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Beyond Food Security: Unleashing the Potential of Sustainable Communities to Transform the UK Food System

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Abstract: This study delves into the urgent task of comprehending and tackling the questions arising from climate change and food security by advocating for sustainable community approaches. Motivated by the urgency of these issues, this research aims to assess the transformative ability of sustainable community practices in mitigating carbon emissions and reshaping the current food system. Drawing on findings from semi-structured interviews with local organisers of sustainable community practices in Bournemouth, UK, this study assesses and examines how these practices contribute to a localised sustainable food system. The findings reveal the multifaceted role of sustainable community practices in the UK, highlighting their collaborative nature, emphasis on environmental conservation, and resilience-building initiatives. Despite challenges such as funding constraints and climate change disruptions, sustainable practices demonstrate resilience and offer opportunities for positive change. This article concludes with recommendations that inform policy development and practical applications.

Keywords: sustainable communities; food system; food security; sustainable consumption; sustainable practices

1. Introduction

In the intricate tapestry of societal dynamics, food emerges as a powerful force, weaving through individual, communal, economic, and global realms, manifesting its influential presence in material, cultural, social, and political dimensions [1]. Simultaneously, the contemporary food system is a key player in the unfolding narrative of climate change, serving both as a contributor to global warming and a recipient of its far-reaching consequences [2,3]. The intertwining relationship between our food system and climate change depicts a critical research problem, resonating across major environmental, socio-economic, and political dimensions that demand urgent attention.

Food systems and global food security are immediately threatened by climate change, which presents a wide range of challenging concerns driven by various socio-economic elements and arising circumstances [4]. Climatic shifts ripple through agricultural productivity, food availability, and nutritional quality, thereby imperilling global food security and nutrition. The evidence base underscores the need for preparedness, especially considering that environmental changes disproportionately impact already vulnerable regions with limited resources for adaptation [5–7]. Adding complexity to this predicament is the demographic reality that anticipates most of the global population growth to unfold in developing world cities, exacerbating the challenges of food access and distribution [8–10]. The existing food system not only grapples with the effects of climate change but also

contributes significantly to the production of carbon dioxide (CO_2), amplifying its own environmental footprint and reinforcing the cyclical relationship with climate change [11]. The food system is thought to be responsible for around 30% of global emissions of greenhouse gases (GHGs), even though agriculture alone only produces 14% of GHG emissions [12,13].

The global food system continues to face turbulence caused by the invasion of Ukraine, gas price increases, and supply chain disruption from the COVID-19 pandemic [14]. International food security comes from a combination of dispersed food production around the globe and open markets. For the UK, international trade is an important component of food security, though successful domestic production provides some resilience against crises and disruptive events [14]. Current UK legislation seeks to develop a prosperous agri-food and seafood sector to ensure food security and contribute to economic growth. To achieve this, farmers will be supported in maintaining domestic production levels through productivity gains and new farming schemes, and over GBP 270 million will be invested in innovation across the supply chain to boost production and profitability across the supply chain [14]. Additionally, policy focus areas include building resilience against climate stresses and geopolitical shocks, decarbonising the farming sector, and improving education about sustainable food systems [14]. While traditional food systems have existed for centuries, the green revolution dramatically altered food production, leading to industrialised food systems, global food processing, and a global syndemic of obesity, undernutrition, and climate change [15]. Sustainable food systems, conversely, are defined by promoting healthy and affordable food that is equitably accessible with minimal environmental impacts and is economically just to those who work in the food sector while also being resilient to future challenges such as climate change [16].

Current research extensively explores the relationship between food systems and climate change [17–19]. However, a critical gap remains in developing comprehensive strategies to enhance food system resilience amid climate challenges. Despite recognising the potential of sustainable practices to foster greener food systems and climate resilience [20,21], efforts to translate these insights into robust policy frameworks are lacking [22,23]. Bridging this gap is crucial, as effective policy implementation hinges on translating sustainable strategies into actionable policies. Place-based interventions are emerging as powerful tools for creating more resilient food systems while also fostering community sustainability. These initiatives frequently take a holistic approach to sustainability [24], addressing food insecurity while simultaneously supporting aspects of community well-being. Examples within the UK include Pulp Friction in Nottingham, a social enterprise that works with people who have learning difficulties to develop work-readiness skills while also reducing food waste [25].

Persistent research and data gaps exist around sustainable community food systems, notably focusing on food production at the expense of other critical facets like processing, distribution, access, and consumption, while the socio-cultural dynamics of public engagement and scaling activities require further elucidation [26–28]. Addressing this omission is vital for developing holistic strategies to guide policymakers and stakeholders. Consequently, this study aims to answer the following research question: how can sustainable community practices serve as a model for greening the UK food system and reducing carbon emissions, and what are the key challenges and opportunities in implementing these practices on a larger scale? This research aims to enhance the understanding of sustainable community practices as a model for transforming the food system and reducing carbon emissions. It seeks to offer valuable insights into successful community sustainability practices, inform policy development, and suggest improvements for more effective and environmentally friendly approaches. By bridging the gap between research findings,

policy implications, and practical applications, this study contributes to the development of a more robust and sustainable food system.

2. Literature Review

Defining 'sustainable communities' within food systems can be challenging due to their varied size, organisation, and progress [29]. Very broadly, however, sustainable communities can be defined as 'places where people want to live and work, now and in the future' [28]. Within the context of a sustainable food system, sustainable communities aim to achieve economic viability, environmental stewardship, and social equity and inclusion, advocating for active community engagement, collaboration, and participation in sustainability initiatives [30]. With respect to 'sustainable food', collective action includes supporting local economies, preserving biodiversity and animal welfare, minimising waste and environmental impact, and offering social benefits like promoting health and education [31]. Feenstra [26] outlines that sustainable community food systems must be predicated on incorporating public participation (i.e., genuine local decision-making), partnerships (i.e., being a vehicle for diverse groups to come together to make their food system and communities more sustainable), and principles (i.e., a commitment to values that shape their community and food system). Consequently, Feenstra ([26], p. 100) defines a sustainable community food system as "a collaborative effort to build more locally based, self-reliant food economies—one in which sustainable food production, processing, distribution and consumption is integrated to enhance the economic, environmental and social health of a particular place".

