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Overcoming divergence: managing expectations from organisers and members in community supported agriculture in Switzerland

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Community supported agriculture (CSA) is a producer–consumer union that aims to shift the predominant paradigm in agriculture towards a model based on social justice, fairness, and participation. However, the long-term existence of CSA initiatives, and their ability to build the social capital envisioned by the initiators, can be challenged by a struggle to generate a sufficient income for a fair salary to be paid to the producer. This study aimed to explore the main challenges faced by eight CSAs in Switzerland, along with the pathways they used to address them. The expectations and perceptions of organisers were collected through in-depth photo elicitation interviews, which were analysed using grounded theory. The perspective of members was evaluated using a quantitative survey with 254 responses. The results showed that organisers are often filled with enthusiastic ideas but experience a sense of deflation when they realise that the members follow a more pragmatic approach. The information flow from members to the organisers leading them to new insights for adjustments, is a key component in overcoming divergence between the expectations of members and organisers. Involving members in administration and fieldwork lowers the workload of the organisers and fosters informal social interactions and mutual understanding, which leads to an increase in social capital. Focusing on local embeddedness and co-creation between members and organisers, thus allowing a dynamic evolution of the CSA, was found to be more beneficial for the long-term existence of the CSA than rigidly trying to implement the initial vision of the organisers.

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Introduction

Community supported agriculture (CSA) refers to a system of agriculture in which a community of individuals commits to supporting a farm operation by sharing the risks and benefits of food production and gaining a degree of, either legal or spiritual, ownership of the farmland (Woods et al., 2017). The evolution of the CSA movement is largely unorganised, autonomous, and disconnected, which makes it difficult to find an elaborate definition of CSA (European CSA Research Group, 2016; Sitaker et al., 2020; White, 2015). However, the core values of CSAs are consistent across the world and are based on the promotion of localised food systems in which consumers and producers have a long-term agreement to share the risks, responsibilities, and produce (Goodman et al., 2008; White, 2015; Urgenci, 2016; Tang et al., 2019).

There are two main types of CSAs: (1) farmer led or farmer-driven CSAs are those in which a farmer initiates a CSA as part of their farm or as a whole farm concept (Ostrom, 2007; Galt et al., 2011; Balázs et al., 2016). (2) consumer-driven CSAs are those that are typically formed by civil society renting a piece of land from a farmer or municipality and employing a farmer or vegetable gardener to accompany the production (Charles, 2011, 2012; Hvitsand, 2016). In consumer driven CSAs, and in some farmer led CSAs, a group of people, hereafter referred to as the organisers, supports the farmers or gardeners in their activities and takes over administrative tasks (Cone and Myhre, 2000; Russell and Zepeda, 2008). Studies on the motivation of farmers and organisers have shown that the drivers to establish a CSA initiative are primarily environmental and social issues, such as the perpetuation of natural resources and social justice (Cone and Myhre, 2000; Hvitsand, 2016; Landwehr et al., 2021; Ostrom, 2007; Wells and Gradwell, 2001). There is a desire to provide quality food for people grown using agroecological practices, in a participatory manner between consumer and producer, and with a binding agreement based on fairness and shared responsibility between the two parties (European CSA Research Group, 2016; Galt et al., 2019; Lea et al., 2006; Samoggia et al., 2019).

CSAs intend to offer an alternative to the predominant food system based on the principles of solidarity and the social and environmental values of its followers (White, 2015). CSAs not only support the spatial connection between producer and consumer but also create a space of what has been described as "cognitive proximity" (Gugerell et al., 2021) in which people with similar interests share knowledge, experience, and ideas (Gugerell et al., 2021). Although CSAs offer an alternative approach to food provision, they still function within the larger framework of the dominant capital-based liberal market system. This leads to a diverse and ever-evolving configuration of multiple elements; ranging from alternative economies to capitalism CSAs (Koretskaya and Feola, 2020).

CSA can also be understood as a direct selling strategy in which produce is sold by the farmer at retail prices, so should theoretically enable CSA farmers to increase their income (Lea et al., 2006; Galt, 2013b; Balázs et al., 2016; Paul, 2018; Zhen et al., 2020). However, studies on the incomes of CSA farmers in different contexts have found diverging results. For example, studies of CSAs in China have found the highest cost–benefit ratio and the highest gross income in comparison with organic and conventional systems (Zhen et al., 2020), while CSA farmers in the United States were found to have lower incomes than the national median for farmers (Paul, 2018). Other studies have shown that CSAs, which are usually being implemented on small farms, lack the necessary economies of scale to be profitable at retail pricing (Clark, 2020; Frère, 2018), highlighting the importance of cost transparency in the initial price determination.

Consumers typically buy a 'share' in a CSA, which entitles them to a portion of the produce. The share price is usually calculated either by dividing the production costs (labour, rent, input, tools) by the number of shares (Pilgeram, 2011; Galt, 2013a; Balázs et al., 2016; Parot et al., 2017) or by adopting the same or similar prices as charged by other, typically older, CSAs (Parot et al., 2017). It has been found that maintenance, risk of production, incidental costs, administrative and educational efforts are rarely represented in the price for CSA membership (Pilgeram, 2011; Galt, 2013a; Balázs et al., 2016; Parot et al., 2017), so part of the costs remain hidden from the members intentionally or unintentionally. CSA farmers commonly justify the intentional decision by perceiving the gratitude and respect expressed by the consumers to fill the economic gap through an intangible payment (Paul, 2018; Pilgeram, 2011). CSA farmers in Hungary were found to identify themselves as a "social/community enterprise" and "non-profit business" (Balázs et al., 2016). Studies have suggested that CSA farmers often lack experience in management and thus may be overwhelmed by the complexity of work involved in running a CSA, which may lead to an unintentional lack of cost recovery (Medici et al., 2021; Tang et al., 2019). In a qualitative study with former CSA farmers, Ostrom (2007) found that economic outcomes were among the main reasons for discontinuing the operation of CSAs.

The farmer's income is not only dependent on a fair price of the shares but also on a sufficiently large member base, so CSA farmers have an interest in fostering loyalty to maintain long-term customers (Ostrom, 2007; Parot et al., 2017; Samoggia et al., 2019; Sitaker et al., 2020). The relationships built over time, along with the ideological motivation of fairness, create a community aspect, which is a distinct difference between CSA and other farming models. This sense of community, and the associated social capital, is not necessarily present at the commencement of the CSA but must be actively established by the CSA farmer (Cone and Myhre, 2000; Wells and Gradwell, 2001; Guthman et al., 2006; Standford, 2006; Ostrom, 2007; Galt et al., 2011, 2019; Pole and Gray, 2013; Parot et al., 2017; Axon et al., 2018; Gugerell et al., 2021).

