commonly used summary measure is the mean or average. The mean or average provides a value familiar to all, but the mean may be affected by very large or very small values in the data. In such cases, the median, or the value in the middle of the distribution, better illustrates what is typical among CSA farms for the variables discussed. Bar charts have also been included to illustrate how the data are distributed.

CSA farms are still relatively young as indicated by the number of years they have been in operation. On average, the current CSA farms of those responding to this survey were in operation for 5.7 years; the median number of years of operation was lower at 5 years. The distribution presented in figure 1 shows that CSA operations are new to most farms. The modal response was just 2 years and 75 percent of all CSA farms have been in operation 8 years or less. The first and third quartiles (Q1 and Q3 in table 4) tell us that 50 percent of the CSA farms have been in operation from 3 to 8 years. Just 12 percent indicated they have been in operation for more than 10 years. The *youth* that is represented by CSA farmers is also borne out later when we review our survey results for the farmer characteristics age and experience.

Table 4: General CSA operation characteristics.										
CSA Characteristic	n	Mean	Standard Deviation	Median	Q1	Q3				
Years in operation	310	5.7	3.6	5	3	8				
Total acres operated (no. acres)	305	58.9	142.2	15	5	50				
Cropland acres operated (no. acres)	302	25.0	74.3	7	2.7	20				
CSA acres operated (no. acres)	292	7.2	20.5	3	1.6	6				
Total acres owned by operator (no. acres)	286	57.9	126.9	18	2	60				
Total acres - all other land-use agreements (no. acres)	246	29.9	54.1	7	0	29				

The CSA survey respondents reported the amounts of land used in several categories of land use. Table 4 presents the average number of acres in each category as well as the median. Comparing the means and medians for the land use measures illustrates that the median, the data value in the center of the distribution, is a better measure of land-use for the typical CSA farm. For example, the mean CSA farm size as measured by the total number of acres operated is about 59 acres,



while the median farm size is just 15 acres. A few very large CSA farms affect the mean number of acres operated.

Figure 2 compares the distribution of CSA farm size measured by *land operated* to the *land in farms* measure reported in the *1997 U.S. Census of Agriculture*, which are comparable measures of farm size. The size classes in figure 2 are those used by the Census of Agriculture

in reporting land in farms. The graph illustrates what was anticipated, CSA farms tend to be smaller than U.S. farms in general. More than 72% of the 305 CSA farms that reported the amount of land operated were evenly distributed between the two classes: *less than 10 acres* and *10 to 49 acres*. For the U.S. in general, those same two categories contained fewer than 30% of all farms. The CSA and U.S. distributions are somewhat similar through the 50 to 139 acre farm size classes; relatively few CSA farms exist in the largest farm size classes.



Greater detail on the distribution of land operated for the CSA farms surveyed is shown in figure 3. In particular, the smaller size categories have been broken down further to illustrate the more frequently observed farm sizes. The most common size category was 2 to 5 acres (19.3 percent) followed by farms of 5 to 10 acres (nearly 13.8 percent). However, the distribution does illustrate that there are a number of large CSA farms. Just over 20 percent operated 70 acres or more and about 14 percent operated 100 acres or more. For a distribution skewed to the right, as is this one, the average farm size (58.9 acres) is greatly affected by the large farms in the data set. The median of 15 acres provides a better indication of the typical CSA farm size; half the farms operated less than the median of 15 acres and half the farms operated more than 15 acres.



A large proportion of CSA operations do not own the land they operate. Figure 3 also shows the distribution of acres owned by the CSA farm. The graph uses the same categories as "acres operated" and shows that nearly 25% of the farms owned fewer than 2 acres. However, most of the farms in that category, 67 out of 70 farms or 23 percent, indicated they owned no land. We also need to be cautious when interpreting summary measures of land owned. While table 2 showed that CSA farms owned nearly 58 acres on average, more than 70% of the farms owned fewer than 50 acres of land.