Sustainable communities are characterised by their commitment to economically sustainable practices for both producers and consumers, whilst aiming for local economic resilience [32–35]. Distinguished by their commitment to environmental stewardship, sustainable communities encompass objectives including minimising ecological footprints, engaging in multi-scale collaborations to advance sustainability initiatives, and prioritising ecologically sound production and distribution practices [30,33,34]. Furthermore, sustainable communities prioritise social equity and inclusion as a fundamental characteristic. This emphasis is evident in collaborative efforts involving diverse participants, to ensure that local food systems are accessible to individuals from varying socio-economic backgrounds [32,36]. Actively engaging local members while adhering to ethical principles like responsibility and equity, fostering social equity and democratic participation, is the hallmark of sustainable community success [37]. Many of the strategies employed by sustainable food communities correspond to increasing knowledge and skills; encouraging sourcing and eating of food; creating local food providers; enabling a local low-carbon food system; and promoting 'growing your own', thus encouraging prosumerism [29]. Many of the examples of sustainable communities are often supported by broader government policy [38]. The processes of decentralisation and democratic involvement attempt to shift the balance of power and decision-making away from centralised governance towards local councils, communities, and individuals. This aligns with what Feenstra [26] states as necessary for the success of sustainable community food systems: participation, partnerships, and principles. This also fully accords with Arnstein's [39] higher rungs of citizen participation. This allows sustainable communities to help shape food systems to become more climate-resilient in tailored ways that suit the needs of local communities [28].

Sustainable communities play significant roles in transforming local food systems by addressing the interconnected dimensions of sustainability. Most sustainable communities focus primarily on the socio-economic dimensions of sustainability [24], while paying lip service to the environmental aspects beyond a commitment to reduce carbon emissions and reduce food waste [32]. This is primarily because most sustainable communities spend

their time surviving rather than thriving, i.e., seeking resources to operate rather than addressing the challenges they were originally designed to tackle [33,40]. Despite this, their contributions are numerous. As a place-based intervention, the provision of information and educational programmes aims to raise awareness about sustainable food systems and the ways in which individuals and broader actors can participate in them [28]. Such interventions allow for collaborations to be developed and for individuals to make informed choices about their food consumption [28,41]. This has clear implications for social equity and allows for the integration of local cooperatives and farmers, which, depending on the scale of the community, can support small-scale farms and local businesses [16,25]. Crossing the intersection to the economic dimensions of sustainability, the development of sustainable food practices within such communities allows for the diversification of local economies, which can further support local businesses as opposed to larger organisations [32]. Furthermore, it allows for improved access to nutritious diets, improved working conditions for farm workers, and marketing processes that create direct links between farmers and consumers [26]. From an environmental perspective, sustainable food communities have much to offer beyond the reduction in carbon emissions. They can change the ways in which agricultural processes are conducted and incorporate novel practices, e.g., agrivoltaics and agroecology, prioritise ecosystem health, promote crop rotation, reduce water intensity, and enhance resiliency against climate change [42,43].

Sustainable consumption requires widespread behavioural changes in the transition to sustainable development. Practices surrounding localising food systems contribute to this agenda. For instance, Eostre Organics in Norfolk supports local organic producers, resulting in significant sales growth [33]. Similarly, the Cumbria Farmers Network promotes cooperation among farmers, expanding sales opportunities [35]. These initiatives enhance farmers' economic viability and sustainability through collective marketing and cooperative efforts, leading to increased income and financial stability [33,35]. Examples of tailored approaches represent a localised and embedded method that values specific resources and social relations [35]. In integrated governance models, local actors, e.g., farmers, local councils, and consumers, prioritise local solutions to food systems that can be addressed more effectively through collaboration rather than individual actors attempting to address them singularly [44]. Consequently, multi-stakeholder approaches are an essential component of sustainable communities addressing localised food system challenges [26]. Without community engagement and tailored innovative solutions, sustainable communities are unable to become an effective vehicle for transformational change [28].

A primary environmental impact of sustainable food communities is their capacity to promote local food production and minimise food miles while encouraging organic farming [32]. The concept of 'food miles' underscores the significant contribution of domestic and international transport activities to energy consumption and greenhouse gas (GHG) emissions [45]. Though not all products become more carbon emission-friendly when locally sourced, certain products demonstrate lower carbon emissions when produced locally [46]. While reducing food miles is an unrealistic goal in the global context, greening the supply chain delivers many areas for improvement and creates opportunities for sustainable practices to be introduced that may reduce carbon emissions. This is further supported by Avetisyan et al.'s [46] analysis, suggesting that while reducing the global shipment of food products can yield environmental benefits, effectively curbing GHG emissions in the food system hinges on optimising production technologies and practices to minimise emission intensity throughout the supply chain.

By emphasising the reduction in GHG emissions through innovative production technologies and practices across the supply chain, sustainable food communities prioritise an entirely sustainable food system rather than just reducing food miles [47,48]. This

encompasses methods such as organic farming, agroecology, and permaculture, which aim to bolster soil health, sequester carbon, and minimise the use of synthetic inputs that contribute to GHG emissions [33,35,49]. Simultaneously adopting energy-efficient practices and harnessing renewable energy sources to diminish GHG emissions during the production process through utilising solar panels, wind turbines, and biomass energy for food production activities further demonstrates this commitment [37]. Implementing composting programmes, curbing food waste, and recycling materials are among the initiatives aimed at reducing the carbon footprint [30,35,37]. These initiatives illustrate the importance of addressing the environmental effects of the food system by considering the full lifecycle of food production and consumption. Ultimately, sustainable food communities strive to establish a circular local food system, aspiring to sustainability throughout the entire food chain.

There are many reasons why localised sustainable community food systems are established. Chief among the many reasons to establish a sustainable community are aspirations to strengthen local self-sufficiency, restore local communities' ability to provide food, alleviate pesticide usage, and lower food miles and related energy consumption [28,50]. Using food as a vehicle for social cohesion and community building promotes sustainable lifestyles while also providing a platform for the expression of alternative values related to society, the environment, and the broader economy [50]. Returning to the example of Eostre Organics, the initiative emerged as a collaborative effort in response to vulnerabilities faced by rural farmers within increasingly globalised food supply chains [40]. Founded as a cooperative with the goal of promoting moral and uplifting ethical business relationships throughout Europe and beyond, Eostre Organics enabled small-scale farmers to supply locally grown food, providing a substitute for traditional distribution networks [51]. Developing local markets and reducing the reliance on supermarkets, Eostre works to secure stable rural livelihoods and promote sustainability through collective action. Uniting small producers and environmentally conscious consumers through shared ethical principles allows Eostre to embody a concerted effort to address global sustainability challenges at a localised scale. The expansion of Eostre's activities to supply cafés, pubs, and shops across Norfolk allows for the scaling of activities beyond initial activities to disrupt the dominant unsustainable regime [40,50].

