

Faculty of Landscape Architecture, Horticulture and Crop Production Science

# A sustainable food-system?

Economic sustainability of Swedish community supported agriculture (CSA)

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Economic sustainability of Swedish community supported agriculture (CSA)

Ett hållbart matsystem?

Ekonomisk hållbarhet i svenskt andelsjordbruk

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## Foreword

This foreword aims to reflect upon my own development of agroecological competences during my time at the master's programme in Agroecology at the Swedish University of Agricultural Science (SLU). As I finished my bachelor's degree in Environmental Science at Lund University, I sought a way of using my knowledge within the field of agriculture when I found the master's programme in Agroecology. The international and holistic orientation of the programme caught my interest and I perceived it as an enriching environment for deepening my knowledge within sustainable agriculture. Throughout my studies, I have believed in the importance of connecting the academia to the every-day life of people. Agroecology emphasises and exemplifies how an increased two-way communication between researchers and practitioners could benefit both science and society. The programme has given me skills to contribute to a stronger connection between these groups and to analyse and use the knowledge that arises. However, for me, the greatest reward of the programme in Agroecology was the knowledge I received in agronomy and sustainable farming methods. It has been enriching to learn to look upon the farm as an ecosystem and study how farming can be performed to conserve energy and nutrients within the system. From now on, I wish to use the agroecological skills and knowledge to work towards development of a more sustainable food-production system.

## Acknowledgments

I would like to thank my co-students during my time at SLU for motivating me by inspiring discussions and dedicated team-work. Especially, I would like to thank Tove Stenius and Emilia Sternberg for the help and support in the start-up process of this thesis. As well, Lina Morin at the County Administrative Board of Västra Götaland was very helpful and gave ideas on how to frame my work. I am also extremely grateful to my supervisor Martin Melin who has guided me at times of confusion and who always has had valuable inputs. Finally, I would like to thank the farmers who accepted to participate in this study and share their thoughts and experiences. It was a pleasure to talk to you and I wish you all the best in your work towards the creation of a more sustainable food-system.

## Abstract

This research investigates Community Supported Agriculture (CSA) in a Swedish setting. CSA is believed to be a potential way towards a more sustainable food-system where consumers and farmers come together to form local and transparent systems. In Sweden, CSA is still in its infancy, but in the last years there has been a large increase in the number of farms. So far little has been written about CSA in Sweden. The concept has been evaluated as ecologically- and socially sustainable, but the economic dimension of sustainability has been in question. Until now the economic viability of CSA-farms has been low, both in Sweden and internationally. For this reason, this study investigates the economic sustainability of Swedish CSA-farms and how it could be enhanced. To place the research in a bigger perspective, the potential for Swedish CSA to contribute to a sustainable food-system is discussed. An agroecological approach is used where both internal- and external aspects affecting the farms and the CSA-movement are considered. Even if focused on economic sustainability, the study aims to describe CSA holistically without neglecting other dimensions of sustainability. 14 CSA farms were interviewed about their economic situation, their view on profitability and opinions on several aspects believed to have the potential to enhance the economic sustainability of the farms. The result showed that the CSA-farms had difficulties to cover labour costs and had problems with inefficiency, hence the economic sustainability of the farms is weak. At the same time, long-term economic plans had been set-up and the member groups were supportive and loyal. CSA gives the farmers a stable and predictable income and the possibility to know in advance how much they need to produce. Possibly, the low viability of CSA-farms is not connected to the concept itself, but rather an effect of the recent establishment of most farms and that many of the CSA-farmers lack professional farming experience. Consequently, the study did not find some approaches or business models to be more conducive than others to reach higher profitability. Finally, the study concludes that CSA succeeds to create relationships between consumers and farmers, gives the consumer insight into how food is produced and attracts new farmers to the profession. However, in the creation of a sustainable food-system, it would be beneficial if more professional and already established farmers converted into CSA.

## Table of Contents

FOREWORD	3
ACKNOWLEDGMENTS	4
ABSTRACT	5
TABLE OF CONTENTS	6
INTRODUCTION	8
Oniconive	o
Objectives Research Question	<b>8</b> 9
AGROECOLOGICAL RELEVANCE	9
LITERATURE REVIEW	10
WHAT IS COMMUNITY SUPPORTED AGRICULTURE?	10
MANAGEMENT SYSTEM AND MAIN CHARACTERISTICS	11
CSA IN SWEDEN	13
THE ECONOMIC SITUATION OF CSA	14
ECONOMY	15
Economy and profitability	15
Business planning and share-prices	16
Financial support	16
Risk sharing	17
Transparency	17
Cooperation and communication between farmers	17
WORKING CONDITIONS AND QUALITY OF LIFE	18
MEMBER RELATIONS	18
Participation, Relationship and direct-sale	18
Core group	18
THEORETICAL FRAMEWORK	19
AGROECOLOGY	19
ECONOMIC SUSTAINABILITY	19
METHOD	20
DATA TREATMENT AND DATA ANALYSIS	21
RESULT	21

ECONOMY	22
ECONOMY AND PROFITABILITY	22
BUSINESS PLANNING AND FINANCIAL SUPPORT	23
Share-prices	24
RISK SHARING	25
Transparency	25
COOPERATION AND COMMUNICATION BETWEEN FARMERS	25
WORKING CONDITIONS AND QUALITY OF LIFE	26
MEMBER RELATIONS FARMER-MEMBER RELATIONSHIP AND PARTICIPATION	26
CORE GROUP	27
DISCUSSION	27
CSA AND ECONOMIC SUSTAINABILITY	27
METHODS FOR ENHANCED ECONOMIC SUSTAINABILITY	29
ECONOMIC BUSINESS PLANNING AND SHARE-PRICES	29
MEMBER INVOLVEMENT AND FARMER-MEMBER RELATIONSHIP	30
ECONOMIC TRANSPARENCY	31
THE POTENTIAL OF CSA TO CONTRIBUTE TO AN ALTERNATIVE FOOD SYSTEM	31
CONCLUSION	33
REFERENCES	35
APPENDIX: INTERVIEW GUIDE (IN SWEDISH)	38

## Introduction

Community Supported Agriculture (CSA) has developed as a response to the industrialised agriculture and is a farming model where farmers and consumers come together to form local and sustainable food systems. (Gliessman, 2015; Henderson & Van En, 2007) In Sweden, CSA has had a rapid development, from approximately nine farms in 2015 to almost 35 in 2018. However, CSA is still an unknown concept for most people. For this reason, very little has been written about CSA in a Swedish context which motivates further study.

Studying earlier work, the ecological and social sustainability of CSA farms in Sweden and other parts of the world are relatively strong (Andersson, 2006; Nilsson & Wejåker, 2016; Sjöblom, 2015; Stigson, 2016). Though, it became evident that the economic sustainability is weak. The concept of CSA has grown out of a desire of creating a system where the farmer is given a fair economic compensation and reasonable working conditions. Although, both in Sweden and in other parts of the world it seems like there is dissonance between theory and practice. (Hvitsand, 2016; Lass, Bevis, Hendrickson, & Ruhf, 2003; Sjöblom, 2015; White, 2015) For this reason, the economic sustainability of CSA has been chosen as the main focus of this thesis.

The thesis embraces an agroecological approach and takes its standpoint in a broad perspective of CSA, both in Sweden and internationally. Thereafter, a SWOT-analysis will be used to evaluate and to easily present Swedish CSA from the three agroecological dimensions of sustainability: ecologic, economic and social. From there, the study will be narrowed down to an in-depth study of the economic dimension. By doing so, the study will hopefully continue the work of earlier research. Finally, as advocated in agroecological theory, the findings will be placed in a system perspective and the potential of Swedish CSA to contribute to a sustainable food system will be discussed.

#### **Objectives**

The aim of this thesis is to investigate the economic sustainability of Swedish CSA and how it could be enhanced. Hopefully, the thesis can provide insight in the economic situation of Swedish CSA-farms and what methods that could be used to increase the economic sustainability of farms. The literature review revealed four key aspects with the potential to increase the economic sustainability:

- Run the farm like a business and do economic planning
- Practice transparent economy
- Personal relationships with members
- Cooperation between farmers

The empirical study is built upon these aspects and on these quotes from earlier research:

"(F)urther research (...) should ask: (...) (H)ow can farmers use their access to members to communicate their financial needs more openly and confidently, and work toward earning higher incomes?" (White, 2015, p. 60)

"(M) any of the cases (farms, writer's comm.) have had developed business ideas (but) the organisational structure, such as price, delivery and work strategies has not always been well developed" (Nilsson & Wejåker, 2016, p. 50)

The researcher uses an agroecological approach and attempts to place the research in a bigger perspective by discussing the potential for Swedish CSA to contribute to a sustainable food system. The study emphasises the desires and aims of the farmers and consider it as factors that

are important to include, something that is agreed upon by Francis et al. (2003). Societies are systems built from human actions and are formed by demands, wishes and visions. Therefore, it is essential to integrate human behaviour as a driving force in the system. (Francis et al., 2003)

#### Research question

To achieve the objectives of the thesis, the following questions are asked:

- 1. To what extent are Swedish CSA-farms economically sustainable?
- 2. How can the economic sustainability of CSA be improved?

#### Agroecological relevance

In this section, it will be explained why CSA is relevant from an agroecological viewpoint and secondly, legitimate the choice of mainly focusing on the economic sustainability of CSA farms in the study.

Commonly, farming practices and the farm-system are the main focus of agroecological research (Gliessman, 2015). Altieri (1995) consider CSA to follow the visions of agroecological farming since it depends on diversification and cycling of nutrients. However, Altieri & Nicholls (2005) claims that introducing alternative agricultural practices only will not change the current system that favours monocultures, big farms and mechanisation. Instead, a major transformation of the conventional agriculture industry and the existing food system is needed. The implementation of resource-conserving practices and alternative farming systems are discouraged by the existing system, a system which is steered by globalisation, the economy of scale and agribusiness corporations who hold large political power. On this basis, Altieri argues for the creation of an alternative economic, social and cultural arena and think it is most likely implemented by movements in the rural sector in combination with actions within urban organisations. (Altieri & Nicholls, 2005)

The CSA movement aims to change the power relations, from wholesalers and big supermarkets back to the farmer. (Henderson & Van En, 2007) Furthermore, it aims to reveal the true cost of food production and build relationships between farmers and consumers. (Gliessman, 2015; Henderson & Van En, 2007) Farmers and consumers involved in CSA try to exist beside the industrialised food market since they make their own agreements. For that reason, they can act relatively independent of market forces, big corporations and political policies and create an alternative to the current system.

