CSA Across the Nation: Findings from the 1999 CSA Survey

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Executive Summary

The Community Supported Agriculture (CSA) movement in the United States began on two East Coast farms in 1986. Since then, this movement has grown to include over 1,000 CSA farms that are linking growers and customers in unique ways.

The 1999 National CSA Farm Survey provides the first comprehensive portrait of the CSA movement in the U.S. The authors hope that this research provides helpful perspectives on the CSA movement, as well as grounds for honest evaluation and celebration. The overall portrait of CSA that emerges from this survey is characterized by interesting patterns of uniformity—what CSA enterprises have in common—contrasted with equally interesting patterns of diversity—how they are different from each other and the rest of U.S. agriculture.

Patterns of Diversity

• Farming operations. (pages 5-6) Farms with CSA enterprises tend to be small enterprises (Figure 3) and often have complementary farming or marketing strategies. Such diversity allows farms to generate multiple revenue streams, spread risk, or experiment with CSA farm management while maintaining existing enterprises. However, nearly 58% of the farms used at least half of their cropland for their CSA enterprises (Figure 6).

• Land tenure and business structure. (pages 6-9) While a majority of CSA farmers own the land they operate, a significant number of these farmers do not own land (Figure 7). Most CSA farmers have rental agreements with private landowners. Some, however, pursue non-traditional land tenure arrangements including land trusts, collective CSA farm ownership, and land use agreements with non-profit organizations or government agencies (Figures 8 and 9). Compared with the rest of U.S. agriculture, fewer CSA farm businesses are set up as sole proprietorships while more have non-traditional business structures. These structures include partnerships, co-ops and not-for-profit enterprises (Figure 11). Important to the success of some CSA farms, non-traditional land tenure and business models may also be important for other 21st century farming enterprises, particularly those with high land or capital costs.

• Age and gender. (pages 9-11) CSA farmers tend to be younger than the average U.S. farmer, with more women taking credit as primary operators. The average CSA farmer in this survey is a full ten years younger than his or her counterpart in the rest of U.S. agriculture. Coupled with data indicating that CSA farmers are relatively new to farming, a picture emerges of entry into farming through CSA (Figures 12-14). This picture is not present in most sectors of U.S. agriculture (Figure 12). While comparability with the U.S. Agricultural Census is not perfect, a much higher percentage of women in the CSA movement identify themselves as primary farm operators than in U.S. agriculture in general. Nearly 40% of primary CSA farmers in the survey were women (Figure 15).

• Income. (pages 12-16) This survey found a median gross CSA enterprise annual income of $15,000 and a median gross farm annual income between $20,000 and $30,000 (Figure 18). In addition, over 60% of the CSA farmers surveyed reported less than $10,000 in non-farm income (Figure 20). More than 60% of
the CSA farms had gross farm incomes exceeding $20,000 compared to about 39% of farms in the 1997 U.S. Agricultural Census (Figure 19). The annual median income for farms with core groups was about $10,000 higher than for non-core group farms (Table 7). For most of the farms in this sample, CSA was only one means of marketing their products. Over 13% of the farms surveyed used less than 10% of their cropland for their CSA enterprise, and about 37% used 90% or more of their cropland for CSA (Figure 6). These data suggest that CSA enterprises come in many forms and make varying contributions to total farm and household income.

Patterns of Uniformity

- **Geography.** (pages 2-3) CSA farms are concentrated in three geographic regions— the Northeast, the West Coast, and the North Central states. Over 50% of the CSA farms surveyed are located in 7 states—most in the northern tier—and over 80% are found in 16 mostly northern states (Table 2, Figure 1). These states have large metropolitan areas and an ample consumer base that might fit the profile of typical CSA members.

- **Sustainable farming systems.** (page 8) Virtually all CSA farms report using environmentally regenerative farming practices, with over 94% implementing organic or biodynamic farming systems (Table 4). This strong land ethic suggests that the CSA movement can be an important leader in the U.S. sustainable agriculture movement.

- **Farm and enterprise size.** (pages 4-7, 12) For the most part, CSA farms are small. Of the farms surveyed, a median of three acres was devoted to CSA and the median numbers of full and half shares were 29 and 23, respectively. However, 30 farms had more than 140 shares and 17 farms had more than 200 shares (Figures 3-7 and 16, Tables 3 and 6). Clearly, CSA works for a wide range of farm and business sizes as a primary or secondary enterprise. It will be interesting to see how these patterns change over time and what combinations of farm and enterprise size provide the best odds for long-term viability.

- **Core groups.** (pages 15-16) The founders of the CSA movement stress the importance of core groups that actively involve the community in CSA farms. Only 28% of the CSA farms in the 1999 survey, however, reported having core groups. Farms with core groups—particularly core groups described as actively involved in decision-making—were more likely to use non-traditional land tenure and business structures, organize social and educational events, establish programs for low-income members and have higher farm incomes (Table 7).

- **Ethnicity.** (page 11) Virtually all CSA farmers who returned the survey were white. An important challenge for the CSA movement is to create opportunities for minority farmers.

