




Article

Community Supported Agriculture Farmers' Perceptions of Management Benefits and Drawbacks

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Abstract: Community Supported Agriculture (CSA) is a direct partnership between producer(s) and a group of consumers/members to share the risks and responsibilities of farming activities. CSA aims at producing and providing environmentally, socially, economically, and nutritionally sustainable food. Past research has focused on CSA members' motivations. This research aims to gain a better understanding of CSA farmers' perceived benefits and drawbacks in managing a CSA farm, and whether CSA management perception varies in different countries. The research collected data from 35 farmers that were based in the United States (US) and Hungary (HU). Data elaboration includes a one-way Anova test, Chi-square test, principal component analysis, and multiple multivariate linear regressions. The results support that US and HU farmers have similar positive perceptions of CSA farming management, especially in food quality, nutritional value products, environmental, and community benefits. The main differences concentrate on economic, financial, and management perceptions. CSA success as an alternative agro-food production and distribution system relies on the capability to involve CSA members. Therefore, CSA farmers' management skills may evolve to ensure the performance of communication and community engaging practices. The main CSA concern is ensuring a fair income and living wage for the farmers and labor force. There is a need for better balancing non-monetary and monetary benefits for the farmers.

Keywords: community supported agriculture; farmers; perception; benefits; drawbacks; management; farm

1. Introduction

Community Supported Agriculture (CSA) is a direct partnership between a group of consumers, called members, and producer(s), whereby the risks, responsibilities, and rewards of farming activities are shared through long-term agreements. CSA aims to provide quality food that are produced in an agroecological way [1,2]. CSA members receive a percentage of the farm's production or fixed produce quantities [3]. CSA agreement consists in payments for agricultural produce, product delivery, and ways of collaboration between CSA farmer and members [4,5]. CSA aspires to create an alternative distribution system, which is not dependent on the conventional market, to have access to healthy food and to establish direct contact with the farmer [6].

The origin of CSA cannot be exactly identified, as it evolved separately and simultaneously in different countries. It can also take different forms as farmers and members shape it to their own needs and expectations. However, the genesis of CSA emerged in Japan in the 1960's due to the growing dissatisfaction regarding the negative impact of mechanized and chemically intensive agriculture, the sale of unsafe food, and the urbanization of farmland [7,8]. During the 1980's and 1990's, the CSA

farming concept expanded in North America. In Europe, CSA grew steadily since the 1970's, booming with the new millennium. Currently, CSA is a worldwide phenomenon, which is spreading in certain countries in Africa, South America, and, in the last years, in the Oceania region.

CSA Farmers' Motivations and Expectations

There are a number of farmers' management practices and motivations to engage in CSA. These include economic, financial, and management factors, such as financial certainty and economic self-determination; environmental factors, such as organic farming practices; and, social factors, such as supporting a sense of community in the network, promoting local food agriculture, and providing healthy produce to the community [9,10].

First, CSA farming has specific economic, financial, and management practices. CSA farming ensures a safe and trusted market. The farmers are supported for an entire season by a group of consumers that receive fresh food every week. CSA members typically purchase a share before the start of the growing season and, in return, they receive regular allotments of the farm's harvest throughout the season. Thus, the risks and benefits of production are shared by the CSA members along with CSA farmers [11–13]. Upfront payment at the beginning of the season ensures a fairly good financial stability. Most of the CSA farmers ask for financial commitment for a medium-long period of time (e.g., year, season, half-yearly payments). Obtaining funds from the buyers before harvest allows for the farmers in the CSA program to carry lower financial debts, and allows them to recover from possible low yields due to weather uncertainties. The shared responsibility by CSA members is one of the main differences between a CSA and a vegetable box scheme [4,14].

A key advantage of CSA farming is to overcome the various food chain steps and interconnections with food chain intermediaries that are necessary to reach the final consumer in conventional food systems. This ensures higher value chain distribution. Long agro-food chain distribution channels often lead to low farmers' profit [15–17]. Moreover, CSA farming allows the farmers to freely set the price of CSA produce share, and to identify what the farmer considers fair value for his work [4,18–21]. Thus, all CSA parties benefit through CSA programs. Farmers are ensured a steady and fair market regardless of seasonal or weather fluctuations. CSA members benefit by receiving regularly a full share of fresh produce.

Second, the environmental factors drive CSA farmers' motivation to adopt sustainable agricultural management practices. These practices include utilizing low/no use of inputs, maintaining biodiversity, adopting traditional farming practices, reducing food miles, and increasing seasonal eating. The farmers' objective is to safeguard the environment (i.e., water, air, soil) by limiting the negative environmental impacts of food production, distribution, and consumption [20–26]

Third, the CSA model emphasizes the social and community aspect of the consumer and producer relationship. The management implementation of this aspect may differ [1,5,25]. Some farms rely on core groups of volunteers to oversee operational aspects of the farm, such as food distribution, marketing, and budgeting. Other farms call on members to help with weeding or harvesting during the season. In contrast, some farms do not require or even encourage their members to work on the farm. Farm events, tours, potlucks, newsletters, and educational programs are other ways in which farms support community development [7]. The community relationship is strengthened every week when CSA members have the opportunity to meet with the farmers at produce share pick-up.

A key aspect of the farmer-member relationship, comprising the core of CSA farming management, is the quality and quantity of the produce share. The CSA farms' structure, season length, and product offerings may impact on the produce share; however, most farms make similar management choices in the proposed food. The core product offerings are typically fresh vegetables and fruits that are grown while using organic farming methods. Some farmers offer additional products, such as meat, eggs, dairy products, herbs, flowers, and honey. It is important to match the CSA food produce share with consumers' expectations. The share should include food that consumers like, know how to cook,

and is in appropriate quantity [4,7,18,20,25,27–29]. Farmers need to adjust their farming management activity to the preferences of their customers.

CSA contributes in promoting healthy diets and helping consumers to re-educate their food habits. CSA membership promotes the consumption of a higher quantity of fresh and seasonal produce. It may also encourage consumers to learn how to store or preserve food for winter months. CSA could be an effective intervention strategy for increasing the amount and variety of fruit and vegetable consumption, which may lead to health improvements [7,20,28,30]. Moreover, the low-income communities in some countries participate in alternative food networks, such as CSA and farmers markets, to access healthy food. This is the case in the United States (US), where the Supplemental Nutrition Assistance Program Electronic Benefit Transfer (SNAP/EBT) provides economic support by making local food more affordable. Healthy food accessibility for low-income population was analyzed in various past studies, focusing on retailing [31–33] and on CSA [20,34–39]. Although studies on retailing mostly explore food economic affordability and physical accessibility to healthy food, research on alternative food networks highlight the importance of the social, community, and networking aspects of consumers' approach to healthy food.