In today's urban society most people are detached from the environment where their food is produced. This detachment results in lack of awareness of where and how food is produced and processed. In its turn, leading to little reflection on how the consumption affects health, other humans and the environment. (Francis et al., 2003) Therefore, Francis et al. (2003) argues for consumer involvement in the food production system. If they are informed of how their food is produced, and by whom, they will be more prone to consume food produced according to agroecological principles, he reasons. CSA automatically connect the consumers both to the place where their food is produced and to the people producing it. The CSA movement seeks the involvement of the consumers through making them members of the farm, educating and informing them about the farm situation, encouraging them to participate and get involved in the farming practices and by building personal relationships.

Using agroecology as a framework when studying the sustainability of CSA farms with a focus on the economic dimension both offers possibilities and challenges. Agroecological theory emphasise the importance of a holistic approach when studying a farm- or food system. However, the researcher needs to determine how far from sustainability a system is and what of its parts that are least sustainable, how the sustainability is being hindered and how it can be changed to move towards a more sustainable system. (Gliessman, 2015) Specialised research is needed but the results must be interpreted and analysed in the context of the whole system and its network of interactions, why a funnel perspective is recommended. (Gliessman, 2015) Based on previous studies and the literature review, the economic viability is considered the least sustainable aspect of CSA, why it will be the focus of this study.

## Literature review

## What is Community Supported Agriculture?

Community Supported Agriculture (CSA) can be described as a food-production- and food-distribution system between a local farmer and people in the area. It builds on an annual commitment and people (consumers) become members of the CSA by paying for a share of the produce at the beginning of the season. In a bad year the members might get less food than expected but in a good year, they get more. (Forbes & Harmon, 2008; Henderson & Van En, 2007) The international network for Community Supported Agriculture, URGENCI, defines CSA as: "a partnership between a farm and consumers where the risks and rewards of farming are shared" (Parot, n.d.)

The concept of CSA did its first appearance in Japan in the 1971 and was called Teikei, which means partnership or cooperation. A group of women was worried about the increased use of pesticides in agriculture, the increased amount of imported food and the decreasing numbers of farmers in the area. Seeking a way to get more insight and to ensure they got healthy food, the women agreed with the local farmer to support them in exchange for food. (Henderson & Van En, 2007) It is generally accepted that Teikei is the first known CSA concept. However, already in the 1950's and 1960's similar practices were started in Germany and Switzerland (Moore, McCarthy, Byrne, & Ward, 2014) and are believed to spring from biodynamic agricultural tradition (Sjöblom, 2015). Less mentioned in the academic discourse are the similar community farms in Chile that developed during the 1960's and 70's. (Salud, 2012) In the mid-1980s, pioneers from Germany and Switzerland established the two first CSA-farms in the USA. One of the farms was started by Robyn Van En and Jan Vander Tuin in Massachusetts and the other farm by Traugher Groh in New Hampshire. (Cooley & Lass, 1998) Within the movement of CSA, they are seen as pioneers and frontmen of the concept and their farms are considered typical CSA-farms. (White, 2015; URGENCI, n.d.)

CSA has developed and spread. It has become a response to the industrial and intensified agriculture that emerged after the green revolution as well as to the globalisation of the food industry. (Gliessman, 2015; Henderson & Van En, 2007) CSA has become an opportunity for the farmers to get their power and recognition back. In a system where food production costs are high but prices on products are low, farmers must choose between either exploiting nature or exploiting themselves. They have lost the connection to their customers, they get little recognition for their work and their status as farmers is generally low. (Devik, 2013; Moritz, Lenard, Sarah, & Vaessen, 2017; Ekman, 2006) The food manufacturing and food wholesale in

European countries and the USA are characterised by a few large actors, which have led to a shift in power relations from the farmers to the big corporations. (Devik, 2013; Olofsdotter, Gullstrand, & Kostas, 2011; Ostrom, 1997) As a consequence, many farmers express a feeling of loss of power over their farming practice and their business. (Devik, 2013 and Stigson, 2016) As an example, the actual tipping point for the first Swedish CSA-farm Ramsjö gård<sup>1</sup> to convert into a CSA-farm was when they got directly subjected to the uneven power relation between the farmers and the wholesale companies. They had their whole cucumber harvest spoiled when a wholesale company, right before delivery, decided to import cucumbers instead of buying from Ramsjö Gård since the price per kilo was 10 Swedish cent (öre) lower. (Stigson, 2016)

#### Management system and main characteristics

Basically, there are two main types of CSAs, either it is consumer-initiated or farmer-initiated. The consumer-initiated CSAs are usually initiated by a group of people that come together because they seek insight into how and where their food is produced. Sometimes the group itself works in the field but more common is to hire a farmer to take care of the production. (Devik, 2013; Henderson & Van En, 2007) Contrary, the farmer-initiated CSAs are founded on the initiative of a farmer who invites people to join and become members. Moreover, several CSA-farms could go together and form a farm-cooperative (Devik, 2013) to offer a larger variety of produce and to share risks (Shrestha, 2012). In Sweden, the farmer-initiated CSA is by far the most common CSA-model and will hereafter be the model referred to if not stated otherwise.

The business and farm structure of farms practicing CSA vary. Some farms have CSA as their only distribution channel whereas others also produce and sell to wholesales, on farmer's markets or in a farm shop. Some farms are involved in other business activities as well, like running a B&B or offering course activities. The delivery of food shares is also done in several different ways. Some farms have self-picking systems and others have a box-system where the farmer put together the weekly share in a box for each member. The members then pick up the box at the farm or a pick-up point. (Henderson & Van En, 2007; Sjöblom, 2015; Stigson, 2016)

There seem to be as many CSA concepts as there are CSA farms which is also the uniqueness of CSA. Independent of external regulations and economic systems (Devik, 2013), every CSA forms its own practice best suited for the specific farm. (Andersson, 2006; Devik, 2013; Moore et al., 2014) What is key-aspects of the concept differs widely depending on who you ask, or which report you read. In an attempt to summarise the different views, these three key aspects could be considered to be the main characteristics of most CSA-farms:

#### 1. A binding agreement where risks and rewards in food production are shared

Traditionally members buy a share for a set period, usually a year, and then become shareholders of the produce but not of the farm. The formal or informal agreement clarify what is included in the share and what obligations there are for the member and farmer respectively. Commonly, the share is pre-payed in advance of the season. (Bjune & Torjusen, 1996; Devik, 2013; Moore et al., 2014; Sjöblom, 2015)

## 2. Farmer-member relationship and member involvement

As earlier mentioned, the idea with CSA is to tie closer bonds between producers and consumers. The members are believed to be interested in the farm and the daily work.

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<sup>&</sup>lt;sup>1</sup> Located outside Uppsala

The farmers, in their turn, appreciate the personal connection to the people who consume their produce. The farmers are in general interested in building and spreading knowledge. (Hvitsand, 2016; Nilsson & Wejåker, 2016) Therefore, member days, harvest festivals and other farm activities are usually arranged during the season. CSA is considered to act community building, both between members and farmers as well as within the member group. (Hvitsand, 2016) Although, according to earlier studies, it seems like CSA in many cases is not as community building as it aims to be (Andersson, 2006; Sjöblom, 2015) and the social factors are usually low ranked among members as a reason for joining CSA (Brehm & Eisenhauer, 2008).

Since the CSA concept builds on involvement and co-management where risks and bounties are shared there is a tradition of having at least one yearly meeting. At the meeting, the farmer and the members can evaluate the past season and plan for the upcoming one. Also, members get the opportunity to influence farm practice. (Henderson & Van En, 2007; Nilsson & Wejåker, 2016) Some CSAs have a "core group" which can be described as a grower-member council. It consists of members that are especially committed to the concept and who are taking responsibility for parts of the business. Usually, the farmer makes most of the production decisions and the core group is responsible for more administrative tasks and member relations, but there are no rules why the implementation differs. (Henderson & Van En, 2007)

#### 3. Transparency of production and economy

A transparent economy is by some considered a key aspect of CSA (Bjune & Torjusen, 1996; Hvitsand, 2016; White, 2015) but according to Henderson & Van En (2007), it is something that is up to each farm to decide if they find necessary or not. If advocating member involvement in economic issues, the member meetings are usually seen as an economic issues can also be discussed like for example bigger investments. (Moore et al., 2014) By a transparent business structure and involvement of the members, in combination with the exclusion of the middlemen, CSA wishes to put the right price on food. The price shall reflect the actual costs of production and the amount of work needed. (Bjune & Torjusen, 1996)

The CSA members' interest in healthy and organic food, together with the involvement in the farm, generates a transparent production system. Regarding farming methods, it is not clear if a CSA-producer must use organic farming methods. The roots of the movement are found in biodynamic tradition (Europe) and the demand for local food produced without the use of pesticides (Japan). However, according to Henderson & Van En (2007), nothing in the CSA concept dictates what methods that should be used. In the USA most CSA-farms, but not all, use organic or biodynamic methods and the general person joining a CSA is not interested in vegetables sprayed with chemicals (Henderson & Van En, 2007; Lass, 2001). Earlier research found all Swedish farms to farm in accordance with ecological principles<sup>2</sup>. (Sjöblom, 2015; Stigson, 2016)

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<sup>&</sup>lt;sup>2</sup> In 2015 and 2016.

#### CSA in Sweden

CSA is a new concept in Sweden. The first Swedish CSA-farm was Ramsjö gård that in 2001 decided to convert their organic farm to CSA. For a long time, they were the only CSA farm in Sweden but between the years of 2012 and 2014 the situation changed and in 2015 the number had increased to nine CSA-farms. (Sjöblom, 2015) According to Stigson (2016), the farms seem to have emerged separately from each other and half of the farms were started by immigrants who brought the concept with them from abroad. The movement has continued to grow and have had an almost explosive development. At the time of this study, at the beginning of 2018, there are thought to be around 35 CSA-farms in the country (L. Morin, personal comm., 9<sup>th</sup> of February, 2018).

