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Dimensions and Benefits of Community Supported Agriculture for Communities

Leslie M. Knigge

Campus Fryslân, Leeuwarden (Netherlands)

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Dr. Carol X. Garzon Lopez

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Abstract

The dominant food system is ill-prepared for the effects of climate change and exacerbates emissions and biodiversity loss through unsustainable farming practices (Rockström et al., 2020). Ensuring access to safe, nutritious food can be enhanced by localized food systems, such as Community Supported Agriculture (CSA), which establishes direct, risk-sharing relationships between consumers and producers (Fomina et al., 2022). This research systematically reviewed 28 articles to explore the benefits of CSA for communities across a framework of ecological, social, and economic dimensions. Key findings reveal that CSA fosters diversified and resilient ecosystems, strengthens consumer-producer relationships, and promotes a trust-based economic model. Moreover, emerging themes were identified that extend beyond these individual dimensions and call for a more holistic approach to agriculture. CSA benefits communities in multifaceted and context-dependent ways, addressing ecological sustainability, food safety, health, income equality, and accessibility for low-income households. It promotes solidarity and transformative power within the dominant food system but necessitates education and awareness to transmit its benefits effectively. Further research is needed to understand CSA practices in the Global South, as current literature predominantly focuses on the United States and Europe, the Global North, and articles published in English.

Key words: community supported agriculture - localization - holistic agriculture - communities

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Introduction

The agricultural methods of our current global food system put extreme pressure on the planetary boundaries as this sector creates the highest emissions, promotes monocultures that destroy local biodiversity, and harms the soils with intense use of chemicals and fertilizers (Campbell et al., 2017). Together with the experienced effects of climate change, such as floods, drought, and extreme weather events, agricultural land is exposed to more and more pressures that reduce crop quality and endanger harvests. With the growing population expected to exceed 9 billion people by 2050, this calls for a solution on how to achieve food security in the future under climate change conditions (Kick et al., 2017).

As the single largest greenhouse gas emitting sector, the global food system is transgressing all five planetary boundaries relevant to food production: cropland use, freshwater use, biosphere integrity, and nutrient loading, and climate change (Rockström et al., 2020). In the last decades, a process of simplification in agriculture, i.e. reduction in crop diversity, homogenization of practices (Rasmussen et al., 2024), has taken place. This includes a structural transition to industrialized agriculture with intensively managed monocultures, limited varieties of seed sources and extensive use of chemical fertilizers and pesticides, among others, that lead to resource exploitation, soil degradation and depletion, and biodiversity loss (Rasmussen et al., 2024). This results in monocultures not being prepared for unstable conditions and extreme weather shocks whose frequency and severity has increased due to climate change (Rockström et al., 2020). Therefore, the food system has become more vulnerable due to its reduced ecological resilience.

The dominant agri-food system has undergone this transition at the expense of a more diversified agriculture, in terms of actors, practices and seed varieties, calling for a reverse of the simplification and a change in the system. The work by Rasmussen et al. (2024) suggests that diversified agriculture, applied in multiple strategies, is an “ecological mechanism for higher resource efficiency, less pollution, improved food sovereignty, and reduced vulnerability to climate change”.

While our current system is environmentally unsustainable, access to organically produced food is often restrained by high costs and the dominance of discounters that determine the prices of produce. More localized food systems can contribute to less transportation distances and supply regional seasonal food that

has potential for positive impacts on health and diversity of produce, if made accessible (Oosterveer & Sonnenfeld, 2011). Further, local production can increase food sovereignty, as coined by La Via Campesina (2021): “the right of peoples to healthy and culturally appropriate food produced through ecologically sound and sustainable methods, and their right to define their own food and agriculture systems”.

One of these localized systems can be found in Community Supported Agriculture (CSA), a concept that connects local farmers directly to the consumers of their produce. CSA can be defined as a “direct-to-consumer distribution model and kind of partnership between local farmers and customers, who pay the farmers a set price before the growing season for a share of the farm’s harvest” (Fomina et al., 2022). Community Supported Agriculture originated in the 1960/70s in Japan, where it is called “teikei” which translates to “food with the farmer’s face on it” (Sumner et al., 2010). It offers high potential for sustainability in combining the areas of ecological, environmental, and social sustainability (Egli et al., 2023).

A study by Ricciardi et al. (2018) showed that smallholder farms, i.e. farms under 2ha, account for “28-31% of total crop production and 30-34% of food supply on 24% of gross agricultural area”. Furthermore, they found that smallholder producers, such as CSA, are using less of their production for animal feed and processing while reducing waste and increasing species richness. Members and farmers of CSA initiatives share the costs and risks associated with the farming season, such as seeds and tools, but also account for potential crop failures. In return, they share the produce of the farm (Piccoli et al., 2021). CSA is part of the alternative food network, valuing solidarity and community, with its “distinguishing feature [...] to establish communities around the interwoven issues of food, land and nature” (Kis, 2014). While values are shared among CSAs, there are different systems and approaches to it which were classified by Kacz et al. (2019) into five groups, depending on how strongly consumers are integrated in the food production process: community supported (shared) farm, subscription systems, box systems, buying groups, and farmers’ markets.

Community Supported Agriculture is contributing to shortening the supply chains within our food system, while promoting sustainable farming practices and contributing to social development. Another

important factor within CSA is solidarity, which has been shown in increased food sovereignty and consumer-involvement in the food production process (Piccoli et al., 2021). Extensive research has been done on the motivations to join CSA (see Cox et al. 2008), with a broad spectrum of different motives and priorities, already indicating a wider scale of impact.

As mentioned, there is a need for change in our current food system and CSA can be seen as a potential solution towards a more sustainable and equitable food distribution. This research addresses a big gap in literature about the multidimensional nature of CSA and the dimensions it has in connecting different areas of sustainability. Only few articles on the topic of CSA actually address the dimensions in which CSA is working, which showed a clear dominance of research from the United States as most of them only considered literature in English (Egli et al., 2023). This exacerbates the publication bias that has also been pointed out in the PRISMA statement (Moher et al., 2009), creating another gap of research in non-US contexts. In order to explore the multidimensionality and benefits of CSA, the following research question is posed:

What are the dimensions in which community supported agriculture (CSA) benefits communities?

Key objectives of the research are to identify the different dimensions and potentials that CSA has. “Dimensions” indicate the areas in which CSA operates and how they are interlinked. Oftentimes, CSA is evaluated based on a single dimension, missing the interconnectedness of societal issues and impact spheres. The multidimensionality of CSA shifts the relevance of one narrative to the inclusion of local contexts that shape its benefits which are to be explored in this study. This broader understanding is beneficial to both the scientific and the general community as CSA offers great potential for transformative change of the food system and the way food and culture are conceptualized. Thus, emerging themes around CSA are discussed and how methods and motivations may differ depending on the local context. The multifaceted view on the farming concept addresses the richness of a more integrative and comprehensive look at the dimensions of CSA: from grassroots movements and bottom-up practices that promote sustainable transitions in the food system to more open mechanisms of knowledge production in the academic field - the analysis of CSA in this research paper is relevant to a wider audience.

Limitations of researching CSA may lie in the context-specific utilization and conceptualization that determine the impacts and benefits of CSA to communities. Given the small-scale approach of CSA that is often related to grassroots organizations, research outcomes may vary greatly based on the local context. To address the geographical bias mentioned above, the United States were excluded in the database search and addressed using a review that covered 67% of articles in the US (Egli et al., 2023). However, using the English search term of “community supported agriculture” in the process may already create a geographical bias as CSA can have different names in non-English speaking countries.

After introducing the methodology for creating a theoretical framework and explaining the steps of the systematic literature review, the paper will introduce the findings of the review along three main dimensions: ecology, social, and economy. Further, emerging themes of CSA are discussed which conclude in future perspectives of the farming practice.