Finally, CSA farming management is not just a job or business practice. It is a commitment that is based on professional and personal values and skills. CSA farmer participation is fueled by a personal engagement, which is beyond a standard business-to-consumer relation [4,40,41]. Past research results support that CSA farmers suffer from their own self-exploitation [40]. Furthermore, CSA farmers and consumers aspire to alleviate market dissatisfactions by participating in CSA initiatives. Farmers are embedded into the community, with the intent of supporting it. This implies a specific approach to manage the CSA members network, which is consistent with community expectations. CSA members get to know the farmer, where their food comes from, and be part of a community. Direct personal communication channels, such as word of mouth, informal social networks, and face-to-face interactions, can effectively contribute to an increase in CSA membership and disseminate information regarding CSA [42]. The value added that is created by the CSA experience leads CSA members' willingness to pay more for their produce [24]. However, the most common challenges of CSA initiatives are the high turnover rate of CSA members and low member retention [38,43,44].

The CSA agro-food system endeavors to provide environmentally, socially, economically, and nutritionally sustainable food. Past research concentrated on CSA members' motivations and only partially explored CSA farmers' managerial approaches and driving factors. There exists limited knowledge and, therefore, there is a need to gain a better understanding of CSA farmers' benefits and drawbacks in managing a CSA farm. Moreover, the literature on the CSA movement drivers and drawbacks is mostly focused on North America and Western Europe. There are few studies regarding how the CSA farming has developed in the so-called post-socialist countries, such as the ones in Central and Eastern Europe (CEE) [4,45]. Furthermore, there is a research gap on the cross-analysis of the perception of the managerial driving forces of CSA farmers coming from different countries, in particular, from countries with different agricultural production and food provision practices. CSA is a flexible concept for a new consumer–farmer connection [1], and each country shapes the CSA relationship differently to fit specific geography, market, and food chain specificities. This paper attempts to fill this gap by assessing CSA farming practices in the US and Hungary (HU). CSA farming practices in the US and HU are inserted into two different agricultural and food traditions and practices. CSA farming in the US has a fairly long tradition. In HU, CSA farming has undergone a recent development [45,46] (Table 1). Assessing and comparing CSA farming practices in different countries can provide a basis to gain a more comprehensive definition and understanding of what drives CSA farmers.

Thus, this research's objective is to fill the current literature gaps by addressing two research questions: (i) What are the perceived motivating benefits and drawbacks of CSA farming management? and (ii) Are there differences and similarities between the perceptions of CSA farmers based in the US and HU? To address these questions, the research focuses on CSA farmers' expectations, motivations,

and attitudes on a number of managerial issues, including economic, environmental, social, community, and food quality aspects of CSA farming.

Table 1. Community Supported Agriculture (CSA) state of the art.

United States	The number of US farms involved in direct sales to consumers were 114,801, with 7,398 exclusively engaged in CSA (2015). The overall value accounted for 226\$ million (7% of the direct-to-consumer sales) [47]. As of 2017, there were 12,617 CSA farms in the USA, a number that has been growing in the last decades [44]. Local, organic, and sustainable foods occupy 4% of the total food supply in the USA. In 2013 there were more than 400,000 families subscribing to these farms [48]. Interest in CSA farming might be attributed to increasing concerns about food safety, local sustainability, environmental degradation, and interest in healthier food.
Europe	The first European CSA farm, called Les Jardins de Cocagne, was founded in 1978 in Geneva, Switzerland. In 2015 there were 2,776 CSA farms [1]. The vast majority of these farms (around 2,000) are situated in France, followed by Belgium (138) and Italy (104). CSA provide food for almost half a million Europeans [1,2]. In Europe, there are farms including products from egg, dairy and meat production, and to a limited extent fish, bakery and beekeeping.
Hungary	The first three HU CSA farms were founded in 2011 [1]. In 2015 the country counted 15 CSA farms (14 CSA farms in 2018 and 13 in 2019) [49]. The estimated number of members is around 1,200. As in other countries, HU CSAs are small-scale (agricultural area ranges between 1–10 ha). Most CSA farms are certified organic. The number of CSA members vary between 10–100, but the CSA member turnover rate is high and recruiting new members is difficult. The majority of the CSAs provide mainly vegetables. The product mix may include meat and eggs [50]. Most CSA farmers have studied either in organic farming or in horticulture. CSA farms give prominence to the social and environmental aspects of CSA farming, and provide educational opportunities [1].

2. Materials and Methods

2.1. Data Collection

The data collection process obtained data and information from US farmers (in Rhode Island, Massachusetts, Vermont, and Georgia) and HU farmers throughout that country. The interviews were carried out from August to November 2017 and from November to December 2018 in the US. In HU, the interviews were carried out from December 2018 to February 2019. These timeframes were selected due to decreased farm activities, thus encouraging higher farmers' participation. CSA farmers in the US were identified with the support of local farmers' associations that are mainly based in New England and Rhode Island, and word-of-mouth among farmers. A researcher was hosted by a CSA farm in order to follow closely the interviewing process. CSA farmers in HU were identified through the Association of Conscious Consumers (Tudatos Vásárlók Egyesülete). The interviewer was based in HU during the data collection phase. These associations were contacted by the researchers by phone or by email. The individual farmers were reached by phone to explore if they were willing to participate in the survey. The farmers were then interviewed as a part of the second step.

The interviews were carried out face-to-face, by telephone, and on line. The data were gathered with the support of Qualtrics, a web-based software. It was used to upload responses during the face-to-face interviews, collect written responses (if the interviewees filled in the questionnaire on line using an online link or a Quick Response (QR) code sent to them via email), and then upload feedbacks (if the data were collected on paper questionnaires).

The sample includes a total of 35 CSA farmers, with 21 farmers from the US and 14 farmers from HU (Table 2). The research sample includes all HU CSA farmers (Table 1). Female farmers in both countries participated in the study more than male farmers. The CSA farmers in the US are younger (P-value 0.010), have children in the household (P-value 0.020), and higher yearly income (P-value 0.001), as compared to CSA farmers in HU (Table A2). US respondents have a higher level of education. There are more farmers in HU who work part-time on the CSA, as compared to US farmers. Furthermore, farmers' CSA experience is well distributed in both groups, going from one year to more than 10 years of CSA farming. The farmers in both countries are mostly in favor of renewing their CSA farming experience for the following year.

Table 2. Sample characteristics.