Because of the recent emergence of CSA farms, so far not much has been written about CSA in a Swedish context. However, Andersson broke new ground in 2006 with the study "Community Supported Agriculture (CSA) – the pathway towards increased sustainability?" (writer's translation). Andersson's work was followed up by Sjöblom (2015) and Stigson (2016). Both studies make a serious attempt to capture the overall picture of CSA farms in Sweden and holistically describe and analyse the situation of Swedish CSA-farms. Finally, in 2016, Nilsson and Wejåker (2016) looked at the motives and drivers among CSA-farmers. Overall, these studies show similar results regarding opportunities and challenges faced by Swedish CSA to become a sustainable alternative to industrial agriculture. Interestingly, many of these aspects are also recognised in other countries, for example in the USA and Norway (Devik, 2013; Hvitsand, 2016; Lass et al., 2003; Ostrom, 1997; White, 2015). Even if the context between these countries differs, similar issues arise.

In order to describe the situation of Swedish CSA and the sustainability of the system, a SWOT-analysis is presented (Figure 1). It is based on the findings of the earlier studies on CSA in Sweden mentioned above: Andersson (2006), Nilsson and Wejåker (2016), Sjöblom (2015) and Stigson (2016). SWOT is an acronym for "strengths, weaknesses, opportunities and threats" and is a popular tool for strategic planning within corporations. A SWOT-analysis enables an assessment of the external situation (opportunities and threats) and the internal characteristics (strengths and weaknesses) of an organisation or business. In this thesis, a SWOT-analysis is used to paint a picture of the situation and to reveal factors that might otherwise be overlooked. It aims to give the reader an overlook in a quick and easy manner to avoid an unnecessarily long and fragmented background section. Since the SWOT-analysis accounts for both external and internal factors, it is considered to go hand in hand with an agroecological approach.

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<sup>&</sup>lt;sup>3</sup> Original title: Community Supported Agriculture (CSA) – En väg mot ökad uthållighet? En studie av Ramsjö Gård.

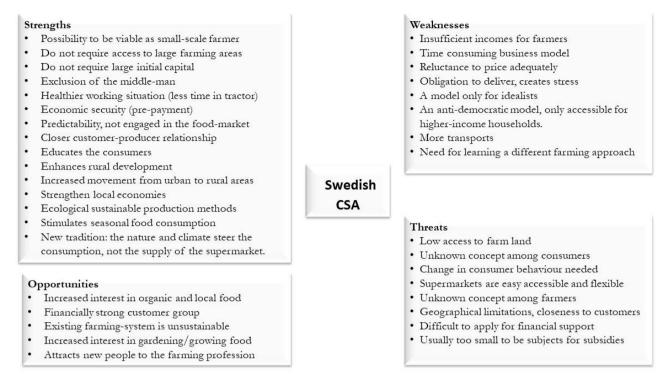


Figure 1: A SWOT-analysis of Swedish CSA based on the findings by Andersson (2006), Nilsson and Wejåker (2016), Sjöblom (2015) and Stigson (2016).

The SWOT-analysis of Swedish CSA reveals that there is a growing interest for organically and locally produced food, especially within financially strong customer groups. On the other hand, CSA is sometimes criticised for being an expensive and anti-democratic model which are only affordable for consumers with higher incomes. Importantly, a big change in consumer behaviour will be needed for people who join CSA. In CSA the consumer cannot chose when to go shopping and what to buy like they can do in supermarkets which have a large variety of produce, all year around and are open from early morning to late evening.

As presented by the analysis, farmers are conserving natural resources and try to not exploit nature by using ecologically sustainable production methods and the concept stimulates local and seasonal consumption. The farmers get closer relationships with the consumers and a healthier lifestyle, but experience stress occurred by a feeling of obligation towards members. Economically-wise, the model is supposed to enable economic viability for small-scale farmers, strengthen local economies and give the farmers a secure and predictable financial situation. Nevertheless, the farmers are receiving insufficient incomes, are reluctant to set adequate share-prices and the model is seen as time-consuming and idealistic. The SWOT-analysis reveals that there is dissonance between theory and the reality. Consequently, the economic dimension will be investigated further. Hereunder follows an in-depth review of the economic situation of CSA in both Sweden and internationally.

#### The economic situation of CSA

It is a frequently raised issue that CSA-farms have difficulties covering their labour costs and making a living from their farm (Lass et al., 2003; Shrestha, 2012; White, 2015) Sjöholm (2015) and Nilsson and Wejåker (2016) made similar findings in Sweden, where incomes were generally insufficient. Although, it is important to bear in mind that a financial scarce situation is not unique for CSA-farmers, but is the situation for farmers in general, independent of agricultural

practice. (Lass et al. 2003; Ekman & Gullstrand, 2006; Karlsson, 2015) Farmers are constantly exposed to price fluctuations on the global market and increased competition from global actors. (Ekman & Gullstrand, 2006) Furthermore, studies show that regardless of increased productivity, the situation for Swedish farmers is not economically sustainable. Roughly estimated, 80 % of the Swedish farmers earned a negative profit during 2010-2015. (Karlsson, 2015)

#### Economy

#### Economy and profitability

A large study performed in 2001 by Lass, Bevis, Hendrickson, & Ruhf (2001) <sup>4</sup> has become an important contribution to the academic field of CSA and is widely used as a reference for the overall situation of American CSAs. For this reason, findings from the survey that are believed to be relevant for this thesis will be shortly presented.

The farmers in the study were asked to evaluate how satisfied they were with different aspects of their farm. Regarding financial aspects, there was no real consensus, but 46 percent of the farmers were satisfied with their ability to cover operational costs. Regardless, wages and benefits were costs that did not seem to be satisfactorily covered. Almost half of the farmers were unsatisfied with their compensation. Besides, more than 68 percent were unsatisfied with their financial security (health insurance, retirement, etc.). Among the 32 farmers who were planning to leave CSA in the near future, "insufficient income" was the second most common reason for wanting to quit. (Lass et al., 2001)

Even though the farmers experience insufficient labour compensation and financial insecurity, they felt that CSA improved their economic situation. A majority of the farmers said that CSA had increased their own compensation and their ability to meet farm costs. In accordance, the survey showed that CSA farms in the USA are less dependent on off-farm income than non-CSA farms. Finally, despite the financial issues, more than 57 percent of the farmers were satisfied with their stress level and quality of life. (Lass et al., 2003) These results correspond to Hendricksen's (2005) findings from a three-year-long case study<sup>5</sup>. A strong association was found between farmers who concentrated on CSA operation and higher net cash income per unit of produce. What is more, the farms which had CSA as their primary or sole distribution channel, had the highest net cash income per acre (Hendrickson, 2005). Similarly, the most established Swedish CSA-farm experienced CSA to give them better economic safety than all other business models they have tried (Andersson, 2006).

To sum up, since CSA-farms are not as affected by unfavourable weather or market fluctuations, they might have a more financially stable situation than farms using traditional business methods (Hendricksen, 2005). This is confirmed by Hvitsand (2016) who states that it seems like the income from CSA is in general moderate, but predictable, as the farmer receives the payments in advance. (Hvitsand, 2016) In addition, CSA might be an attractive marketing alternative since CSA-farmers are less dependent on off-farm income than other farmers. Cutting out the middlemen gives economic possibilities for farmers as long as the share-prices reflect the cost of producing the share, including labour costs. (Henderson & Van En, 2007; Shrestha, 2012) The profitability is in the end very much dependant on the motivation of the farmer since many

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<sup>&</sup>lt;sup>4</sup> The study is usually referred to as "The 2001 Survey". Survey questionnaires were sent to around 900 CSAs that were thought to be operating in 2001. Around 350 farms responded. 12 percent of the respondents had been running CSA for ten years or more but the average years in operation were 5.7, indicating that many of the CSA-farms were relatively newly established.

<sup>&</sup>lt;sup>5</sup> From 2002 to 2004, Hendricksen performed a farmer-led case study of 19 vegetable farms in Wisconsin, USA. Out of these 19 farms, 13 were involved in CSA.

factors need to be well developed for a business to grow successfully. (Scott & Bruce, 1987) Nilsson and Wejåker (2016) found that none of the farmers in their study had profit as a motivation for establishing their CSA. Rather, they were driven by a will to contribute with sustainable food, educate, removing middle hands and building networks.

#### Business planning and share-prices

"Even if many of the cases (farms, writer's comm.) have had developed business ideas, the organisational structure, such as price, delivery and work strategies have not always been well developed" (Nilsson & Wejåker, 2016, p. 45)

Even if many CSA farmers see CSA much as a lifestyle and ideology, the farms must function as small businesses to be long-lived. That includes economic management systems, budget planning and contractual agreements with members. (Henderson & Van En, 2007; Hendrickson, 2005) If the farmer lacks economic skills, it might be favourable for the farmer to focus on the production and have someone else to take care of the financial tasks (Henderson & Van En, 2007; Shrestha, 2012).