Methodology

A broad variety of literature on CSA can be found in case studies (Piccoli et al., 2021; Kacz et al., 2019; Krul & Ho, 2017; and many more), quantitative assessment (Pérez-Neira & Grollmus-Venegas, 2018) or introductory literature to alternative food systems (La Trobe & Acott, 2000; Bazzani & Canavari, 2013) in multiple research areas. However, a gap has been identified in reviews on the topic which bring together the multidimensional characteristics of CSA. An initial search in the Scopus database, limited to reviews, with the search term *TITLE-ABS-KEY ("community supported agriculture") AND (LIMIT-TO (DOCTYPE , "re"))* was performed on 23.02.2024 and gave result to a total of 24 documents, many of which focused on specific aspects of CSA or a specific region. In order to address the mentioned research gap, this paper applied the steps of a systematic literature review based on the Preferred Reporting Items for Systematic reviews and Meta-Analyses (PRISMA), specifically PRISMA-EcoEvo, a transparent and standardized procedure for high-quality systematic reviews in the field (O'Dea et al., 2021). The approach includes a step-by-step checklist for systematic reviews in the field of ecology and evolutionary biology.

Theoretical Framework

For a comprehensive understanding of the various dimensions in which CSA operates, a theoretical framework was developed to systematically review findings in literature. This framework consists of three main dimensions, namely ecology, social, and economy, with respective categories and subcategories (see Figure 1 below). The framework was created following three main steps: (1) Existing reviews were searched in Scopus to synthesize categories for the systematic review. The initial search of “community supported agriculture” listed 24 documents. (2) A selection process based on title and abstract gave a total of four reviews for the theoretical framework. Included were the papers by Egli et al. (2023), Brown & Miller (2013), Chen (2013), and Jonason (2017) (see Appendix A). (3) The selected reviews were read focusing on possible dimensions of CSA and corresponding themes were identified. On the basis of the dimensions provided by Egli et al. (2023), which were adjusted and supplemented by the other reviews, an

overview of dimensions of CSA and their (sub)categories was created and put together in the following theoretical framework:

Figure 1

Theoretical Framework

Dimension	Category	Subcategory
Ecology	Biodiversity	crop variety, local species
	Inputs	seasonal, regional, organic
	Outputs	organic, nutritious, seasonal, regional
	Soil	less pollution and toxins, soil nutrients
	Seasonality	greenhouse
	Regionality (localization)	transportation
Social	Farmers/volunteers	direct interaction with consumers, income, part-time activity vs full-time activity
	Members/customers	nutritional benefits, social benefits, health, less choice
	Surroundings/community	neighborhood improvement, better access through localization
	Education	unknown foods, food system, origin of foods, food knowledge, stronger understanding of relationship between sustainability and environment
	Activity	more physical activity
	Involvement	harvesting, decision-making
	Community interaction	social events, participation
	Empowerment	shares interests and alternativity
Economy	Farmers income	higher income compared to agricultural census farm
	Revenue	farmers markets vs csa, self-determination
	Area/surroundings	entrepreneurial activities, benefits local businesses, community economy
	State economy	secondary impact on state's economy, state-level impact
	Costs	covering farm costs?, tools to determine economic activity
	Consumers	shopping less, price comparison to supermarket, quality
	Uncertainty	risk-taking

Systematic Literature Review

The systematic literature review followed the methods of the PRISMA-EcoEvo approach (O'Dea et al., 2021), as described below. Literature was searched in the Scopus database in February 2024. The selection of articles went as follows (also see Figure 1):

1. An initial search term was used with no limitations to get an overview of all literature on CSA. To avoid a language bias, there was no language-filter applied to ensure that non-English documents are also included in the review. This search gave result to 512 documents (22.02.2024).

TITLE-ABS-KEY ("community supported agriculture")

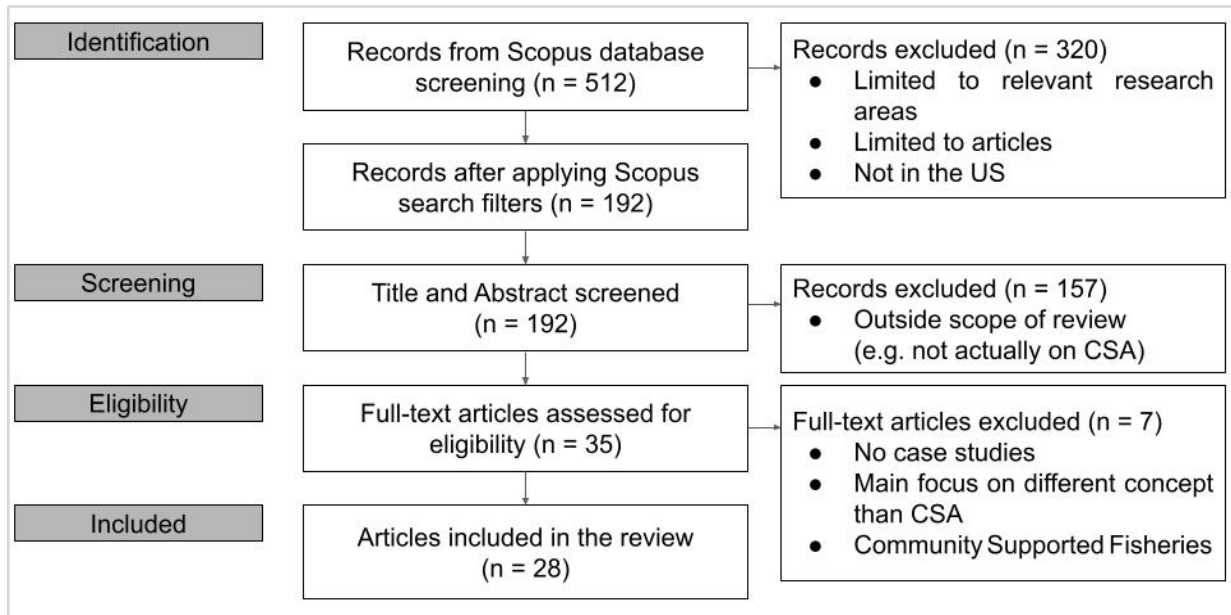
2. A first selection filter was applied, limiting the search to subject areas relevant to the research and the document type to only articles. Books, book chapters, reviews, and other types of documents were excluded from the search to focus on more in-depth analyses and methodologies which are usually found in articles. This search gave result to 384 documents (22.02.2024).

TITLE-ABS-KEY ("community supported agriculture") AND (LIMIT-TO (SUBJAREA , "SOC") OR LIMIT-TO (SUBJAREA , "AGRI") OR LIMIT-TO (SUBJAREA , "ENVI") OR LIMIT-TO (SUBJAREA , "ECON") OR LIMIT-TO (SUBJAREA , "BUSI") OR LIMIT-TO (SUBJAREA , "MEDI") OR LIMIT-TO (SUBJAREA , "ENER") OR LIMIT-TO (SUBJAREA , "PSYC") OR LIMIT-TO (SUBJAREA , "ARTS") OR LIMIT-TO (SUBJAREA , "EART") OR LIMIT-TO (SUBJAREA , "DECI") OR LIMIT-TO (SUBJAREA , "HEAL") OR LIMIT-TO (SUBJAREA , "MULT") OR LIMIT-TO (SUBJAREA , "VETE") OR LIMIT-TO (SUBJAREA , "IMMU")) AND (LIMIT-TO (DOCTYPE , "ar"))

3. Among the 384 documents, 50% (192) were studies performed in the United States, indicating a prevalence of research in the US. In order to overcome this geographical bias and to represent more nuanced themes and key terms, the US as a location was excluded from the search. It is important to focus on less represented countries, as research in the US seems to be extensive and one of the review articles mentioned above had 67% of the analyzed studies in the US (Egli et al., 2023). Thus, a selection filter was applied that excluded the location US. This search gave result to 192 documents (07.03.2024).