- **Education.** (page 11) CSA farmers are a highly educated group. Over 95% of the primary farmers surveyed attended or graduated from college (Table 5). These intellectual resources can enhance leadership for the future of the CSA movement, particularly for the further development of ecologically sound farming systems, and non-traditional land tenure arrangements and business forms.

- **Commitment to the CSA movement.** (box, page 6) Over 98% of the CSA farmers surveyed said that they would support the CSA movement through participation in research, technical assistance provision, and mentoring activities. This commitment can help the CSA movement grow with regard to region and ethnicity, and ensure sustainable incomes for all CSA farm families in the country.
Introduction

After 17 years of innovation and perspiration, Community Supported Agriculture (CSA) continues to grow and evolve. CSA has garnered significant press in the past five years, but there is a lack of objective data describing this emerging agricultural and social institution. One objective of this research is to fill that void.

This report represents the first comprehensive attempt to gather national, statistical data on this group of hard-working, creative farmers. Partners in this research effort are the Northeast Sustainable Agriculture Working Group, the Robyn Van En Center for CSA Resources at Wilson College, the Department of Resource Economics at the University of Massachusetts and the Center for Integrated Agricultural Systems at the University of Wisconsin-Madison. The specific goals of the research team include:

1. Help create a complete and accurate national listing of active CSA operations,
2. Generate a list of CSA operators willing to participate in activities that will help support the CSA movement, and
3. Gather data that document the CSA movement and help the CSA community learn about itself at this stage in its development.

The information gathered to meet this third goal includes characteristics of CSA farms, operator characteristics and farm and family income. The sections below correspond to data gathered from those parts of the survey questionnaire.
Survey Methods and Response Rate

During the spring of 2000, a survey was mailed to 1,019 CSA farmers included in a database compiled by the Robyn Van En Center. One hundred forty-five questionnaires were returned as undeliverable and an additional 49 respondents indicated they no longer had a CSA operation. Of the remaining 825 questionnaires, 368 were returned complete (or at least partially so)—a response rate of 45%.

Most, but not all, of the farms returning the survey operated a CSA in 1999 and 2000 (Table 1). Eighty-seven percent of the respondents had a CSA operation in 1999, and even more—96%—planned to have a CSA operation in the year 2000. The significant number of respondents (48) who did not operate a CSA farm in 1999 lowered the number of cases from which reliable data could be analyzed. Of the 316 farms that operated a CSA in 1999, 99% planned to operate their CSA farms in 2000.

The data include CSA farms from 41 states. Table 2 shows the number of farms that responded in each state. New York had the greatest number of CSA farms responding, 34, representing nearly 11% of the total. The top ten states represent 210 CSA farms, 66.5% of the total. The top 12 states include over 72% of the respondents. It is difficult to know whether the geographic distribution of farms in this data set represents the population of CSA farms across the U.S., because there are no other comprehensive surveys to use in comparison. This geographic distribution reflects similar patterns found in databases compiled by the Robyn Van En Center and Biodynamic Farming and Gardening Association in the mid-1990s (see Figure 1 on page 3).

<table>
<thead>
<tr>
<th>Survey Question</th>
<th>Number of Respondents</th>
<th>Percent “Yes”</th>
</tr>
</thead>
<tbody>
<tr>
<td>Did you have a CSA operation in 1999?</td>
<td>364</td>
<td>86.8</td>
</tr>
<tr>
<td>Will you have a CSA operation in 2000?</td>
<td>364</td>
<td>96.2</td>
</tr>
<tr>
<td>Do you wish to have your CSA farm information listed on the Robyn Van En Center web site?</td>
<td>354</td>
<td>95.4</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>State</th>
<th>Frequency</th>
<th>State</th>
<th>Frequency</th>
<th>State</th>
<th>Frequency</th>
</tr>
</thead>
<tbody>
<tr>
<td>NY</td>
<td>34</td>
<td>NH</td>
<td>7</td>
<td>NE</td>
<td>2</td>
</tr>
<tr>
<td>CA</td>
<td>26</td>
<td>ME</td>
<td>6</td>
<td>RI</td>
<td>2</td>
</tr>
<tr>
<td>WI</td>
<td>26</td>
<td>NJ</td>
<td>6</td>
<td>TX</td>
<td>2</td>
</tr>
<tr>
<td>MA</td>
<td>25</td>
<td>CO</td>
<td>5</td>
<td>AL</td>
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<tr>
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<td>19</td>
<td>CT</td>
<td>5</td>
<td>AR</td>
<td>1</td>
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<tr>
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<td>NM</td>
<td>5</td>
<td>AZ</td>
<td>1</td>
</tr>
<tr>
<td>IA</td>
<td>17</td>
<td>VA</td>
<td>4</td>
<td>DE</td>
<td>1</td>
</tr>
<tr>
<td>OR</td>
<td>16</td>
<td>ID</td>
<td>3</td>
<td>GA</td>
<td>1</td>
</tr>
<tr>
<td>VT</td>
<td>15</td>
<td>IL</td>
<td>3</td>
<td>ND</td>
<td>1</td>
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<tr>
<td>OH</td>
<td>14</td>
<td>KS</td>
<td>3</td>
<td>NV</td>
<td>1</td>
</tr>
<tr>
<td>MN</td>
<td>11</td>
<td>KY</td>
<td>3</td>
<td>TN</td>
<td>1</td>
</tr>
<tr>
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<td>AK</td>
<td>2</td>
<td>UT</td>
<td>1</td>
</tr>
<tr>
<td>MO</td>
<td>8</td>
<td>FL</td>
<td>2</td>
<td>WV</td>
<td>1</td>
</tr>
<tr>
<td>MD</td>
<td>7</td>
<td>IN</td>
<td>2</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
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.