In this study, social capital is defined by the school of thought derived from Putnam (1995, p. 67) and "refers to features of social organisation, such as networks, norms, and social trust that facilitate coordination and cooperation for mutual benefit". In the case of CSA, social capital generation can be understood as the build-up of social relationships based on trust, mutual gains, shared values, reciprocity, and cooperation (Engbers et al., 2017; Van Oers et al., 2018; Gugerell et al., 2021). Generating social capital in CSA can be challenging (Charles, 2012) and tends to be structured around the farmer (Ostrom, 2007). Results from previous studies have shown that involving the members in the food production process through volunteer work on the fields has played a critical role in raising awareness, trust and co-creation of knowledge, which contributes to fostering a loyal member base (Balázs et al., 2016; Cone and Myhre, 2000; Ducottet and Parot, 2020; Medici et al., 2021; Savarese et al., 2020)

From the consumer's perspective, the most important motivations to commit to a CSA are access to fresh and healthy produce, environmental concerns, and the desire to support local agriculture (Lea et al., 2006; Pole and Gray, 2013; Peterson et al., 2015; Hvitsand, 2016; O'Kane, 2016; Parot et al., 2017). An important motivation for membership is the quality of the produce, which remains the most primary factor throughout their membership for some consumers (Pole and Gray, 2013). For others, the social aspects of community, exchange, and friendships were an unexpected outcome that became a valuable factor in choosing to continue their membership (Pole and Gray, 2013).

CSA members often see the farmer as more trustworthy than the supermarkets because of the direct relationship with them (Balázs et al., 2016; Birtalan et al., 2020; Cone and Myhre, 2000; O'Kane, 2016). However, it has also been shown that most members perceive the community more as a community of interest rather than a community based on mutual social ties (Cone and Myhre, 2000; Russell and Zepeda, 2008). In general, the members have lower expectations of the social capital generated by the CSA than those held by the farmers (DeLind, 1999; Cone and Myhre, 2000; Guthman et al., 2006; Ostrom, 2007; Russell and Zepeda, 2008; Pole and Gray, 2013).

A wealth of scientific literature points to the imbalance of burden and rewards of work by CSA farmers. By undercharging and/or shouldering a disproportionate share of the burden of work, either deliberately or otherwise, farmers deviate from the original CSA principle of production risk-sharing and engage in self-exploitation (Pilgeram, 2011; Galt, 2013a; Kondoh, 2014; Urgenci, 2015; Balázs et al., 2016). Despite the strategy of self-exploitation to keep prices low, scholars, including Galt (2013a) and Samoggia et al. (2019), have identified an increasing lack of member commitment. It remains largely unknown which concrete strategies organisers and CSA farmers use to balance their intrinsic motivations and economic needs and those of their members to end self-exploitation and be more successful.

Following the research calls of Axon et al. (2018), Paul (2018), Galt et al. (2019), and Samoggia et al. (2019), this study aims to examine: (1) the arrangements, practices, and structures of CSAs surrounding the build-up of social capital; (2) the consolidation of expectations, which is understood as the combination of needs and visions between all parties; and (3) the generation of an adequate income for CSAs. To address this aim, we take a case study approach and use mixed methods to examine the perceived experiences of operating/participating in eight Swiss CSAs from the points of view of CSA organisers and members.

Methodology

This study used a mixed-methods approach involving in-depth interviews, photo elicitation, and an online survey. Photo elicitation is a rather uncommonly used tool that emerged in anthropology and has been shown to evoke information, memories, and feelings from research participants which would not have been able to be captured through the spoken word only (Beilin, 2005; Johnsen et al., 2008; McBrien and Day, 2012; Dockett et al., 2017; Eelderink et al., 2017). The inductive character of the qualitative phase made in-depth interviewing and photo elicitation suitable tools and have not yet been used in CSA research before. Secondly, a quantitative deductive phase in which members' data were collected was chosen to increase the explanatory power on internal processes and perspectives in CSAs. The concept of triangulation proposes that using different methods to study the same target increases the richness and validity of research results through contemplation from different perspectives (Olsen, 2014). The quantitative survey questions were derived from the results of the qualitative phase, so each phase is presented separately so that the relationship between them is apparent.

Study sample. The CSA terrain of Switzerland has a rich history and diversity, which offers a space for exploring the aims of this study, using a case study approach with mixed methods. Eight case study CSAs in Switzerland were selected using the principle of maximum variety (Patton, 1990). The legal status, farm affiliation, year of establishment, number of members, and cultivated area of the participating CSAs are shown in Table 1.

Table 1 CSAs included in the study.

Reference	Legal status	Farm affiliation	Established in	Number of members	Hectares cultivated	Other income sources	Role of interviewee
CSA 1	Cooperative	No	2010	200	1.13	None	Garden group
CSA 2	Association[a]	Yes	2016	120	3	None	Garden group, organisers
CSA 3	Cooperative	Yes	1981	800	90	Market	Farm group, organisers
CSA 4	Association	No	2017	46	0.5	None	Garden group, organisers
CSA 5	Cooperative	No	2018	130	0.85	None	Organisers
CSA 6	Association[b]	Yes	2011	300	10	None	Farm group, organisers
CSA 7	Association	Yes	2010	21	2[c]	Market, farm shop, event hosting	Farmer, organisers
CSA 8	Association	No	2014	140	6	Market, guided tours	Garden group, organisers

[a]With anticipation of founding a cooperative.
[b]Connected to limited liability company.
[c]There are vegetables grown on 2 ha, only a small amount flows into the CSA.

Data collection in the qualitative phase. Eight in-depth interviews, based on photo elicitation, were held via Skype with a representative of the organisers of each of the eight CSAs (Table 1). Before the interview, the interviewees were asked to prepare four pictures, of which two show one or more aspects of their CSA initiative that work well and two pictures that show one or more aspects, which work not so well (yet). Using photographs as an entry point to the interview is a strategy to break down the gap between researchers and research participants by putting the participant into the position of the expert and allowing the interviewer to concentrate on what was being said instead of thinking of the next question to ask (Harper, 2002). Photo elicitation requires a certain openness to the data received, which elevates the relevance of the data of this study. With each photo, a discussion of underlying practices, arrangements, and structures was started to investigate together why something works well or does not. The images remain the private property of the respondents and were deliberately selected due to their meaning, so they are not displayed in this contribution.