However, the local food movement is not without its detractors; in particular, the activities of sustainable community food systems often disregard the needs of low-income consumers who are priced out of such systems [52]. Despite a broad range of appeal, the example of Eostre Organics appeals to a specific market of consumers who have strong social and environmental ties to localism and ecological citizenship [50]. While sustainability initiatives, such as localised food systems, can extend their focus to catalyse broader societal shifts towards sustainability, they necessitate continuous and diverse activities to engage heterogeneous publics to maintain meaningful community involvement [28]. Additionally, there is an assumption surrounding the environmental and health-related positive outcomes that local food systems are associated with, which have been critiqued by Born and Purcell [53]. They describe the problem of the 'local trap', a direct assumption of inherent positive impacts at a local scale. Consequently, local food systems are socially constructed by actors with strategic agendas to market the local food economy to success [53]. Furthermore, within the local food movement, there have been many references to social injustices and inequities highlighting the disregard for the needs of low-income consumers while advancing the profit margins of local farms and farmers [26]. This opposition also features a strong sense of homogeneity leading to nativist sentiments [42,54].

Despite the limitations of sustainable communities and their impacts on transforming food systems entirely, they surely have a place in transitioning to a sustainable future.

Their ability to foster partnerships between actors that have been traditionally separated by third-party processes allows for crucial citizen involvement and integrated governance models to form in their place [26,55]. Furthermore, sustainable communities can integrate local sustainable food production and nutritional concerns while also reducing food waste and carbon emissions [44,56].

3. Methodology

This study examines sustainable community practices in the UK food system using social research methods to address uncertainties about their effectiveness in promoting food system sustainability and reducing carbon emissions. Building upon existing knowledge and avoiding duplication of efforts, this research contributes novel insights to the field. A qualitative research technique was applied to interview organisers who are currently shaping the local food system in Bournemouth, UK. Four semi-structured interviews with members of Gaia (a sustainable food cooperative) and one interview from Transition Town Poole, two sustainability initiatives in Bournemouth, UK, provide insights into how sustainable community practices are integrated into the food system. This section outlines the rationale for using semi-structured interviews and their benefits and challenges in addressing the research question.

This research adopts a social research methodology to address pressing questions in sustainable consumption and sustainable communities [24,26,57]. Acknowledging the intricate nature of human interactions and social structures, traditional scientific models may not fully capture these complexities. For this study, focusing on sustainable practices and their implications for the UK food system, understanding diverse perspectives within communities is crucial. This perspective emphasises the need for research approaches that prioritise human experiences, values, and social contexts and may involve methods sensitive to these nuances. Employing an inductive approach to theorising and conceptualising can facilitate the discovery of new insights and perspectives within this research context [57]. Inductive research "involves the search for patterns from observation and the development of explanations, theories for those patterns through series of hypotheses" [58] p. 7.

This study utilised semi-structured interviews, enabling the application of inductive reasoning and the collection of nuanced data essential for informing policy development and practical interventions within the UK food system [59]. This method, recommended by Wilson [60] and Harding [59], offers flexibility to explore important aspects while ensuring consistency across participants. Each interview's unique content acknowledged diverse perspectives, contributing to the generation of broader principles and concepts that are practiced [61]. Through systematic analysis, this study aligned with the inductive reasoning process, facilitating the generation of new knowledge. Given the exploratory nature of the research question, semi-structured interviews were deemed appropriate, consistent with methods reported in previous studies [33,35,37]. Notably, Franklin et al. [42] conducted similar interviews using a participatory action research (PAR) approach in collaboration with a sustainable community core group.

Semi-structured interviews offer a flexible approach balancing standardised questions with the opportunity to explore new lines of inquiry based on the interviewee's responses [62,63]. This methodology allows themes and ideas to emerge directly from the data, facilitating a deeper understanding of the complexities inherent in community-based sustainability initiatives. By using a preconceived interview guide with standard questions, comparability across interviews is maintained while enabling in-depth exploration of specific topics [63]. This adaptability ensures all relevant issues are covered and unexpected insights are accommodated, reducing researcher bias and enhancing data quality.

Semi-structured interviews, while advantageous, pose challenges primarily due to their time-consuming nature [62]. Scheduling interviews based on participants' availability resulted in significant gaps between sessions, slowing data collection. Additionally, conducting interviews required substantial time for preparation and finding suitable time slots, sometimes leading to the need for re-recording due to participant requests [62]. Managing and analysing extensive qualitative data further added to the time and effort invested, echoing findings from similar studies [37]. It can be challenging to ensure the quality of social research, especially when authors do not give enough information about how they designed their study or how they interpreted their results [64]. To address this, Moon et al. [65] developed a guideline aiming to enhance qualitative data credibility. This study endeavoured to follow this guideline, focusing on aspects such as dependability, credibility, confirmability, and transferability [65]. One prominent complaint of qualitative interviews is bias resulting from badly crafted questions. Nevertheless, this was intended to be prevented by developing prior knowledge of robust question design through methods textbooks and other sources [63,66]. Qualitative research does not aim to be representative; rather, it is indicative. This study presents its findings as indicative of sustainable food communities in the BCP area. While some issues may indeed be identifiable in similar locations, they may not be universal. Critics of qualitative methods suggest that findings are not generalisable to broader populations or locations given small sample sizes. However, qualitative research approaches provide a depth of understanding of a specific topic in a concentrated location rather than the broad descriptions that quantitative research provides. Adopting a qualitative approach, therefore, provides key insights into the topic being explored, which is crucial for this study.

The selection of data collection sites was a critical aspect of this study's methodology. The Bournemouth, Christchurch, and Poole (BCP) unitary authority area, on the south coast of England, was chosen, given the increasing number of sustainability initiatives, particularly those that focus on the local food system. In total, 369,989 people (49.8% male, 50.2% female) live in the BCP area [67]. Demographically, the area has a relatively low level of diversity compared to other UK regions, with 82.4% of residents identifying as White British and 17.6% identifying as BME (Black and Minority Ethnic population) [67]. In the BCP region, the median age is 42 years old, and 63.5% of homes are owner-occupied, with the remaining 36.5% being either privately or publicly rented [67]. Bournemouth, as a coastal town, was also selected for its active involvement in sustainable food initiatives and its diverse population mix. Another criterion was the community engagement and willingness to be part of an interview, and priority was given to the community actively engaged in sustainable practices related to food systems and environmental conservation. Furthermore, efforts were made to select a site with levels of community resilience. Data collection occurred between February and March 2024 at different locations in Bournemouth that are part of the Gaia initiative (a multi-agency initiative aimed at minimising consumption and improving sustainable food practices).