When Sjöblom (2015) studied Swedish CSA-farms in 2015, she found that even if many farms had calculated the number of members needed to cover the production costs, few of the farms had made more detailed calculations on the required number of members and required share-price to cover a salary. The same observation was made in the USA where salaries often were excluded from the budgets if there was a budget at all. Instead, many farmers in USA and Sweden simply set share-price based on what they believed consumers were willing to pay or looked at share-prices of other CSA farms. (Devik, 2013; Ostrom, 1997; Sjöblom, 2015) Among the farms who had made a budget, many had not included farmer salary. (Galt, 2013; Lass et al., 2003; Nilsson & Wejåker, 2016) Neither, were time and effort for administrative and logistic tasks accounted for, such as maintenance of member relations and preparation of weekly delivery. (Galt, 2013)

Many CSA-farmers perceive the consumer as very price-sensitive, why they fear to set the share-prices too high. (Sjöblom, 2015; Hvitsand, 2016) The unpredictability of how much the farmer will be able to produce also affect the confidence to set an adequate share-price, at least for the more recently started CSAs. (Nilsson & Wejåker, 2016; Sjöblom, 2015) However, there are indications that a higher share-price might be conducive to build a stable member group. By setting a higher or correct share-price from the beginning, only the committed customers will stay, customers who understand the model and the hard work connected to food production. In its turn, this will create a more sustainable and predictable system. (Henderson & Van En, 2007; Devik, 2013)

#### Financial support

Most farmers engaged in the traditional agricultural sector, at least in Europe, survive thanks to subsidies. (Gardner, 1996) In contrast, for CSAs it is uncommon to apply for subsidies. Only 16% of the CSA farms in USA get subsidies (Lass et.al. 2003) and in Sweden only approximately three CSA farms are large enough (larger than 4 hectars) to be granted support (The Swedish Board of Agriculture, 2018; Andersson, 2006, Interviewed farmer 9, pers. comm., 29<sup>th</sup> of March, 2018). Furthermore, the farmers express it as too difficult and too time-consuming to apply for financial support. (Nilsson & Wejåker, 2016). The issue of financial support is not uncomplicated since some advocates argue that it lies in the very concept of CSA to not cover production costs with subsidies. It is seen as vital that the farm can bear itself, independent of external actors. Otherwise, there is a risk of setting share-prices too low and customers get used to prices that do

not cover the production costs. (Devik, 2013; Sjöblom, 2015) For the same reason, farmers mention the importance of not being in debt. They rather use crowdfunding among their members than apply for a bank loan. (Moore et al., 2014; Sjöblom, 2015)

#### Risk sharing

One of the few aspects that all definitions of CSA seem to embrace is the aspect of risk sharing. Even so, in practice, there is shown to be social or cultural barriers for the farmer to share the risks of farming. (Hvitsand, 2016; Sjöblom, 2015) According to Sjöholm (2015), the main reasons why Swedish CSA-farms do not practice risk sharing is a feeling among the farmers that i) they are not enough well-established to be comfortable with "promising" anything and ii) the customers are not yet ready for the concept.

#### Transparency

Economic transparency is a discussed issue within the CSA movement (Henderson & Van En 2007; Pers. comm. farmer 26, 20<sup>th</sup> of March, 2018; White, 2015). According to the literature, it seems to be no right or wrong ideologically wise. Nevertheless, there are advocates for the practicing of transparent economy and how it could be used as a tool for adequate price-setting. (Bjune & Torjusen, 1996; Devik, 2013; Henderson & Van En, 2007; Ostrom, 1997; White, 2015) Furthermore, economic literature supports that transparency could improve resource allocation and efficiency and from a member perspective, economic transparency enables them as investors to reveal the risks. (Vishwanath, 2001)

Vander Tuin, founder of Temple-Wilton Community Farm and one of the CSA pioneers, say that the fundamental values of CSA has been a bit lost in the expansion of the concept. It lies in the very core of CSA that the farmer should earn a living in the same range as other people in the community. Vander Tuin experience a dissonance between ideology and practice which have led to shortcomings, especially financial ones. Further, many farmers practicing CSA fail to present the true costs of production and stand by them, Vander Tuin argues (White, 2015). In that regard, White (2015) claims that the movement has succeeded to create a mythology of a moral economy where the farmer is dignified, earns a decent salary and where transparency and mutual understanding of the farm are basic elements. However, when it comes down to it, many CSA-farms are unwilling to share a potential scarce financial situation with their members. From that perspective, the movement has created a myth and branded itself through this myth, (White, 2015)

Instead of the CSA movement chasing a definition of what a "real" CSA is, White (2015) recommends that each CSA-farms clarify what CSA means to them. Further, the farms are recommended to present the farmer's economic compensation to make economic conditions visible for members. The farm of Vander Tuin shared in-depth financial information with their members and felt that it helped them to form close bonds with their members. It was a direct way of ignoring market forces and having the members to meet the true production costs. (White, 2015) The same discourse is seen in Norway where economic transparency is believed to enhance the understanding of the true costs (Devik, 2013), both favouring the particular farm and the sustainability of CSA as a food system.

#### Cooperation and communication between farmers

Cooperation between CSA farms such as sharing of tools, make purchases together and exchanging seeds could generate economic benefits and decrease dependency on external actors. (Devik, 2013) CSA-farms could also go together and create cooperatives. They could then offer a larger variety of produce (Shrestha, 2012) and potentially decrease dependency on the economic

market even more. If one CSA experience shortage its members can still get their food from the other farms and do not have to turn to the market out of necessity. (Lamb, 1994) In addition, cooperation in the form of communication and knowledge-sharing between farms is shown to have the possibility to improve the practice, both farming and administration-wise and eventually the revenue of the farm. (Hendrickson, 2005)

## Working conditions and quality of life

Neither maximized profit nor making money is an aim or a desire for the CSA-farmers. They are aware of the hard market conditions for farmers in general and are involved in CSA mainly for ideological reasons and because they are appealed to the farmer's lifestyle. (Andersson, 2006; Galt, 2013; Hvitsand, 2016; Lass et al., 2003; Ostrom, 1997) As a consequence, CSA-farmers, at least in the USA, tend to fall into self-exploitation where they monetarily undervalue their work and the positive externalities of their farm. They believe so strongly in the concept and the values of CSA that they tend to accept low economic compensation. (Galt, 2013; White, 2015)

#### Member relations

## Participation, Relationship and direct-sale

The involvement of customers in the food system has been earlier discussed. It is seen as conducive both for creating a sustainable food system and for a sustainable farming system. Both in Sweden and internationally the general CSA-farmer would like to see their members more engaged in the farm but wish for it to develop organically. It looks like the CSA concept might not always be as community building as it aims to be and the contact between members and their farm is quite modest. (Ostrom, 1997; Sjöblom, 2015; White, 2015) Correspondingly, the social or community-related factors have been ranked low as a reason for becoming a CSA-member. (Cooley & Lass, 1998; Galt et al., 2016; Hvitsand, 2016)

The social relationship between the farmer and the member is suggested to increase the willingness to pay among members. If the members personally know the farmer and realise how much work it is to produce food, they might not only be willing but actually demanding, to pay a higher share-price (Devik, 2013). In her research, Ostrom (1997) found it to be unusual (2 out of 20 interviewed farms) for the farms to realise the "ideal" concept of CSA, with a democratic decision structure, members who voluntarily participate in the farm work (administrative or practical) and the budgeting process. The two farmers who did, seemed to be more confident in their farm's future since their members were loyal, understood the goals of CSA and the hard work of producing food. Consequently, even if CSA was created to offer the farmers a fair wage by creating social relationships, in the end, many CSA farmers are not receiving satisfactory compensation. (Galt, 2013)

The personal relationship risk to increases the farmer's sense of obligation to produce and deliver accordingly to the members' expectations. Consequently, farmers do not dare to price adequately, afraid of not being able to deliver. (Galt, 2013; Sjöblom, 2015) In addition, because of the personal bond, decisions by the farmers tend to be affected by altruistic feelings towards members. (Lass et al., 2003; White, 2015)

#### Core group

There are indicators that a core group might be a useful tool for ensuring reasonable economic compensation for the farmers. As earlier mentioned, a core group consists of members who are especially committed to the farm and usually take responsibility for some of the business tasks. Farmers with core groups or who have hired someone else to take care of member relations have shown to be more likely to earn a better salary since the members are more prone to ensure a fair

salary for their farmer than the farmer oneself. (Galt, 2013; Henderson & Van En, 2007; Ostrom, 1997; Shrestha, 2012)

A core group could also decrease the amount of administrative work for the farmer which enables that they can focus on producing food. (Devik, 2013; Henderson & Van En, 2007; Ostrom, 1997)

## Theoretical Framework

#### Agroecology

The theory of Agroecology is helpful to understand why community supported agriculture can be useful in the strive towards a sustainable system for food production and food consumerism. Agroecology is the holistic study of agroecosystems including all environmental and human elements (Altieri & Nicholls, 2005). It derives from the concept of the agroecosystem, which is a farm or an agricultural region understood as an ecosystem. (Gliessman, 2015) The theory of Agroecology offers a framework to analyse the food system. The food system includes all actors in the production chain together with the larger structure in which these actors exist. (Gliessman, 2015) Francis (2003) argues that agroecology should be defined as the ecology of the food system to ensure integration of the economic, ecological and social dimensions within and outside the farm system. Likewise, Altieri & Nicholls (2005) stress the importance of understanding all factors affecting a certain agricultural system. It goes beyond the farm system itself to also include the political, cultural and economic context in which the farm exists. Together with environmental and climate aspects it will generate a more comprehensive picture of the situation and is essential to reach full sustainability of the system (Gamble, Wallace, & Thies, 1996). The aim of agroecology is to create ecologically sustainable agroecosystems that are resourceconserving and socially just but still productive and economically viable (Altieri & Nicholls, 2005).

#### Economic sustainability

The basic meaning of economy and the cornerstone in classical economic theory is the maintenance of resources. This could be all types of resources, for example monetary- or natural resources. In national economic theory, sustainable (development) is defined as maintenance of total assets. If the resources build up in the same pace as they are used, it can be seen as sustainable in the long run. (Bergström, Axelsson, Nycander, & Skånberg, 1996) If applied to a business situation, a business is considered economically sustainable over time if costs are lower than incomes and resources used in a manner where they are sustained over time. There should also be an amount of surplus money in case of unexpected expenses. (Bergström et al., 1996; Flodén, 2005)

At society level, economic sustainability gets slightly another meaning. "Sustainability" as a concept started to appear more frequently in political and other official contexts in connection to the oil crises in the 1970s. The UN World Commission on Environment and Development, usually known as the Brundtland Commission, wrote the report "Our common future" in 1987. (Mulligan, 2018) This report made the first official attempt to define "sustainability" and "sustainable development". Development was considered sustainable if it "meets the needs of the present without compromising the ability of future generations to meet their own needs". (UNWCED, 1987) Further, sustainable development was more thoroughly defined in Agenda 21 where it is said to be built up by three dimensions: ecologic-, economic- and social development. In Agenda 21,

economic sustainability is seen as economic growth without depletion of financial, natural and human capital. (Basiago, 1999). In a business situation, it could be described as to not use resources on the expense of human beings or nature. (Munier, 2005)

To conclude, a business is considered economically sustainable if the business is economically viable and earns a revenue without exploiting neither humans, nor nature, and uses its resources in a manner where stocks are not diminished over time. (Flodén, 2005)

#### Method

It is difficult to define the number of CSA-farms in Sweden but according to the contact person at the County Administrative Board of Västra Götaland there might be approximately 35 CSA-farms. (Lina Morin, Pers. Comm. February 12<sup>th</sup>, 2018) The attempt was to find all farms as who identified themselves as CSA-farms. The farms were found through Google-searches, blogs, social media forums and the homepage of the Swedish Association of CSA (Andelsjordbruk Sverige). Thus, there might be farms that have not been found and contacted and the study does not claim to have been in contact with all Swedish CSA-farms.