		Country (%)		Total (%)
		US	HU	
Gender	Male	33.3	46.2	38.2
	Female	66.7	53.8	61.8
	Total	100.0	100.0	100.0
Level of education	High school	4.8		2.9
	Some college	14.3	38.5	23.5
	Bachelor's degree	61.9	15.4	44.1
	Postgraduate degree	19.0	46.2	29.4
	Total	100.0	100.0	100.0
Age	18–24	14.3		8.8
	25–34	52.4	23.1	41.2
	35–44	14.3	38.5	23.5
	45–54	9.5	15.4	11.8
	55–64	4.8	23.1	11.8
	65–74	4.8		2.9
	Total	100.0	100.0	100.0
Work condition	Full time	95.2	84.6	91.2
	Part time		15.4	5.9
	Student	4.8		2.9
	Total	100.0	100.0	100.0
Yearly household income	Less than \$10,000	5.3	53.8	25.0
	\$10,000–\$19,999	21.1	38.5	28.1
	\$20,000–\$29,999	15.8	7.7	12.5
	\$30,000–\$39,999	10.5		6.3
	\$40,000–\$49,999	26.3		15.6
	\$50,000–\$59,999	10.5		6.3
	\$60,000–\$69,999	5.3		3.1
	More than \$150,000	5.3		3.1
Total	100.0	100.0	100.0	
Children in household	With children	85.7	46.2	70.6
	Without children	14.3	53.8	29.4
	Total	100.0	100.0	100.0
Number of years of CSA farming	1 year	28.6		17.1
	2 years	9.5	7.1	8.6
	3 years		14.3	5.7
	4 years	4.8	7.1	5.7
	5 years	9.5	14.3	11.4
	6 years	9.5	14.3	11.4
	7 years	4.8	7.1	5.7
	8 years	9.5	21.4	14.3
	9 years	14.3		8.6
	10 years	4.8	7.1	5.7
	More than 10 years	4.8	7.1	5.7
	Total	100.0	100.0	100.0
Intention to renew CSA farming the following year	Strongly disagree	9.5	15.4	11.8
	Somewhat disagree	4.8		2.9
	Neither agree nor disagree	9.5		5.9
	Somewhat agree	9.5	7.7	8.8
	Strongly agree	66.7	76.9	70.6
	Total	100.0	100.0	100.0

Note: The sample includes 35 CSA farmers, with 21 farmers from the US and 14 farmers from HU.

2.2. Questionnaire Structure

The questionnaire included items that were identified from the literature review (Table A1). The questionnaire items were fine-tuned on the basis of context analysis of the US and HU, and the support of CSA farmers interviewed during the questionnaire testing phase. The questionnaire was tested first with CSA farmers in Italy. Subsequently, it was re-tested with CSA farmers in the US and in

HU. Unclear questions were rephrased to make sure that the questions were not biased and that the respondents fully understand the questions.

The literature review covered farming and membership approaches to CSA. The questionnaire included items that were aimed at exploring specificities of CSA farming management, and to what extent CSA farmers' management motivations match with CSA members' expectations, as supported by the literature. Moreover, these elements were purposely grouped into a set of statements expressing drawbacks in CSA farming, since some aspects express possible critical managerial experience for the CSA farmers. The main elements emerging from the literature review were integrated into concise statements representing benefits and drawbacks. The questionnaire's items were clustered into the categories, according to their consistency in forming homogeneous sets of concepts in relation to the benefits and the drawbacks (Table A1). The interviewees graded the level of importance of each statement with a Likert scale from 1 (strongly disagree) to 5 (strongly agree). Interviewees initially graded the entire set of benefits and then later the entire set of drawbacks. This approach was designed to generate independent and unrelated thinking regarding the benefits and drawbacks to avoid biased feedback due to forced or involuntary consistency of the answers.

2.3. Data Elaboration

The data elaboration followed various steps. First, a one-way Anova test was used to analyze the responses to the questionnaire's items in the US and HU groups. Second, the research developed specific elaborations for the perceived benefits and drawbacks questionnaire items. The items were grouped calculating the average value of the relevant items that were included in each of the eight constructs on the perceived benefits, and of the four constructs on the perceived drawbacks. From these resulting values, the research defined dichotomous variables (calculated as below–equal to 3 versus above 3). These were cross-analyzed with the countries of CSA farmers (US versus HU) and tested against the Chi-square P-value.

Subsequently, the research carried out a principal component analysis (PCA) of the eight constructs on perceived benefits, and a second PCA for the perceived drawbacks, which aimed at exploring the existence of latent factors in each set of items. The PCA on perceived benefits was statistically significant. The PCA was carried out with Varimax rotation. The limited number of missing values in the responses suggested adopting the listwise method, so as to strengthen the elaboration results. The Kaiser–Meyer–Olkin measure of sampling adequacy and the Bartlett's test of sphericity were calculated to assess the appropriateness of the data for PCA. The internal consistency, convergent, and discriminant validity of each component was verified. The internal consistency of each set of items was measured using Cronbach's alpha and composite reliability (CR). The choice of factors was made on the basis of the eigenvalue criterion being higher than 1, and while considering the cumulated variance explained by the factors taken together. The data were elaborated with the support of SPSS Statistics 21.

3. Results

3.1. CSA Farming Perceived Management Benefits and Drawbacks of US and HU Farmers

Results support that US and HU farmers have similar perceptions of CSA farming management, and they have divergent views on a limited number of benefits and drawbacks. There is a general positive view of CSA farming, with critical perceptions, especially of some economic, financial, and management issues. Farmers believe that CSA farming delivers a good quality agro-food produce share (Table 3). In particular, farmers believe that the produce is of high quality, tasty, fresh, and has trustful production origin. The respondents report that providing an adequate quantity and mix of quality products can be challenging. Moreover, HU farmers extoll more importance to CSA positive capability to bring safe food and they are more focused on vegetable produce as compared to US farmers (Table 4).

Table 3. CSA farmers' perceptions on management benefits and drawbacks items.