The collected qualitative data were analysed using the grounded theory approach (Glaser and Strauss, 1967). A cross-case study analysis was performed on the data from the in-depth photo elicitation interviews using the constant comparative method described in Charmaz (2014). Throughout the analysis, the defined codes, categories, and dimensions are constantly compared.

Data collection in the quantitative phase. A quantitative online survey was sent to the members to evaluate whether the perceptions of the organisers collected during the interviews align with the members' perceptions. The survey included 24 scale items built upon the 22 dimensions and five categories: empathy, assurance, responsiveness, reliability, and tangibles, defined by Parasuraman et al. (1988). The items were adjusted to the CSA context using literature, the preliminary results of the interview analysis and double-checked with the interviewees for completeness. Respondents were asked to rate, on a five-point Likert scale, the importance of each item to their satisfaction with their membership, and their actual satisfaction with each item. The member survey was analysed following Galt et al.'s (2019) application of Martilla and James' (1977) Importance-Satisfaction-Analysis (ISA) matrix in which the mean responses are calculated (Table 3) and then plotted on a matrix with importance and satisfaction as the x and y axes (Fig. 1). The positioning of each scale item in Galt et al.'s (2019) matrix allows conclusions and recommendations of where resources should be committed for the scale items. In a second stage, a correlation analysis was carried out on the 24 dimensions using the "rcorr" function in the "Hmisc" package in R version 4.0.2 (R Core Team, 2020). Visualisation was done using the "corrplot" function in the "corrplot" package by Wei and Simko (2021). Although the central limit theorem and investigation by e.g. Murray (2013) allow for the normality assumption to be accepted in Likert-scale data, both Pearson and Spearman correlation coefficients were calculated and are shown in Fig. 2.

CSA from the organisers perspective (qualitative phase)

Results of the qualitative phase. The cross-case study analysis revealed a range of challenges faced by the participating CSAs and the solution pathways they use to address them. The challenges were categorised according to revealed constructs referring to general processes in CSAs; namely, intrinsic motivation as an impulse for starting an initiative, defining the organisational framework, building common ground between organisers and members, implementing the enterprise, and retrieving feedback.

Intrinsic motivation as an impulse. The respondents reported a highly diverse range of motivations, including creating a paradigm shift in agriculture through agroecological food production, sharing risks, guaranteeing purchases, creating fairer working conditions, reducing food-waste, togetherness, including mindfulness and spirituality, opening space for experiments, conserving nature, and promoting multi-functionality and alternative ways of economic activity. Implementation of these visions, which go beyond the actual vegetable production, underline the importance of self-fulfilment as a common motivational factor. Self-fulfilment is an expression of the personal creative urge to live a different reality in the realm of the hegemonic system: "It [CSA 2] is working in the predominant system, but it is not dependent on the system. Instead it is first and foremost a social union of producers and consumers that works differently" (CSA 2).

A contributing factor to self-fulfilment is the sense of inclusion from the activities of the CSAs: "this whole thing about being part of something, getting to know people, this social aspect is I think an important point" (CSA 5). Many of the long-lasting members are families: "You have a core group [of members] who are often part for many years, feel connected to the place and the people through e.g. seeing their kids grow up here" (CSA 6). The CSA becomes part of their family history, and thus the memories they share with the CSA is likely to be dear to them. This effect was predominantly observed in the older CSAs that have existed for eight years and longer. Furthermore, the appreciation of the organisers' work is an important source of motivation and their reward: "It makes me happy to produce like this when I know that everything is appreciated what I do" (CSA 4). Therefore, a motivated member base can leverage the CSA to new heights in a positive feedback loop, as responsibility for food production and management can be shared.

Defining the organisational framework. The representatives of the CSAs perceive their most important task areas to be project management, external communication, member administration and coordination, Information Technology, bookkeeping, and food production: ideally, with one person allocated to each area for an organiser group size of six. The responsibility of organisation can become an excessive burden to the organisers with the coordination role, and their perception of the work investment of other organisers may influence their own continued motivation: "it is a challenge in such volunteer schemes that people do this on the side and also don't rank the priority as high. This can be frustrating" (CSA 5). Some CSA initiatives do not rely on volunteers for the administration and coordination of members. Instead, they have assigned the main administrative tasks to one of the organisers and paid them a wage. This model was observed in five CSA initiatives that had existed for longer than five years and had grown continuously since their inception, so it appears to be compatible with the longevity of a CSA initiative. The definition of workgroups to which members can sign up can help to coordinate members and support the more labour intensive tasks of the organisers: "There were always people who were working on this subject [public relations], but we want to reinforce the work with workgroups" (CSA 6).

In addition to defining and creating a management structure and organisational framework, the budget calculation is an important milestone in establishing a CSA. CSAs that are still in the establishment phase typically do not have any reference points to base calculations, leading to a "rough reference price" (CSA 2). Guesses or incomplete budget calculations may result in the erosion of wages to gain financial coverage: "The members have partly profited from the cheap price, and on the other hand