Two other measures of land-use by CSA farms were collected, the amount of cropland and land used for the CSA operation. Information on the amount of cropland was provided by 302 of the farms and 292 farms told us how much land was used for their CSA operations. Figure 4 shows the distribution of CSA farms by both cropland acreage and acreage used for the CSA operation. These distributions are also skewed to the right. Large farms in the data set affect the mean of 25 acres making it a poor indication of typical CSA farm scale. In fact, 75 percent of the CSA farms had fewer than 20 acres of cropland as indicated by the third quartile. The median of 7 acres of cropland provides a better measure of what is typical for the amount of cropland on CSA farms and 50% of the farms had between 2.7 and 20 acres of cropland. While only twenty-five percent of the farms had 20 acres or more of cropland, there were large CSA farms. Over 5 percent had 100 acres or more of cropland and the largest farm reported 900 acres of cropland. The distribution of CSA acreage is also skewed as shown in figure 4. The median of just 3 acres indicates what is typical for acreage devoted to the CSA operation. Most farms (84 percent) used fewer than 10 acres for their CSA operation and over 65 percent used fewer than 5 acres for the CSA operation. Figure 4 shows that CSA operations represent only a portion of the farm's activity.



The CSA enterprise may be one of several farm enterprises allowing farms to spread risk, to experiment with managing a CSA or to test the local market for CSA. CSA represents just one enterprise or form of marketing among a number sharing the farm's land resources. To further illustrate this feature of CSA farms, two ratios of land used for the CSA operation were created: a ratio of acreage used for the CSA to total acreage operated, and a ratio of acreage used for the CSA operation to the number of acres of cropland. A value of 0.1 for the first ratio indicates that 10% of all land operated is used for the CSA operation; a ratio of 1.0 would indicate that all land operated was used by the CSA. Interpretation of the second ratio is similar comparing CSA acreage to cropland acreage. Because most CSA farms provide vegetable crops, the second ratio provides an estimate of the proportion of crop production represented by the CSA operation. Figure 5 shows the proportion of farms in each category for these ratios. The greatest percentage of farms (26.7%) used less than 10 percent of their land for the CSA operation. However, a number of farms are focusing on their CSA operation as the primary farm activity. Almost thirty percent of the farms used at least half of their land for the CSA operation and nearly 15 percent (41 farms) used between 90 and 100 percent of their landoperated for the CSA operation. Comparing cropland use illustrates that many CSA farms are devoting a large share of their cropland to the CSA enterprise. Nearly 36 percent of the CSA farms use 90 percent or more of their cropland for the CSA operation and over 55 percent of the CSA farms used more than 50 percent of their cropland for the CSA operation.

Relationships between the proportion of land used for the CSA operation and other land variables provide some additional information on CSA farms. The ratios we created are negatively and significantly correlated with both total land operated and the amount of cropland.<sup>3</sup> Thus, smaller farms with fewer acres of cropland are more likely to devote a larger proportion of their land to their CSA operation. For example, farms with a ratio of CSA land to land operated in the



highest category (0.9 to 1.0) operated 9.5 acres of land, on average; the median number of acres operated for these farms was 3 acres. By comparison, CSA farms with a ratio of CSA land to land operated in the lowest category (less than 0.1) operated 69 acres on average; the median number of acres operated for these farms was 12.5 acres. Thus, most CSA farms that focus exclusively on their CSA operation are smaller farms. The same relationship exists for the ratio of CSA acreage to cropland acreage.

What other methods do these farms use to market their products? Figure 6 shows the percentages of all 2001 CSA farms (314 farms) that used one or more marketing methods in addition to their CSA operation. (Many farms used more than one additional marketing method.) Both farmers markets and direct marketing to restaurants and retail stores were used by 53 percent of the farms. Roadside stands and on-farm sales were also popular methods; a combined 50 percent of the farms used these two methods to sell



directly to consumers. Most farms used a variety of methods to market their products. Only about 16 percent did not indicate an additional method of marketing and 22 percent of the farms used just one method in addition to their CSA operation. The majority of the farms, 63 percent, used two or more marketing methods in addition to their CSA operation.

<sup>&</sup>lt;sup>3</sup> Negative correlations measured between the ratio of CSA land to land operated, the number of acres operated and the number of acres of cropland occur by chance less than 1 percent of the time; both correlations were different from zero at the 1 percent level of significance. For the ratio of CSA land to cropland, the negative correlations between land operated and cropland acreage were different from zero at the 10 percent level of significance.