Benefits (Benefits in)	Mean	Std. Deviation	Std. Error	F	Sig.
<i>Products' characteristics</i>					
Providing organic quality food	4.49	0.853	0.144	1.710	0.200
Providing tasty food	4.51	0.951	0.161	1.955	0.171
Providing fresh food	4.66	0.802	0.136	2.813	0.103
Providing transparency about food origins	4.63	1.003	0.169	2.161	0.151
<i>Community benefits</i>					
Promoting CSA solidarity community	3.91	1.121	0.190	1.705	0.201
Increasing human capital	3.86	0.772	0.131	1.840	0.184
Sustaining local economy	4.56	0.927	0.159	2.087	0.158
Establishing a relationship with farmers	3.88	0.88	0.15	1.031	0.318
Establishing a relationship with consumers	4.65	0.88	0.15	2.124	0.155
Establishing a relationship with land and with their communities	4.38	0.74	0.13	0.236	0.630
Promoting ideals of agricultural work	3.79	0.88	0.15	0.275	0.603
Sustaining the production for personal consumption	3.97	1.09	0.19	1.214	0.279
Adopting the principle that agriculture's primary purpose is to feed people	4.38	0.89	0.15	0.145	0.706
Improving consumers' understanding of work in agriculture	4.32	0.88	0.15	0.007	0.936
<i>Health and Nutrition benefits</i>					
Increasing consumers' accessibility of a more nutritionally balanced diet	4.03	0.97	0.17	0.747	0.394
Providing healthy and nutritious food to the local community	4.65	0.88	0.15	1.071	0.309
Providing healthy recipes	3.85	0.99	0.17	0.103	0.750
<i>Economic and financial benefits</i>					
Having upfront payment	4.26	0.93	0.16	0.292	0.593
Having better price with direct selling	4.35	1.04	0.18	0.662	0.422
Reducing marketing-related costs	4.44	0.86	0.15	0.089	0.768
Controlling pricing	4.18	0.83	0.14	0.087	0.770
Ensuring value for money for products	4.21	0.69	0.12	0.027	0.871
Limiting production risks and market competition	3.41	1.08	0.18	1.449	0.237
<i>Management benefits</i>					
Receiving training on agricultural production practices	3.76	0.92	0.16	0.612	0.440
Receiving information on production practices	3.88	1.01	0.17	0.779	0.384
Producing good food variety	4.06	1.11	0.262	0.150	0.704
Sharing ideas and information on CSA professional challenges and opportunities	4.12	0.77	0.13	1.296	0.263
Sharing agricultural machineries and tools among CSA farmers	3.21	0.98	0.17	0.013	0.909
Sharing promotional tools about CSA farm's activities and products	3.82	0.87	0.15	0.270	0.607
Sharing information and dissemination activities	3.71	0.80	0.14	1.583	0.217
<i>Environmental benefits</i>					
Reducing food miles	4.53	0.86	0.15	0.002	0.962
Increasing seasonal food eating in the community	4.85	0.44	0.07	0.538	0.469
Saving water	4.65	0.77	0.13	2.825	0.103
Protecting air quality	4.53	0.83	0.14	1.822	0.187
Growing more varieties to safeguard environment	4.47	0.87	0.21	1.569	0.230
<i>Experiencing farm life</i>					
Opportunity of working on the farm for consumers	3.74	1.21	0.21	2.626	0.115
Opportunity of growing their own food for consumers	4.09	0.87	0.15	0.118	0.734
<i>Emotional values</i>					
Providing consumers' stress relief	3.76	0.78	0.13	0.001	0.979
Providing consumers' life enrichment	4.24	0.66	0.12	0.002	0.961
Providing consumers the opportunity to escape from urban chaos	3.76	0.78	0.13	0.224	0.639
Providing consumers the opportunity to socialize with other people	3.94	0.65	0.11	0.016	0.900
Providing consumers the satisfaction from seeing plants growing	4.24	1.02	0.17	2.047	0.162
Drawbacks (Difficulties in)	Mean	Std. Deviation	Std. Error	F	Sig.
<i>Products' characteristics</i>					
Providing different mix and quantity of food	3.21	1.12	0.19	0.526	0.473
Providing continuous adequate quality and quantity of products	3.29	1.21	0.29	1.869	0.192
<i>Management of CSA farm</i>					
Choosing a good place and timing for share pick-up point	2.88	1.34	0.23	0.019	0.892
Finding and keeping trained labor	4.63	0.81	0.20	0.788	0.390
Setting the price of the share	3.41	1.28	0.31	1.442	0.248
Having adequate products' storage	3.00	1.32	0.32	0.000	1.000
<i>Management of CSA network</i>					
Recruiting CSA members	3.29	1.16	0.28	0.156	0.698
Communicating with CSA members	2.65	1.11	0.27	1.586	0.227
Communicating easily with all members	2.88	1.37	0.23	1.349	0.254
<i>Environmental drawbacks</i>					
Farm management caused by the weather	4.12	0.99	0.24	2.295	0.151
Farm management caused by pests and diseases	3.76	1.15	0.28	0.932	0.350
Farm management due to weed control	4.12	0.93	0.22	0.101	0.756

Note: The elaboration is based on responses from 35 farmers (21 US farmers and 14 HU farmers).

Table 4. CSA farmers' perceptions on management benefits and drawbacks items with significant one-way Anova (US and HU farmers).

		Mean	Std. Deviation	Std. Error	Sum of Squares	df	Mean Square	F	Sig.	
BENEFITS										
<i>Products' characteristics</i>										
Providing safe food	US	3.76	1.091	0.238	BG	11.433	11.433	15.252	0.000	***
	HU	4.93	0.267	0.071	WG	24.738	0.750			
	Total	4.23	1.031	0.174	Total	36.171				
Providing a food offer focused on vegetable production	US	3.50	1.000	0.500	BG	1.921	1.921	5.247	0.036	**
	HU	4.29	0.469	0.125	WG	5.857	0.366			
	Total	4.11	0.676	0.159	Total	7.778				
<i>Community benefits</i>										
Networking activities for the community	US	3.76	0.831	0.181	BG	5.505	5.505	10.538	0.003	***
	HU	4.57	0.514	0.137	WG	17.238	0.522			
	Total	4.09	0.818	0.138	Total	22.743				
Promoting community social connections through farms events	US	3.24	1.179	0.257	BG	6.876	6.876	7.198	0.011	**
	HU	4.14	0.535	0.143	WG	31.524	0.955			
	Total	3.60	1.063	0.180	Total	38.400				
Providing food traditionally appreciated by the community	US	3.76	0.889	0.194	BG	2.305	2.305	3.680	0.064	*
	HU	4.29	0.611	0.163	WG	20.667	0.626			
	Total	3.97	0.822	0.139	Total	22.971				
Increasing solidarity with other CSA farmers, as social cooperation	US	3.67	1.197	0.261	BG	3.219	3.219	3.370	0.075	*
	HU	4.29	0.469	0.125	WG	31.524	0.955			
	Total	3.91	1.011	0.171	Total	34.743				
Reconnecting the community to the rural environment	US	3.90	1.221	0.266	BG	4.055	4.055	3.945	0.056	*
	HU	4.62	0.506	0.140	WG	32.886	1.028			
	Total	4.18	1.058	0.181	Total	36.941				
Providing local produce to the community	US	3.71	1.707	0.373	BG	8.936	8.936	4.719	0.037	**
	HU	4.77	0.439	0.122	WG	60.593	1.894			
	Total	4.12	1.452	0.249	Total	69.529				
<i>Health and Nutrition benefits</i>										
Providing healthier food	US	4.48	1.078	0.235	BG	2.203	2.203	3.034	0.091	*
	HU	5.00	0.000	0.000	WG	23.238	0.726			
	Total	4.68	0.878	0.151	Total	25.441				
<i>Economic and financial benefits</i>										
Having stable and fair incomes	US	3.81	1.123	0.245	BG	3.413	3.413	3.585	0.067	*
	HU	4.46	0.660	0.183	WG	30.469	0.952			
	Total	4.06	1.013	0.174	Total	33.882				
<i>Environmental benefits</i>										
Protecting biodiversity	US	4.38	0.865	0.189	BG	1.738	1.738	3.341	0.077	*
	HU	4.85	0.376	0.104	WG	16.645	0.520			
	Total	4.56	0.746	0.128	Total	18.382				
Making less/no use of chemicals	US	4.14	1.153	0.252	BG	4.888	4.888	5.689	0.023	**
	HU	4.92	0.277	0.077	WG	27.495	0.859			
	Total	4.44	0.991	0.170	Total	32.382				
Saving soil quality	US	4.19	0.873	0.190	BG	4.309	4.309	8.533	0.006	***
	HU	4.92	0.277	0.077	WG	16.161	0.505			
	Total	4.47	0.788	0.135	Total	20.471				
Farming with traditional method	US	3.25	1.500	0.750	BG	6.028	6.028	5.499	0.033	**
	HU	4.15	0.899	0.249	WG	16.442	1.096			
	Total	3.82	1.185	0.287	Total	22.471				