In total 30 CSA-farms where found. Four farms were directly excluded from the study, two of them because the upcoming season would be their first season, one farm because it was run voluntarily and the last farm because the farmer had decided to take a break from CSA. The rest 26 farms were contacted by email and asked if they would like to participate in the study. Those of the farms which did not answer the first time were sent a second message as a reminder. In total, 14 farms approved to participate, eight farms refused and four did not answer. One of the interview subjects showed at the time of the interview to have quitted CSA last season. This farmer was included in the study anyway because it had not been their own choice to quit and they were believed to have valuable contributions as an interview subject. To not make the result misleading the farmer has been treated as if being an active CSA-farmer. Furthermore, two of the respondents (one of them is the same farmer as mentioned above, who no longer is a CSA-farmer) look upon their CSA mainly as social projects and not as a way of producing food and earn their living. Nevertheless, they have been included in the analyse since they have experience of the different elements of the CSA and the economic viability of the concept. The 14 interviewed farms were geographically spread out and cover almost the whole of Sweden.

To answer the research questions, semi-structured interviews have been performed (see Appendix 1). Qualitative methods are useful when studying opinions, values and desires of people. It can give a deeper insight into how people experience their situation (Eneroth, 1986; Gustavsson, 2003). Interviews enable the researcher to ask more complex questions and for the respondent to speak more freely (Sverke, 2003). Furthermore, the use of qualitative methods, such as interviews, is in accordance with agroecological theory for two main reasons:

- i) Agroecological theory emphasises the importance of giving voice to the farmers and connecting academic research with farmers and stakeholders. (Edwards, Grove, Harwood, & Pierce Colfer, 1993; Gliessman, 2015)
- ii) Social science methods that integrate human dimensions and cognitive issues of farmer decision making is argued to have a great potential to enrich the analysis and study of the total agroecosystem. (Francis et al 2003)

All interviews were held over the telephone except one interview which was done in person. Telephone interviews were used because of limits in time and economic resources. Having one face-to-face interview might have influenced the result since it might affect the talkativeness and comfort of the respondent (Bjärke, 2003). Though, in this case, it is believed to be a negligible difference since also the telephone interviews differed a lot in length, from 30 to 70 minutes. The interview questions were written in advance, but some room was given to the respondent to add information they found relevant. The collected data from each respondent depends a lot upon how willing the interview subject is to share and talk on their own initiative, which became evident by the difference in length of interviews.

#### Data treatment and Data analysis

All interviews were recorded and after that transcribed. The interviews were not literally transcribed at all times and could be seen as "summarised transcription". That means to transcribe what the interview subject says but not every sound and sometimes in more general terms and to complement with more detailed transcription when needed. The advantage is that it saves time but there is a risk of missing information. (Alvesson, 2011) The transcripts where eventually coded and thematised.

Ethics have been taken into consideration throughout the research and the informants were informed that the interview would be recorded. The information has been treated confidentiality where the interview transcripts and personal information have been stored separately. No information that could be linked to a certain farm has been published. To ensure the anonymity of the interview-subjects "they" and "their" have been used as a gender-neutral pronoun as accepted by ACES (The Society of Editing). (ACES, 2017)

#### Result

The 14 interviewed farms are spread geographically over the country and all of them are focused on vegetable production. Only one CSA includes meat and other products in the shares, but two farms plan to sell eggs and meat separately from the shares in the future. In general, the farms deliver vegetables between April and October. All respondents cultivate small areas for their CSA ranging from a plant bed area of approximately 150 m<sup>2</sup> to a farming area of 2 hectares, with a mode value somewhere between 0,5 to 1 hectare. Apart from two respondents who have run CSA for four respectively six seasons, the remaining 12 farmers have practiced CSA between one to three seasons<sup>6</sup>. The number of members of each farm ranges from around ten to 110. A couple of farms have not only private individuals as members but also restaurants and/or municipalities.

<sup>&</sup>lt;sup>6</sup> Five farmers had run CSA for one season, three for two seasons and four for three seasons.

Table 1: An overview of the situations, opinions and business structures for the 14 interviewed CSA- farmers. The numbers in the table refer to the number of farmers.

	Yes	No	To some extent	No data
Have earlier farming experience	5	9		
Practice pre-payment	11		3	
Have members who pick up their shares at the farm	12	2		
Earn ones living from the CSA (more than 50 %)	3	11		
Work full time with CSA (the majority of the year)	6	4	21	$2^{2}$
Have the intention/desire to live from the CSA	9	3	2	
Is satisfied with one's salary	1	9		33
Wish to expand their CSA operation	13	1		
The CSA cover its own production costs	10	1		34
Have made a long-term economic plan	11	3		
Make a yearly economic budget	10	4		
Have applied for "Setting-up aid"	9	4		15
Have a core group	1	11	2	
Have a yearly members meeting	5	9		
Organise social activities for members	9	5		
Do share economic information with members	4	10		
Think it is uncomfortable to discuss the economy	4	10		
Cooperate with other farmers (e.g. tools, purchases)	5	9		

Some farms were difficult to categorise. One farm run by a couple, was intended to generate a 50 % employment for each partner, which would equalise 100 % of the couple's income. The other farm aimed towards one full-time employment and two half-time employments.

#### Economy

## Economy and profitability

Almost all interviewed farmers think it is important for the CSA to be profitable. However, almost two-thirds are new to professional farming (see table 1) and to CSA which make them too inefficient to make any profit and are still dependant on money from external sources. Their opinions differ of what is a decent salary. A smaller number aims towards, by the respondents referred to as, a "standard salary" at 20 000-25 000 SEK a month, but the majority of the farmers are satisfied with a much lower salary. This majority do not expect to ever earn a "standard salary" and they mean that lifestyle and other values compensate the lower salary. Contrary, when labour is hired they are careful to pay the employees reasonable wages. Nevertheless, they all agree that in the beginning ideology alone might be enough as motivation and compensation but eventually, they will need more than ideology to keep going, it must be economically defensible.

Some of the interviewed farmers used to sell their produce at farmers markets and "REKO-ringar" (a social-media based direct-sell alternative) before starting with CSA. They experience

<sup>&</sup>lt;sup>2</sup>These farmers did not know.

<sup>&</sup>lt;sup>3</sup> Earned their salary from the farm but had other operations besides CSA why their level of satisfaction would be misleading to include.

<sup>&</sup>lt;sup>4</sup>These farmers were uncertain.

<sup>&</sup>lt;sup>5</sup> As visible in appendix 1, this was not an original interview question. One farmer did not mention the support why it is not clear if they had applied for it when establishing the farm.

<sup>&</sup>quot;You receive other compensations. But you must find a balance between those compensations and the economic compensation" (Interviewed farmer no. 23, March 12<sup>th</sup>, 2018. Pers. comm. Writer's translation)

CSA as a much better distribution channel since the demand is more stable, they know in advance how much they will sell, and the CSA-members are people who understand the value of the produce and who are willing to pay. In addition, CSA is more relationship building and the farmer does not constantly need to act as a salesman. Only two interviewed farmers also sell their produce through wholesale. They earn more money through that distribution channel, but CSA is still the smaller part of their operation why no real economic comparison could be made. However, one of these farmers meant that the CSA is by far the most important part of the farm in all other aspects than economically-wise. It steers what they choose to produce, what happens on the farm and the overall business vision.

Weather or not it was complicated for the farmers to find new members, was not included in the interview guide (see appendix 1) and thus, not specifically asked about. The farmers did not bring up the subject on their own initiative but the experience of the researcher during the interviews was that it has neither been a problem to recruit new members, nor an issue with the number of members who chose to quit. Nevertheless, one farmer felt anxious for the high number of members that quit every season. They had 50 % of the members leaving after each season even if the members expressed to be satisfied. The farmer had discussed the issue with other CSA-farmers and got the impression that this was the general situation.

#### Business planning and financial support

As shown in table 1, most farmers have made a long-term economic plan and a yearly budget. The farmers who have chosen not to make a budget either think it is unnecessary or think it does not make sense since everything is too uncertain. It might be easier to make one in the future when they have better insight, they reason. On the other hand, one of the farmers with previous farming experience argues that it would be nearly impossible to run a farm without having a budget since the profit margins are very much dependant on efficiency with time, labour and money.

All farmers who have applied for "Setting-up aid" (Startstöd)<sup>7</sup> from the Swedish Agricultural Board (see table 1) have been obliged to do a long-term economic plan since it is a requirement. Many of them would not have made one otherwise and certainly not in such detail. In retroperspective they are all very happy for doing the plan and found it beneficial to be "enforced" to deal with the financial issues. Farmers mentioned that making an economic plan motivated them since they could see that it was not impossible for them to become profitable in the long run.

Apart from enforcing the farmers to make a long-term economic plan, the "Setting-up aid" also enabled farmers to commit directly from the start and without the need of taking a bank loan. The support allowed the farmers to make crucial investments and receive some salary. Without the "Setting-up aid" the development of the farms would probably have been slower which became the situation for one farm that applied for the support but who, because of formality mistakes, was not granted. Only one respondent said explicitly that it felt difficult and bureaucratically to apply for the "Setting-up aid", why they had decided to postpone the application.

It is a common approach among the interviewed farmers to start small and expand a bit every year. They start small to make it more manageable and to have time to learn and get familiar with

<sup>7</sup> A person, not older than 40 years, who wish to establish or take over an agricultural-, horticultural- or reindeer herding business can be granted Setting-up aid of 250 000 SEK. (The Swedish Board of Agriculture, 2018b)

the soil. Since the farmers are inexperienced and therefore inefficient, they say it is unreasonable to make a budget based on an hourly wage. The members should not pay them for learning how to farm. One farmer solved that problem by estimating the salary based on general time-recommendations for certain crops that is found in handbooks of The Swedish Board of Agriculture.