TITLE-ABS-KEY ("community supported agriculture") AND (LIMIT-TO (SUBJAREA , "SOCI") OR LIMIT-TO (SUBJAREA , "AGRI") OR LIMIT-TO (SUBJAREA , "ENVI") OR LIMIT-TO (SUBJAREA , "ECON") OR LIMIT-TO (SUBJAREA , "BUSI") OR LIMIT-TO (SUBJAREA , "MEDI") OR LIMIT-TO (SUBJAREA , "ENER") OR LIMIT-TO (SUBJAREA , "PSYC") OR LIMIT-TO (SUBJAREA , "ARTS") OR LIMIT-TO (SUBJAREA , "EART") OR LIMIT-TO (SUBJAREA , "DECI") OR LIMIT-TO (SUBJAREA , "HEAL") OR LIMIT-TO (SUBJAREA , "MULT") OR LIMIT-TO (SUBJAREA , "VETE") OR LIMIT-TO (SUBJAREA , "IMMU")) AND (LIMIT-TO (DOCTYPE , "ar")) AND (EXCLUDE (AFFILCOUNTRY , "United States"))

4. Lastly, the articles were screened to decide whether they are included in the research or not. This happened in two steps. First, the eligibility was determined by the title and abstract alongside the connection to the research question “What are the dimensions of community supported agriculture for local communities” and the theoretical framework. It was paid attention to the actual connection to the research question to ensure that papers were not included that used the term “community supported agriculture” in other contexts such as technological developments or business model assessment that are irrelevant to the question at hand. Out of 192, a total of 35 articles were selected for further assessment. Secondly, a full-text screening was completed, directed by the dimensions and categories provided by the theoretical framework and asking whether one or more of the dimensions outlined were addressed by the article. Another seven articles were excluded, as they did not include a case study of CSA, or covered either a broader or different concept such as community supported fisheries. In the end, a total of 28 articles were selected for the systematic review (see Appendix B).

Figure 1*PRISMA Workflow Systematic Review*

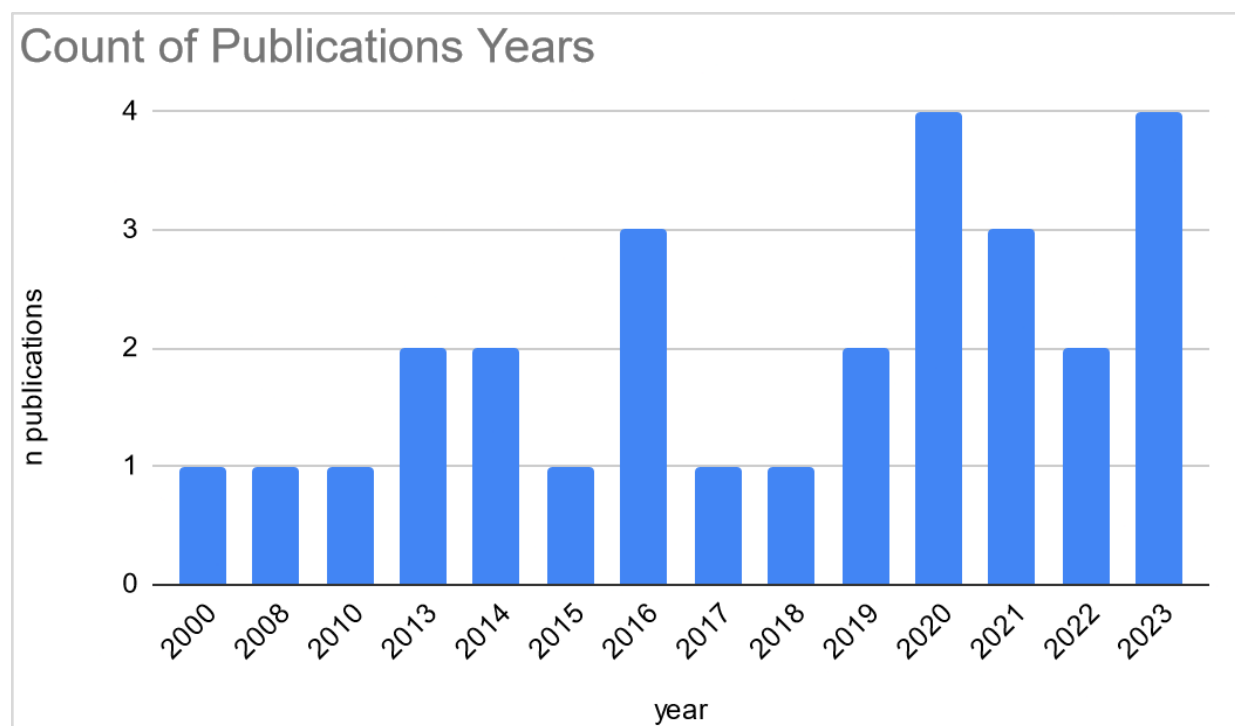
Findings

Bibliometric Analysis

The literature search provided 192 articles, of which 157 were excluded after screening the title and abstract, and another 7 after reading the full article. Thus, this article includes 28 articles, published between the years 2000 and 2023. More than half of the articles were published in 2019 or later (Figure 2), indicating an increased research interest in CSA.