Table 4. Cont.

		Mean	Std. Deviation	Std. Error	Sum of Squares	df	Mean Square	F	Sig.	
<i>Experiencing farm life</i>										
Opportunity of staying in nature for consumers	US	4.10	0.831	0.181	BG	1.577	1.577	2.962	0.095	*
	HU	4.54	0.519	0.144	WG	17.040	0.533			
	Total	4.26	0.751	0.129	Total	18.618				
Opportunity for consumers' children to improve knowledge on food origins	US	4.43	0.598	0.130	BG	1.963	1.963	7.790	0.009	***
	HU	4.92	0.277	0.077	WG	8.066	0.252			
	Total	4.62	0.551	0.095	Total	10.029				
DRAWBACKS										
<i>Environmental challenges</i>										
Difficulties in growing product without chemical pesticide and herbicide	US	2.86	1.236	0.270	BG	5.899	5.899	4.653	0.039	**
	HU	2.00	0.913	0.253	WG	40.571	1.268			
	Total	2.53	1.187	0.204	Total	46.471				

Note: The elaboration is based on responses from 21 US farmers and 14 HU farmers. *, **, *** Significant at $p < 0.10$; $p < 0.05$; $p < 0.01$.

The results support that CSA farming is committed to promoting a sense of community among the members participating in the initiative (Table 3). CSA farmers in the US and HU believe that CSA aims to establish a relationship with consumers, with the local territory and communities, and to sustain the local economy. CSA farmers in HU are more strongly committed to providing local produce to the community. In their view, CSA farming contributes to food security, reconnects the community to the rural environment, and promotes the community networking activities (Table 4). Farmers strongly believe that CSA farming aspires to providing healthy and nutritious food to the local community (Table 3). This is particularly relevant among farmers in HU.

The economic and financial benefits that are related to CSA farming are valuable. The respondents believe that CSA farming helps with reducing marketing-related costs, getting them better prices due to direct selling, and having benefits from the upfront payment. Furthermore, respondents believe that they have better control over pricing, which ensures the value of the products sold (Table 3). Farmers in HU have more favorable views towards the income stability and fairness that CSA farming brings (Table 4). Moreover, the respondents believe that CSA farming has the benefits of sharing ideas and information regarding professional challenges and opportunities, producing food variety, receiving information on production practices, and sharing promotional tools (Table 3). There are some managerial challenges that CSA farmers have in both countries. In particular, they have difficulties in finding and keeping trained labor, setting the price for the share, recruiting CSA members, and having adequate storage space. Communication with CSA members and the management of pick-up points raise limited concern.

Environmental values drive CSA farming. The respondents think that CSA farming increases seasonal food eating in the community, contributes to save water, safeguard air quality, reduce food miles, and safeguards the environment by growing a variety of produce (Table 3). They also think to encounter farm management difficulties due to the weather and weed control. Farmers in the US and HU have some differences in the sensitivity towards environmental benefits of CSA farming. Farmers in HU more strongly believe that CSA farming contributes to save soil quality, makes limited use of chemicals, protects biodiversity, and promotes farming traditional methods, as compared to their US counter-parts (Table 4). US farmers are more concerned about the limited use of chemical, pesticides, and herbicides, as compared to farmers in HU (Table 4).

CSA farming seeks to promote rural and farm life, and it is often tied to emotional values. Farmers appreciate giving consumers the opportunity to grow their own food and see plants growing. CSA participation can enrich consumers' life-experience by affording them with the opportunity to socialize with other people (Table 3). HU farmers have a favorable belief that CSA farming can improve the knowledge regarding food origins of members' children and help members to spend time in nature (Table 4).

3.2. Main Perceived Benefits and Drawbacks

The results show that CSA farmers place great importance on environmental benefits (mean 4.49), the quality and variety of the products (mean 4.45), and the health and nutritional properties of the goods (mean 4.13) (Table 5). The management benefits are the least important (mean 3.75). The economic and financial benefits of CSA farming are quite important, and it is worth noting that the minimum value across all the farmers is fairly high (mean 3), and the standard deviation (0.55) is lower compared to the other aggregated items. In general, CSA farmers think that difficulties that are related to CSA network farm and management are of limited importance. The environmental challenges of CSA farming are more significant (mean 3.21).

Table 5. Perceptions on benefits and drawbacks constructs (all farmers) and chi-square by Hungary (HU) and United States (US) countries.