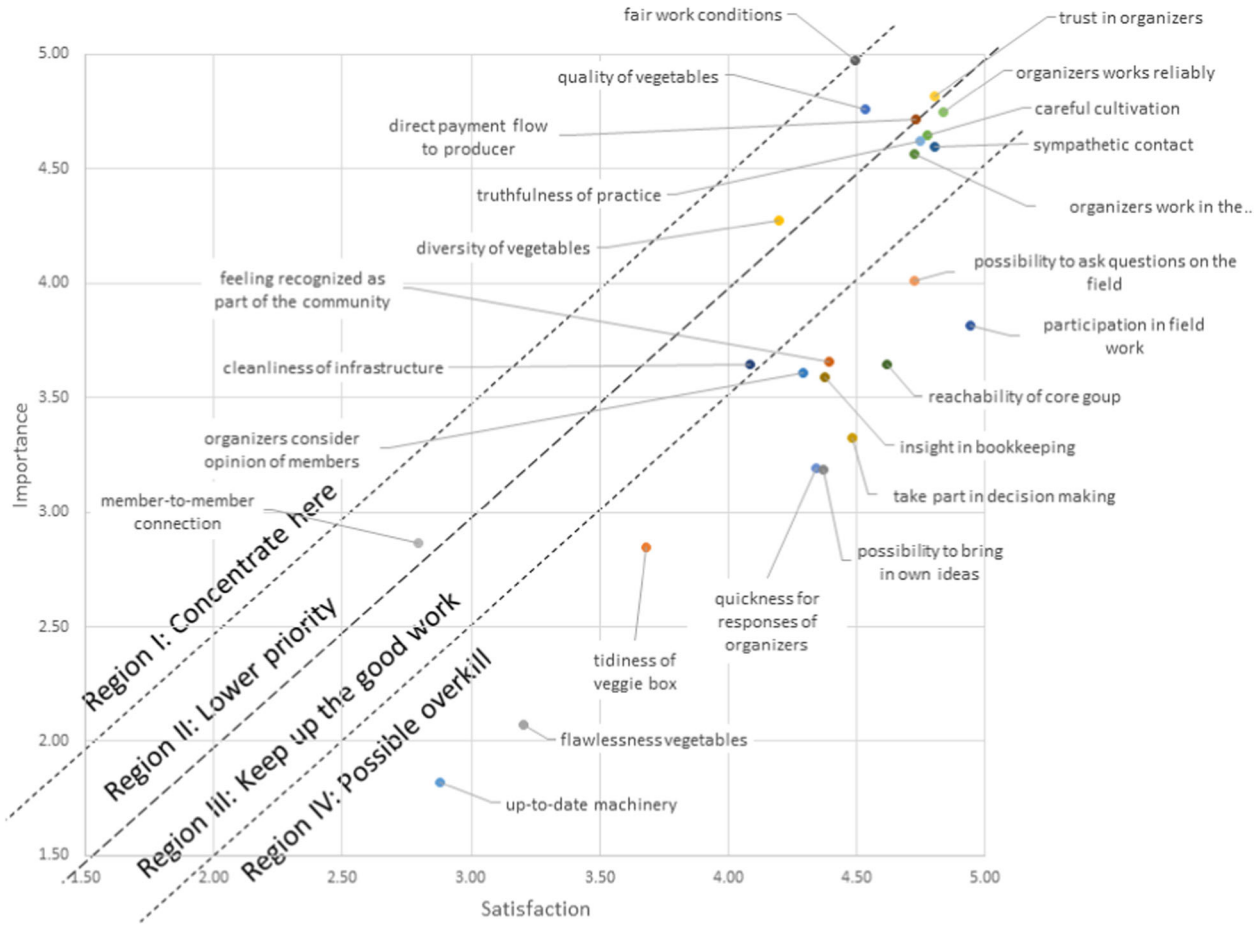

Fig. 1 Graphic presentation of the Importance-Satisfaction-Analysis (ISA) of current CSA members as performed by Galt et al. (2019). The same terminology has been applied. Region I contains the aspects of CSAs that haven rated higher in importance than satisfaction (difference of min. 0.5 points) indicating that there are open expectations, which have not yet been met. Region II indicates similar aspects but the difference between importance and satisfaction is <0.5 points. Region III describes aspects which work well satisfaction is <0.5 above the importance. All aspects which have been rated higher in satisfaction than importance by at least 0.5 points are in region IV indicating a disparity in the relevance of the particular aspect between organisers and members and shows where too much energy may have been invested by organisers clearly exceeding the members' expectations.

the gardeners suffered from the agricultural wage which is common in agriculture" (CSA 2).

Several strategies were identified to increase financial resources when the initial budget calculation is not based on real costs. In six of the eight CSAs, they use the shareholding principle in which each new member buys a share of the CSA at entry: "This money [from the shares], we can invest in production, machines, we can simply invest" (CSA 3). Some CSAs increase their funds through accessing subsidies, taking out private loans from members, or crowdfunding. The price usually increases when moving from a reference price to a price that reflects real costs: "This brought a price increase of the subscription, and if that doesn't add up, there might bring an increase again" (CSA 2). Some CSAs have flexible prices reflecting solidarity and alternative ways of thinking, such as one CSA offering three options: "a minimal contribution, a cost-covering contribution and a solidarity contribution" (CSA 4).

Building common ground between organisers and members. Once the organisational framework has been defined, the next step in establishing a CSA is to build common ground between organisers and member base in understanding and sharing the core values of CSA. General meetings (GM) are held in all participating CSAs, and participation by members in shows a degree of interest in how the CSA is organised and whether principles of fairness are met:" the people come again and again and ask: "How is it [the CSA] structured? It is important to me as member of the cooperative that people have fair wages and fair working conditions" (CSA 3).

However, it is not uncommon to find imbalances between the organisers' and the members' expectations; leaving the organisers feeling exhausted and overwhelmed with the responsibility of food production, member coordination, and administration. As CSA 8 describes it: "This responsibility is, however, often very heavy too, exactly when you are standing in between everyone". Especially in young CSAs (CSAs 2 and 4), the workload for the organisers can be higher than expected due to lack of experience leading to an imbalance between the burden and rewards of work: "I think gardeners face this with unpaid overtime" (CSA 4). The most common strategy to lower the workload is to use the member base as a resource of work power.

Seven of the eight CSAs made participation in fieldwork mandatory by contract. Even though the participation increased the administrative work for them, it was evident that this additional labour force is fundamental to the existence of the CSAs: "Nobody can be part of CSA 6 and not notice: Without participation in fieldwork, it won't work" (CSA 6). Stimulating continuous, regular support on the fields appears to be a challenge for established CSAs, and member commitment can be sporadic: "You have some waves in it. In the beginning of the