Descriptive statistics and data distributions are presented in a variety of ways throughout this report. The most commonly used summary measure is the arithmetic mean or average. The average provides a value familiar to all, but may be affected by very large or very small values. In such cases the median, or middle value in the data, better illustrates a typical CSA farm. Tables and bar charts have been included to illustrate how the data are distributed.

Figure 1. Distribution of CSA farms in the U.S.

It is interesting to note the geographic concentration of CSA farms responding to this survey (as well as listed in the Robyn Van En database). As this map shows, the numbers clearly indicate a northern tier bias in CSA farm location with three dominant areas: the Northeast (where CSA originated in the U.S.), the West Coast and the North Central region.

Map by Larry Cutforth
Characteristics of CSA farms

Years in operation, acreage, and other farm characteristics

CSA farms are relatively new businesses, averaging 5.5 years in operation (Table 3). Figure 2 below shows the distribution of years in operation for the farms that responded to the survey. About 25% of the farms have had a CSA operation for three to four years. Nearly 75% of the CSA enterprises have been in operation for seven years or less. Fewer than 2% of the farms reported that they have been in operation more than 15 years.

The delivery season lasts about 162 days, on average, for these farms (Table 3). This is 23 weeks, or just over five months, of fresh produce for CSA members. The median of 152 days is consistent with a CSA operation that provides produce for the months of May through September. These results reflect the large proportion of CSA farms in the Northeast and North Central regions of the U.S.

<table>
<thead>
<tr>
<th>Characteristic</th>
<th># Farms</th>
<th>Average</th>
<th>Median</th>
</tr>
</thead>
<tbody>
<tr>
<td>Years in operation</td>
<td>307</td>
<td>5.5</td>
<td>5.0</td>
</tr>
<tr>
<td>Length of season in days</td>
<td>295</td>
<td>161.8</td>
<td>152.0</td>
</tr>
<tr>
<td>Number of hired workers</td>
<td>284</td>
<td>2.8</td>
<td>2.0</td>
</tr>
<tr>
<td>Total acres operated</td>
<td>302</td>
<td>60.0</td>
<td>18.0</td>
</tr>
<tr>
<td>Cropland acres operated</td>
<td>292</td>
<td>26.8</td>
<td>7.0</td>
</tr>
<tr>
<td>CSA acres operated</td>
<td>297</td>
<td>7.4</td>
<td>3.0</td>
</tr>
<tr>
<td>Total acres owned by operator</td>
<td>293</td>
<td>44.4</td>
<td>14.3</td>
</tr>
<tr>
<td>Total acres—all other land-use agreements</td>
<td>234</td>
<td>49.0</td>
<td>5.0</td>
</tr>
</tbody>
</table>

Figure 2. Distribution of farms by number of years the current CSA has been in operation
Farms with CSA enterprises tend to be smaller than U.S. farms in general. Figure 3 compares the distribution of total acres operated on farms with CSA enterprises to the “land in farms” measure reported in the 1997 U.S. Census of Agriculture. These are comparable measures of total farm size. The size classes in Figure 3 are those used by the Census of Agriculture for reporting land in farms. Nearly 70% of the 302 CSA farms reporting the amount of land they operated were evenly distributed between two classes: less than 10 acres and 10 to 49 acres.

Size categories are further broken down in Figure 4 to illustrate the more frequently reported farm sizes. The most common size category was two to five acres (16% of CSA farms) followed by five to ten acres (nearly 13% of CSA farms). However, there are a number of CSA operations on large land holdings. The median of 18 acres is the best indicator of the typical size of farms with CSA enterprises (Table 3). The average farm size (60 acres) is greatly affected by the large farms in the data set.

Seventy-seven percent of the CSA farms had fewer than 30 acres of cropland (Figure 5). The median of seven acres provides a good measure of typical cropland on farms with CSA operations (Table 3). Large farms in the data set affect the means of both cropland acreage (26.8 acres) and CSA acreage (7.4 acres) making them poor indicators of farm scale.