Figure 2

Number of Publications per Year

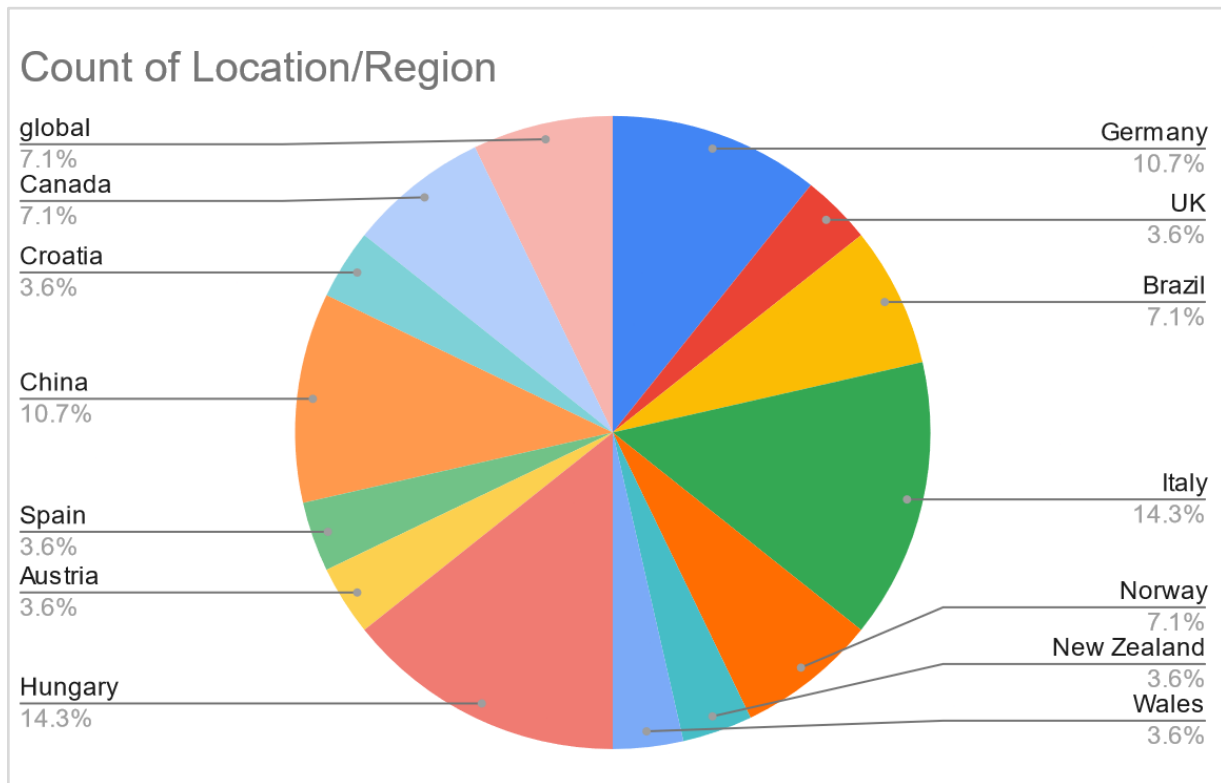


Even though no language filter was applied, all papers, except for one, were published in English. The article published in Croatian has been machine translated by google translate. As the US have been excluded from the search, the large majority of articles is in the European context (18), covering only two studies in Brazil, two in Canada, three in China, one in New Zealand, and two global perspective articles (Figure 3), creating a lack of research in Africa, Asia, Australia, Oceania, and South America. The used approach of this research creates a more diverse database in terms of geographical coverage in comparison

to a similar study that included the United States (Egli et al., 2023), as 22 additional studies were included in this research.

Figure 3

Distribution of Articles Across Countries



Major research areas include sustainability, agriculture, and food systems, as can be seen in the journals shown in Figure 4.

Figure 4*Journals in which Selected Articles were Published*

	Sources <S3: AsIs>	Articles <S3: AsIs>
1	SUSTAINABILITY (SWITZERLAND)	6
2	AGRICULTURE AND HUMAN VALUES	2
3	AGROECOLOGY AND SUSTAINABLE FOOD SYSTEMS	2
4	INTERNATIONAL JOURNAL OF AGRICULTURAL SUSTAINABILITY	2
5	JOURNAL OF CLEANER PRODUCTION	2
6	ANNALS OF LEISURE RESEARCH	1
7	ANTIPODE	1
8	APPETITE	1
9	BRITISH FOOD JOURNAL	1
10	DEUROPE	1

1-10 of 10 rows

Based on the theoretical framework, 25 of the articles addressed the dimension of ecology, making up for 89.3% of the articles considered in the review. All except for one article addressed the social dimension (96.4%) and 17 articles discussed the economic dimension (60.7%).

In the following sections, the findings of each dimension and its categories are summarized and described.

Dimension: Ecology

Ecological variables entailed biodiversity, the inputs and outputs, soil characteristics, and the seasonality and regionality of production. The dimension was mentioned in 89.3% of the articles.

Generally, CSA applied organic farming practices that foster biodiversity by a variety of crops, including old and rare species and seeds. A focus lies on agricultural diversity that seeks to preserve local biodiversity and create habitats through nature conservation and renaturation (Medici et al., 2021; Voge et al., 2023; Plank et al., 2020). As a consequence, CSA farms for example in New Zealand described a higher resilience through diversified agriculture and crop variety (Savarese et al., 2020). Further, while the organic methods may not always be certified, CSA generally avoids the use of pesticides and other chemical fertilizers and instead applies physical weed management. The concept opposes monoculture and aims to minimize external inputs. A farm in Italy reported the use of self-produced seeds and manual work to reduce emissions and consume less non-renewable energy (Medici et al., 2021). A closed-loop system of nutrient cycling, water storage, and compost creates organic dung and reduces the need for external resources.

“Smallholders would produce between 70 and 80% of the global food out of roughly one quarter of the available fertile land” (Christiano, 2021).

Aforementioned inputs influence the quality and characteristics of the outputs of CSA practices. First and foremost, the organic produce provided high quality, safe, nutritious, and tasty fruit and vegetables. This has been mentioned in almost all case studies. The production process is overall reducing air and soil pollution, which together with the diverse crop can increase ecological resilience in the long-term. Further, CSA is decreasing food loss and waste in the production stage, but also reduced household waste and food waste (Pedrosa & Xerez, 2023). A study in Norway showed that the removal of packaging decreased plastic and paper waste, while the volume of compost waste increased (Standal & Westskog, 2022).

“The organic farm [...] consumed between 38.0 and 46.3% less non-renewable energy and emitted between 17.8 and 25.9% less CO₂-eq emissions than [the compared conventional peri-urban farms]” (Pérez-Neira and Grollmus-Venegas, 2018).

The impact on soil health was described as positive due to less pollution of water and soil through chemicals. The closed loop for vegetable waste and the use of self-made compost increased the quality of the local soil. Crop rotation methods were applied in Italy and Austria to increase soil health and resilience (Medici et al. 2021; Plank et al., 2020). The weekly share of harvest always provided seasonal fresh produce, which is reducing emissions and the ecological footprint of agriculture, while also limiting the crop season. In winter only stored vegetables were distributed to the local collection points. A key aspect of CSA is the localisation of food production by shortening supply and distribution chains and re-establishing the connection between consumers and producers (Krul & Ho, 2017; Kacz et al., 2019; La Trobe & Acott, 2000). CSA operates on a regional scale, with distribution points usually accessible by foot, bike, or car which also has the positive effect of reducing food miles. Overall, the ecological practices of CSA farms improve the environmental conditions in the area and increase crop diversity and soil health in the agricultural system.

Dimension: Social

A vast majority of articles considered social aspects of CSA (96.4%), ranging from farmers and volunteers, and members, surroundings and community, education, involvement and participation, and empowerment .

Literature stresses the close relationship between farmers and consumers, as they are sharing the risks of production. Further, this relationship of trust recognizes the work of rural producers and fosters the appreciation of it through close interactions. Farmers and volunteers in Italy, Hungary, and Norway reported an increased quality of life, specifically mentioned in rural areas of Brazil, as they and their work are not alienated in society (Piccoli et al., 2021; Balázs et al., 2016; Hvitsand, 2016; Pedrosa & Xerez, 2023). Overall, CSA is blurring the line between strict categories of consumers and producers, bringing together a set of shared values that are embraced in the concept.

Both farmers and members were described as mostly young, and highly educated citizens from urban areas (Krul & Ho, 2017; Sumner et al., 2010; Kacz et al., 2019; Orlić, 2014; Verfuert et al., 2023). CSA members are driven by food safety and health, as the produce is nutritious and of high quality. The members of initiatives in China connected positive emotions and experiences of happiness, joy, freedom, reduced stress levels to their membership (Chen, 2013), but in other countries also mentioned a lack of choice in produce and the high prices as an obstacle to participate in CSA (Balázs et al., 2016; Verfuert et al., 2023). However, other farms were considered as affordable and accessible for lower income households, indicating a range of approaches within CSA (Wilson, 2013). In Italy for example, CSA farms offered individual subscriptions based on member income (Piccoli et al., 2021). Further, members reported an enhanced quality of life and well-being in both physical and psychological aspects. Their membership sometimes brought changes in eating habits and the shared responsibility was mentioned as an active factor in their participation .

On a communal level, the impacts of CSA contributed to connecting rural and urban areas, by facilitating exchange between the different contexts, which creates and fosters a community identity around CSA (Wittenberg et al., 2022). Collaboration also happens through partnerships with the local government

or charity partners, local schools, and among different CSA initiatives as well. This may create job opportunities in the area and provide access for low-income households - in Hungary it created job opportunities for people with disabilities or disadvantages in the job-market (Kacz et al., 2019). As a center of cultural activities such as movie screenings or festivals, the quality of life in rural areas has improved, also through the creation of social capital and networks which create an active neighborhood and bring knowledge and experience into different families. Overall, members described community aspects around food. For example, meaningful connections were created in Hungary by sharing ideas with other members (Kis, 2014; Balázs et al., 2016). CSA is a point of meeting and exchange that establishes solidarity among members and farmers.