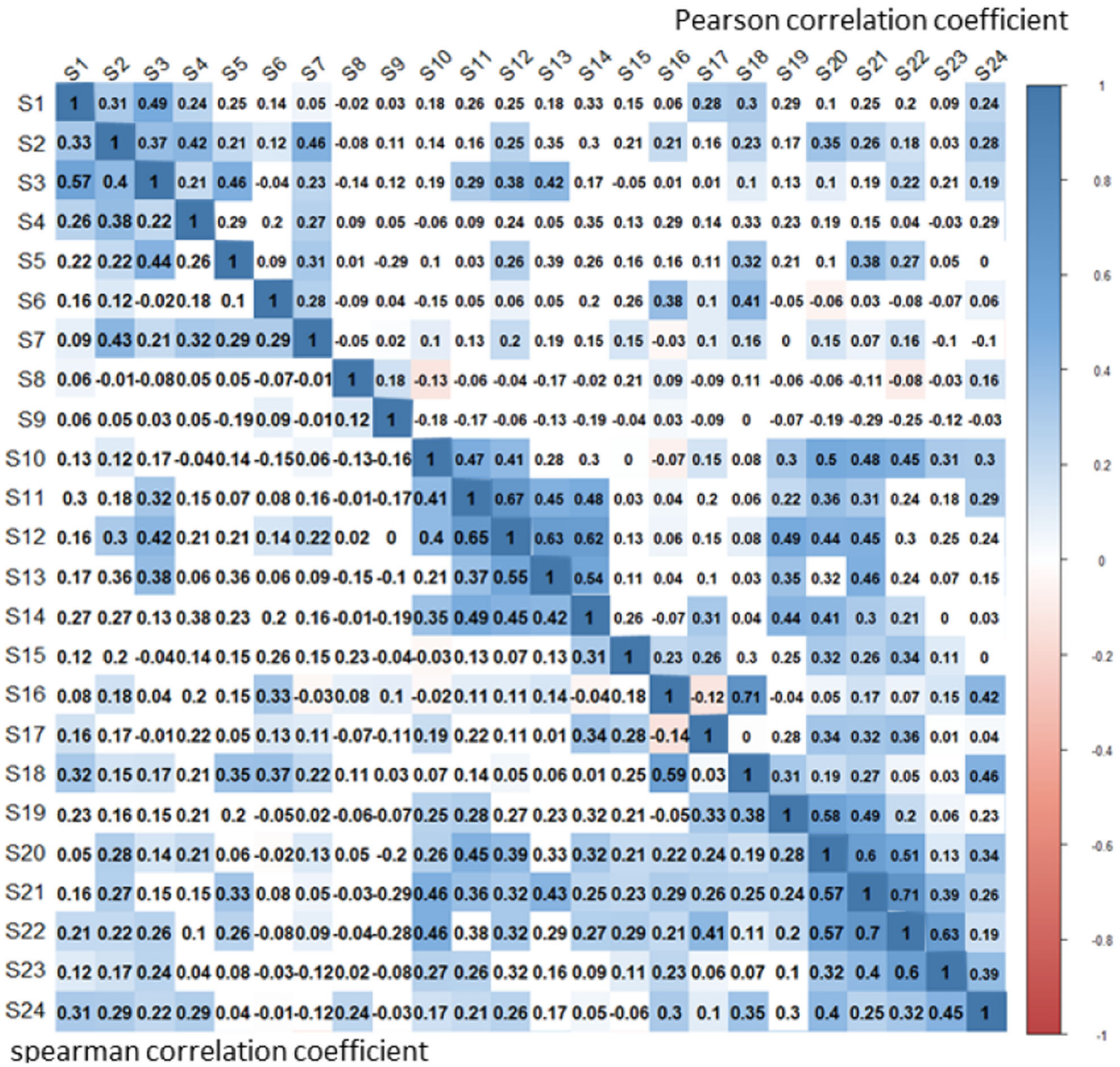

Fig. 2 The correlation coefficients between the 24 variables of the multiple-Item scale questions on satisfaction (see Table 3 for details of the items). On the top right, the Pearson method was used to calculate the correlation coefficient and on the bottom left, the spearman method was used. After comparing the results of the two methods, there is barely a detectable difference. Significance correlations are pointed out by colour according to the colour scale on the right. A significance level of 0.01 was applied.

year there are always a lot of people coming when spring starts, and everyone wants to go outside. Then summer break, it is hot, then it becomes a bit harder at a time" (CSA 1). Offering a diversity of possibilities to honour their mandatory commitment can enable members to find an aspect that interests them: "Someone is doing all the account stories. […] She's doing that, pays for the vegetables but instead of coming to the fields, she does these office jobs" (CSA 1).

It was frequently mentioned that, over time, members start to invest more voluntary time as they realise its importance: "long term members, who gained a good insight, come a lot to help pack the vegetables. Every week they're joining." (CSA 3). It becomes a regular part of their weekly routine. In well-established CSAs, fieldwork becomes partly self-organised. Members take over the lead of a work assignment, or even a whole action day, without input from the garden/farm group: "on action days there are seldom members of the farm group or organisers present because the idea is that we don't have to work on the weekends, but instead members are coming. It is led by a member and not a skilled employee [garden/farm group]" (CSA 6).

However, it can be deflating for the organisers to realise that not all members are as enthusiastic about the project as the organisers: "in their daily life where so many things happen which have nothing to do with us [the CSA]. They don't have the farm in front of their face like us who work here all day" (CSA 6). One option to involve members and strengthen their connection to the CSA is to encourage individual projects, such as by offering a free subscription to initiators of the project within the initiative, or by simply offering a space: "We have infrastructure, land, and also certain monetary resources. Who wants to initiate something, should do it" (CSA 1). A written agreement between each member and the organisers, meaning a formal document with terms and conditions, is a reliable tool to communicate expectations and principles clearly to new members: "It's like

an agreement, a purchase guarantee. You pay the price of the vegetables in the beginning of the year and oblige yourself to participation and adopt the risk" (CSA 1).

Practical implementation. Most of the sampled CSAs deliver their vegetables to pick up points in several villages and to at least one pick up point in a larger city. CSAs with limited access to urban residents, who form the majority of CSA members, have to adapt their offers accordingly. "For example, in Lausanne or Geneva, the people have a need to go outside into nature to get their basket or participate in fieldwork. At ours, they do not need this. They all already have their own garden" (CSA 7). A common strategy for accessing urban residents is to establish multiple pick-up points through collaboration with another alternative food network (AFN) who have storage space in the targeted city, reported as being the easiest way: "We are in contact with them, and they said from the beginning: "hey great! We always wanted a CSA with us" (CSA 4). Collaboration between AFN and CSA is often mutually beneficial, as it expands not only their catchment area but also their social network.