A typical farm devoted the median of 3 acres solely to the CSA operation (Table 3). Most farms (nearly 80%) used fewer than ten acres and over 62% used fewer than five acres for their CSA operations (Figure 5). These distributions illustrate that CSA operations often represent only a portion of a farm’s activity.
In addition to operating a CSA, many farms sell produce through farmers' markets, farm stands or wholesale channels. Still others have additional enterprises such as poultry, beef, or flowers. A ratio of land used for the CSA operation to cropland operated was created for all farms reporting. A value of 0.1 for the ratio indicates that 10% of all cropland was used for the CSA operation; a ratio of 1.0 would indicate that all cropland was used by the CSA. Over 42% devoted less than half their cropland to the CSA operation (Figure 6).

**However, the greatest percentage of farms focused on CSA as the primary farm enterprise.** Nearly 58% of the farms used at least half of their cropland for the CSA operation, and 37% (104 farms) used more than 90% of their cropland for CSA. The data indicate that smaller farms with fewer acres of cropland are likely to devote more of their land to CSA.

**Farmers willing to help strengthen CSA**

The majority of responding farmers expressed their willingness to engage in future activities that support CSA. Of 316 farmers, 312 or 99% responded positively to at least one of five questions regarding participation in research, technical assistance provision and mentoring activities. These farmers represent a tremendous pool of talent willing to extend the CSA movement.

- 95% were interested in participating in future research and information gathering related to CSA.
- 85% would consider public speaking or being interviewed about CSA.
- 82% would consider mentoring a start-up CSA farmer.
- 76% were interested in providing voluntary technical assistance to CSA farms in their regions.
- 67% were interested in providing technical assistance, for a fee, to CSA farms in their regions.
Land ownership patterns

On average, these CSA farms owned 44.4 acres of land (Table 3). This statistic is misleading, however. These farms owned a median of 14.3 acres, and a significant proportion of CSA farms did not own the land they operated. Figure 7 shows the distribution of CSA farms by the number of acres owned. The most frequent response was “zero acres.” Seventy-eight farms—about 27% of the respondents—indicated they owned no land, and 17% reported owning fewer than ten acres. Thus, many CSA farms obtain productive land from other landowners.

One hundred sixty-two CSA farms reported alternative land use arrangements including rental agreements, long-term leases, and ownership by a CSA organization (other than the farmer) or a land trust. While most farms had fewer than 10 acres of land under alternative agreements (28%), just over 7% of the farms had other agreements for over 200 acres (Figure 8). Figure 9 shows that most of these land-use agreements, about 68%, were made with private landowners. The next most popular category of landowner—other—accounted for about 21% of the arrangements and included non-profit organizations such as universities, churches, conservation organizations, family arrangements, housing authorities and other institutions. Government, CSA organizations and land trusts accounted for just 11% of land-use agreements.
Hired workers

Another measure of CSA farm scale is the number of hired workers (Table 3, Figure 10). Respondents were asked to report the number of workers they hired, using decimals to report part-time workers. CSA farms hired an average of 2.8 workers annually, but the median value of two hired workers may better suggest what is typical for these farms. About 23% of the CSA farms hired no additional labor. Another 23% of the farms hired two to three workers; the number of workers hired by CSA farms ranged from zero to over 50 workers.

More research is needed to understand the diverse labor arrangements used by CSA farms. It is difficult to assess accurately the amount of hired labor used specifically for CSA enterprises, as hired workers may also contribute to additional enterprises such as farm stands and wholesale accounts. Many farms rely on unpaid operator, family or share-holder labor. These types of labor are not included in the statistics above.

Cultural practices

More than 94% of the CSA farms that responded to this survey managed organic or biodynamic farms, about half of those as certified organic or biodynamic farms (Table 4). Respondents were asked to characterize their operations as certified organic; organic, but not certified; biodynamic; or to list another form of cultural practice. Many farms listed more than one cultural practice. For example, 18 of the farms that were organic (certified or not certified) also listed biodynamic practices. These farms were included in the biodynamic category. Eighteen of the farms, less than 6%, listed a combination of organic or biodynamic and low-spray or integrated pest management practices or did not respond to the question. Thus, nearly all farms surveyed (94%) were providing organic produce to their shareholders.

<table>
<thead>
<tr>
<th>Cultural practice</th>
<th>Number</th>
<th>% of Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Certified organic</td>
<td>132</td>
<td>41.8</td>
</tr>
<tr>
<td>Organic, not certified</td>
<td>136</td>
<td>43.0</td>
</tr>
<tr>
<td>Biodynamic</td>
<td>30</td>
<td>9.5</td>
</tr>
<tr>
<td>Other</td>
<td>14</td>
<td>4.4</td>
</tr>
<tr>
<td>No response</td>
<td>4</td>
<td>1.3</td>
</tr>
<tr>
<td>Total number of respondents</td>
<td>312</td>
<td>100.0</td>
</tr>
</tbody>
</table>

A number of farms listed more than one of the cultural practices. A single category was selected where appropriate.
Business structure

CSA farms were more likely to have some alternative form of business organization than farms in the 1997 Census of Agriculture (Figure 11).1 Fewer CSA farms were run by individual operators or as sole proprietorships (63% compared to 86% of all U.S. farms). More CSA farms were organized as partnerships (12% compared to 9% of all U.S. farms) and corporations (11% compared to 4%). Fourteen percent listed an alternative form of organization compared to less than 1% of the 1997 Census farms. Not-for-profit CSA farms dominated these alternative forms of organization (nearly 12%); cooperatives made up about 2% of this category.