“CSAs reflect the culture of the community they serve, the capabilities of the CSA and the farmers who manage it” (King, 2008).

In the area of education, CSA has a positive impact on both personal and professional development. A range of educational activities such as workshops, training courses, lectures, conferences, and mentoring allowed for knowledge sharing of agricultural practices and collaboration with universities broadened the research in this area. The involvement of schools in the community was reported in Italy, Germany, and Canada, and created awareness of the food system and origin of food among young people, and visits to CSA farms also taught them how to interact with nature (Medici et al., 2021; Wittenberg et al., 2022; Sumner et al., 2010). Gardening skills can be explored through participation and people learn why organic agriculture may be more expensive than conventional agriculture. Recipes and knowledge on the correct storage, nutrient intake, seasonality, and processing of unknown produce was shared among members, for example through a newsletter in New Zealand and Norway aiming to inform and engage them (Savarese et al., 2020; Hvitsand, 2016). Overall, CSA contributes to the preservation and expansion of local knowledge, increasing food literacy, and the environmental education of people.

While physical health is often improved through exercising farm work outdoors and volunteering in the fresh air, it was reported that members tend to pay a financial contribution rather than supporting the physical and managerial work of the farm (Piccoli et al., 2021). However, visiting and volunteering at the

farm are a big part of member involvement in CSA. By participating in the decision making processes, for example on crop selection in the beginning of the season or payment and distribution schedules, consumers take up a more active role in the food system and act as co-producers (Wittenberg et al., 2022; Medici et al., 2021). Management and manual tasks often are supported by voluntary work which increase the interaction with gardeners and exposure to agricultural methods. Many CSAs organize volunteer and open days, and community events, but some also require members to contribute labor in the initiative. This has also expanded to the option of a workshare in Canada that allows the exchange of farm labor for a weekly share of the harvest (Wilson, 2013).

Within the community, social events are organized that stimulate active participation and increase social cohesion. The interaction at drop-off points, cultural activities and community events such as seasonal dinners or parties build community and new friendships between members. There is a lot of potential for conviviality and a space of shared interests and values that foster solidarity and interaction between farmers and members, but also among members. This interaction can be improved through virtual groups and social media that make sharing of recipes and pictures easier (Matzembacher & Meira, 2019).

Empowerment through CSA goes beyond the recognition of the work in the field and the engagement of active food citizens as CSA acts as an example of a solidarity economy that embodies alternative visions of food practices that radically differ from the conventional status quo in capitalist production modes. Members are empowered by growing their own food and increasing the farmers' autonomy while the local approach to food also contributes to a de-commodification of food. CSA can be considered a social movement within the alternative food networks (Wilson, 2013; Matzembacher & Meira, 2019; Plank et al., 2020; Orlić, 2014).

Dimension: Economy

The economic dimension, addressed in 60.7% of reviewed articles, consists of the categories farmer's income, revenue, surrounding areas, state economy, costs, consumers, and uncertainty.

Similar to the above mentioned divergence in accessibility, some CSAs reported higher incomes and fair pricing for farmers (Pedrosa & Xerez, 2023; Doernberg et al., 2016), while others mentioned the risk of self-exploitation of farmers by working more hours than being paid for (Voge et al., 2023; Balázs et al., 2016; Mert-Cakal & Miele, 2020). The former is supported by the direct source of investment and employment which creates stable income due to the payments in advance. Therefore, fluctuating yields are not directly impacting the income of the farmer, as seen in Norway (Hvitsand, 2016). However, the latter observation suggests that CSA farmers do not necessarily receive higher incomes than conventional farmers.

Generally, CSA farms differ from the dominant economic growth paradigm. Revenue of CSA farms is created from production surplus which can be sold at farmers markets. Additionally, an annual membership fee and the cost reduction which will be elaborated below allow for an increased profitability of the concept. The example of Brazil shows that for the surrounding area, CSA has positive impacts on value generation and employment in rural areas by developing a local economy (Pedrosa & Xerez, 2023). Thus, local farmers, production and business are supported.

The local impacts can also translate to the state economy as new social and economic relationships are lived that differ from existing market models. However, CSAs receive little funding from public bodies and are therefore not deeply incorporated into national economies. This is the case in Austria where funds for investments in machines and materials need to come from elsewhere (Plank et al., 2020).

As mentioned before, member shares in CSA generally cover the production costs of a farm, but sometimes also allow for small investments which are carried by the community. Covering costs is easier to predict and calculate as payments of members usually come in advance. The operation costs of a farm are mainly in machinery, labor payments, and seed purchases as initiatives try to reduce sales costs by involving members in transport and packaging (Pérez-Neira & Grollmus-Venegas, 2018; Balázs et al., 2016; Kis, 2014). Distribution points and self-pickup reduce time and spendings on transport and gasoline. Furthermore, in the case of Wales, a lot of help and labor comes from international volunteers who support the planting and harvesting (Mert-Cakal & Miele, 2020).

“Not all communities can cover the costs above with member shares: in most of the cases, only production costs are covered (68.4%), while roughly a half of cases can also cover small expenses (47.4%), with one fifth (21.1%) even able to cover higher expenses” (Medici et al., 2021)

While some consumers discussed higher prices than in conventional agriculture, others were less concerned about costs, and others mentioned accessible pricing techniques that are based on the income level of the community. Depending on the strategy of the CSA, participation is more accessible for vulnerable populations by offering workshares that allow for a non-monetary exchange, which will be further explored in the discussion.

Lastly, considering the risks and costs sharing between producers and consumers, some CSAs stressed the aspect of uncertainty in the concept. Main causes of uncertainty are for example a shortage in members who can cover the costs of production in Italy (Medici et al., 2021), or land insecurity due to short-term leases of farming land in the case of China (Krul & Ho, 2017). These obstacles may be overcome by cooperation, direct trade, and sharing responsibilities, but depend on the methods used by the specific initiative.

Overall, the literature provided a broad overview of dimensions that CSA is working in. The theoretical framework suggested three: ecology, social, and economy (Figure 1). However, as the findings have shown nuances, looking at these dimensions individually is too narrow of an approach and is considering them as isolated characteristics. Instead, combining the dimensions to a more holistic view of CSA provides space for emerging themes that the individual articles may not consider. It is necessary to discuss CSA from a multidimensional perspective as the socio-economic and environmental factors are all influencing each other and contributing to the success and opportunities that one can derive from the concept.

Discussion

Emerging Themes

Geographical Differences

Looking at different countries offers the possibility to observe geographical and contextual factors that are inherently connected to their historical, political, and social development. Throughout the review, it became visible that these specificities do not only show the various ways how CSA is utilized within countries but also reveal international differences which are explained with the examples of China, Hungary, and Italy, and contrasted to the United States.

All three papers in the Chinese context mentioned food safety and the access to safe food as a main motivation to participate in CSA. In recent years, China is gradually transforming the food system from what used to be a “state-coordinated and food-security oriented system” to one that has increased participation by the civil society and private sector (Si et al., 2015). While the availability of food to feed the growing population has increased, the use of chemicals and fertilizers did too. Thus, soil and water resources are at high risk of contamination and environmental pollution, limiting high quality food production. The transition is therefore supported by the increased concerns of consumers to gain access to safe and healthy food, as food scandals became more frequent (Chen, 2013; Krul & Ho, 2017). However, “being introduced from a western context rather than being endogenous initiatives”, CSAs in China are going through adaptation processes that also relate to the extent that alternative values are promoted (Si et al., 2015). While access to healthy food is a main driver for consumers, producers seem to show a wider set of values that also touch upon sustainability and social justice. However this inconsistency may cause reduced alternativeness of CSA in the conventional system as there is less solidarity between initiators and consumers which limits community building. Generally, there seem to be less intentions for a wider social-political transformation and the motivation for CSA originates in different dimensions than in other countries. This observation may also be caused by the authoritative political system in China, which makes

it difficult to promote alternativeness and therefore CSA takes a rather complementary approach in the country (Si et al., 2015).