	Minimum	Maximum	Mean	Std. Deviation	Chi-Square P-Value (a)	
<i>Benefits</i>						
Perception on products' characteristics	1.00	5.00	4.45	0.78633	0.045	** (b)
Perception on community benefits	1.33	4.89	4.12	0.75348	0.077	* (c)
Perception on health and nutritional benefits	1.50	5.00	4.30	0.78764	0.635	
Perception on economic and financial benefits	3.00	5.00	4.13	0.55537	0.112	
Perception on management benefits	2.17	4.83	3.75	0.70383	0.148	
Perception on environmental benefits	2.25	5.00	4.49	0.73439	0.533	
Perception on experiencing farm life	2.50	5.00	4.18	0.71914	0.311	
Perception on emotional values	2.50	5.00	3.99	0.66425	0.526	
<i>Drawbacks</i>						
Perception on products' characteristics	1.00	5.00	3.15	1.02639	0.582	
Perception on management of CSA farm	1.00	5.00	3.10	1.05684	0.094	* (d)
Perception on environmental challenges	1.00	5.00	3.21	1.06446	0.148	
Perception on management of CSA network	1.00	5.00	2.99	1.05452	0.637	

Note: ** Significant at $p < 0.10$; * $p < 0.05$; (a) the Chi-square P-value was calculated on cross-tables between items' perception below-equal to 3 versus above 3 among CSA farmers' countries. (b) Significant values are US CSA farmers (below or equal to mean: 38.1%; above mean: 61.9%); HU CSA farmers (below or equal to mean: 7.1%; above mean: 92.9%). (c) Significant values are US CSA farmers (below or equal to mean: 42.9%; above mean: 57.1%); HU CSA farmers (below or equal to mean: 14.3%; above mean: 85.7%). (d) Significant values are US CSA farmers (below or equal to mean: 57.1%; above mean: 42.9%); HU CSA farmers (below or equal to mean: 28.6%; above mean: 71.4%).

Moreover, results show that US and HU CSA farmers assess differently the benefits that are related to the products' characteristics (p-value 0.045), the benefits provided to the community (p-value 0.077), and the CSA farm management drawbacks (p-value 0.094) (Table 5). In particular, HU farmers have a higher perception of the benefits that CSA farming ensures in products' characteristics and in supporting the community, as compared to US farmers. The HU farmers may have more difficulties in CSA farm management, as compared to US farmers (Table 5).

The PCA results show the existence of two main latent factors for the perceived benefits (Table 6). The PCA was tested until all of the factors had satisfactory internal consistency values. The Kaiser–Meyer–Olkin index was 0.800. Bartlett's test of sphericity was highly significant (0.000). These results indicated that the data were appropriate for use in the analysis. Items loaded strongly into one factor. The factor loadings are all above 0.700. The internal consistency, convergent, and discriminant validity of each component was verified. The internal consistency of each set of items was measured using Cronbach's alpha and composite reliability (CR). Cronbach's alpha values are significant, as they are

between 0.797 and 0.925, which is, respectively, good and excellent values [51]. CR was 0.85 and 0.93. Values were satisfactory [52,53]. The square root of each construct's average variance extracted (AVE) was calculated to ensure it was greater than its bivariate correlation with other constructs in the model to confirm discriminant validity. The ranged from 0.585 to 0.813, and since they are above 0.500 they are considered satisfactory. The results confirm the reliability and validity of the research components. The PCA elaboration on the perceived drawbacks did not identify the latent factors.

Table 6. Factor analysis on benefits in CSA farming and convergent validity and discriminant validity for each construct.

	Product and Community Benefits	Management and Farm Life Values Benefits
Perception on products' characteristics	0.919	
Perception on community benefits	0.905	
Perception on health and nutritional benefits	0.880	
Cronbach's Alpha	0.925	
Perception on economic and financial benefits		0.717
Perception on management benefits		0.775
Perception on experiencing farm life		0.696
Perception on emotional values		0.858
Cronbach's Alpha	0.797	
Variance explained	54.70	19.08
Convergent Validity and Discriminant Validity		
	Product and Community Benefits	Management and Farm Life Values Benefits
Product and community benefits	0.813 *	
Management and farm life values benefits	0.173 **	0.585 *
Composite Reliability	0.93	0.85
Mean value	4.29	3.98

Note: * Diagonal values = Fornell and Larcker's AVE. ** Subdiagonal = Inter-construct correlations

These results support that CSA farmers identify two main groups of benefits. One focuses on good quality and healthy products characteristics and the advantages the community derives from CSA participation. The other is related to the economic, financial, management benefits, and the rural life experiences and values deriving from CSA farming. The first group is perceived more positively (mean 4.29), as compared to the second group (mean 3.98).

4. Discussion

CSA originated as a reaction to economically concentrated domains of supermarket chains and discount stores. Food is often sourced internationally and sometimes is discounted at the expenses of food quality in these outlets. Moreover, food is no more the expression of the relation of human beings with their own territory and community [25,54,55]. These seminal origins are still valid. CSA still is an agro-food production and selling system that aims to be different from mainstream agro-food commercial channels. In CSA, agro-food produce becomes a medium to build a community by delivering quality food, safeguarding the environment, establishing network relations, and cultivating a sense of belonging among the CSA participants [1]. The research results support that CSA farmers agree on this multidimensional purpose.

The literature demonstrates that CSA is a complex and multi-faceted agricultural model covering a number of dimensions. Personal values, professional motivations, and community relations are strongly interrelated. The boundaries between these dimensions are blurred, and there are overlaps that may compensate for certain dissatisfactions in a dimension. The present findings confirm this explanatory framework. Moreover, the research supports that this is consistent through countries, despite different food consumption and production traditions, various timing of CSA development in the country, and socio-economic characteristics of CSA farmers.

The research results establish that various personal, social, environmental, and economic driving forces motivate CSA farmers, which are consistent with previous studies' conclusions [4,6,7]. These dimensions can be summarized into two main perceived benefits. First, CSA farmers treasure the product and community benefits that CSA farming brings, confirming past research findings [7,11,27]. Farmers aim at providing quality and healthy food, and a valuable experience for the CSA network and the local community [7,11,18,28]. This is particularly relevant for HU farmers, who highlight the importance of their role in securing safe local food and providing opportunities for networking and reconnecting with the rural life. This result agrees with earlier findings that emphasize the appreciation of the economic dimension of US CSA farming [12,56].

Second, CSA farmers acknowledge the existence of environmental difficulties in CSA farming, with managerial challenges. However, they believe their work brings benefits to soil, water, air quality, and helps to reconnect the community with the natural environment, as observed in preceding studies [16,24,57]. HU farmers show higher perception of the benefits CSA farming brings to consumers and children. US farmers are more concerned about the possible difficulties for not using chemical inputs in the agricultural production.