Core groups

Another important characteristic of CSA farms, core groups, is discussed on pages 15-16.

CSA Operator Characteristics

Age, ethnicity, gender, education and farming experience

Unlike the 1997 U.S. Agricultural Census, which only collected information on one farmer per farm, the 1999 National CSA Farm Survey characterized the ages and farm experiences of up to three individuals involved in owning, managing and operating CSA farms. One hundred eighty-four farms reported a second farmer (“Farmer B”) and 30 farms reported a third farmer (“Farmer C”).

The U.S. farm population is aging, mainly because fewer young people are entering farming. The average U.S. farmer was 54 years old in 1997. Evidence suggests, however, that young people are drawn to CSA farming. In this survey, “Farmer A” was ten years younger, on average, than the average U.S. farmer in 1997. The mean age of “Farmer A” was 43.7 years. “Farmer B” was 42 years old and “Farmer C” was 35

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1 We discuss results for those farms that responded to the question on legal organization. There were 30 CSA farmers who chose to not answer this question. Hypothesis tests were performed at the 5% level of significance using the U.S. proportions as the null hypotheses. For each of the four tests performed, we reject the null hypothesis that the survey proportions are equivalent to the U.S. proportions.
years old, on average. In Figure 12, the age distribution for CSA “Farmer A” is compared to the age distribution for primary farm operators in the 1997 U.S. Census of Agriculture. The CSA age distribution shows significantly higher proportions of farmers in the age groups 25-34, 35-44, and 45-54 when compared to the proportions for all U.S. farms. These differences suggest that CSA farmers tend to be younger than the principal operators of U.S. farms as reported in the Census of Agriculture.2

Statistics on years of farming experience further illustrate that new farmers are entering the CSA movement (Figures 13, 14). Forty-three percent of those responding as “Farmer A” had fewer than ten years of farming experience. Even greater percentages of individuals reporting as “Farmer B” and “Farmer C” had farmed for fewer than ten years. “Farmer A” had 13.9 years of farming experience and was a CSA farmer just 5.4 years, on average (Figure 14). “Farmer B” had a mean of 5.1 years of CSA farming experience and “Farmer C” averaged 3.3 years of experience as a CSA farmer.

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2 The hypothesis tests for proportions were conducted at the 1% level of significance.
Ethnically, CSA farmers are a very homogeneous group. Nearly 97% of the farmers listed their ethnicity as White/Non-Hispanic. Other than Whites, only Hispanic farmers represented more than 1% (four people) of the “Farmer A” cohort.

Gender statistics present a more diverse picture, especially when compared with the 1997 U.S. Agricultural Census (Figure 15). About 61% of the respondents listed as “Farmer A” were male and about 39% were female, while the opposite distribution was found for “Farmer B.” For “Farmer C,” gender was more evenly split with about 57% female. Strikingly, more women farmers responded to the CSA survey than the 1997 Census, where only 8.6% of primary operators were female. As a single farmer is designated as the operator in the U.S. Census of Agriculture, the percentage of women involved in farming operations is likely underreported. Still, a much higher percentage of women identify themselves as primary farm operators on CSA farms than in U.S. agriculture in general.

CSA farmers are a highly educated group (Table 5). Nearly all of the individuals in this study completed high school. Most of the primary CSA farmers (Farmer A) attended college, with 77% having a college degree. These levels of education are consistent across the three CSA farmers for whom data were collected, with more than 75% of all farmers (Farmers A, B and C combined) having a college degree. Overall, nearly 25% of these farmers have graduate degrees.

<table>
<thead>
<tr>
<th>Table 5. Levels of education for CSA farmers</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Level of Education</strong></td>
</tr>
<tr>
<td>------------------------</td>
</tr>
<tr>
<td>Less than high school diploma</td>
</tr>
<tr>
<td>High school diploma</td>
</tr>
<tr>
<td>Some college</td>
</tr>
<tr>
<td>College graduate</td>
</tr>
<tr>
<td>Graduate degree</td>
</tr>
<tr>
<td>Totals</td>
</tr>
</tbody>
</table>
Farm and Family Income

Many CSA farms are family owned and operated, and their incomes reflect a range of opportunities and sources. Often, the CSA operation is just one of several enterprises that generate farm income. This section depicts the income generated from CSA, other farm enterprises and non-farm sources.

Income from CSA enterprises

CSA enterprises generate income by selling shares of vegetables and other products. Farmers participating in the 1999 National CSA Farm Survey were asked to report the number and price of “full shares,” “half shares” and “other shares” sold. As share composition and value varied from farm to farm, the summary statistics in Table 6 are offered with caution.