The approach of focusing on specific geographic locations to identify sustainable practices was chosen because it considers all factors that could influence the success of sustainable communities and their initiatives [42]. Exploring sustainable practices within a single geographical area allows for the analysis of individual projects as well as the social contexts in which they are located [42]. The BCP region, home to more than 400,000 people, demonstrates socio-economic traits common to coastal English areas [68]. While the BCP area may not be widely recognised for sustainability or alternative lifestyles like some communities in Stroud (UK), there are various initiatives in BCP that range from grassroots efforts by individuals to initiatives led by local councils, such as Environmental Hubs and Go Green Bournemouth [69].

To guarantee the participation of those actively engaged in sustainable behaviours associated with food systems, a purposive sample technique was utilised. Participants were selected based on their roles within the organisation, level of engagement in sustainable initiatives, and willingness to participate in interviews, due to the small sample size. Participants from Gaia and Transition Town Poole were chosen based on their experiences in enabling affordable and accessible sustainable community food systems in the BCP area [70]. These organisations were specifically chosen because they are leaders in promoting accessible and appealing alternatives to carbon-intensive consumption and have been supported by external funding to scale their activities, e.g., the BU and Santander Universities Eco Entrepreneur Fund [70]. This strategic choice of participants is also reflected in the study conducted by Howarth et al. [71]. Participants were identified and contacted directly via phone or email, with initial recruitment facilitated through snowball sampling starting from the first interviewee. The first interview was conducted with one of Gaia's co-founders, who provided valuable insights and guided subsequent participant selection to align with the research question. Table 1 includes the socio-demographic profiles of participants that were interviewed. This information provides insights into the diverse backgrounds and characteristics of the individuals involved in this study. Additional details such as gender, age, geographic location, and occupation may further enrich our understanding of the participants' perspectives and experiences.

Table 1. Socio-demographic profiles of participants.

Participant Number	Gender	Age	Geographic Location	Occupation
P1	Male	29	Bournemouth	CEO
P2	Male	42	Wareham	Founder
P3	Female	68	Poole	Retired book editor
P4	Female	35	Somerset Levels	Co-Founder
P5	Male	39	Somerset Levels	Co-Founder

Thematic analysis of the interviews involved recording and transcribing verbatim with informed consent [72,73]. This approach examines patterns and recurring aspects within qualitative data, shedding light on individuals' behaviours and interactions in social contexts [74]. Thematic analysis provides flexibility in data analysis by attempting to recognise, evaluate, and record themes that emerge from interview data [73,75]. Following Clarke and Braun's framework [75], steps included transcription, familiarisation, coding, theme identification, review, definition, and finalisation [74]. Initial codes were generated from qualitative data, leading to theme identification and comprehensive data understanding [74].

Coding in qualitative research is carefully interpreting and dividing data sections based on the concepts they represent. Multiple codes were applied, each reflecting a single concept [76]. This approach enables researchers to thoroughly examine and analyse patterns within the data by facilitating complex inquiries to investigate relations between concepts. It also allows for systematically retrieving all data associated with a specific concept [77]. A pattern-based analysis, according to Clarke and Braun [78], helps researchers to find important aspects in the data, which is essential for formulating the research question. In the perspective of thematic analysis, every topic that has been found is deemed significant. This methodological technique yields profitable outcomes and allows participants and researchers to have adequate flexibility. The results of this analysis are provided in the following section on results.

4. Results

4.1. Community Engagement and Empowerment

The results suggest that sustainable community practices, particularly in collaboration with local stakeholders, play a vital role in fostering a sense of unity and shared responsibility within the community, aimed at preserving community vitality and engagement:

"My role as head of partnerships is to onboard local businesses, that being independent businesses, ethical businesses, vegan or vegetarian restaurants, outdoor activities, and ultimately anything that benefits the local community. (. . .) Gaia as well also probably strengthens (. . .), the local community by bridging the gap between normal consumers and local businesses". (P1)

"With the gardens, we have several different kinds of schemes running to sort of encourage the community to come and visit and be a part of the garden". (P2)

"So we've got a community shop and pub. (. . .) About 200 people came together and the shareholders bought the pub and shop". (P4)

"So that was part of their foundations, where one of the things that the committee cast in what they were going to do with that place was that it was going to be localised, and I think they put like a 50 k radius on". (P5)

The statements above indicate the multifaceted approach adopted by sustainable community practices in engaging with local stakeholders. By actively involving various entities such as independent businesses, ethical establishments, and community-focused initiatives, these practices aim to create a cohesive environment where both residents and businesses work together towards common goals. For instance, Franklin et al. [42] show how by promoting connections between consumers and local businesses, initiatives like Stroudco encourage shared responsibility for sustainable practices and local food production. Moreover, the emphasis on bridging the gap between consumers and local businesses (P1) underscores the importance of fostering connections and relationships within the community, thereby enhancing social cohesion and collective responsibility. Kropp et al. [79] expands on this idea by suggesting that some alternative food networks engage in 'prosuming', where individuals are both producers and consumers, which establishes transparent relationships and reflects the solidarity and shared accountability in a connected community, mirroring the sentiments expressed by participant 4. Additionally, initiatives such as community gardens serve as tangible examples of spaces where community members can actively participate, fostering a sense of ownership and belonging among residents. Numerous studies have demonstrated the value of community gardens in fostering social inclusion and cohesiveness [80]. Shaw et al. [30] emphasise the central role of community in sustainability, highlighting its potential for social empowerment within local contexts. Overall, these actions support community resilience and general well-being in addition to promoting environmental sustainability.

While diverse community involvement is essential for the success of sustainable community practices, it is imperative to critically assess the reliance on volunteers and community engagement strategies to ensure long-term viability and effectiveness:

"You don't have to be an eco-warrior to start doing more". (P1)

"(. . .) most days we have one or two, at least volunteers in the gardens and we've got a bank for about 15 to 20 from the local community". (P2)

"The "local community" is very diverse in such a large town. Some people are active and willing to participate. Others are not. Community engagement needs careful messaging to bring people on board". (P3)

"Then they have one shop manager and one pub manager. But apart from that
the rest are all volunteers". (P4)

While it is evident that some individuals within the community are actively engaged
and willing to participate in sustainability initiatives, it is important to recognise the challenges associated with recruiting volunteers and ensuring widespread participation. P3's
observation highlights the diverse nature of communities within large towns, where some
individuals may be more receptive to engagement than others. Certainly, it is acknowledged that engaging people in sustainability initiatives presents numerous challenges.
These obstacles include factors such as limited awareness of sustainability projects, time
constraints, prioritisation of convenience, feelings of powerlessness, and the perceived
incompatibility of current practices [81].