Figure 3 illustrated that differences exist between the amount of land owned and operated. If the CSA farms did not own the land they operated, then other land-use agreements must be important. Figure 7 shows the distribution of acreage used by the CSA through some other arrangement. The most frequent response was *zero*, 29 percent of the 246 farms responding did not have any other land use agreements. An additional 23 percent of the farms

responding had other agreements for 2 to 5 acres or 5 to 10 acres. While table 4 indicated that an average of almost 30 acres were under other agreements, over 75 percent of the farms had other agreements for fewer than 30 acres or no such agreements. The median of 7 acres under other agreements is a better indication of what is typical for the CSA farms surveyed.



These other arrangements could include rental agreements, long-term leases, and ownership by a CSA organization (other than the farmer) or a land trust. Figure 8 shows that most land-use agreements, over 68 percent, were made with private landowners. The next most popular category, *other*, accounted for about 17 percent of the arrangements and included a number of non-profit organizations (universities, churches, conservation organizations, etc.),

family arrangements as well as towns and other institutions. The remaining three categories, government, CSA organizations and land trusts accounted for about 15 percent of landuse agreements. While we can not determine exactly how this land contributes to the CSA operation, it is clear that other land-use agreements are important to the success of CSA farms.



Table 5. Number of workers and total hours worked on 2001 CSA farms.										
	Nur	mber of F	People	Estim	Percent Baid a					
	n <sup>1</sup>	Mean	Median	$n^1$	Mean	Median	Pala a Wage			
Growers	271	1.79	2.0	187	2479	2160	35.0			
Family of Growers	105	2.43	2.0	69	932	400	11.8			
Workers (incl. interns, apprentices, etc.)	215	4.13	3.0	167	2370	1000	48.1			
Members	124	14.9	6.0	105	326	120	0.0			
Other	32	23.7	3.5	30	547	275	3.2			
<sup>1</sup> The number of farms reporting.										

Another CSA farm scale measure is the number of workers that worked for the CSA operation. Table 5 shows the different types of labor reported by the CSA farms, the number of workers, the estimated total hours for 2001 and the percent of workers that were paid a wage. The typical farm had 2 growers working a combined 2160 hours. Farms most frequently reported one grower (121 farms) or two growers (119 farms). About 35 percent of the growers said they were paid a wage. Many listed other forms of compensation such as net returns from the farm. Life style and peace of mind were important and very common responses when asked what other forms of compensation were given. Family members contributed labor as well with just 12 percent receiving a wage. Two family members were typical with over 86 percent of the farms reporting one, two or three family members contributing labor.

The third category reported includes hired labor as well as interns and apprentices. There was a wide distribution of the number of workers, from 1 to 30, but nearly 68 percent of the farms reporting used between one and four workers. About half these workers were paid a wage with other forms of compensation including room and board and the educational experience. Members also represent a sizeable labor resource for some farms; the number of hours contributed by members was as great as 3,000 hours.

These data provide a limited picture of the typically diverse nature of labor arrangements on CSA farms. They also suggest an area where more research would be useful. It is difficult to assess accurately the amount of hired labor used for the CSA operation. CSA farms rely on unpaid operator, family and member labor as well as hired labor, the amounts of which are difficult to evaluate using a survey questionnaire. Real problems may arise if these inaccurate measures of labor used on CSA farms, hired or otherwise, are correlated with other CSA farm variables to draw conclusions from the data.

Table 6 presents a summary of the cultural practices used on the CSA farms surveyed. Respondents were asked to characterize their operation as: certified organic; organic, but not certified; biodynamic; or to list another form of cultural practice. Many farms listed more than one cultural practice, typically a combination of organic and biodynamic. Of the 7 percent that listed other cultural practices, many listed practices that were organic or sustainable. Some

Table 6. Cultural practices used on CSA farms.		
Cultural practice	Number	% of Total
Certified Organic	134	42.7
Organic, not certified	128	40.8
Biodynamic	11	3.5
Certified Organic and Biodynamic	10	3.2
Organic and Biodynamic	7	2.2
Other	23	7.3
No Response	1	0.3
Total	314	100.0
A number of farms listed more than one of the cultural practices. We selected	d a single category w	here appropriate.

practices suggested transitions to organic or biodynamic methods of producing. If we included those farms with the group of organic and biodynamic producers, more than 96 percent of the respondents followed some form of organic or biodynamic production, nearly half as certified organic or biodynamic farms. The conclusion is that virtually all CSA farms surveyed practiced some form of sustainable or environmentally friendly production.