As post-soviet countries, Hungary and Croatia are interesting to study when it comes to the relation of state, food security, and community. Balázs et al. (2013) and Orlić (2014) recognize the historical background of the countries and how it affects the way CSA is implemented in communities. In Central Europe agriculture is still a very important sector of production (Kacz et al., 2019), however there is a lack of literature on the development of CSA in post-socialist states (Balázs et al., 2013). Croatia and other post-communist countries experience the “absence of political, vertical social trust in institutions” (Orlić, 2014). Instead, family and individuals are more important which foster strong relationships of trust and active neighborhood participation in the studied CSAs, showing strong importance of the social dimension. These dynamics are “remnants of informal economy [...] compensating for some faults of the planned economy” (Balázs et al., 2013). Overall, the mistrust in institutions led to more sovereign and self-sufficient food production among the Croatian and Hungarian populations which is only slowly becoming recognized by national institutions. In the media, CSA is promoted as an innovative solution for various ecological, food, and energy crises (Balázs et al., 2013; Orlić, 2014).

In Italy, community aspects are very prevalent. Culture and sharing are strongly connected to food production and therefore more diverse mechanisms of structuring food alternatives are common. While CSAs are becoming more popular, they are less frequent in Italy (Medici et al., 2021). Solidarity Purchasing Groups have been widely organized in the last decades and are more popular. The difference is a cooperation for the ethical sourcing of food products, based on direct purchase and fair prices, in comparison to local production and distribution of food products with higher member involvement (Medici et al., 2021). Orlić (2014) points out that “solidarity consumption through CSA not only causes immediate benefits to members [...] but on a higher level results in creating partnership relationships full of trust, which is certainly important in times of general insecurity and social fragmentation”, an aspect that is dependent on the local context.

In the US, the main dimension considered is the social one. Egli et al. (2023) conducted a systematic literature review which mainly covered CSA farms in the US (66.6%), covering membership and farmwork aspects which were perceived positively in terms of social impact and community. However, it is worth mentioning that “soil variables were never considered” in the CSAs researched by Egli et al. (2023). This ecological impact however, was frequently addressed in studies in Italy, China, Brazil, Wales, and New Zealand, stressing the importance of highlighting research in non-US contexts (Medici et al. 2021; Krul & Ho, 2017; Pedrosa & Xerez, 2023; Mert-Cakal & Miele, 2020; Savarese et al., 2020). In general, geographical differences occur and imply a context-specific importance of benefits and dimensions of CSA. In some cases, the reconnection of producers and consumers is “narrowly built upon safety of food” (Si et al., 2015) while others value community interaction and mutual trust higher. Therefore, different contexts have different priorities and the dimensions are oftentimes interlinked, stressing the multidimensional nature of CSA.

Income Equality - Accessibility

Contextuality also matters in the assessment of whether CSA is perceived as an economically stable source of income for farmers, and to what extent CSA is accessible to low-income households.

The income of farmers has varying results in regards to being sufficient and earnings above conventional agriculture (Pedrosa & Xerez, 2023) or a form of self-exploitation of the farmer (Doernberg et al., 2016). Self-exploitation implies an undervaluing of the farmers’ work in terms of low returns and earnings. This matters for the sustainability of CSA as “the longevity of CSA as a social formation can be undermined by its own monetary undervaluing of its crucial components” (Galt, 2013). If farms do not follow a fair pricing principle, they may not be able to sustain themselves in the long run, however, this notion is also influenced by a neoliberal conceptualization of profit being monetary excess. In practice, positive emotions towards the work, autonomy, and relationship building also contribute to the farmer’s tendency to self-exploit. This paradox of income has been researched in California, United States, by Galt (2013) and showed that in California, United States, 48% of CSA farmers are unsatisfied with their

compensation and cause financial insecurity in terms of pension, social security, and health insurance. Furthermore, the study showed the immense range of earnings between different CSA farms which lay between \$0 and \$150,000, while the distribution “is skewed toward the low end” (Galt, 2013) with minimum values being much more common. In another study in the US however, income was always valued higher than in conventional farms, with earnings up to 350% higher, yet, as was mentioned, “still not enough to secure living” (Egli et al., 2023). Reasons for the low earnings are long working hours which are not or low-paid, the number of employees, not taking extra labor such as transportation and member events into account, or the type of CSA which showed to bring higher profit with a single-farm box model. Furthermore, the moral obligation of farmers towards members which made them less likely to address unfair exchanges due to the personal relationship between them. Farmers felt pressured to keep up a normal harvest season and bought produce from nearby producers to offer a full share to the members which decreased earnings (Galt, 2013). However, farmers' motivations were mentioned that go beyond a capitalist incentive of profit-making. The high earning is “often not a high priority relative to other values” such as community building, self-provision, and their love for the work (Galt, 2013). This discrepancy between fair pay, underpaid workers, and even profit in CSA is based on the context and intention of the farm. Therefore, solutions to self-exploitation should also not be considered as “one-size-fits-all” as the context determines the goals and conditions of the CSA initiative. Galt (2013) suggests raising prices for each share, changes in managerial tasks, and raising awareness of payment among members by opening the dialogue about earnings and participating in the budgeting to get acquainted with what is feasible to produce in one season.

Literature consistently mentions that farmers and members create a demographically homogeneous group of usually young, white, middle-/higher-income, and highly educated people (Kacz et al., 2019; Krul & Ho, 2017; Verfuehrt et al., 2023; Pedrosa & Xerez, 2023; Orlić, 2014; Hvitsand, 2016; Plank et al., 2020). This raises the question of how CSA can be made more accessible to non-white, low-income families with less formal education and diversify the member group to expand CSA's social effects to marginalized groups and less privileged populations. Addressing this discrepancy can bridge the gap between income groups, education levels, urban and rural populations by creating relationships and connections between

them. Verfuert et al. (2023) provided free vegetable bags to low-income families: Over the period of the study, food insecurity decreased, while well-being and food literacy increased and finances became available for other necessities: “The importance of affordability by increasing time and/or money savings in other areas of life” (Galt et al., 2017). Currently, accessibility of CSA to low-income families is mentioned in literature as a common benefit by providing low-barrier food access (Wilson, 2013), but also a limitation that perceives the concept as elitist (Krul & Ho, 2017; Orlić, 2014). This discrepancy seems to be a global one, as it is also found, though not further investigated, in research in the US (Egli et al., 2023) and the countries considered in this review. Galt et al. (2017) state that affordability is “one of the primary concerns of low-income households” and are linked to barriers such as “transportation, work schedules, and financial constraints” generally. Low-income families are more likely to suffer job losses and work more part-time jobs, making it difficult to engage in CSA. However, their participation is of great value as low-income households tend to be more dedicated than high-income members, value its attributes higher and in more dimensions (Galt et al., 2017). Furthermore, studies showed that lower-income neighborhoods have less access to supermarkets than suburban areas of higher-income levels, making CSA an opportunity to access more fresh produce (Forbes & Harmon, 2008). Participation in CSA makes it possible to save money spent on food and enter a community of like-minded people. Thus, “the inclusion of [low-income households] in CSAs provides a benefit for both members and farmers” (Galt et al., 2017). To overcome the barriers of joining CSA, Forbes & Harmon (2008) provide a list of strategies that include both pricing schemes within the initiative, but also more interaction with the government through funds and allowances. For example, accepting governmental food assistance such as coupons and food stamps as payments needs to be authorized and funds can be granted, but require an exchange between (local) governments and CSA initiatives. Within a CSA, different payment plans could be applied that allow to pay in smaller installments, workshares that exchange labor with free or discounted food shares, or subsidizing low-income shares. The latter can be done by pay what you can give or sliding scale systems in which high-income households pay a higher price and therefore subsidize a reduced price for low-income households, or through donations from and collaborations with community organizations that connect families with the CSA initiative. The

communal support can also go beyond pricing schemes by helping each other out with transportation or smaller tasks and contributing to local food banks which can reduce barriers significantly for low-income families to participate in CSA (Forbes & Harmon, 2008).

