

Exploration of Short Food Supply Chain Practices, Challenges, and Opportunities: A Case Study of Local Farm Markets in Dorset County, England.

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Abstract

Purpose: The research investigates the practices, challenges, and opportunities within Short Food Supply Chains (SFSCs) and Alternative Food Networks (AFNs) through a case study of local farm markets in Dorset County, England.

Research Approach: Utilizing a qualitative approach, the study conducted semi-structured interviews, focus group discussions, and observations across seven local farm markets to gather in-depth insights from 22 participants, including farmers, vendors, and market administrators.

Findings: The findings reveal the historical evolution and current practices of local farm markets, highlighting the motivations for participation, including economic incentives, social interaction, and community engagement. Key challenges identified are inconsistent participation, logistical difficulties, competition from supermarkets, and limited online presence. The study emphasizes the need for enhanced marketing strategies, infrastructure improvements, and robust online platforms to capitalize on existing opportunities.

Originality: This research offers a unique examination of SFSCs within the specific context of Dorset County, integrating multiple theoretical perspectives to provide a comprehensive understanding of local food systems.

Practical Impact: The insights gained will inform strategies for improving the sustainability and resilience of local food systems. The proposed development of a hybrid food hub model aims to integrate local farm markets, community-supported agriculture (CSA), online marketplaces, and community kitchens/fridges to enhance food distribution and community engagement.

Keywords: Short Food Supply Chains, Alternative Food Networks, Local Farm Markets, Sustainability, Community Engagement, Dorset County

1. Background

Short food supply chains (SFSCs) are pivotal in promoting sustainability and supporting local communities through direct producer-consumer interactions, which offer a more transparent, equitable, and resilient alternative to conventional industrial supply chains (Bonfert 2022; Vittersø et al. 2019; Manser 2022). The evolution of SFSC (a subset of Alternative Food Networks -AFNs) outlets, such as local farm markets, community-supported agriculture (CSA), and online marketplaces, has been driven by the need for local food systems amidst issues in traditional supply chains (Vicente-Vicente et al. 2023). Traditional food systems, often criticized for their environmental impacts and economic inefficiencies, have spurred consumer demand for locally sourced, sustainable food (Vittersø et al. 2019).

Dorset, with its 8,000 years of agricultural heritage, renowned local produce, 2,241 commercial farm holdings covering 197,008.6 hectares, a gross output of £306 million, and a GVA of £112 million, is an ideal area for studying AFNs and SFSCs. Food production in Dorset directly employs 5,974 people, representing 9.8% of the sector's total employment in the South West (Dorset Council, 2021). Research in other regions shows these networks foster community ties and promote sustainable agriculture (Matacena & Corvo, 2019). However, specific studies on Dorset County are limited, presenting a research gap this study aims to fill (Coombes, 2023).

This study aims to fill this gap by focusing on the unique context of Dorset, analysing the practices, challenges, and contributions of its local farm markets. The research questions address the operational structures of local farmers' markets, the challenges faced by local farm operators, and the markets' contributions to community engagement, economic development, and environmental sustainability.

2. Theoretical Framework

Farm markets are vital for socio-economic integration, fostering direct-to-consumer exchanges and building community trust and reciprocity (Manser 2022; Vittersø et al. 2019; Vilalta-Perdomo et al. 2022). These interactions support economic and social exchanges, rooted in Polanyi's theory of embeddedness (1957) and expanded by Hinrichs (2000). SFSCs offer alternatives to the industrial food model, promoting local food initiatives and sustainability (Marsden & Franklin 2013).

SFSCs also contribute to food social justice by creating inclusive and equitable food systems, addressing social inequalities, and ensuring fair access to nutritious, locally produced food. The broader food system impacts social justice through its production, distribution, and consumption practices. SFSCs support social justice by improving access to fresh local food and bolstering local economies (Goodman, DuPuis, & Goodman 2012).

This study integrates various theories to analyse factors influencing local farm markets in Dorset County (see Figure 1). Food Systems Theory emphasizes the interconnectedness of production, distribution, and consumption (Ericksen 2008). AFNs as a subset of the food system promote local, sustainable marketing, creating resilient food systems by reducing reliance on industrial food systems. SFSCs within AFNs focus on direct sales through local markets and CSA initiatives.