Finally, in terms of general CSA farm characteristics, we asked about the legal business organization of the farm. The CSA farm survey results are compared to the 1997 U.S. Agricultural Census results for all farms in figure 9. The popular forms of organization on CSA farms are somewhat different. CSA farms had a smaller percentage of individual operator/sole proprietorship farms (63 percent compared to 86 percent). CSA farms had higher percentages of

partnerships (12.2 percent vs. 8.9 percent) and corporations (11.6 percent compared to 4.4 percent). CSA farms were also more likely to have some alternative form of organization; over 13 percent listed an alternative form of organization compared to less than 1 percent for the 1997 U.S. Agricultural Census farms. The *other* category for the CSA farms was dominated by not for profit farms; nearly 12 percent were not for profit organizations.



#### **CSA Farmer Characteristics**

An important goal of the survey was to use the responses to learn more about CSA farmers/operators. A number of questions were included that allowed us to characterize each of the individual farmers operating CSA farms. Summary statistics presented in table 7 help to characterize the ages and farm experiences of the CSA farmers. The mean age was 43.6 years for "Farmer A," presumably the primary farm operator. A second farmer ("Farmer B") was reported for 205 CSA farms and 43 farms reported a third farmer ("Farmer C"). The ages of these two farmers were 41.8 and 38.6 years, respectively. Age distributions for all three CSA farmers are presented in figure 10. While the distributions for "Farmer A" and "Farmer B" seem

skewed slightly, the effects are small. Mean and median ages were very close for these farmers. The distribution for "Farmer C" and the difference between the mean and median (33 years of age) shows that this is primarily a group of young farmers; the mean was affected by a number of individuals who were 70 years of age and over.



Table 7. CSA farmer characteristics.												
Operator Characteristics	n	Mean	Standard Deviation	Median	Q3							
Farmer A:												
Age	311	43.6	10.4	44.0	35.0	51.0						
Years Farming	306	12.9	10.0	10.0	6.0	18.0						
Years as CSA Farmer	307	5.6	3.5	5.0	3.0	8.0						
Farmer B:												
Age	205	41.8	11.1	42.0	34.0	50.0						
Years Farming	201	10.4	9.6	7.0	4.0	13.0						
Years as CSA Farmer	197	4.8	3.1	4.0	2.0	7.0						
Farmer C:												
Age	43	38.6	18.4	33.0	23.0	52						
Years Farming	41	10.2	11.0	7.0	3.0	14.0						
Years as CSA Farmer	40	4.4	3.3	3.5	2.0	6.0						

One concern that has been voiced about U.S. agriculture in general is that the farm population is aging. There is concern that farming does not draw young entrants, but we find evidence to suggest that young farmers are drawn to CSA farming. The youth of the CSA movement is in sharp contrast to U.S. agriculture in general. The age distribution of U.S. farmers was obtained from the 1997 U.S. Census of Agriculture. The Census data are for the primary farm operator. According to the U.S. Census of Agriculture, the average age of farm operators has increased from 52 in 1987 to 53 in 1992 and 54 in 1997. In figure 11, the age distribution for CSA "Farmer A" is compared to the age distribution for the 1997 U.S. Census of Agriculture farm operator. We find evidence contrary to the picture painted by the general U.S. agricultural population. CSA "Farmer A" was ten years younger, on average, than the average U.S. farmers are much younger than U.S. farmers in general. While 51 percent of CSA primary farm

operators (using "Farmer A" for comparison) were younger than 45 years of age, only about 27 percent of all U.S. farm operators were younger than 45 in 1997. Only 12.5 percent of CSA farmers were age 55 older compared to 48.4 percent for U.S. farm operators. The comparison illustrates the youth that exists in CSA operations, which provides a strong foundation of CSA farmers for the future. The CSA age distribution shows a higher proportion of farmers in the age group, 25 to 34. This group represents new entrants into farming, a characteristic not present in U.S. agriculture in general.

Table 7 also provides summary statistics for the number of years of farming experience and CSA experience for all three farmers. "Farmer A" had been farming 12.9 years, on average, as of January 2001; the median number of years farming was 10. These statistics and the distributions our three CSA farmer variables shown in figure





12 illustrate the fact that CSA is still a young movement. Forty-seven percent of those responding as "Farmer A" had fewer than 10 years of experience. Even greater percentages of

CSA "Farmers B" and "Farmers C" (60 and 66 percent, respectively) had been farming fewer than 10 years.