While CSA can be utilized to make food more accessible to low-income households and be a driver for farmers to determine fair wages, the concept oftentimes has barriers that limit the participation of less formally educated, non-white, and lower-income people or lead to the undervaluing of farmwork and low pay. These dynamics between being a driver of food security versus being closed-off to the broader population, and providing fair wages versus self-exploitation of farmers is very context dependent and a paradoxical element of CSA. Nevertheless, efforts should be made to reduce these barriers and make participation in the alternative food system more accessible.

Community - Solidarity - Transformation

Community building and solidarity are driving forces in the successful establishment and flourishing of CSA initiatives (Sumner et al., 2010; Chen, 2013). For some, this aspect is an essential characteristic of CSA, while, as we have seen in the case of China, other aspects may be more important in certain contexts. The social dimension was the most commonly mentioned in the articles (96.4%) and includes community and relationships that translate into solidarity. The forms in which CSA also may rebuild communities and create transformative change, i.e. “a fundamental, system-wide reorganization across technological, economic and social factors, including paradigms, goals and values” (IPBES, 2019), appear in a variety of ways, as was seen throughout the literature review.

A strong sense of community supports the “creation of social capital” (Wittenberg et al., 2022) when new friendships are made and interactions happen at pickup points or farming events. Piccoli et al. (2021) state that “by redefining meanings and social norms around food practices, this model actualizes significant processes of food re-socialization and re-territorialization”, which build a new community around food and production that gives back agency to farmers and consumers. Events organized for members to visit the farm are encouraging them to participate in farm life and contribute to the conviviality

within CSA (Medici et al., 2021; Balázs et al., 2016). Sumner et al. (2010) describe it as “being part of a village and people from other parts of your life are weaving into other things and it really breaks down that compartmentalization that happens in modern culture”. This connection through values and support makes room for active participation in the production process and encourages solidarity among members and farmers (Orlić, 2014).

Solidarity, a process of support and understanding, is crucial to the relationship of trust that is built within CSA (Plank et al., 2020). Small scale producers are marginalized in the conventional agricultural system that is dominated by big corporations and monocultures. This alienation is also witnessed among consumers who are dependent on the industry and distanced from the locations of food production (Piccoli et al., 2021). CSA bridges this gap by re-establishing direct consumer-producer relationships that are independent of the big market players. According to Plank et al. (2020), solidarity can appear in different spheres and levels of CSA: it can be expressed between producers and consumers, but also among consumers as a group, and among producers itself, and lastly create spillover effects that bring solidarity within society. Being part of a CSA initiative can therefore be seen as empowering and contributing to the transformation towards a more sustainable food system and way of living.

Community building and shared values can create the space for transforming the dominant food system. Solidarity being one of the important pillars of CSA, the farming practice has the potential to change the overall way people view and approach food consumption and production. Small farmers are “increasingly excluded from the center of trade and production” (Kacz et al., 2019), however CSA can reclaim the market power of small farms in the conventional system by living solutions of an alternative economy to capitalist food production (Wittenberg et al., 2022; Standal & Westskog, 2022). This includes the recognition of the dignity in the agricultural work that farmers do, but also the civic engagement that makes consumers an active food citizen (Sumner et al., 2010). CSA is a local approach to solving issues in the global food system, that range from sustainability concerns to health and social justice issues. It challenges the inequalities promoted by the status quo of big corporations, capitalism, globalization, and food imports (Kis, 2014; Orlić, 2014; Matzembacher & Meira, 2019). Localization can strengthen

communities and restore ecological resilience and knowledge systems to increase food security (La Trobe & Acott, 2000). CSA as a tool of empowerment for farmers and consumers by growing their own food and being autonomous also increases food sovereignty (Hvitsand, 2016), which becomes increasingly important in modern society.

The mentioned changes in the food system were showcased during the Covid-19 pandemic in which CSA has been proven to be a resilient tool and alternative to the dominant agricultural system that is vulnerable to economic and climate shocks (Mert-Cakal & Miele, 2020). While social activities had to be reduced, a door-to-door service could continue the delivery of fresh produce, as the supply-chain in CSA is short and therefore less disrupted by the pandemic (Piccoli et al., 2021; Mert-Cakal & Miele, 2020). In comparison to the conventional market, local initiatives could still be supported and were less dependent on developments all over the world. The global health pandemic demonstrated that “human systems are interconnected, vulnerable, and often unfair” (Christiano, 2021) which is why a change in the way we produce and consume food is crucial on the path to a sustainable future. Based on the community that CSA creates and the solidarity that comes from it, the concept is a catalyst for change and transforming the current food system towards more resilient and localized systems.

Education

For transformative change to happen, education about sustainability and alternative food networks is crucial. CSA contributes to the learning space that can facilitate such knowledge sharing. Not many schools utilize CSA connections in their region, examples were only mentioned in the cases of Italy (Medici et al., 2021), a collaboration with a university in China (Krul & Ho, 2017), Canada (Sumner et al., 2010), and Germany (Wittenberg et al., 2022). This is a missed opportunity as there is great potential for sustainability education as students experience a hands-on application of theory, learn about the origins of their food, and the potential of small-scale and local food production and consumption (Chen, 2013; Sumner et al., 2010). Educational events and conferences are sometimes held that are also educating the general public in surrounding areas about the food system (Savarese et al., 2020). Furthermore, education goes

beyond the idea of formal education in schools and universities as it also includes knowledge transfer of traditions, culture, and agricultural practices. Volunteering is a common way to engage in CSA which supports knowledge sharing (Plank et al., 2020), but also the membership in CSA itself is increasing food literacy and creates awareness about the need for sustainable food production (Verfuehrt et al., 2023). Passing on agricultural techniques and engaging in manual labor also makes CSA an educational garden that raises curiosity and confronts members with the impact of their consumer choices and eating habits (King, 2008).

Thus, CSA showcases a variety of knowledge systems and practices of sharing them which contribute to awareness and education of students, members, and in society in general. The different types of knowledge offer potential to combine and embrace them with formal education, but also more traditional practices - a merging that is yet to be explored.

Holistic Approach

As we have seen, there is a diversity of methods and focus in CSA initiatives, out of which each is very connected to the local context. Looking at each of them isolated, however, does not do justice to the multifaceted impacts of CSA and how they are interconnected. In a study by Medici et al. (2021), CSAs were asked to name the claims they make in their care for the environment. It was shown that one quarter addressed two environmental claims, while almost 50% even focused on more than three aspects. This shows that CSA does not address concepts individually, but uses a holistic perspective in agriculture (Medici et al., 2021) that shows that food is more than a commodity.

While there are many aspects to consider, the multidimensionality of CSA also shows that there is no one model of how CSA works but that different local contexts require different needs and potentials. Each CSA is therefore selecting their own impact spheres and focus that is beneficial to the local community, applying their own methods and approaches. This makes the concept similar to a grassroots movement, “being a solution that responds locally to the interests and the values of communities focused on sustainable development” (Medici et al., 2021).