## Share-prices

The farmers have different approaches for setting share-prices. There is no consensus whether it is beneficial to begin with a lower share-price or if it is better to set a higher price directly. Some have chosen to set a lower price in the beginning and increase it when the member group has become more stable and the yearly produce more predictable. The other, opposite, approach is to set the desired share-price from the start to make it easier to eventually achieve profitability. All farmers agree that they do not intend to offer cheap vegetables but rather high-quality vegetables at an affordable price.

That the price-setting seems to be dependent on the geographical localisation of the farm. Closer to bigger cities it is easier to find people who are aware and put a value on organically and locally produced vegetables, hence are willing to pay a higher price than for conventional products in the supermarket. In other (more rural) places the situation is said be more difficult because people value low-price food or are not as aware. On the other hand, one farmer who considers themselves to be situated in a "low-price area" found CSA to be a better market alternative than selling on farmers markets. CSA allowed them to find the customers in the region who had interest in locally, ecologically produced vegetables.

It becomes apparent that there are as many ways to set share-prices as there are CSA farmers, but the methods can be divided into three categories:

- 1. **Set share-prices based on the prices of other actors.** In this method, the farmer looks at other actors when deciding one's prices. The mentioned actors are vegetable markets, other CSA-farms, organic products in supermarkets, market prices, small-scale producers and internet-based distributors. One method was to weight all vegetables to enable a comparison of the price per kilo to other actors.
- 2. **Set share-prices based on what is considered as a reasonable price.** A "reasonable price" is either reasonable from the farmers' perspective or what the farmers think people in that area consider as reasonable. This category also includes the approach to set the share-price based on a valuation of each vegetable, for example how demanding a vegetable is to grow and how much space it takes up. Also, the value of positive externalities are added to the share-price.
- 3. Set share-prices based on more economic calculations. The share-prices are set by calculating the number of shares to a certain price that is needed to cover a desired salary. Alternatively, the price is based on an estimation of a reasonable hourly wage. Among the farmers who chose this approach, many of them built the calculations on a monthly salary rather than hourly wage.

These three price-setting categories emerged, but in several cases the farmers used a mix of methods from several categories. Only one farmer sets the share-prices (and the budget) together with the members. In this case, the costs of the CSA are equally distributed on the number of

members. Notably, only one respondent thought the money saved by excluding the middlemen should be shared between the farmer and the member.

#### Risk sharing

The aspect of risk-sharing is communicated clearly to members through information meetings, homepages, welcome letters and sometimes through a written agreement. The risk-sharing is not considered problematic even if some farmers experience some stress in less bounteous years. Only one respondent gives their members the opportunity to have the money back if they quit during the season.

As shown in table 1, all interviewed farmers practice pre-payment. Although, there are a few who practice monthly pre-payment instead of seasonally or offers the choice of monthly or seasonally pre-payment. Many members think it is an obstacle to commit for a whole season why many farmers have made a system where the members get a few "vacation-weeks" each. Alternatively, some farmers have encouraged their members to give away their share to someone else when they are on vacation.

#### Transparency

Only four of the respondents practice economic transparency even though more than twice as many answered they would be comfortable to do so (see table 1). There was uncertainty of how interested the members would be in this type of information. Only one respondent thinks it is a crucial element of the CSA in order for the farmer and the members to set the budget.

'It is a part of the concept. In a way, it is their (the members, writer's comm.) farm as well. And it is, of course, interesting to know: if I pay for this, does it mean that the farmer can make a living from it or, as for me, that I do it almost voluntarily." (Interviewed farmer no. 21, March 27<sup>th</sup>, 2018. Pers. Comm. Writer's translation)

Using economic transparency as a tool for explaining and motivating a certain salary or a share-price are not favoured by all farmers. Instead, they think it would be much better to motivate share-prices by underlining the hard work and the positive ecological externalities. In contrast, one respondent thought it was a helpful tool to explain to the members why there was an increase in share-prices and to show their economic compensation.

'It also becomes a question of how idealistic you wish to be' (Interviewed farmer no. 21, March 27th, 2018. Pers. Comm. Writer's translation)

At the occasions where economic transparency has been practiced, there has generally been little discussion about it and almost no comments. However, when a farm presented their budget and it became evident that they could not live from the farming, their members got almost irritated that they had a recommended price which did not give them a salary they could live from. The members had taken for granted that the share-price covered salaries for the farmers.

#### Cooperation and communication between farmers

Four of the respondents have cooperation with other small-scale farmers where they share tools or do purchases together. One of these farmers also buys products from another farm to sell together with the shares. Two of the farms shared tools with each other but they realised quickly that it was complicated and inefficient because they usually needed the tools at the same time.

The Swedish Association of CSA, Andelsjordbruk Sverige, is an association which has grown successively as the number of CSA farmers in Sweden has increased. Almost all interviewed farmers are, more or less active, members in the association. This is a collaboration which almost

all interviewed farmers appreciate. It gives them inspiration and motivation to continue with CSA and to believe in the concept.

## Working conditions and quality of life

Many farmers accept to earn much less than if they had worked with another job because CSA allows them to have a certain lifestyle. According to themselves, they work hard for low wages mainly because they are new to farming and therefore inefficient. Nevertheless, in the end, they need to be able to pay their bills.

Several farmers say to experiences stress to not be able to deliver what the customers have paid for. It seems like the level of stress decreases as the experience increases. Generally, the farmers with earlier experience of professional farming do not experience any stress, or less stress, because they are confident in their farming skills and more certain of what they can expect from their land. What is more, the farmers cultivate a large diversity of crops which is a way to handle the risks and uncertainties since it makes the system less vulnerable. Other methods used to decrease stress levels were to invoice one month in the beginning and the end of the season separately, defining a share as a certain area of the field rather than a certain amount of vegetables and to produce more than necessary to be sure there is enough.

#### Member relations

#### Farmer-Member relationship and participation

According to the farmers, having a relationship with the members are more important than the members being involved in the farm and participating in, for example, the farm work. At several times, farmers emphasise that knowing their members and meeting them once a weak really makes a difference to their work. Though, the overall experience is that the general CSA-concept is more important for them than for the members, who seem to be satisfied as long as they get ecologically grown vegetables of good quality. Most members are believed to see themselves more like customers than members why the more idealistic farmers argue that CSA-farmers face a pedagogic challenge. The challenge is to change the members' attitude from being customers to become members and co-producers. Though, there is an insecurity of where to draw the limit, how much can the farmers expect from the members in terms of responsibility and involvement.

The farmers differ a lot in their attitude towards members and member-involvement. They could be divided into two groups. The farmers who think it is extremely important to emphasise that the members are "members" or "share-owners". The other group uses the word "customers" for their members and like to see them as customers rather than members. The latter group is smaller and still appreciates communication and to have a relationship with their members. They are also interested in knowledge-spreading. In the other group of farmers, the opinions differ concerning the level and type of member-involvement. Some farmers are very open for their members to come and work in the field, any day, but are reluctant to meetings and more administrative involvement of members and for others, it is the other way around. There is no coherency between a certain approach and degree of profitability or years of practice. As visible in table 1 it is common to invite the members to social activities at least once a year. The number of members who shows up at these events varies but it seems like usually around a third or a fourth of the members show up with their families, a number that seems to satisfy the farmers. The social activities are thought to give a surplus value to the members, which is seen as important by several farmers.

The farmers have noticed the importance of being clear about the CSA-concept towards new members and to discuss their expectations to avoid disappointment. There are many people confusing CSA with the concept of weekly vegetable subscriptions, often internet based. The farmers put a lot of time and effort into communicate with their members through newsletters and social media are attentive to inform about the situation of the farm and if there are any changes or unexpected situations. There is very little questioning from members about increases in share-prices or other issues concerning the farm and the farmers feel that the members trust them to make decisions.

As visible in table 1, far from everyone have held a proper members-meeting. Instead, it was more common to have an information- or start-up meeting. When members meetings were held, the participation rate was in most cases rather mediocre. The different reasons for not having a proper members meeting were lack of time for the farmer, a perception of lack of time for the members and a perception of the members as uninterested. At the meetings, the past season has been evaluated and the members have gotten the opportunity to suggest what vegetables to be grown next year. Pick-up points, times of delivery and similar logistic issues were also common subjects. As an alternative to members meetings, farmers send out evaluation forms. The anonymity makes it easier for members to be honest, especially when asked about the share-price. Even if members are encouraged to have opinions there might be social barriers which restrain the from saying it directly to the farmer.

#### Core group

None of the farms have an official core group. Only one of the interviewed farms do have what in theory should be called a core group, even though they do not use that word. That said, some farms do have members that are more engaged in the farm and who theoretically could be regarded as core group-members. These are members who are responsible for certain delivery points, who helps to grow seedlings or who take care of social media. The core group concept is unknown for many of the respondents and for the ones who have heard of the concept, they are still too newly established to have had the time to reflect closer upon it. However, when the concept was brought up in the interviews, some spontaneously thought it sounded like an interesting idea and like something that would be existing to try in the future. Though, the degree of interest in developing a core group depends on how much time and focus the farmer is willing to put on building relationships and what the members request.

## Discussion

In this section, the research questions will be discussed. Finally, in order to place my study in a bigger perspective, I will discuss the potential for CSA to contribute to an alternative food system.

## CSA and economic sustainability

As earlier defined, a business is economically sustainable if it earns a revenue without exploiting nature or human labour and without diminishing resources (monetary or natural) over time. The study focuses on the economic- and human-labour aspect of this definition and do not investigate to what extent the farms are natural resource conserving. Based on earlier research it is assumed that farmers are conserving natural resources and try to not exploit nature. In contrast, the result shows a tendency towards self-exploitation of the farmer. Hired labour was paid a reasonable salary but the farmers themselves were shown to earn close to nothing in most cases. This could be considered as exploitation of human labour (of the farmers) and in addition, it is economically unsustainable since the majority of the farmers aim to live from their CSA.

Furthermore, to be economically sustainable the farm should be viable and earn a small revenue in case of unexpected expenses. Only three farmers earn their living from the CSA and only one of them is satisfied with one's salary. Yet, the result showed that eleven farmers "wish to live from the CSA" (of which two farmers wishes to live from the CSA "to some extent"). Consequently, most of the CSA farms are not capable of cover their business cost and several farms use money from the "Setting-up aid" from the Swedish Board of Agriculture to earn a small salary. With some exceptions, the farms were not economical viable thus, not economically sustainable.