Table 6. CSA shares and share prices

<table>
<thead>
<tr>
<th>CSA Income Source</th>
<th>n</th>
<th>Mean</th>
<th>Median</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of full shares</td>
<td>272</td>
<td>50.5</td>
<td>29</td>
</tr>
<tr>
<td>Price per full share ($)</td>
<td>273</td>
<td>412</td>
<td>400</td>
</tr>
<tr>
<td>Number of half shares</td>
<td>147</td>
<td>38.2</td>
<td>23</td>
</tr>
<tr>
<td>Price per half share ($)</td>
<td>151</td>
<td>264</td>
<td>250</td>
</tr>
<tr>
<td>Number of other shares</td>
<td>94</td>
<td>32.4</td>
<td>11.0</td>
</tr>
<tr>
<td>Price per other share ($)</td>
<td>70</td>
<td>231</td>
<td>183</td>
</tr>
<tr>
<td>Income from CSA operation($)</td>
<td>306</td>
<td>30,425</td>
<td>15,000</td>
</tr>
</tbody>
</table>

Respondents sold a median of 29 full shares and 23 half shares. Large CSA enterprises bumped up the average number of shares sold. Thirty farms sold more than 140 full share equivalents and 17 farms sold more than 200 full share equivalents (Table 6 and Figure 16).³ Average share prices were relatively uniform across the farms, regardless of size. Full shares sold for $412 and half shares for $264, on average.

Ninety-four CSA operations reported selling some type of “other share” including home delivery, flower, winter, institutional and numerous other types of shares. They sold about 32 “other shares” at $231 per share, on average. The prices of these “other shares” ranged from just a few dollars to nearly $1,000 due to the tremendous differences in value of the products offered.

³“Full share equivalents” represent an attempt to adjust the number of half-shares and other shares to the equivalent of a full share based on share price. Thus, if a full share costs $500 and the “half share” costs $300, then we “estimate” that the “half share” is actually 0.60 of a full share. We then add all these adjusted values together to estimate how many full shares were produced. Use of price has obvious problems but it is one way to try and create a single output measure to use as a summary.
The best measure of gross CSA income is the median figure of $15,000. The 306 farms that chose to report their earnings averaged $30,425 in CSA income (Table 6, last row). This is well above the median figure, indicating the influence of a few large CSA operations. Fifty percent of the operations—the range between the 25th and 75th percentiles—had CSA incomes between $7,000 and $30,960. Clearly, most farms returning this survey were relatively new and quite small, or had diversified incomes and their CSA enterprises provided only a portion of their total farm and household incomes.

CSA farms offer special events

In addition to selling shares, many CSA operations offered additional benefits to their communities through a range of social and educational events (Figure 17). While these programs typically didn’t directly enhance farm or family income, they were important activities for these CSA organizations. A total of 251 CSA farms—81.5% of the farms responding to this question—planned events at their farms. A variety of events were offered including potluck dinners, farm tours, events for children of farm members, educational programs for the community and local schools, and many other innovative efforts to bring the community closer to the farm.

One hundred fifty-five farms—51% of the 303 farms responding—offered creative programs to help low-income families in their communities:
- A “partner shares program” subsidized shares for low-income families
- Member donations funded “assistance shares” for CSA members who needed a break on share price
- CSA farms contributed to local food banks; some pledged a certain percent of their produce each week
- Low-income members were offered “work shares”
- CSA farms created voucher systems and accepted food stamps

There are statistically significant differences between the percentages of core group and non-core group CSA farms that offered social events or low-income programs. These differences are statistically significant at the 1% level of significance. Ninety-six percent of the core group farms held social or educational events at the farm, significantly higher than the 76% of the non-core group farms. Seventy-seven percent of core group farms had low-income programs, compared to 43% of non-core group farms.
**Total farm income and non-farm income**

Based on the income figures described above, finances are a major challenge for some CSA farms. Because CSA was only one of several enterprises for many farms participating in this survey, total gross farm income data were gathered by asking the respondents to select an income category that matched their total farm receipts. CSA income was also grouped using the same categories, and both distributions are presented in Figure 18 to illustrate the relative importance of the CSA enterprise to total gross farm income.

Forty percent of the farms had gross farm income of less than $20,000, while 60% had gross farm income of $20,000 or more. While the categorical nature of these data prevents calculation of average and median income, we do know that the median gross farm income lies somewhere between $20,000 and $29,999. The gross farm income category with the greatest response (about 22%) was $40,000 to $99,999.

Most farms fit into the USDA’s “small farms” category, defined in part as farms with gross sales of less than $250,000 per year. 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 higher gross farm incomes than most U.S. farms** (Figure 19). Just over 60% of the CSA farms had gross farm incomes exceeding $20,000 compared to about 39% of the U.S. Agricultural Census farms. The Census, however, defines a farm as any operation with $1,000 or more of sales; data is collected for smaller operations as well. CSA farms are primarily intensive vegetable farms, and a comparison to that group of U.S. farms would be particularly interesting.