Future Perspectives

Proposals

CSA is a multifaceted approach that adapts to and enhances the local conditions. However, in order to create a wider impact, maybe even globally, the upscaling of CSA should be considered. As has been researched by Pérez-Neira & Grollmus-Venegas (2018), the use of organic farming and direct distribution reduce greenhouse gas emissions and consume less non-renewable energy which should be an incentive to upscale CSA, which is following a local and ecological approach to agriculture. However, due to its context-specificity, upscaling has been considered difficult, however local policy-making along agricultural fields and urban-rural interactions can contribute positively to that process (Christiano, 2021). “Multiple components, including accessibility to land to expand growing activities, and distance for CSA members to reach the farm are physical factors that limit the scalability of CSAs” (Verfuerth et al., 2023) which is why recommendations were made to scale up CSAs and other alternative food networks. These include an assessment of the potential to upscale the initiative, a clear vision or conceptualization of what the upscaling may look like, collaborative processes with producers and communities, and clear coordination across all actors that ensures the sustainability in the long run (Verfuerth et al., 2023).

While these are broader aspects that further address the implementation of CSA, its accessibility is also determining the acceptance within communities and number of members. One way to make it more accessible to the population is to reduce financial, geographical, or cultural barriers that may hinder people from joining and participating in CSA. This could be done by including low-income households, following the above-mentioned strategies to increase accessibility provided by Forbes & Harmon (2008).

Furthermore, reach could be increased through establishing networks between CSAs that can connect regions, research, and resources such as machines or harvest. In Europe for example, the international network URGENCI (Urban-Rural networks: GEnerating New forms of exchanges between CItizens) is a grassroots movement that brings together solidarity-based small-scale food producers in over 40 countries. With mobilizing activities, research projects, and educational events, the network increases

the visibility of CSA, creates partnerships, raises awareness, and is representing the movement at United Nations level (URGENCI, 2024). Also on a national level, there are several networks of initiatives that can promote these relationships on a smaller scale and create movement in their country.

Keeping up the Benefits

Unfortunately, policies or strategies itself will not carry the work behind CSA. It needs social, community effort to keep up the benefits that CSA offers. While this can be seen as a drawback to CSA, it also shows the importance of communal aspects and close relationships for the initiative, but also in society in general. Receiving back agency in the dominant food system by localizing the production and shortening supply chains brings responsibility to embrace and further develop CSAs. The technologization of and alienation from production processes has created a system that is not resilient to the effects of climate change and other socioeconomic challenges. With CSA bridging multiple actors in the food system and re-establishing these relationships for communities to flourish, require input from members, farmers, (international) volunteers, policy-makers, and more in order to continue sustainably in the long-term.

Limitations and Future Research

While this research has provided a detailed overview of the multidimensional benefits of community supported agriculture, there are some limitations which provide potential for further research.

Even though no language filter was applied, all except one articles considered in the review were published in English. As CSA often operates on a small scale, research may also be published in the local language as the concept has various country-specific names (see Appendix C). By only applying the search term “community supported agriculture”, this may have excluded important contributions on CSA published with the local conceptualization of it. Thus, when applying a filter to exclude the US, the impact of the region was decreased, however, not that of the language. Though being a limitation to this review, it offers potential for further research that includes even more articles by running multiple searches in the database using different translations of CSA, for example teikei in Japan, AMAP in France, or CADESA in Mexico.

Another aspect to consider is the majority of research coming from European countries, creating a lack of representation of the Global South, specifically African countries, other Asian countries than China, and other than Brazil in South America. This geographical imbalance may also be due to the mentioned language bias by using an English search term. This ties well with the fact that CSA may not always appear in peer-reviewed literature, but is represented through bottom-up initiatives and grassroots movements. Thus, further research should investigate how to include their value and benefits beyond the mainstream academic knowledge production and create more representation of CSA in countries of the Global South. In the future, research approaches should also explore and revise this geographical bias in other reviews and publications.

Lastly, the described dimensions and benefits always depend on the local context. This means that also the analysis is framed within that scope and can therefore only reach the definition of the specific case study. As a consequence, results may not always be generalizable, but are still of importance to understand and acknowledge CSA as a concept and potential solution for sustainable development. This research tried to showcase these nuances while giving a general overview on the benefits and impact spheres of community supported agriculture.

Conclusion

The current food system is not prepared for climate change conditions and even contributing to further emissions and biodiversity loss by using unsustainable agricultural practices that transgress the planetary boundaries (Rockström et al., 2020). Therefore, securing access to safe and nutritious food is necessary and can be improved by localized food system approaches. Community supported agriculture, a concept in which consumers and producers are in a direct and risk-sharing relationship (Fomina et al., 2022), is a solution to be explored to re-establish shorter supply chains and contribute to climate-proof agricultural transitions. This research applied the method of systematic literature review to lay out the dimensions in which CSA is operating, namely ecology, social, and economy, and how these benefit communities. A total of 28 articles were included in the analysis. Main findings are that CSA operates in all three dimensions mentioned in the framework, enabling more diversified and resilient ecosystems, building relationships between consumers and producers and increasing their knowledge and participation in food production, and living an alternative economic vision of trust and risk-sharing. The review showed the interconnectedness of multiple dimensions that CSA addresses and has impact in. Food is more than a commodity, but has significant cultural and context-specific value which is embraced by CSA. Looking at dimensions individually is too limited, as the concept has various emerging themes and potentials that require a more holistic approach to agriculture and the food system. As titled by Sumner et al. (2010), CSA is “putting the culture back into agriculture”.

To answer the research question “What are the dimensions in which community supported agriculture (CSA) benefits communities?”, more than the three main dimensions of social, ecology, and economy are included. The benefits for communities are multifaceted and context dependent in their impacts and potentials. Emerging themes that were identified are geographical differences in the needs and motivations for CSA which may be related to environmental sustainability, but also concern food safety and health reasons. Furthermore, income equality for farmers and the barriers and drivers of making CSA accessible to low-income households were discussed. The importance of community is stressed in their contribution to a solidarity society that has transformative power in the dominant system, but also requires

education and awareness in transmitting this knowledge. Lastly, it was found that a more holistic understanding of agriculture and CSA is needed in order to best utilize and identify the benefits of community supported agriculture to communities and the sustainability of the food system in general.

Implications for further research are in the practice of CSA in the Global South, as Africa, Asia, and South America were underrepresented in the literature due to the sole use of the English terminology “community supported agriculture” and how the participant profile of CSA can be diversified to include marginalized groups and make the concept more accessible to low-income families.

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Appendices

A. Literature (Framework, n=4)

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C. CSA in Different Countries

CSA in different languages (some examples)

Taken from URGENCI (<https://urgenci.net/our-network/>) and literature review (Appendix B).

- US, UK (and other countries): Community Supported Agriculture (CSA)
- Canada: Coopérative pour une Agriculture de Proximité Écologique (CAPÉ)
 - Quebec (Canada): Agriculture Souteune par la communaute (ACS)
- Japan: Teikei
- Switzerland: Fédération romande d'agriculture contractuelle de proximité (FRACP)
- Belgium: Groupes d'achats solidaires de l'Agriculture paysanne (GASAP)
- Mexico: Agricultura de Responsabilidad Compartida (ARC)
- France: Associations pour le maintien d'une agriculture paysanne (AMAP)
- Finland: Kumppannuusmaatalous
- Italy: Grupo d'acquisto solidale (GAS)
- Germany and Austria: Solidarische Landwirtschaft (Solawi)
- China CSA network: zhongguo dalu shehui nongye
- Portugal: Associações para a Manutenção da Agricultura de Proximidade (AMAP)
- Czech Republic: Asociace místních potravinových iniciativ (AMPI)
- Romania: Asociația pentru Susținerea Agriculturii Țărănești (ASAT)