On average, "Farmer A" was a CSA farmer for just 5.6 years. CSA experience is fairly evenly distributed around the mean, with 53 percent of the farmers having fewer than 5 years experience (figure 13). CSA experience for "Farmer A" varied from less than 1 year to 20 years. The distributions for Farmer B were very similar; the greatest amount of experience was 15 years. Farmer C, being typically



younger, had fewer than 5 years of CSA experience on average.

Several demographic characteristics were gathered from the CSA farmers. About 97 percent of the farmers listed their ethnicity as White/Non-Hispanic. Typically 1 or 2 representatives of the remaining ethnic groups were included in the "Farmer A" and "Farmer B" cohorts. Thus, CSA farmers are generally not very diverse ethnically. Gender statistics present quite a different picture, especially when compared with the 1997 U.S. Agricultural Census

(figure 14). About 64 percent of the respondents listed as Farmer A were male and about 36 percent female, while the opposite distribution was found for Farmer B. Farmer C gender was split at about 60 percent female and 40 percent male. Figure 14 compares genders of CSA farmers with the U.S. Census of Agriculture farm operators. There is a striking difference between the CSA results and U.S. agriculture in general. For U.S. agriculture, there are slightly more female



farm operators in 1997 compared to previous years. In 1987, 6.3 percent of the farm operators were women. The percentage increased in 1992 (7.5 percent) and 1997 (8.4 percent). Of course, a single farmer is designated as the operator in the U.S. Census of Agriculture, so these percentages are likely lower bounds for the percent of women involved in U.S. farm operations. Still, there are apparently far more women farmers in the CSA movement than in U.S. agriculture in general.

Table 8. Levels of Education for CSA Farmers.											
	Farmer A		Farm	er B	Farmer C						
Level of Education	Number	Percent	Number	Percent	Number	Percent					
Less than High School Diploma	4	1.3	3	1.5	0	0.0					
High School Diploma	20	6.5	9	4.5	6	15.0					
Some College	54	17.4	45	22.3	14	35.0					
College Graduate	160	51.6	99	49.0	15	37.5					
Graduate Degree	72	23.2	46 22.8		5	12.5					
Totals	310	100.0	202	100.0	44	100.0					

The educational levels for CSA farmers are presented in table 8. CSA farmers are a highly educated group. Nearly all of the individuals completed high school; only 1.3% of the total number of farmers (552) indicated they had not completed high school, and several of these

individuals were of the age that suggests they were still in high school at the time of the survey. Most of the primary CSA farmers (Farmer A) attended college; more than 74 percent had a college degree and 23 percent had a graduate degree. Figure 15 shows that these levels of education are consistent across the three CSA farmers for whom data were collected with nearly seventytwo percent of all CSA farmers having a college degree. Overall, more than 22 percent also had graduate degrees.



## **Farm and Family Income**

Many CSA farms are family owned and operated and their farm and family incomes reflect a range of opportunities and resources. The CSA operation is just one of the opportunities available to generate farm income. In this section, we try to piece together a picture of the income opportunities from both farm and off-farm sources.

#### **CSA Farm Income**

CSA farms generate income by selling shares of vegetables and other products in a variety forms. To try and summarize the shares sold by CSA operations, we asked the farmers to report the number of "full shares," "half-shares," and "other shares" that were sold. Shares on different farms represent different bundles of food and other products, so our summary is offered with caution: But, the "share" is the most commonly discussed measure of CSA output, hence our decision to report these summary figures. We summarize the numbers of shares and prices for the different shares; the prices capture to some degree the variation in share composition.

The season for these farms also varies, typically lasting from May into October. The CSA farms surveyed provided produce to their shareholders for an average of 24 weeks, or just over 5 months. Figure 16 shows that this was quite typical; the length of season did not vary greatly across the CSA farms surveyed. Over 45 percent provided produce for 20 to 24 weeks and nearly 83 percent of the farms provided produce between 15 and 29 weeks. There were a number of CSA farms (about 3 percent) that did offer winter shares and operated year-round.