Out of the 14 interviewed farms, 12 have not existed for more than three seasons which probably affects the result. They are at a phase in the development of their farm where they must: get to know their soil and their fields, make larger investments, learn CSA-farming and how to match the sowing with the weekly deliveries. Furthermore, they have not had time to create a stable member group. In general, regardless of business type, it takes time and effort to become profitable (Nilsson & Wejåker, 2016) and these farms are still in that process. Many of the respondents have started small and will not be profitable before they have more members and a reaches a higher level of productivity. 13 of the respondents have the intention or desire to expand their business.

Only five of the 14 interviewed farmers had earlier farming experience. Consequently, the farmers are not only establishing a farm from scratch and are new to CSA-farming, they are new to professional farming in general. They are learning by doing and are generally inefficient. The low degree of efficiency requires the farmers to work more than they are getting paid for and it hinders them from reaching higher productivity. For the farms to become more economically sustainable, the farmers need to reach higher efficiency, something the farmers themselves are aware of. Worth to notice is that the two respondents who besides CSA were involved in traditional distribution channels were still economic dependant on that part of the operation. Compared to other direct-sell options, the farmers found CSA more favourable because it ensured a higher, more stable and predictable income. The result indicates that there is as much as 50 % of the CSA-members who quit each season. If that is true, it is a weakness of the system and an obstacle for the economic sustainability. It could simply be that the turn-over rate of members is higher in the beginning of the farm's establishment before the more committed consumers have been found. Since the recruitment of members and turn-over rate was not specifically asked about, no conclusions can me made but might be an issue to look further into.

Based on my findings, I suggest that it is conducive to aim towards earning a salary, even a small one because it gives a reason for the farmer to engage in the economy of their farm.

"When I decided that it was alright to not get a salary, I might have allowed myself to not care so much about the economy" (Interviewed farmer no 23. Pers. Comm. 12<sup>th</sup> of March, 2018. Writer's translation)

The result indicates that the majority of the CSA farmers expect to earn a lower salary than people working in other professions. This is problematic for several reasons. Firstly, it risks being self-fulfilling since the farmer automatically accepts a low salary and might be demotivated to do economic planning. Secondly, it conflicts with the basics of CSA where the idea is that the farmer should get recognition and have the same economic security as the others in the community. Thirdly, low salaries risk narrowing the group of farmers who are willing to involve in CSA farming. Fourthly, from a system perspective point of view, it devalues the expertise of farmers and makes it unfavourable to do farming.

The farmers rather quickly create stable and loyal member groups who trust and support them. I would argue that it might be because of close contact between farmers and members. Even if not all farms have a lot of personal contact with their members, the farmers send out regular newsletters, sometimes as often as each week, and some of the farmers meet their members each week when delivering shares. From an ideologic point of view, this level of personal interaction might be rather mediocre. Though, for people used to buy all their food in supermarkets, I would argue that they experience a huge difference. Stable member groups enhance the economic sustainability since it generates a stable and predictable income for the farmers. Compared to other direct-sell distribution channels, through CSA they know exactly how much they must produce and how much money they will earn which makes it easier for the farmer to plan the economy. Farms who practice subscription systems for vegetable- or meat boxes have similar conditions even if they usually do not practice seasonally contracts and pre-payment to the same extent. It would be interesting to compare the profitability of CSA-farms to the profitability of farms whit subscription systems.

The members' willingness-to-pay were said to differ depending on geographical localisation and there were indications that it might be easier to find potential CSA-members closer to larger cities. Although, far from all interviewed were located close to big cities. Nevertheless, a couple of the respondents who were localised in places where consumers were very price-sensitive and less aware of the environmental issues of conventional agriculture, had difficulties to sell on farmers markets but CSA enabled them to find the more conscious customers who valued vegetables produced in an environmentally sound way.

My study is in accordance with earlier research regarding financial support and bank loans. The farmers seek to be financially independent of external actors why they are reluctant towards bank loans and do rather use crowdfunding. Nevertheless, many farmers have applied for, and been granted, "Setting-up aid". In earlier studies and in the literature, farmers are recommended to be careful of accepting financial support or subsidies to not cover up the true costs of production. According to the study, the "Setting-up aid" has not had that effect for the respondents. The support from The Swedish Board of Agriculture has been used for investments and to give the farmer a salary in the start-up process, which has enabled the farmers to fully pursue their idea directly from the start and have helped them financially in a phase when they are still too inefficient in their practice.

#### Methods for enhanced economic sustainability

Based on the literature review, economic business planning, the farmer-member relationship, economic transparency and cooperation between farmers<sup>8</sup> were investigated as methods for increased economic sustainability of CSA farms. The study investigated the current situation but also the farmers' opinions about, and interest in, these methods.

## Economic business planning and share-prices

The study revealed that the financial support from the Swedish Agricultural Board, the "Setting-up aid", initiated the farmers to make thorough business plans for a longer time-period. Most farmers would not have made a plan if it had not been a requirement for the application, but in retro-perspective they found the planning helpful and it motivated them to believe in the CSA-concept and their business idea. The result did not show a difference in economic viability between the farmers who had made a budget and the ones who had not. Again, this is probably

<sup>&</sup>lt;sup>8</sup> This method, "cooperation between farmers", is discussed in the next section: "The potential for CSA to contribute to an alternative food-system".

since almost all respondents have started with CSA farming recently. Three, out of the four farmers who did not make a yearly budget, had only been farming for one season why it might just be a matter of time. Nilsson and Wejåker found in 2016 CSA-farmers to be reluctant towards applying for financial support since they found it too complicated and too time-consuming. My findings show that this is no longer the case, at least not regarding the "Setting-up aid". All in all, in comparison to earlier studies the interviewed farmers stay rational and business minded and have a business plan for their farm. They have in general accounted for the administrative and logistical work related to deliveries and member relations.

Regarding price setting, the literature recommends farmers to set a correct price from the beginning so that the members do not get used to low prices that do not cover the costs. Several farmers in this study have the opposite opinion. They have chosen to set lower share-prices until they are established and are more certain of their productivity. When it is time for an increase in share-prices they will have established a more stable and loyal member group who hopefully will accept a higher price, they reason. This reasoning is in accordance with the literature, where a close relationship is thought to enhance the willingness to pay. The result shows that if the farmer is clear towards members about why there is an increase in share-price, the members are acceptant. What is more, contrary to earlier work where farmers showed to be reluctant towards practicing risk sharing before being better established, this study shows that farmers dare to share the risks with their members directly from the start. It might be explained by the growth of the movement, which by now is three time as big, why the farmers feel better support to practice the CSA-concept more fully.

The literature review showed that farmers commonly set their share-prices by looking at the prices of other CSA farms. This method is practiced also by the interviewed farmers in this study but usually in combination with other methods. Several farmers compare their price per kilo to the prices in supermarkets. CSA attempts to stand outside the market but in this phase of development of the concept, it might be unavoidable to not compare the products and prices to those at the market since potential members may do so. However, it would be desirable if the farms could solely look at their own costs when setting the price. According to the farmers, this approach is not used to a larger extent because the inexperience makes it difficult to know what costs to expect, how time-consuming different tasks are and what is a reasonable amount of time for a certain task.

#### Member involvement and farmer-member relationship

I aimed to study if member involvement and the farmer-member relationship could enhance the willingness to pay, hence be a tool for increased economic sustainability of CSA. Earlier work indicated that members or an external person might be better at ensuring a decent salary than the farmers themselves. Since the majority of the farms in the study are newly established (more than half of the respondents had only participated in CSA for one or two seasons) it becomes slightly difficult to study this issue. It is not possible to see any difference in profitability between farmers who meet their customers more often, compared to the ones that do not. It can be concluded, however, that the relationship enhances loyalty and trust of members which the farmers say decreases their stress levels and is helpful when the harvest fails. Interestingly, this is in contradiction to earlier work that found personal relationships to increase the farmers' sense of obligation. The interviewed farmers say they experience stress and an obligation to succeed to deliver. Though, I question if the reason is the CSA concept. Rather the result indicates that the stress might be the effect of confounders such as inexperience and new business establishment, since the more experienced farmers in general experience less stress. In that case, stress and

obligation might not be incorporated in the concept and not a weakness of CSA as earlier believed.

The literature argues for the use of a core group for financial tasks or to have an employee responsible for economic issues. Only one of the interviewed had a proper core group and the farmer handled the economy themselves why this issue could not be studied. Furthermore, the result shows a moderate interest among members to engage in the farm and very few are interested in helping out in the field. The general perception among the farmers is that most members joined the CSA to receive quality vegetables and not so much to be part of a farm. That said, usually, every farm has a few members who are more engaged which is enough to create, for example a core group. As pointed out by Ostrom (1997) it simplifies involvement if members are situated close to the farm which is an obstacle since the farms usually are situated in more rural areas. Approximately half of the respondents would appreciate more engagement from their members. The cause is not evident and could simply be connected to the farmers' social needs but the result shows that underlying reasons might be of an ideologic character and the desire of farmers to spread knowledge about sustainable food production and consumption.

#### Economic transparency

The potential of economic transparency as a method for increased sustainability was complicated to study since only four respondents had practiced it and when practiced, it had not resulted in further discussion between them and the members. According to the farmers, there might be social barriers and lack of knowledge hindering the members from asking about or discuss the economy or share-prices. Opinions differ but many respondents are positive towards sharing economic information why it would be a possible way of enhancing the sustainability of the farms if it is shown to be advantageous. The ones who are not, argues that it is better to increase the members' willingness-to-pay by enhancing the value of the produce by, for example, emphasise the positive externalities. At the same time, economic transparency is suggested to increase members' willingness-to-pay but according to the result that might not be the reason for the scarce economic situation. Rather it seems to be a consequence of economy of scale and the devaluation of food in general and inefficiency of interviewed CSA farms specifically.

#### The potential of CSA to contribute to an alternative food system

Moving from farm-level towards system level. In the light of economic sustainability, and the result of the study, I will discuss the potential of CSA to contribute to an alternative food system.