Collaborations with neighbouring farmers were especially mentioned by CSAs that rent land from local authorities, have no affiliation with a farm (Table 1), and thus have limited machinery available: "One of our neighbouring farmers, who also has a vegetable subscription, pays nothing for it but ploughs for us and works the soil with the rotary harrow. That's one of these agreements" (CSA 1). Other ways to increase the work power are offering apprenticeships, internships, or additional permanent positions. In CSA 1 and CSA 6, there is a collaboration with social services and implies a component of social integration: "The goal of these programmes is actually not the work integration but social integration" (CSA 1). This can be seen as a spillover of the intention to create a more socially just and inclusive system.

Gaining feedback. Although gaining feedback is an additional task faced by the organisers, installing some feedback mechanisms is a key means of evaluating whether the offer of a CSA matches the members' expectations. Informal personal communication with the garden/farm group is one of the main channels for receiving feedback from members. Taking the members' concerns seriously, proactively informing and seeking the conversation with members has been found to be beneficial: "I notice it extremely that so many questions can be answered when you spend an afternoon together" (CSA 6). Some CSAs have created more structured feedback using online surveys in which they ask concrete questions on different aspects of the CSA, such as future strategy, vegetables, and communication, which provide a general notion of the community's feeling about a certain topic. Surveys produce more responses than are usually received at a general meeting and remove the need for criticism to be delivered directly, which can reduce inhibitions to criticise: "you can do it almost anonymously and have it filled quickly. It's of course much easier than coming to the farm and think about votes or let's say, the whole strategy" (CSA 3).

Two CSAs in the sample hold workshops with the members to enhance the co-creation of the CSA. During these workshops, they discuss how the members see the future of the CSA or what motivates them to be part of it. With the resulting information, the organisers can better combine the expectations of all parties: "For the organisers who take everything back what was collected, it forms the base for the work so that people know that they can have a say" (CSA 6). There is some evidence that the feedback mechanisms that have been installed in the participating CSAs are not always effective, with some causes of dissatisfaction remaining unknown. Representatives of CSA initiatives are often unaware why people cancel their vegetable subscription, which is often done without explaining their reasoning: "The reasons you get to hear are usually: "I have my own garden", "I'm moving, it was all great", but the real reasons… Sometimes we would be glad to receive some honest criticism" (CSA 1).

Table 2 Return of member survey.

CSA	No. of responses	No. of members	Return rate (%)
CSA 5	48	130	36.92
CSA 4	3	46	6.52
CSA 8	15	140	10.71
CSA 2	67	120	55.83
CSA 6	56	300	18.67
CSA 1	19	200	9.50
CSA 7	0	21	0.00
CSA 3	1	800	0.13
Other	45		
Total	254	1757	14.46

Return rate based on the number of members from Table 1.

CSA from the members' perspective (quantitative phase)

Results of quantitative phase. The return rate of responses from each participating CSA to the member survey was various (Table 2). In total, 254 responses were collected, of which 212 were completed. The Cronbach's alpha statistic was calculated for both the 'importance' and 'satisfaction' scales and returned results of 0.804 and 0.863, respectively, indicating both scales' good internal consistency. The alpha statistic was calculated for the scales with each item removed, which returned no improvement in the alpha statistic for any of the items of the 'importance' scale. One item (cleanliness of infrastructure) marginally improved the alpha statistic (from 0.863 to 0.868) when removed from the 'satisfaction' scale, but the improvement was sufficiently small that the items were kept in the analysis. The mean responses show that 'fair work conditions', 'trust in organisers' and 'quality of vegetables' are the most important aspects of CSA from the perspective of CSA members (Table 3).

In a second step, the mean responses were plotted in accordance with Galt et al.'s (2019) Importance-Satisfaction-Analysis (Fig. 1). Most aspects appearing in the region of possible overkill relate to the active participation of the members in the CSA, which suggests that the communal experience is less important to CSA members than it is to organisers. Most of the items in region III are those that relate to operational and strategic tasks of the organisers, which shows that the members trust the organiser.

Correlation analysis. The correlation analysis was performed with both Pearson and Spearman correlation coefficients. However, as could be expected due to the central limit theorem, correlations are almost identical (Fig. 2). The following statements are based on the correlation analysis using Pearson correlation coefficient. In general, there are barely any negative correlations and the few that there are show weak relationships. Based on the ISA and the interviews, we draw attention to the behaviour of the following three aspects: 'fair work conditions', 'trust in core group' and 'feeling recognised as part of the community'.

'Fair work conditions' (S9) shows only a weak but positive correlation with 'trust in core group' (S16) and 'direct payment flow to producer' (S8) on a 0.01 significance level. 'Trust in core group' (S16) shows a strong positive correlation with 'organisers work reliably' (S18) and less strongly but also positively with

Table 3 Mean and standard deviations of the survey responses.

Index	Labels	Importance	Std.	Satisfaction	Std.	Difference
1	Quality of vegetables	4.76	0.52	4.53	0.69	−0.23
2	Neatly packed vegetable box	2.85	1.32	3.68	1.26	0.83
3	Flawlessness vegetables	2.07	0.89	3.20	1.10	1.13
4	Diversity of vegetables	4.27	0.78	4.20	0.90	−0.07
5	Up-to-date machinery	1.82	0.92	2.88	1.04	1.06
6	Careful cultivation	4.64	0.59	4.77	0.47	0.13
7	Cleanliness of infrastructure	3.65	1.00	4.08	1.01	0.44
8	Direct payment flow to producer	4.72	0.59	4.73	0.60	0.01
9	Fair work conditions	4.97	0.18	4.49	0.84	−0.48
10	Insight in bookkeeping	3.59	1.13	4.38	1.04	0.79
11	Sympathetic contact	4.59	0.60	4.80	0.46	0.21
12	Reachability of organisers	3.65	1.10	4.62	0.64	0.97
13	Quickness for responses of organisers	3.19	0.97	4.34	0.75	1.15
14	Possibility to ask questions on the field	4.01	0.95	4.73	0.53	0.71
15	Member-to-member connection	2.86	1.08	2.80	1.28	−0.07
16	Trust in organisers	4.82	0.45	4.80	0.45	−0.02
17	Truthfulness of practice	4.62	0.65	4.75	0.51	0.12
18	Organisers work reliably	4.75	0.46	4.84	0.40	0.09
19	Participation in field work	3.82	1.16	4.94	0.37	1.13
20	Feeling recognised as part of the community	3.66	1.14	4.39	0.90	0.73
21	Possibility to bring in own ideas	3.18	1.03	4.37	0.84	1.18
22	Take part in decision making	3.32	1.06	4.48	0.85	1.16
23	Organisers consider opinion of members	3.61	1.05	4.29	0.93	0.69
24	Organisers work in the interest of the community	4.56	0.69	4.72	0.51	0.16

Respondents were asked to rate the importance and their satisfaction with each of the 24 items on a 5-point scale from 1 (do not agree at all) to 5 (agree completely).