U.S. farmers commonly rely on off-farm income, and the proportion of farm household income from non-farm sources has increased over time.\(^4\) However, for the greatest percentage of CSA farmer respondents, non-farm income was less than $1,000 and 61% of the individuals listed as “Farmer A”

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earned less than $10,000 in non-farm income (Figure 20). Considering all CSA farmers (“Farmers A, B and C”) who responded to this question, nearly 62% reported less than $10,000 in non-farm income.

**Core Groups**

The original CSA model incorporated the idea of the “core group” to help farmers make decisions, gather feedback, and engage members in tasks such as finding new members or writing newsletters. CSA farms were conceived to be community farms and part of the community’s role was to support and help the grower, beyond paying the price of membership. Survey results suggest that most farms are not using this basic CSA structure. Seventy-two percent of respondents did not have a core group. For the 28% of farms that did have core groups, forty-five (16%) had advisory core groups and 35 (12%) had core groups that were more actively involved in making decisions.

Are these core group farms different from the other farms that responded to the survey? Table 7 on page 16 separates the farm characteristics listed in Table 3 between “core group” and “non-core group” CSA farms. The average number of hired workers was significantly different across these two types of farms.\(^5\) While the number of acres under alternative land-use agreements was not significantly different between these groups, the percentage of CSA farms with alternative land-use agreements was significantly greater for core group farms (80%) than for non-core group farms (66%). This is not surprising given that these unique land-use arrangements would likely be established and managed by a supervisory group.

In this survey, core group farms had significantly higher mean CSA income than non-core group farms (Table 7). The annual median income for core group farms was nearly $10,000 higher than for non-core group farms. Average full share price was also statistically higher for core group CSA farms.\(^6\) These income differences between core group and non-core group farms are accounted for by the sale of a

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\(^5\) We completed hypothesis tests (t-tests) of no difference between core group and the non-core group means and proportions discussed. We used a 10 percent level of significance to decide whether the observed differences were statistically significant.

\(^6\) The same t-tests are applied here. Differences considered “significant” would occur by chance less than 10 percent of the time.
higher number of shares and a higher price per share (see Table 7). These results are consistent with previous research where core group farms were observed to have higher net incomes on average.\footnote{Lass, D., Rattan, S. and Sanneh, N. “Economic Viability of Community Supported Agriculture in the Northeast.” Amherst: University of Massachusetts, Department of Resource Economics. July 2001.}

In addition, core group farms were more likely to adopt alternative business structures. Core group farms were less likely to be operated by individual operators or as sole proprietorships than non-core group farms. Sixty-six percent of the non-core group farms were operated by an individual operator or sole proprietor compared to 54% of the core group farms. The core group farms were more likely to operate as a not-for-profit farm (18%) compared to the non-core group farms (10%). A greater percentage of core group farms also organized social events and low-income programs (see Figure 17, page 13).

<table>
<thead>
<tr>
<th>Characteristic</th>
<th>Non-Core Group Farms</th>
<th>Core Group Farms</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td># Farms</td>
<td>Average</td>
</tr>
<tr>
<td>Years in operation</td>
<td>229</td>
<td>5.5</td>
</tr>
<tr>
<td>Length of season</td>
<td>245</td>
<td>161.1</td>
</tr>
<tr>
<td>Number of hired workers</td>
<td>216</td>
<td>2.5</td>
</tr>
<tr>
<td>Total acres operated</td>
<td>228</td>
<td>61.5</td>
</tr>
<tr>
<td>Cropland acres operated</td>
<td>220</td>
<td>27.5</td>
</tr>
<tr>
<td>CSA acres operated</td>
<td>225</td>
<td>7.2</td>
</tr>
<tr>
<td>Total acres owned by operator</td>
<td>225</td>
<td>46.3</td>
</tr>
<tr>
<td>Total acres—all other land-use agreements</td>
<td>174</td>
<td>47.8</td>
</tr>
<tr>
<td>CSA Income</td>
<td>227</td>
<td>$28,553</td>
</tr>
<tr>
<td>Share prices:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Full share</td>
<td>197</td>
<td>$405</td>
</tr>
<tr>
<td>Half share</td>
<td>107</td>
<td>$262</td>
</tr>
<tr>
<td>Number of shares:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Full shares</td>
<td>197</td>
<td>49</td>
</tr>
<tr>
<td>Half shares</td>
<td>104</td>
<td>35</td>
</tr>
</tbody>
</table>

Final Reflections

The 1999 National CSA Farm Survey focuses on characteristics of the farmers and farms creating the CSA movement in the United States. This survey reveals two sides to this movement: a challenging side and a brighter, resource-abundant side.

On the bright side, most of the characteristics of the surveyed CSA farmers are grounds for considerable optimism. These farmers tend to be young women and men who are highly educated and committed to environmentally responsible farming systems. They care deeply about the CSA movement and are open to experimenting with non-traditional land tenure and business structures.

Most of the challenges revealed in the survey are financial, as indicated by a median gross CSA enterprise annual income of $15,000 and a median gross farm annual income of somewhere between $20,000 and $30,000. In addition, over 60% of CSA farmers report less than $10,000 in non-farm income.