Shares also vary by the content and the number of people they are to serve. We tried to get a sense of how much each share contained by asking how many people the share was intended to serve. On average, a full share served 3.7 people, with 60 percent of the farms responding that their full shares served four people. Full shares for most all farms surveyed (97.3 percent of the respondents) served between 2 and 5 people. For half shares, the average number of people served was 2.1, with 97 percent of the farms responding that their half shares were designed to serve one to three people. There was little variation in the distributions for the number of people served by full and half shares. A number of farms indicated they produced other types of shares. These included working shares for core-group members, low income shares, donated shares, flower shares and animal product subscription shares to name but a few. On average, these shares served 5.5 people, but there was a great deal of variation making this

Table 9: CSA Income: reported shares, prices and income for all respondents.											
CSA Income Source	n	Mean	Standard Deviation	Median	Q1	Q3					
Number of full shares	289	56.2	91.0	30	11	60					
Price per full share (\$)	295	\$429	\$193	\$400	\$340	\$500					
Number of half shares	144	47.1	70.5	22	9	60					
Price per half share (\$)	146	\$282	\$172	\$250	\$200	\$320					
Number of Other Shares	93	35.0	68.8	11	4	40					
Price per Other Share (\$)	87	\$270	\$257	\$200	\$100	\$335					
Income from CSA Operation (\$)	293	\$33,541	\$56,995	\$15,000	\$6,000	\$32,000					

statistic of only casual interest. With these caveats in mind, we'll review the results from the survey shown in table 9.

The CSA survey respondents sold about 56 full-shares and 47 half-shares, on average (table 9). These summary statistics were also affected by large values in the data set; the median numbers of full-shares and half-shares were 30 and 22, respectively. While the data for numbers of shares were skewed to the right, the corresponding price data do not appear to be affected by large values. A full share sold for about \$429 and a half-shares sold for about \$282, on average in 2001. Both these means are close to there respective median values. The standard deviations for the two price variables were relatively small reflecting distributions that were clustered fairly tightly around the mid points. Fifty percent of the CSA operations sold their full-shares at prices that ranged from \$340 to \$500. The range of half-share prices for the middle 50 percent of the CSA operations was \$200 to \$320. The CSA operations also sold a variety of other types of shares too numerous to list here. Ninety-three CSA operations reported selling about 35 "other shares" at \$270 per share, on average. The standard deviation for the prices of these "other shares" is quite large due to the tremendous range of values for these shares, from just a few dollars to nearly \$1,200. There was also a large standard deviation for full-share price, from a few dollars to \$4000. The variability of CSA shares illustrates the ability and willingness of the farms to serve the needs and desires of the shareholders.

In addition to selling shares, many CSA operations offered additional benefits to the community through social or educational events and low-income programs. While these programs typically don't enhance farm or family income, they're certainly an important product or output of the CSA organization and they are important to the goals of the CSA operators. Social and educational events were organized by 227 CSA farms representing 73.5% of the farms that responded to the question. A great variety of events were offered, including potluck dinners, farm tours, events for children of shareholders, educational programs for the community and local schools, and many other innovative events to bring the community closer to the farm. 173 farms, 56% of the 308 farms responding, indicated that they offered low-income programs for their communities. These included donations of unclaimed shares, organizing donations from

shareholders, donating a portion of the harvest to food banks, scholarships and many others. Perhaps the most popular form of low-income program was to trade shares for work or barter.

CSA respondents were also asked to report their CSA income. On average, income from the CSA operation was \$33,541 for the farms that responded. Again the mean does not reflect the center of the CSA income distribution very well; median income from the CSA operation was \$15,000. Fifty percent of the operations had CSA income between \$6,000 and \$32,000. Comparison of the mean to the upper end of this range shows the effect of large CSA operations on the mean. The value for the mean falls within in the 75<sup>th</sup> percentile of the income distribution.

We calculated CSA share income by combining the number of shares sold and share price data for CSA operations that reported both the numbers of shares sold and the prices of those shares (table 10). This provides a comparison to the reported CSA income, a valuable way of checking our data. The two values will vary because some CSA farms offer other products to their CSA shareholders when they stop by the farm to pick up their shares. However, it appears that most of the CSA income is from shares and some farms did not answer the final question on CSA income. The mean and median CSA share incomes that we calculated, \$33,730 and \$15,798, are quite close to the mean and median incomes determined from the data reported by the farms (table 10). The most popular (289 respondents) and largest source of CSA income is from sale of "full shares," \$24,278 on average.