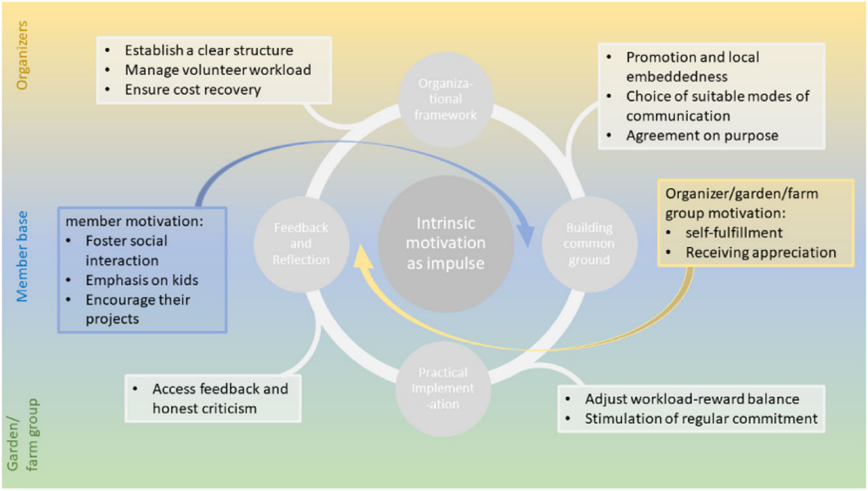

Fig. 3 The internal cycle of organisational adjustment in CSAs Organisers being the group of people who perform the main organisational and administrative tasks. The garden/farm group is part of the organisers but have a specific responsibility, which differentiates them from the rest of the organisers. Member base describes the group of consumers who participate in the CSA. The grey bubbles show the most prominent phases of organisational adjustment with the white boxes indicating how the CSAs in the study moved from one phase to the next. The colour background is an indication of who plays the main role during each phase.

'careful cultivation' (S6) and 'organisers works in the interest of the community' (S24). The item: 'feeling recognised as part of the community' (S20) was not highly rated by members but showed the strongest positive correlations with 'insight in bookkeeping' (S10), 'participation in field work' (S19), 'possibility to bring in own ideas' (S21) and 'take part in decision making' (S22) (Fig. 2).

Discussion

The findings of this study enabled the formulation of an explanatory model involving intrinsic motivation leading to a cycle of creation and co-creation of an organisational framework, building common ground, practical implementation, and reflection and feedback (Fig. 3).

Delivering the expectations. Reflecting the results of previous studies, the visions of the organisers go beyond risk sharing in vegetable production to include community building, zero-waste management, gender equality, social justice, and nature conservation (Cone and Myhre, 2000; Wells and Gradwell, 2001; Ostrom, 2007; Hvitsand, 2016; Gugerell et al., 2021). The member survey revealed that members value these key components of the communal experience less than the organisers do. Although

Diekmann and Theuvsen (2019) nominate catering to member's interests as precisely as possible as a key factor in gaining long-term success and stability, the expectations of members appear to be not fully aligned with the vision followed by the organisers of the CSAs in this study; some of which have proven resilient over time. Indeed, the dissonance found in this study in expected delivery of services as part of the CSA membership between organisers and members is similar to the results of Lea et al. (2006), Pole and Gray (2013), and Peterson et al. (2015). Based on the results of our study, CSAs successfully overcome the divergence of expectations between organisers and members through an internal cycle of organisational adjustments, which ultimately leads to social capital build-up (Fig. 2). CSA 3 is an example of successful cycling with a 40-year history of continuous readjustment and diversification of production, offer, and possibilities to engage, which illustrates the importance of allowing co-creation to happen and the CSA to grow. This understanding of CSA as a dynamic evolution between organiser(s) and members, with a need for continuous reinvention and readjustment, was often a revelation to the founding organisers, who initially envisage a system that is simply established and administered.

Underestimating social capital generation. The range of motivations for participation in the organisation of a CSA shows high variability, which is in line with the findings of Wells and Gradwell (2001), Charles (2012) and Hvitsand (2016). However, the organisers often experience a sense of disappointment when they realise that not all members share the same creative urge and therefore find it hard to build the social capital they had envisioned. Axon et al. (2018) propose that creating a sense of collective interests and achievable goals, and co-producing community level initiatives, can support engagement by providing ownership and motivating transitions in behaviour and social practices. The result that members do not value communal aspects as highly as the organisers is similar to those reported in several studies on motivations for participation by CSA members (DeLind, 1999; Cone and Myhre, 2000; Guthman et al., 2006; Ostrom, 2007; Russell and Zepeda, 2008; Pole and Gray, 2013), which suggests that these results might be generalisable to other contexts.

The current practices and arrangement in Swiss CSAs to build social capital are diverse. They commonly start with a written agreement in which members commit to participation in the CSA and fieldwork. During the fieldwork, informal social interactions take place between members as well as between members and the organisers, which are fundamental to the social capital generation in CSAs. Furthermore, the transfer of responsibility from the organisers to members can be interpreted as a sign of trust. These findings are comparable to the results of Balázs et al. (2016) and Gugerell et al. (2021) and suggest that trust in the organisers is connected to their reliability, careful food production, and the organisers working in the interest of the community as shown in the correlation analysis. The results stress the importance of the information flow from the members to the organisers. However, this study did not explicitly measure to what extent social capital was built using these practices and arrangements in the participating CSAs so it will be a challenge of future research to explore that issue further.