Moreover, P4's mention of volunteer-run establishments such as cafés and shops exemplifies the reliance on unpaid labour to sustain community initiatives. While volunteering is
commendable and contributes to the sense of community cohesion, it also raises questions
about the long-term sustainability and scalability of these practices, particularly in terms of
volunteer recruitment and retention. Indeed, Sherriff [82] highlights the challenges inherent
in such reliance on volunteers, citing the case of the Bentley Bulk community-supported
agriculture model. Despite initially thriving on a trading model that incorporated LETS
credits earned through labour, the project eventually ceased due to insufficient funding,
having been dependent on volunteer energy [82]. This outcome underscores the fragility
of initiatives heavily dependent on volunteers, as demonstrated by the eventual closure
of the trading system following prolonged reliance on the organiser's unpaid efforts. Additionally, volunteer engagement in sustainable community practices often stems from
motivations such as a sense of belonging, social inclusion, or enjoyment. However, this
aspect can significantly alter the dynamics of projects, particularly those reliant on voluntary labour. In such cases, where there is a need to deliver tangible outcomes, tensions may
emerge in balancing the diverse needs and motivations of volunteers [83]. Thus, while
diverse community involvement is crucial, it is essential to critically assess the feasibility and sustainability of relying heavily on volunteers to drive sustainable community
practices forward.

Inclusivity and accessibility are crucial components of sustainable community practices, as they strive to ensure that all members of the community have equal opportunities
to participate and benefit from these initiatives:

"And that's why Gaia is all about incentivizing our members to supporting more
local businesses, making it more accessible, more affordable and more appealing
to the masses". (P1)

"We bring volunteers from the Bibby Stockholm, (...) and it's home to asylum
seekers. Welcoming the residents of the Bibby barge (...) that's also been a really
eye opening from a community point of view, because you've got really mixed
cultures, lots of political kind of headlines and things around those residents but
the guys themselves actually, their mental health, they're suffering quite badly
and the impact that they have on the gardens is really positive". (P2)

These quotes underscore the commitment of sustainable community practices to inclusivity and accessibility by actively engaging with diverse segments of the population. By
incentivising support for local businesses (P1) and welcoming asylum seekers as volunteers (P2), these initiatives demonstrate a proactive approach to breaking down barriers
and fostering a sense of belonging within the community. Furthermore, the efforts of
sustainable initiatives striving to make food affordable for all hold significant implications
for food security in the UK. According to MacMillan and Dowler [84], the idea of food

security should shift to a micro-level perspective, considering the requirements of people who are vulnerable to food poverty and addressing the needs of homes, communities, and individuals rather than only considering the national level. Kirwan and Maye [85] discuss that the advocacy for local food is characterised by its emphasis on meeting the needs of overlooked or marginalised groups at the local level. Thus, as local food systems may not substantially contribute to the overall production, they may play a vital role in ensuring food security for everyone [85].

Additionally, the positive impact observed on the mental health and well-being of residents from the Bibby Stockholm (P2) highlights the transformative potential of inclusive community initiatives, which not only provide practical benefits but also contribute to social cohesion and support networks. The benefits community gardening has can be observed in other gardening initiatives [86]. Delind [87] underlines how the commercialisation of food items tends to overlook the emotional, expressive, and embodied connections individuals have with food and place, which are crucial for experiencing sustainability on a deeper level. Furthermore, Shaw et al. [30] acknowledge that community gardens are regularly partnered with local national health systems, which acknowledge the therapeutic value of these spaces for specific patient populations.

Addressing the research questions of this article, community engagement and empowerment are key factors in ensuring that sustainable community food systems are successful. Empowering actors and individuals to participate is a key challenge for sustainable communities, and one that is often identified as decreasing over time [88,89]. However, this challenge can be overturned into an opportunity should interventions or activities focussing on engaging communities be continuous throughout the life course of the project. This corresponds to what Feenstra [26] identifies as two of the core elements of sustainable communities: partnerships and participation. These findings corroborate this assertion, noting that there are significant opportunities to expand participation through appealing to individual motivations and developing senses of cohesion, community, and collective responsibility. Only through making sustainable community initiatives exciting and meaningful to be involved in can such projects turn initial excitement into sustained participation [24,28].

4.2. Local Sustainability Initiatives

Collaborative partnerships between sustainable community initiatives and various stakeholders, including businesses, environmental organisations, and experts, are instrumental in driving impactful actions towards greening the UK food system and reducing carbon emissions:

> "We partner up with businesses like barrel bikes, we created an initiative called pedal and pick for us where they gave us 20 bikes, and they put bins on the front of them and we all cycled around for a few hours collecting waste and rubbish on the beach, on the town and yeah, in the local forests as well". (P1)

> "The osprey reintroduction has been, you know, a huge success and we couldn't take the advance really down to Birds of Poole Harbour and the Roy Dennis Foundation, you know, kind of implemented that. So we have different experts that could be experts in like say rewilding, through translocation of wild birds. It could be that it's diversity and inclusion in the countryside and kind of sharing it around so that's another really nice kind of positive". (P2)

> "Since 2012 the Community Orchard has been a success. It is very popular with the local residents, it builds community, creates a home for wildlife and even produces a harvest too!" (P3)

> "So in the village of St. Gregory, they've got stoke environment group. (. . .) So every year we work with them, an event called Envirofair. And that's a sort of collective of the sort of whole sort of community of St. Gregory, and how we can work together to help with that". (P4)

By engaging with businesses, environmental organisations, and expert groups, these initiatives demonstrate a holistic approach to addressing environmental challenges. Through partnerships, resources are pooled, expertise is leveraged, and innovative solutions are implemented, leading to impactful actions with far-reaching benefits. For instance, the pooling of resources allows for the sharing of knowledge and costs among participating organisations, thereby reducing duplication of efforts and promoting efficiency. Collaborating allows small-scale producers, such as those at Eostre Organics or another cooperative in Wales, to overcome obstacles by sharing resources and equipment, thereby avoiding substantial capital costs [90]. Furthermore, collaborating with other actors enables the incorporation of diverse perspectives, which can be unified into a cohesive voice to address common issues [91]. This unified voice enhances credibility when communicating concerns to stakeholders such as the public and policymakers. Such partnerships not only enhance the effectiveness and scalability of sustainability initiatives but also foster community engagement, environmental stewardship, and a sense of shared responsibility. In fact, research by Montgomery et al. [91] underscores the collaborative nature of collective social entrepreneurship and the need for working together within sustainable organisations or institutions to bring about meaningful change. This highlights the vital role of collaborative partnerships in shaping the trajectory towards a more sustainable and resilient future for both local communities and the broader ecosystem.