In the final section of the survey, we inquired about both the gross farm income and the non-farm incomes of the farmers. Gross farm income data were gathered by asking the respondent to select the income category that matched their farm. The categories and responses in each category are shown in figure 17. Thirty-seven percent of the farms had gross farm income of less than \$20,000, while 63 percent had gross farm income of \$20,000 or more. The gross farm income category with the greatest response (nearly 17 percent) was \$50,000 to \$99,999, a fairly wide income category. The distribution of gross farm income for CSA farms appears "bi-modal" with over 16 percent of the farms reporting gross farm income in the \$10,000-\$19,999 range.

Table 10. Mean and median CSA share income calculated from share information.											
	n	Number of Shares	Mean Share Price (\$)	Mean Share Income (\$)	Median Share Income (\$)						
Full shares	289	56.2	\$425.12	\$24,278.40	\$12,000.00						
Half shares	142	47.2	\$276.57	\$16,419.87	\$5,377.50						
Other shares <sup>1</sup>	83	38.0	\$270.24	\$8,474.89	\$2,750.00						
Calculated CSA share income	298	88.0 <sup>a</sup>	\$357.96 <sup>b</sup>	\$33,729.85	\$15,797.50						
<sup>a</sup> Number of shares represents the ave	rage nur	iber of shares	sold of any type.								

<sup>b</sup> Average share price is a weighted average of the different types of shares sold where numbers of shares are used as weights.

Figure 17 also provides a comparison of CSA income to gross farm income. A categorical variable for CSA income was created using the same income categories that were used for gross farm income. The two variables are closely related; greater CSA income is associated with greater gross farm income. However, when comparing the



two distributions, we can see that CSA income is more densely clustered in lower income categories. About 58 percent of the farms had CSA income of less than \$20,000, while only 37 percent of the farms had gross farm income less than \$20,000. As we saw above when comparing total land operated to land used for the CSA operation, there are a number of farms for which the CSA organization represents a small part of total farm activity. These farms may be experimenting with CSA or may find limited demand for their CSA shares. These farms may also represent the potential for expansion of the CSA concept.

Most farms fit into the "small farms" category. However, comparing the CSA farms' gross farm income to the value of farm sales for all 1997 Agricultural Census farms shows that the CSA farms typically had greater gross farm income than most U.S. farms (figure 18). Nearly 63 percent of the CSA farms had gross farm income that exceeded \$20,000 compared to 38.5 percent for the Agricultural Census farms.



It is common in U.S. agriculture for farmers to rely on off-farm income and the proportion of farm household income from non-farm sources has increased over time.<sup>4</sup> However, as shown in figure 19, the greatest percentage of all CSA farmers had non-farm income of less than \$1,000 and nearly 58 percent of the individuals listed as "Farmer A" had non-farm income less than \$10,000. Considering all CSA farmers ("Farmers A, B and C") who

responded to this question, just over 55 percent had non-farm income of less than \$10,000. It appears that CSA farmers are less likely to rely on nonfarm income. As expected, non-farm income is negatively associated with CSA income and gross farm income. Non-farm income is also negatively associated with our various measures of farm size (number of acres operated, cropland and



CSA land); however, these negative associations are strong only for "Farmer B." Increasing farm size implies additional need for "Farmer B" to spend more time working on the farm. These relationships are consistent with those found in other studies of non-farm income.

<sup>&</sup>lt;sup>4</sup> An historical perspective is offered in Hallberg, M., J. Findeis and D. Lass, Multiple Job-Holding among Farm Families, Ames: Iowa State University Press. 1991.

## **Summary – the Farmers' Views**

This document serves as a summary of the national 2001 CSA survey and we also provided a terse summary of our results at the front of the document. Rather than offer our own views yet again, we will present a view from the farmers themselves. We asked the CSA respondents to indicate how they felt their farm was doing and how their CSA operation contributed to the farm. These two additional questions provide a convenient way of further summarizing our findings from the standpoint of the CSA farmer. The two questions and the percentage of CSA farmers choosing each response are shown in tables 11 and 12.

First, we asked the respondents to assess their level of satisfaction with different aspects of their farm as a whole. About 46 percent were satisfied (either *satisfied* or *very satisfied*) with their ability to cover operating costs. When asked to evaluate their ability to build and maintain the physical farm infrastructure, a clear consensus did not emerge. About equal percentages were unsatisfied and satisfied, 39 percent and 34 percent, respectively. The distribution of responses for their ability to compensate other workers was very symmetric; about 34 percent were unsatisfied, 32 percent neutral and 34 percent satisfied. Again, no clear consensus emerged. However, wages and benefits to the farmers appear to be costs that are not covered in a satisfactory manner. More than 48 percent were unsatisfied (either *unsatisfied* or *very unsatisfied*) with their own (the farmer's) compensation. This is often the case in agriculture in general as farmers are typically residual claimants on returns to their operations. More than 68 percent were unsatisfied with their financial security (health insurance, retirement, etc.); 32 percent of those respondents were *very unsatisfied*. While farmers are doing reasonably well in managing the farm to cover costs, they seem to neglect the costs associated with their own compensation.