Other managerial aspects of CSA farming are perceived similarly among US and HU farmers. For instance, hiring and keeping trained labor are areas of concern in both countries [26]. Agricultural work is seasonal, often poorly paid, and CSA farming, at times, relies on volunteers that are not professional workers. In the long run, this limitation may adversely affect CSA farmers' motivations and management sustainability. CSA farming is usually poorly capitalized [4,26,58], and CSA farmers receive limited benefits from CSA farmers' network in sharing agricultural machineries and tools [4,58]. Those instruments may become useful, especially in addressing the difficulties due to weed control, weather adversities, pests, and diseases.

CSA members are generally very satisfied, but the membership turnover rates are often high, as highlighted by past studies [7,59]. The membership turnover rate can reach 50% in the case of a well-established CSA, and even higher in the first couple of years for a new CSA [60,61]. The present research results support that CSA farmers are more concerned about the management activities that are necessary to identify new CSA members, than coordinating and communicating with the member network.

These findings show that there are some difficulties in managing the CSA farms from an economic, financial, and management perspective, which is consistent with earlier studies. The US respondents had a higher level of income and their concern is mostly focused on setting the right price for the produce. HU farmers share this same concern, but they also express apprehension in having stable and fair incomes. This is consistent with HU sample features, which are characterized by lower income and part-time employment in the CSA.

Finally, earlier research supported that CSA farming management requires careful logistics management [21,62,63]. Farmers need to adequately manage the location, opening times, and accessibility of the CSA share pick-up points. The pick-up points should be convenient for CSA members. Consumers have limited time availability and they could easily opt to centralize all food purchasing in the same place, such as a retailer. Interviewed farmers indicate that pick-up point management does not represent a critical drawback.

Managerial Implications

The higher accessibility to sustainable and healthy food provided by conventional sales channels increasingly challenges the CSA concept. Retailers promoted and exploited consumers' interest in healthy food, and they are currently offering a wide spectrum of food options [64–70]. Organic food sales have increased [71,72]. Consumers' interest in a nutritionally balanced and sustainable diet, and in alternative food network initiatives, such as CSA, are shaping the whole food system offer, including mainstream sales channels. Thus, initial objectives to be an alternative distribution system counterbalancing the conventional market, to give access to healthy food, and to food that respects the environment are no longer solely the CSA farming program's attractiveness. These goals are pursued by other food system actors that become direct competitors to CSA farming. The evolved framework sets a new agricultural and marketing background for CSA, which leads to a number of managerial implications.

First, what differs the CSA experience from other food network initiatives includes the consumers' desire to (i) know the origin of the food and the farmer that produced the food their family and children eat, (ii) trust the quality of the food, to belong to a community, and (iii) to establish network relationships. Satisfying these consumers' expectations means CSA farmers' management skills must evolve with the goal of combining agronomic and farming management with communication skills. CSA farmers' management activity should invest in communication, provide information, and organize social events. CSA farmers management skills may include marketing, interpersonal relation, and network management. The manager of a CSA farm might inform regarding farm initiatives, such as the weekly/seasonal plans, the offered products, and the location and time of farm events. Moreover, CSA farmers may gather feedback from the members and adjust the agro-food production and provision accordingly [50].

Earlier research explorations establish that CSA members' dissatisfaction relates to the impossibility of choosing the share products, the scarce variety, the excessive products amount, and the dislike of the delivered product, which results in food waste. Consumers are used to having options to choose the food they want, and not to depend on weather- adversity and yield fluctuations. This dissatisfaction may lead the members not to sign up the CSA membership for the following year [50,59]. Good communication and constant information and feedback to members can ease members' understanding regarding agricultural practices and CSA farming dynamics [73]. It supports the creation of a sense of embeddedness into a farm community system, which includes inherent risks. The customers should commit to the philosophy of CSA. Education and promotion can support this process. CSA members' understanding towards the CSA experience will stimulate their commitment and limit members' fading enthusiasm. Membership recruiting is time and energy consuming, and other members' recommendations remain as excellent promotional instruments.

Second, the agronomic and farming management competencies remain crucial. These are, for example, the ability to manage a commercial fruit and vegetable farm, with a large number of crops at different stages of development, to forecast a sufficient amount of ripe fruit at the right time, and, in most cases, a commitment to organic or sustainable farming practices. Member satisfaction is highest when receiving a wide variety of vegetables in sufficient amounts. Therefore, farm labor should be prepared in agronomic and farming practices.

Third, there may be the need to improve the skills and extend the machineries to manage surplus production. This can be transformed in frozen, dried, or preserved food, and then possibly sold as value added products. The CSA farming may take management decisions that lead to the availability of extra time, and manual and flexible labor, which are often scarce in the busiest months of the season.

Fourth, the farmer should be aware of the species and varieties that are well-established and popular in the region. The farmers should be able to suggest recipes to help members process the whole product share if the farmers provide products that members are not familiar with [59].

Finally, CSA farmers' management skills must evolve to ensure performing farming practices, to engage committed members, and to build long-term trust between the farmer and member of the CSA

community. From a managerial perspective, the farmers agree that CSA allows for setting a fair price, having a good knowledge on the following years' income, being more resilient and less vulnerable to external influences, and being independent from big food chain actors' unfair trading practices [74]. However, there is concern regarding the capability of CSA initiatives to ensure a fair income and living wage for the farmers [75]. In particular, there is a need to better understand how CSA management initiatives can contribute to increasing sources of income. Increasing the CSA membership fee and producing share price may not be successful management strategies. CSA monetary contributions can only be increased to the extent that they remain competitive, as compared to retailing and other food sales channels pricing. Non-economic benefits of CSA membership are an added-value for consumers, but the price level has limitations. Currently, the price, despite freely set and fair-minded, may not ensure a reasonable income.

5. Conclusions

A number of research studies examined the characteristics of CSA members and their membership driving factors. However, there are few studies regarding CSA farmers' managerial approaches and driving factors. Past studies are mainly focused on North America and Western Europe. The present study aims to fill this gap by exploring CSA farmers' managerial approaches and driving factors, and to obtain a better understanding of what are the CSA farmers' benefits and drawbacks in managing a CSA farm. Furthermore, it aims at expanding the research knowledge on farming management practices in countries with different agricultural, economic, and political backgrounds, such as the US and HU.

Overall, the present research shows that non-monetary benefits are the essential backbone of CSA farming, but the monetary benefits are to be ensured for CSA long-term perspective and upscale [23]. There is need to find a balance. The reallocated power to CSA farmers, consumers, and local community should respect all CSA parties' professional and personal needs and expectations. Future research might be aimed at identifying areas to strengthen CSA farming management capability to merge CSA initiatives' principles and long-term sustainability. The comparison between different countries CSA experiences support that there are significant similarities through countries, despite that they are inserted in different agro-food production and consumption systems. Everywhere there is need to support initiatives that value the persons' sense of purpose and nourish people's and environment's wellness.