Sustainable community practices prioritise environmental conservation and resilience at the local level, integrating initiatives that promote ecological awareness and action:

> "We've had this interesting interaction in between a horticultural space somewhere that you could grow on a sort of garden level, grow your own food and plants and herbs and things like that. Suddenly, you've also got quite an exciting conservation project right on our doorstep. You can't really ignore only one aspect. You need to have the ecological aspect, you need to have that social aspect and then you need to have the economic which is why we've got this business part as well". (P2)

> "It's a free event, (. . .) but they do loads of initiatives for children to sort of teach them so there's arts and crafts but teaching you at the same time about the environment and recycling". (P4)

These statements illustrate a collective acknowledgment of the interconnectedness between environmental health, social well-being, and economic sustainability within sustainable community practices. This threefold focus, as previously discussed, represents a shared goal pursued by sustainable communities [30]. However, it is essential to recognise that a food system cannot solely prioritise environmental conservation; it must also consider the social (i.e., consumers) and economic aspects. Consequently, sustainable communities actively engage in environmental conservation through initiatives that educate, raise awareness, and facilitate the realisation of a sustainable food system among community members. Conversely, applying the threefold focus to global food systems reveals a predominant emphasis on economic considerations:

> "The whole world is structured like a big business, and it preys on the natural world, which is really, really not fair, I think". (P5)

Participant 5's comment highlights a critical viewpoint on the global food system by emphasising how economic concerns predominate above environmental health. In

the context of sustainable community practices, where the interconnectedness of environmental, social, and economic sustainability is acknowledged, this quote serves as a stark reminder of the imbalance present in larger-scale food systems. It reflects a sentiment echoed by sustainability advocates, emphasising the exploitation of natural resources by global economic structures. In contrast to the dominant focus on commercial profit within global food systems, this viewpoint emphasises the significance of sustainable community projects, which aim to address not only environmental concerns but also social and economic dimensions.

It is argued that embracing and encouraging participation in embodied activities is the greatest way to attain sustainability. The concept of embodiment utilised here is based on the notion that we perceive and understand the world via our bodies [92]. Participation in embodied practices has been demonstrated to foster an embodied approach to sustainability within community-based initiatives, such as community gardening. Participants renew their relationship with the food system and interact creatively, productively, and sustainably with urban environments by actively participating in these behaviours and influencing their surroundings [92]. Consequently, sustainable communities and initiatives, by prioritising practices that actively involve community members, stand in stark contrast to global food systems, which often address environmental concerns with minimal engagement. This divergence underscores the significant potential of sustainable communities to reach and involve community members effectively, consolidating sustainability efforts within each engaged participant. This insight holds profound implications for the UK food system, as it contributes to enhancing resilience against climate change.

This theme further embeds the importance of partnerships as an opportunity that sustainable communities must take advantage of to be successful. Multi-stakeholder approaches are essential for sustainable communities to engage heterogeneous publics given that motivations for participation vary [28]. Multi-stakeholder engagement provides multiple opportunities for sustainable communities to be successful. It allows for diversified activities to develop, ensuring residents can become involved in various aspects of the food system. The findings of this study illustrate that activities and events that ground the reality of food system issues as part of the everyday life of individuals can embody sustainable practices [92]. Consequently, for sustainable communities to effectively and meaningfully green the food system, ensuring that many varied stakeholders engage in local food systems enables sustained participation [89].

4.3. Education for Sustainable Practices

Participants emphasised the importance of providing clear guidance and raising awareness to facilitate engagement with sustainable living practices:

"Right now, you know, if you were to ask an average consumer where to shop more ethically you know, most of them probably would want to do it but they don't really know how and ultimately Gaia bridges that gap". (P1)

"And so, we've adopted that rewilding kind of process here. But it's not unusual to interact with that in a meaningful way. (. . .) So actually, it's a positive example of how humans can reverse the negative impacts that they've had. And we've got all of that in a very small space, which I really like because it means that you can talk to people about lots of different aspects and almost pick what they're excited by". (P2)

"In raising awareness, we try to stay positive and create a collective vision of a better world". (P3)

These quotes highlight the importance of raising awareness and providing guidance in fostering sustainable practices within communities. They emphasise the need for accessible information and positive messaging to empower individuals to make sustainable choices. However, while initiatives like Gaia aim to bridge the gap between consumer intention and action, there are still significant barriers that individuals face in adopting sustainable lifestyles. Specifically, participants noted that many individuals express a desire to shop ethically but lack the knowledge of how to do so effectively (P1). This suggests that while awareness-raising efforts are essential, there is a need for more comprehensive guidance and support to facilitate behaviour change. Additionally, the emphasis on positivity in raising awareness (P3) underscores the importance of framing sustainability as an opportunity for collective action and positive change rather than focusing solely on the challenges. Overall, while these initiatives play a crucial role in raising awareness and fostering a collective vision of a better world, addressing barriers such as a lack of knowledge and guidance remains imperative for sustainable practices to be widely adopted. This highlights the need for ongoing education and support to empower people to make sustainable decisions in their day-to-day activities. Multifaceted goals of such initiatives range from empowering consumers to informing them about the broader implications of food consumption. These efforts seek to increase consumer awareness of local food producers and provide them with the information they need to make educated decisions by tying local food to other aspects of the food system, such as the effects of industrial food production and the possibility of rural–urban links. Other research sheds light on a significant challenge within the food system: consumers' lack of awareness regarding the environmental impact of certain food items, for instance, meat production [93,94].

This lack of awareness leads to a failure to recognise the importance of reducing the consumption of high-GHG-emission food items as a means of creating more environmentally friendly diets. Specifically, participants in these studies expressed difficulty in identifying reduced-meat recipes and integrating vegetarian meals into their diets due to a perceived lack of knowledge and the perceived effort involved in preparing such meals [95]. Overall, these findings highlight the importance of education, guidance, and awareness-raising efforts in empowering individuals to make sustainable choices within their communities. While industrial food systems may not prioritise such initiatives, sustainable community practices play a crucial role in filling this gap by providing accessible information and positive messaging, ultimately fostering a collective vision of a better world.