Despite the divergence, CSA offers a vehicle to experiment with alternative economic activities and social constructs. Although the members will never all be involved to the same extent, this study revealed that, along with the organisers, a common occurrence is the crystallisation of a group of members who feel connected to the people and land. Cone and Myhre (2000) and Pretty (2001) suggest that regular participation yields higher rewards for the members: thereby stimulating a sense of civic responsibility and connectedness. The perception of the organisers in this study also agrees with the positive correlation between member satisfaction, years of participation, and number of visits at the CSA that was found by Lang (2005). This result indicates a process of self-identification and connection, which likely results from knowledge exchange, shared memories, and a feeling of being needed, which are caused by social interaction at the CSA. Opening space for such social interactions is, thus, a primary responsibility of the organisers. The finding that a substantial amount of work time flows into member assistance and communication with members echoes other studies, which have recognised similar importance, and effort needed, of cultivating and maintaining a loyal member base (Cone and Myhre, 2000; Wells and Gradwell, 2001; Guthman et al., 2006; Lea et al., 2006; Standford, 2006; Ostrom, 2007; Galt et al., 2011, 2019; Parot et al., 2017).

A tightrope walk between idealism and pragmatism. The variety in engagement of members allows the conclusion that members have diverse expectations and, hence, are very heterogeneous. The expectation of a consistent rate of member commitment is likely to remain unfulfilled. Instead, CSA should rather be seen as a vehicle for many who are interested in alternative concepts of food systems and offer accommodation for a wide range of drivers among its members (Cox et al., 2008; Charles, 2011; Galt et al., 2011; Savarese et al., 2020). The way CSAs are organised resembles 'dynamic governance', which is also known as 'sociocracy': A style of management first introduced by Endenburg (1988). However, democratic decision-making based on consent, work groups (or circles as referred to by Buck and Endenburg, 2010), and the inclusion of all participating entities in decision-making are a few of the key elements of dynamic governance (Romme, 1996; Buck and Endenburg, 2010). A further challenge for future research is to evaluate the extent to which CSAs could benefit from the explicit and systematic introduction of dynamic governance.

With the willingness to reinvent themselves every season, the participating CSAs move forward as a co-evolution between organisers and members (Standford, 2006; King, 2008; Wight, 2015; Ducottet and Parot, 2020). This entails a certain reciprocity between idealism and pragmatism (Charles, 2011) which allows for learning and education to build the basis for the development of sustainable communities (Ducottet and Parot, 2020). CSAs that achieve self-organisation of the members, at least to some extent, were found to be those that relax their fixed idea of how the CSA must work and, thus, re-create the framework, season by season. The execution was found to be context-specific, which has also been observed in studies of CSAs by Charles (2011), King (2008), and Tang et al. (2019). However, the present study revealed that, even after decades of existence, most members do not willingly partake in decision-making processes. For them, and in agreement with the results of Sitaker et al. (2020), the CSA may always resemble more of a "community of common interest" (Cone and Myhre, 2000) or "conceptual community" (Russell and Zepeda, 2008), entailing a rather pragmatic union between consumer and producer, which is not necessarily based on personal relationships.

Bringing burden and rewards of work back to balance. Blending idealism and pragmatism is a major challenge for the organisers: often leading to what Galt (2013a) calls "psychological pressure". It describes the pressure on the organisers to make the CSA work, to produce an 'adequate' share, and to be 'adequate' in responding to what they perceive the members expect. Due to the

divergence of priorities and expectations as well as the financial dependency of the organisers on members, the organisers may slide into what has been termed "pre-emptive self-exploitation" (Galt, 2013b), which describes the imbalance between rewards and workload and silent effort given to member retention. The presence of self-exploitation in the participating CSAs is a paradox in itself since CSAs are built on the principles of fair working conditions and social justice for people working in agriculture (Galt, 2013b). This paradox may be explained by the CSAs embeddedness in a larger capitalistic system (Tang et al., 2019) and lack of awareness from members making the CSA "an alternative market arrangement rather than a partial alternative to the market economy" (DeLind, 1999, p. 4).

The participating CSA initiatives used a variety of tools and arrangements to tackle the imbalance between the burden and rewards of work. There are two main approaches: increasing rewards or decreasing workload. Candid honesty and transparency between the organisers and members are important for both approaches: essentially requiring a transparent and openly communicated budget calculation and calculation of workload. The need for reciprocity of understanding was similarly identified by Sitaker et al. (2020) and Jilcott Pitts et al. (2021) who called for both organisers and members to consider the needs along with the resource and financial constraints of the other. The results of our study suggest that participatory wage schemes can help to balance workload and rewards by putting the personal perception and understanding of fairness in the forefront of discussions. The other approach to lowering the workload revealed a diversity of methods, with the involvement of members in fieldwork as the most commonly used among the CSAs, although a common practice in other studies has been to involve members in fundraising and outreach (Sitaker et al., 2020). Collaborations with other stakeholders and additional paid positions are other methods to decrease the workload. Balancing workload and rewards is an ongoing process due to changes in life situations, member base, and context. As such, it more resembles an ongoing recalibration and is closely tied to the efforts in social capital generation. This opens new room for future research on how the collaboration between farms, CSAs, and potentially other AFNs could elevate the collective impact on the sustainable development of a local context.

Conclusions

This study offers an explorative case study analysis of eight Swiss CSA initiatives: differing in size, age, and organisation. The social processes have been distilled from the data and summed up in the internal cycle of readjustment stating four critical stations in the continuous evolution of CSAs: defining an organisational framework, building common ground between organisers and members, practically implementing food production, accessing feedback from members, and taking time for reflection resulting in readjustments of the organisational framework. The expectations of the organisers are charged by idealism and enthusiasm to address shortfalls of modernity with a distinct focus on community, but this often clashes with the more pragmatic perspective of members who expect healthy vegetables produced under fair and socially just circumstances. It became clear that the food production and cost recovery, which is essentially the core of CSA, needs to be working before social capital generation can be expected. This may mean that organisers should invest their energy mainly in setting up the food production and member participation scheme in their first years to spark commitment and build a solid basis from which they can expand to meet their social goals. The meeting of organisers and members in the field, at the intersection of work and community, is thus essential in balancing the burdens and rewards of work, generating social capital, and facilitating the information flow from members to organisers and between members themselves.

Data availability

Data that underpin the study are available on request in accordance with the General Data Protection Regulations (GDPR). These data are not deposited in an open repository because their qualitative nature would make their public availability GDPR non-compliant.

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Ethical approval

This research was undertaken entirely in Switzerland, where approval is only required for social science research if it includes the use of non- anonymised personal data. That was not the case in this study, so there is no committee available that could grant or decline ethics approval.

Informed consent

All data were collected in compliance with both the European General Data Protection Regulations and with national Swiss law, which includes that all participants gave permission for their data to be used in this study.

Competing interests

The authors declare no competing interests.

Additional information

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