However, the survey reveals that numerous farms with CSA enterprises have higher sales receipts than many of their counterparts in the general U.S. farm population. Within CSA, farms with active core groups receive higher incomes than those lacking supportive interaction with their farm members. As observed earlier, significant differences exist, on average, between core group and non-core group farms. These include the number of hired workers, CSA income, the proportion of farms with alternative land-use agreements, type of legal organization and the proportions of farms offering educational, social or low-income programs.

An important goal for the CSA movement is to continue developing models of farming enterprises and networks that are not only socially diverse and ecologically regenerative, but also economically sustain farm families. If developed, such models will command serious attention in both the CSA community and the rest of U.S. agriculture.
Future Research

The researchers who conducted the 1999 survey are committed to following the ongoing development of the CSA movement in the U.S. through regular surveys and other research, including a 2001 growing season survey. We encourage other researchers to contact us regarding their related CSA research projects or plans. Following are some additional ideas that we believe would be fruitful areas of future investigation:

Better understanding of the long-term economic and quality of life realities associated with CSA in the U.S.

1) What proportion and types of farmers enter farming through CSA, or move to CSA as a diversification strategy?

2) What are the scale and organizational factors (acreage, shareholders, labor and management) associated with CSA as a primary or secondary enterprise? What kinds of labor efficiencies and incomes per acre are marks of successful CSA at the primary and secondary enterprise levels? What are the appropriate measures to determine the success of CSA operations?

3) How sustainable are primary and secondary enterprise levels of CSA in terms of career-long economic and quality of life rewards for farm families? What means of assessment can determine whether a CSA farm is viable in the long run?

4) Case studies of small, medium and large CSA farms.

Better understanding of the aggregate dynamics of CSA in the U.S.

1) Why is CSA concentrated in certain geographic regions? Is there a model that explains or predicts the occurrence and adoption of the CSA model? How can researchers and practitioners help forward the CSA movement?

2) What are the dynamics and demographics of CSA regarding population centers? Is CSA limited to farms within metropolitan access? What are the number and nature of rural and truly urban CSA farms?

3) What are the overall rates of change and growth of CSA? For instance, the total number of CSA farms in the Madison, Wisconsin, area seems to have stabilized over the past several years. Is this true of other areas where CSA farms have been present for some time? Is there a maximum market share at which CSA is likely to level off? How does this vary from one locale to another? What is the extent of public awareness of the CSA movement? Is awareness and involvement limited primarily to those engaged in ecological and sustainability issues?

4) What are the entry and exit rates of CSA farms? Do these rates vary by the level and scale of enterprise discussed above? What are the entry and exit rates of CSA farmers? What are the main factors that affect their entry and exit? How are the experiences of exiting CSA farmers different from remaining CSA farmers? Are entry and exit rates affected by the demographic characteristics of an area?
Better understanding of the variations in CSA organization, culture, and vision.

1) For what enterprises is CSA primarily a niche marketing strategy? For what enterprises is CSA a conscious alternative to conventional food relationships?

2) What are the important characteristics that distinguish these two visions? Land ownership and tenure? Enterprise organization and authority/responsibility (strong core groups)? Valuing of labor and standard of living for farmers? Education and involvement with other forms of “food citizenship” and politics? How many CSA farms exist in the US where shareholders organized first and then hired a farmer?

3) Comparative case studies of CSA farms demonstrating contrasting positions regarding these visions and enterprise characteristics.

Better understanding of the networking in which CSA can be involved.

1) How many area-wide CSA networks are there? On what do they focus? Joint education, recruitment of shareholders, information sharing and mentoring new farmers are a few possibilities. How are these networks organized and how stable are they?

2) Networks of CSA and other farmers may diversify the kinds of farm products offered as shares. How many farms are creating complementary shares such as honey, flower, egg or meat shares? How are these networking relationships organized and what are their advantages and disadvantages?

3) Networks between CSA and non-food “community supported” enterprises also exist. In what forms are “community supported” models being developed outside of agriculture, e.g. in education, health care, housing or auto sharing? Are CSA farms beginning to interact or network with them? In Madison, Wisconsin, discussions are underway between an urban CSA and a co-housing group.

4) Case studies of all the above networks can provide details on the logistics and other organizational aspects of these examples.

Better understanding of CSA members/shareholders.

1) CSA member demographics such as age, education, household income and ethnicity affect the demand for CSA shares and the viability of CSA farms in different places. What are the most important characteristics of CSA members? Are CSA members' attitudes about sustainability and environmental issues important? Can we measure these attitudes?

2) What are the turnover and retention rates among CSA members? What individual shareholder characteristics account for differences in these rates across CSA operations? What factors account for the variation in turnover rates across CSA farms? What are the important characteristics of the shares and farms that affect decisions by CSA members to stay or leave?

3) Case studies of shareholder-started farms could provide further information on these special types of CSA farms and their relative rates of success.