Sustainable community practices serve as a robust educational platform for fostering practical skills and knowledge essential for sustainable living. Participants emphasised the importance of hands-on learning experiences, ranging from traditional crafts like willow weaving and horse logging to gardening workshops and educational events focused on reuse and recycling (P2, P4). Moreover, participants underscored the critical role of education for children in promoting food-related sustainability, advocating for comprehensive curricula that integrate growing, preparing, and cooking food at every level of schooling (P3). These quotes collectively highlight the diverse educational opportunities provided by sustainable community practices, which aim to empower individuals with the skills and knowledge needed to adopt sustainable lifestyles and contribute to greening the UK food system:

> "We run a lot of educational courses. So we hope that that supports people (. . .) and they range from being quite crafty and focused from Willow weaving and sort of heritage crafts. We've got a local woodsman who runs horse logging courses. So we do lots of things like that through to gardening workshops through to kind of more expertise". (P2)

"Education for children is clearly key to any food-related sustainability strategy. Introducing children to the practicalities of where their food comes from has been sadly missing in the school curriculum. Growing, preparing and cooking food should be taught at every level in schools. There should be visits to farms and market gardens, talks from local suppliers, discussions on supply chains, local food, organic growing, packaging, permaculture, nutrition, diet, etc.". (P3)

"So it's that education piece, thinking communities and events as well. And we continue to try and do educational events as much as we do sort of market events as well where we can teach people about reusing". (P4)

"It's a very family run business for hundreds of years and they take the willow, and they weave it into baskets and different shapes and things. (. . .) That's like an educational centre as well. You can follow the whole process". (P5)

These quotations highlight the critical role that hands-on learning and skill-building programmes play in promoting sustainable community practices. By offering a diverse array of educational courses, workshops, and events, sustainable communities aim to empower individuals with the knowledge and skills necessary for sustainable living (P2, P4, P5). Moreover, these initiatives serve as platforms for experiential learning, enabling participants to engage in activities such as willow weaving, horse logging, and gardening, fostering a deeper understanding of sustainable practices (P2, P4, P5).

From a broader perspective, these educational efforts align with the notion of "sustaining sustainability" proposed by Axon [81], which emphasises the need for continuous action and collaboration among various actors at the local and national levels to address sustainability challenges. However, the lack of organisational and governmental support for sustainability initiatives poses a significant barrier, as it diminishes individuals' sense of behavioural control and fosters feelings of powerlessness [96]. Weitz et al. [97] expand on the challenges of promoting sustainability by discussing the complexities of translating sustainability into actionable policies. They highlight the multidimensional and integrative approach required to address sustainability challenges effectively. While policies targeting production sustainability focus on a specific group, policies affecting consumption patterns must cater to a much larger and heterogeneous group of actors [98]. This intricacy highlights how difficult it is to create policies that appeal to and affect the behaviour of each consumer [99,100]. Thus, while practical education and skill-building are integral components of sustainable community practices, concerted efforts from multiple stakeholders are essential to create an enabling environment for long-term sustainability.

Information provision, access to information, and recurring education around sustainability and its implementation are often cited as a barrier to action [96]. However, the findings from this study suggest that education and information provision clearly have a place in sustainable communities and that their role is often identified as an enabler of participation in local food systems [24,81]. Furthermore, providing information to various groups with tailored messages allows for specific aspects of sustainable community food systems to be advertised and made more appealing, as participants from Gaia illustrate as a core strength of their public engagement strategy. Reducing the barriers to participation in sustainable communities demands resources for the continuous provision of interventions, i.e., information provision and feedback [81]. Given that sustainable communities often rely on external funding and volunteers, central organisation and administration through project managers can support the development of local projects as opposed to multiple actors acting in siloes without integrated thinking and action. Thus, allowing for some element of centralised management, though heavily influenced by collaborative partnerships,

may allow sustainable community food systems to embed and implement their principles more effectively [26].

4.4. Overcoming Barriers to Sustainable Practices

Participants highlighted significant challenges related to funding and resource constraints in implementing sustainable community practices. The lack of financial support from local councils or governmental bodies was cited as a primary obstacle, hindering initiatives such as Gaia from effectively reaching and engaging with the local community. Additionally, the absence of individuals with project management skills within community groups further compounds these challenges, leading to delays in essential projects despite securing funds:

> "So the two challenges I can think of is firstly funding. (...) We've had no help from the local council or government and starting Gaia or helping getting a message or word out to the local community (...)". (P1)

> "In a community group there is often also a lack of people with project management skills to complete practical projects. For example, for the community orchard we secured funds for a shipping container toolshed, but it took 2 or 3 years to find someone able to project-manage the selection, purchase and installation of the shed". (P3)

The sentiments expressed by participants highlight a common issue: sustainable communities often face challenges due to insufficient funding and a shortage of skilled individuals. Comparatively, industrial and global food systems typically lack active participation in promoting sustainability, despite possessing the necessary resources to do so. Considering these observations collectively, a proposed solution is to foster collaboration between sustainable initiatives and the broader UK food system. This collaboration could involve government and other stakeholders providing funding and resources to support sustainable community efforts. In this symbiotic relationship, the government and relevant entities could step in to fill gaps in resources where communities face shortages. Conversely, sustainable communities and initiatives could contribute by bridging gaps in the industrial food system's engagement with consumers regarding sustainability practices. This reciprocal support mechanism would enhance the effectiveness of both sustainable initiatives and the broader food system in promoting sustainable practices and addressing key challenges.

However, the literature suggests that the interest in the local food movement among various stakeholders presents a unique opportunity to enhance food system resilience. Specifically, supermarket retailers, as major drivers of the modern food system, have the potential to diversify their procurement and distribution systems through localisation efforts [101]. Public–private partnerships can facilitate such shifts and foster system-level change. For instance, partnerships like the one between the Centre for Environmental Farming Systems and a regional supermarket chain demonstrate how capacity-building training, networking activities, and innovative distribution techniques can be enacted to build more resilient food procurement and distribution systems [101]. This collaborative approach, rooted in public–private partnerships and bottom-up initiatives, mirrors the need for collaboration between sustainable community practices and the broader UK food system [55]. By leveraging resources and expertise from both sectors, sustainable initiatives can address their funding and skill shortages, while contributing to filling the gaps in the industrial food system's engagement with consumers regarding sustainability practices. This reciprocal support mechanism enhances the effectiveness of both sectors in promoting sustainable practices and addressing key challenges within the food system.