The reality is that most farmers are not drawn to their profession because of high salaries and good benefits. When asked about quality of life issues, different conclusions can be reached. Over 57 percent of the farmers were satisfied with their level of stress and quality of life; fewer than 20 percent were unsatisfied. When asked about their workload, we found a very even distribution, but the greatest percentage of farmers was satisfied. More than 74 percent were satisfied with their ability to maintain or improve soil quality on their farm. While a consensus did not emerge for satisfaction with their own workload, more than 50 percent were satisfied with the workload for other workers. Finally, the greatest percentage of farmers rated community involvement as satisfactory.

How does the CSA operation affect farmer assessments of these same aspects of their farm as a whole? The CSA operation improves the farmer's ability to meet operating costs (73.4 percent chose *improves* or *greatly improves*) and farmer compensation (54.3 percent chose *improves* or *greatly improves*). In addition, the 42 percent said the CSA operation improved their ability to build and maintain physical infrastructure and 37 percent said their ability to compensate other workers was improved. A majority of respondents also said the CSA operation improve soil quality (52.4 percent), and community involvement (64.4 percent).

Young highly educated farmers, relative to U.S. farming, characterize the CSA movement. These farmers are highly motivated to contribute to the CSA movement, their communities and the environment. We know that farming in general represents a challenging profession for monetary reward and financial security; this appears true for the respondents to this survey. But, according to the respondents of this survey, farming provides a satisfying profession in terms of the quality of their life and their ability to contribute to the quality of life for their workers, their community and the quality of the environment. And, their CSA operation enhances these experiences.

Table 11. CSA farmer assessments of their level of satisfaction with the following aspects of their farm as a whole.							
		Very			Very		
	n	Unsatisfied	Unsatisfied	Neutral	Satisfied	Satisfied	
			Percent of	Responde	nts		
Financial ability to meet annual operating costs	305	5.3	25.9	23.0	33.1	12.8	
Farmer compensation	303	12.2	36.3	26.4	21.1	4.0	
Financial security for farmer including health insurance, retirement, etc.	298	31.9	36.2	16.8	9.1	6.0	
Financial ability to build and maintain physical farm infrastructure	301	13.0	26.6	26.3	28.2	6.0	
Farmer stress level/quality of life	301	2.3	17.6	22.6	43.2	14.3	
Maintenance or improvement of soil quality	306	0.7	6.9	18.0	47.7	26.8	
Workload for the farmer	305	4.6	26.6	32.1	32.8	3.9	
Compensation for other workers	269	6.3	27.1	32.3	27.1	7.1	
Workload for other workers	264	3.4	8.0	37.9	42.8	8.0	
Community involvement	302	7.3	16.6	32.5	31.5	12.3	

Table 12. Farmer assessments of the CSA operation's effects on the following aspects of their farm as a whole.							
		Greatly				Greatly	
	n	Undermines	Undermines	Change	Improves	Improves	
			Percent of	Responde	nts		
Financial ability to meet annual operating costs	293	2.4	7.5	16.7	48.8	24.6	
Farmer compensation	289	3.1	10.0	32.5	39.5	14.9	
Financial security for farmer including health insurance, retirement, etc.	285	8.1	16.1	53.0	17.5	5.3	
Financial ability to build and maintain physical farm infrastructure	281	3.9	10.7	43.4	35.9	6.1	
Farmer stress level/quality of life	285	2.1	14.4	26.7	41.4	15.4	
Maintenance or improvement of soil quality	290	1.0	3.1	43.4	33.1	19.3	
Workload for the farmer	284	3.9	22.2	40.5	27.5	6.0	
Compensation for other workers	257	2.3	9.7	51.4	31.9	4.7	
Workload for other workers	251	2.4	9.6	59.8	24.3	4.0	
Community involvement	284	2.1	3.9	29.6	40.5	23.9	