The limitations of this study should be acknowledged. The farmers involved provide a comprehensive picture of HU CSA farming and a good picture of the US situation. Future studies may further expand the basis of data, adopting the same methodology to compare more than two countries, including countries from Asia and Africa. Further analysis may focus on understanding the factors that lead farmers to enter and to exit from CSA farming, not just on the existing benefits and drawbacks of current CSA farming. Additional research can also be conducted to further identify the benefits and barriers to fully exploit the farmers' CSA networks and associations. These may provide relevant support for overcoming the challenges of CSA farming.

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Appendix A

Table A1. Literature references for questionnaire items.

Questionnaire Item	Literature References
Benefits (Benefits in)	
<i>Products' characteristics</i>	
Providing organic quality food	[28,57,75]
Providing tasty food	[16,75]
Providing fresh food	[28,75]
Providing transparency about food origins	[4,25]
Providing safe food	[7,8,17,57,63]
Providing a food offer focused on vegetable production	[7,20]
<i>Community benefits</i>	
Promoting CSA solidarity community	[11]
Increasing human capital	[11,75]
Sustaining local economy	[21,24,76]
Establishing a relationship with farmers	[4,44,57]
Establishing a relationship with consumers	[4,77]
Establishing a relationship with land and with their communities	[7,12,44,57]
Promoting ideals of agricultural work	[11,75]
Sustaining the production for personal consumption	[4]
Adopting the principle that agriculture's primary purpose is to feed people	[6,11]
Improving consumers' understanding of work in agriculture	[19,23]
Networking activities for the community	[75]
Promoting community social connections through farms events	[5,7,8,78]
Providing food traditionally appreciated by the community	[22,79]
Increasing solidarity with other CSA farmers, as social cooperation	[11]
Reconnecting the community to the rural environment	[75]
Providing local produce to the community	[21,24,75,76]
<i>Health and Nutrition benefits</i>	
Increasing consumers' accessibility of a more nutritionally balanced diet	[7,18,28,30]
Providing healthy and nutritious food to the local community	[7,18,28,30]
Providing healthy recipes	[7,18]
Providing healthier food	[7,18,28,30]
<i>Economic and financial benefits</i>	
Having upfront payment	[4,13]
Having better price with direct selling	[4,7,16,80]
Reducing marketing-related costs	[4,7,58]
Controlling pricing	[4,16–18]
Ensuring value for money for products	[4]
Limiting production risks and market competition	[3,4,12,13,16,24,29]
Having stable and fair incomes	[4,19]
<i>Management benefits</i>	
Receiving training on agricultural production practices	[12]
Receiving information on production practices	[4]
Providing good food variety	[12,16,24,59]
Sharing ideas and information on CSA professional challenges and opportunities	[29,81]
Sharing agricultural machineries and tools among CSA farmers	[4]
Sharing promotional tools about CSA farm's activities and products	[58]
Sharing information and dissemination activities	[4,13,19,44,81]

Table A1. Cont.

Questionnaire Item	Literature References
Benefits (Benefits in)	
<i>Environmental benefits</i>	
Reducing food miles	[4,5,16,22,23,57,75,82,83]
Increasing seasonal food eating in the community	[22,24,76]
Saving water quality	[16,56]
Saving air quality	[19,82]
Growing more varieties to safeguard environment	[4,7,25]
Protecting biodiversity	[4,16,77,83]
Making less/no use of chemicals	[4,8,58]
Saving soil quality	[4,78]
Farming with traditional method	[4,16,25,26,81,84]
<i>Experiencing farm life</i>	
Opportunity of working on the farm for consumers	[4,24,29]
Opportunity of growing their own food for consumers	[4,22]
Opportunity of staying in nature for consumers	[19]
Opportunity for consumers' children to improve knowledge on food origins	[82]
<i>Emotional values</i>	
Providing consumers' stress relief	[4,11]
Providing consumers' life enrichment	[4,58]
Providing consumers the opportunity to escape from urban chaos	[4,19]
Providing consumers the opportunity to socialize with other people	[4,24]
Providing consumers the satisfaction from seeing plants growing	[6,16,25]
Drawbacks (Difficulties in)	
<i>Products' characteristics</i>	
Providing different mix and quantity of food	[7,12,16,18,24,25,57,59]
Providing continuous adequate quality and quantity of products	[29]
<i>Management of CSA farm</i>	
Choosing a good place and timing for share pick-up point	[4,75]
Finding and keeping trained labor	[26]
Setting the price of the share	[4]
Having adequate products' storage	[12]
<i>Management of CSA network</i>	
Recruiting CSA members	[6,7,18,29,38,39,44,57,62,82,84]
Communicating with CSA members	[17,64,75]
Communicating easily with all members	[75]
<i>Environmental drawbacks</i>	
Farm management caused by the weather	[58]
Farm management caused by pests and diseases	[26,58]
Farm management due to weed control	[26]
Difficulties in growing product without chemical pesticide and herbicide	[26]

Table A2. The US versus HU farmers' characteristics (Chi-square analysis).

		Country		Total	Chi-Square	p-Value
		US	HU			
CSA experience	From 1 to 5 years of CSA experience	52.4	42.9	48.6	0.418	
	From 6 years of CSA experience onwards	47.6	57.1	51.4		
	Total	100.0	100.0	100.0		
Intention to renew CSA farming	No or uncertain	23.8	14.3	20.0	0.406	
	Yes	76.2	85.7	80.0		
	Total	100.0	100.0	100.0		
Gender	Male	33.3	46.2	38.2	0.349	
	Female	66.7	53.8	61.8		
	Total	100.0	100.0	100.0		
Level of education	Without academic degree	19.0	35.7	25.7	0.237	
	With academic degree	81.0	64.3	74.3		
	Total	100.0	100.0	100.0		
Age	Below 35 year-old	66.7	21.4	48.6	0.010	**
	Equal or above 35 year-old	33.3	78.6	51.4		
	Total	100.0	100.0	100.0		
Work condition	Full-time	95.2	78.6	88.6	0.165	
	Part-time or student	4.8	21.4	11.4		
	Total	100.0	100.0	100.0		
Yearly household income	Below 30,000 \$/year	38.1	100.0	60.0	0.001	***
	Equal or above 30,000 \$/year	61.9		40.0		
	Total	100.0	100.0	100.0		
Children in household	With children	85.7	46.2	70.6	0.020	**
	Without children	14.3	53.8	29.4		
	Total	100.0	100.0	100.0		

Note: **, *** Significant at $p < 0.10$; $p < 0.05$; $p < 0.01$.

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