These quotes collectively emphasise the unmistakable impacts of climate change on sustainable practices within communities. From the firsthand experiences shared by seasoned gardening team members to the organisational challenges of conveying the urgency of climate issues without inducing pessimism, and the direct consequences of ecological challenges such as flooding, it is evident that climate change is not just a distant threat but a current reality affecting daily activities:

> "(...) from talking to our gardening team who've been gardening for 40 years. (...), the weather impacts are becoming more and more difficult. Because they're really swinging wildly, whether it's a storm, whether it's a drought, whether it's a flood, you're getting the bigger swings, so that's definitely impacting". (P2)

> "In my mind the changing global climate is a massive challenge for us all. (...) I suppose as an organisation our challenge has been to convey the climate message to the general public without sounding like doom-mongers". (P3)

> "We do see the sort of quite carefully direct impact of ecological sort of issues really with flooding and things like that". (P4)

The opinions expressed by participants demonstrate how sustainable communities can acknowledge the effects of climate change and continue to be aware of local changes. These accounts underscore the imperative to address climate change swiftly and comprehensively. By acknowledging the tangible effects of climate change on community practices, we are compelled to take proactive steps to mitigate its further escalation and to adapt to the changes already underway. While initially daunting, this awareness offers valuable insights into understanding the evolving landscape and devising strategies to mitigate current effects and prevent future challenges, thereby fostering climate resilience. Although there is evidence that climate change is having an influence on several aspects of the food system [4], further research is needed to determine how sustainable communities may operate as early warning systems for the consequences of climate change on the environment in the UK.

While the notion of grand challenges as a macro-level disruptive change may inevitably shape the narrative and future of sustainable communities, these findings suggest that the everyday challenges that local food systems face are those that are of pressing concern. Notably, funding and important skill sets are necessary for the survivability and success of sustainable communities and the food systems that they support. Arguably, integrating the appropriate skill sets that sustainable communities necessitate for their success is essential to allow them to deliver their stated objectives as opposed to merely surviving [88]. This can be a substantial opportunity for sustainable communities as skill sets such as project management can provide sustainable communities with clearer purposes and embed their principles throughout their activities more overtly [26].

5. Concluding Discussion

This study illuminates the multifaceted role of sustainable community practices in transforming the UK food system and mitigating carbon emissions. Through the findings, several key messages emerge, each highlighting different facets of how these practices can serve as a blueprint for change. Firstly, sustainable community practices thrive on collaborative partnerships and inclusive engagement, pooling resources and expertise to foster unity, shared responsibility, and social cohesion within communities. Secondly, these practices prioritise environmental conservation and local resilience by integrating initiatives that promote ecological awareness and action, empowering community members to make sustainable choices. Thirdly, overcoming challenges like funding constraints and climate change disruptions is crucial for scaling up sustainable practices with collaborative

partnerships and leveraging resources, which may enable communities to promote sustainability effectively. Lastly, while challenges exist, the transformative potential of sustainable community practices in addressing environmental issues underscores their significance, offering opportunities for driving positive change and fostering long-term sustainability. In essence, sustainable community practices represent a viable model for greening the UK food system and reducing carbon emissions, offering a pathway toward a more sustainable and resilient future.

These findings have important implications for sustainable communities and the transformational change of food systems should effective interventions be implemented. Various place-based interventions in sustainable communities [28] and educational activities could be applied [27,41] with reasonable success. It has been shown that education plays a substantial role in shaping the understanding of issues around food security, e.g., purchasing, preparation, and waste [27,41]. Both formal and informal learning, including university programmes, can shape awareness around food waste and equip individuals with knowledge and skills to address these issues in their personal lives. Furthermore, from a socio-cultural perspective, traditional food practices often incorporate waste-reduction techniques such as preserving seasonal produce or the British tradition of a Sunday roast and using leftover food for meals throughout the week to reduce food waste [102]. Moreover, the transition to a sustainable food system also brings additional socio-cultural contexts adding further depth to community-based initiatives and place-based interventions. Sustainable communities, for example, are not static; they evolve over time, adding additional activities and structures such as community gardens and cooking clubs [28]. These play a substantial role in educating communities about sustainable food practices and foster social cohesion around food [41].

We recognise that this study is limited by a small sample size, so it may not fully reflect the breadth and diversity of challenges and opportunities faced by sustainable communities. Despite this small sample size of interviews, qualitative research does not seek to be representative but seeks to be indicative of topics being researched, in this case assessing sustainable community practices in the UK food system around Bournemouth. Defining 'sustainable communities' within food systems presents a challenge due to their varying size, organisation, and progress [29]. This limitation makes it difficult to establish a unified overview of sustainable community practices. This study experienced limited responses to participant recruitment efforts, potentially resulting in a sample that is more pro-sustainable. This may have impacted the breadth and diversity of perspectives captured in this study, leading to an incomplete understanding of the challenges and opportunities associated with sustainable community practices.

Future research should aim to address the limitations of this study by conducting larger-scale investigations involving a more diverse range of sustainable communities across different regions of the UK. This would provide a more comprehensive understanding of the challenges and opportunities faced by sustainable communities, allowing for more nuanced insights into effective strategies for promoting sustainability. Furthermore, future research should investigate the policy implications of sustainable community practices and their potential integration into local, regional, and national policies. Understanding how these practices can be supported and scaled up through policy frameworks is crucial for widespread adoption.

Policy measures should be developed to address the challenges identified in this study, particularly regarding funding support and resource allocation for sustainable community initiatives. Policymakers should consider allocating specific funding streams to support the development and expansion of sustainable community practices, ensuring that these initiatives receive the necessary resources to thrive and make meaningful contributions

to greening the UK food system. In practice, there is a need for greater collaboration and coordination among stakeholders involved in sustainable community initiatives, including local councils, governmental bodies, non-profit organisations, and community members. This could involve the establishment of regional networks or platforms where stakeholders can share knowledge, resources, and best practices, facilitating collective action towards sustainability goals. Additionally, there is a need for capacity-building initiatives to enhance the skills and knowledge of individuals involved in sustainable community practices, ensuring that they have the tools and support needed to implement effective sustainability solutions at the local level.

More specifically, we recommend the following practical applications based on these findings. Primarily, funding for sustainable community food systems needs to be generated through both local council and multi-stakeholder approaches, i.e., working as part of a consortium of businesses or collaborating with universities and generating funding from research councils, i.e., proof of concept funding. Continuously providing information and advertising activities is essential for public engagement; not doing so risks sustaining any meaningful participation in food systems to transition towards sustainability. This can be challenging if resources are thin and requires creativity on behalf of sustainable communities to invest where efforts are better placed. This aligns with our third recommendation: identifying baseline skill sets that are established and necessitated for future development. Through this baseline skill set survey, communities can identify where to target recruitment for scaling up their activities.

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