At a first glance, it looks like opinions differ regarding how idealistic one must be as CSA-farmer. Some try to practice CSA according to the "book", but for others, it is not as important with member involvement and democratic processes. Although, when investigated further these farmers are not less idealistic. They are still interested in spreading knowledge of how and where food is produced and about the benefits with agroecological, and similar, farming methods. They seek relationship with their members and aim to organise a social activity every year. A democratic decision processes and holding meetings etc. is time-consuming and is dependent on dedicated members who perhaps also have previous knowledge about CSA and who prioritise farm-involvement in their life.

According to Francis et al (2003), consumers need to be educated to be receptive and ready to join a CSA and that CSA, in its turn, could deepen the knowledge and involvement in food production. However, the Swedish CSA movement is not that patient and will not wait for the consumers to potentially be educated. The CSA-farmers aim to find people who already appreciate food of high quality produced locally and with ecological methods and to find those

people who seek to be part of a farm and close to the roots of their food. All farmers have in common that they wish to educate the consumers in accordance with Francis reasoning. Since CSA is an unknown concept for most people the farmers face a pedagogic challenge to have the consumers start seeing themselves as members and not merely as customers.

As earlier stated, a sustainable food system is a system which closes the gap between consumers and producers and brings the consumer closer to the source of their food. The study shows that CSA in Sweden succeeds to create a relationship between producers and consumers. Furthermore, through different communication channels and social activities, the consumers get insight into how their food is produced and the work behind it. A sustainable food system consists of agroecosystems that are both ecological- and social sustainable at the same time as being economically viable. The result indicates that the economic viability of CSA farms is low which seems to be due to the inexperience of the farmers and because almost everyone had to start their farming practice from scratch. Though, the study could not validate if the more experienced farmers did better economically since they were also recently established. Possibly, if experienced farmers with an already established farm and prepared fields converted to CSA, the profitability would be better. For this reason, it would be benefit the growth of the concept if a higher number of professional and already established farmers decided to convert to CSA. In addition, it would be favourable if CSA was mentioned as a potential farming concept at farm schools to inspire future farmers with farming education to enrol in CSA. On the other hand, it is an advantage that inexperienced farmers are drawn to the concept. The CSA concept attracts a new type of Swedish farmer. Since there is a decline in the number of farms in Sweden and a third of the farmers<sup>9</sup> are 65 years or older (The Swedish Board of Agriculture, 2017) it is necessary to attract and involve new and younger people in farming. From that perspective, CSA has a potential to contribute to a sustainable food system

To increase the potential of the Swedish CSA movement to contribute to an alternative food system, I would argue that a wider production and more cooperation between farms is needed. Almost all respondents are specialised on vegetable production why other foods must be purchased elsewhere. There is need of a much broader approach which is only observed at the farms of two respondents. A way to achieve this could be cooperation between farms. In that way, the consumers get less dependent on external actors since the farms could focus on different productions but work together as a unit or system. Also, if the harvest fails, the other farm might be better off which makes the system less vulnerable. To decrease dependency of external actors even more, it would be favourable for farmers to engage in other cooperative activities, such as exchange of seeds and other inputs. It was discussed by Devik (2013) who found that cooperation gave the Norwegian farmers increased and cheaper access to crop varieties better suited for their type of farming, why the cooperation was both economically and ecologically beneficial. The bigger part of members food consumption that could be covered by local CSA-farms, the more money will stay in the community which improves the local economic sustainability. There will also be an automatically spin-off effect where people consume both more locally and more seasonally.

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<sup>&</sup>lt;sup>9</sup> Farmers registered as holders in private firms 2016

#### Conclusion

CSA in Sweden is still in its infancy and for many an unknown concept which affects both the number of farmers who get involved in CSA and the expectations of the consumers who join a farm. Most of the farmers who participated in the study were new to professional farming and many of the farms were recently established and in a phase of expansion. The study shows that CSA-farmers do not expect to earn as much as they would have done working within another profession, which is a threat to the development of the movement. In general, the farmers wish to live from their CSA but currently most of them are earning a low salary or even no salary. The current economic situation of CSA is therefore considered unsustainable. However, the result indicates that the CSA-concept outcompetes farmers markets and possibly other direct-sell options when it comes to earning a stable and predictable income and regarding the creation of farmer-member relationships.

Four methods believed to have the potential to enhance the economic sustainability of Swedish CSA-farms were evaluated. These tools were: economic business planning, the farmer-member relationship, economic transparency and cooperation between farmers. Overall, the tools were difficult to evaluate since it was no difference in profitability between farms that used the tools and the farms that did not. This is not believed an indicator for the inefficiency of the evaluated tools. Rather the result is affected by the recent establishment of most farms and sometimes due to the inexperience of professional farming among farmers. It would be valuable to study the farms again in a few years' time when they have had time to expand since many of them still have small member groups.

In contrast to earlier studies, the result showed that the farmers act rationally and business-minded even if they are driven by ideology. The majority had an economic plan for their farm and had tried to account for the administrative and logistical work of their business. In addition, the share-price has been calculated based on several factors and not only by looking at the price of other CSA-farms. A contributing factor seems to have been the requirements of the "Setting-up aid" which enforced the farmers to make a long-term economic plan. In retro-perspective the farmers found it beneficial and appreciated to have been enforced to gain insight into the economy. In addition, the support also enabled farmers to more fully pursue their plan directly from the start.

Very few farms cooperated with other farmers and/or practiced economic transparency why no results were found regarding these tools. However, the majority of the farmers said to be comfortable with discussing economic issues with members and several showed interests for sharing economic information with members. Instead of using economic transparency to increase the members' willingness-to-pay, the value of produce could be enhanced through emphasising the positive externalities and the hard work behind it.

The farmer-member relationship was easier studied but seemed to be more important for the farmers than for the members. As earlier research has indicated, the study found members to be moderately interested in getting involved in the farm. The reason could be unfamiliarity with the concept but also lack of time or interest. Nevertheless, the farmer-member relationship seems to create stable member groups with members who are supportive and trust their farmers. Contrary to earlier studies, the personal relationship rather decreases than increases the stress levels of farmers.

CSA succeeds to close the gap between consumers and farmers and brings the consumer closer to the origin of their food. In addition, the farmers are interested in knowledge-spreading why

consumers who join CSA probably will be educated. Both these aspects are very conducive to create more sustainable food-systems in accordance with agroecological theory. However, eventually, a larger variety of produce will be required to decrease the need for members to turn to the supermarkets for purchases. This could be achieved by cooperation between two or more farms. Cooperation is also conducive for the sustainability of CSA since it could help to decrease dependency on external actors for farming purchases. CSA seems to attract new farmers and a new type of farmer which from a Swedish point of view is important since there will be a generation shift in the near future. Nevertheless, it is believed to be essential for the growth of the Swedish CSA movement if a higher number of professional and already established farmers converted to CSA since they might reach higher efficiency and productivity much quicker than new and inexperienced farmers.

To sum up, CSA is still a new concept in Sweden and many of the farms are still small and inefficient where incomes are not covering labour costs. Therefore, the farms are not viable and Swedish CSA is not economically sustainable. It is not clear if it is due to the CSA-concept itself or because of the recent establishment of farms and the inexperience of farming among many of the farmers. However, CSA succeeds well in connecting the consumer to the place and the person producing their food and it has potential to act educating about food production. Further research should study how professional and established farmers could be encouraged to get involved in CSA and how CSA could reach out and become a familiar concept among consumers.

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## Appendix: Interview guide (in Swedish)

Hur många ha/m2 odlas för andelarna?

Vad produceras till andelarna?

Hur många medlemmar har gården?

Hur långt från centralort ligger gården?

Hur länge har du/ni varit jordbrukare? Hur länge har du/ni drivit CSA?

Vilken typ av betalningssystem och prissättning använder ni? (Riskdelning? förskottsbetalning? fast pris? olika stora andelar?)

Vilken typ av leveranssystem används?

Hur stor andel av medlemmarna kommer till gården för att hämta sin andel?

Hur kommuniceras CSA-konceptet ut till medlemmarna? (Hemsida? Informationsbrev? Muntligt?)

Lever du/ni av andelsjordbruket?

Är din/er intention/önskan att kunna leva av andelsjordbruket?

Hur stor del av verksamhetens inkomst kommer från andelsjordbruket?

Önskar du/ni minska, bibehålla eller expandera andelsjordbruket?

Hur viktigt är det för dig att andelsjordbruket är lönsamt?

#### Hur upplever jordbrukaren lönsamheten och sin egen kompensation

Får du/ni betalt tillräckligt från andelarna för att täcka kostnaderna?

Får du/ni ut en skälig lön varje månad?

Hur mycket arbetar du/ni med uppgifter relaterade till andelsjordbruket? (Heltid? Deltid? Antal månader?)

Har du/ni några anställda?

Känner du/ni en stress att inte lyckas levererar det medlemmarna har betalat för?

#### Hur arbetas det med ekonomin i företaget

Vem sköter andelsjordbrukets ekonomi?

Finns en långsiktig ekonomisk plan?

Görs en budget för varje år?

Hur har andelspriserna satts? på vilka grunder?

Har du/ni fått några kommentarer (positiva eller negativa) på priset från era medlemmar (nuvarande eller tidigare)?

Får gården subventioner eller annat finansiellt stöd? Varför/varför inte?

(Vad har du/ni för syn på att ta emot finansiellt stöd? så som uppstartsstöd eller investeringsstöd?)

#### **Medlemsrelationer**

Har du/ni en kärngrupp eller har planer på att börja med det?

Håller du/ni medlemsmöten?

Kommer medlemmarna på mötena? Hur stor andel?

Deltar medlemmarna på andra arrangemang om sådana anordnas?

Är medlemmarna intresserade/engagerade i gården/andelsjordbruket? Kommer de med åsikter eller förslag?

Har andelspriset diskuterats med medlemmarna? Varför, varför inte?

Delar du/ni ekonomisk information med medlemmarna?

om ja: hur var reaktionerna?

om nej: är det något du/ni skulle kunna tänka dig/er att göra? Om nej: inte ens om du/ni fick reda på att det kunde öka betalningsviljan hos medlemmarna?

Har medlemmar på eget initiativ frågat kring ekonomin?

## Samarbete mellan gårdar

Har du/ni kontakt med andra andelsjordbrukare? Har du/ni något form av samarbete med andra jordbrukare, andelsjordbruk eller ej? Delar du/ni maskiner eller verktyg med andra jordbrukare?

39