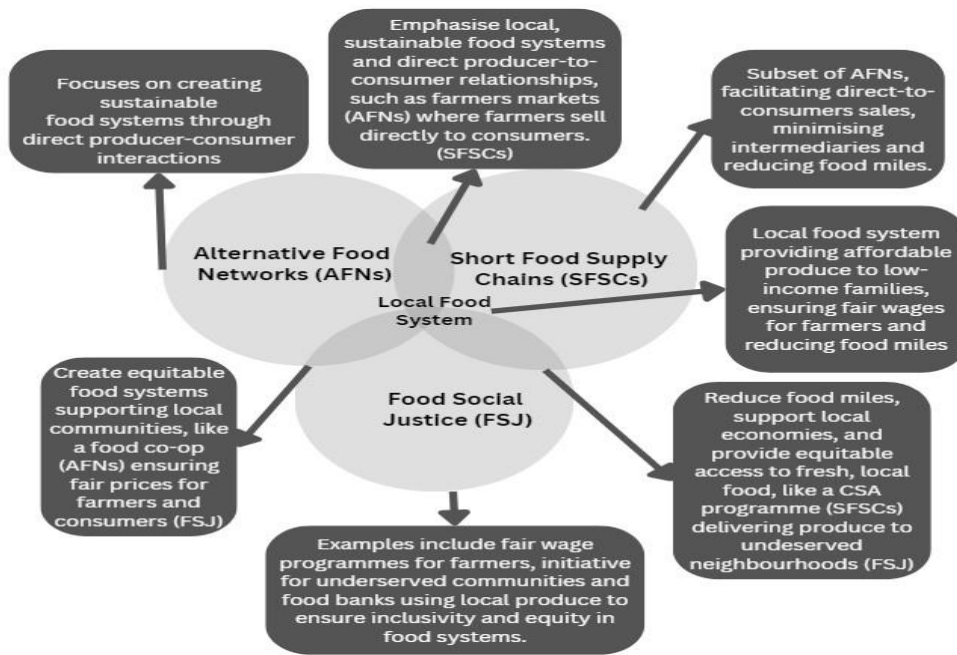


Figure 1: Conceptual Framework (Source: Authors)

3. Methodology

3.1 Research Design and Approach

This qualitative study employs semi-structured interviews, focus group discussions, and observations of local farm markets and food festival activities to explore the practices, challenges, and opportunities within local farm markets in Dorset County. This approach captures the nuanced experiences of local stakeholders, providing detailed data for developing effective market strategies (Creswell 2014).



Figure 2: Map of Dorset County highlighting key market locations (Source: Google Image, Adapted by Authors)



Figure 3: Farm produce display at Wareham local market (Source: Authors' Field Survey)

3.2 Description of the Study Area

The study focuses on seven farmers' markets in Dorset County (see Figures 2 and 3), a region in southwest England with a rich agricultural heritage. Dorset is bordered by Devon, Somerset, Wiltshire, and Hampshire, with a southern coastline along the English Channel featuring the Jurassic Coast, a UNESCO World Heritage Site.

3.3 Participants and Sampling Strategies

Participants included 14 local farmers, vendors, distributors, a dairy farmer, an abattoir operator, a local farm market developer, 2 food festival community volunteer managers, and 2 Bournemouth University academics (22 participants). These individuals were purposefully sampled for their roles and expertise in SFSCs and broader AFNs.

3.4 Data Collection

Data were collected from April to June 2024 through semi-structured interviews, focus group discussions, and observations. This mix of methods allowed for a thorough exploration of research topics while ensuring consistency.

3.5 Data Analysis

Data were analysed using content and thematic analysis to identify key themes and patterns. Thematic analysis systematically examined the data, uncovering issues and opportunities in local farm markets. An iterative coding process refined themes, ensuring a comprehensive understanding. The 'Transkriptor-Speech to Text' App was used for accurate transcription of interviews, maintaining the nuances of participants' responses. Ethics approval was obtained from Bournemouth University Research Ethics Review Committee.

4. Results

4.1 Historical Development of Local Farm Markets in Dorset County

Local farm markets in Dorset have evolved significantly from small, informal gatherings to well-organized community events. This progression is evident from insights gathered across various markets, including those in Swanage, Blandford, Wareham, Weymouth, Wimborne, Dorchester, and Bridport. The drive towards sustainability and organic farming practices has largely been influenced by consumer demand and heightened environmental awareness. These markets have grown into vibrant hubs, attracting a diverse consumer base and playing a crucial role in the local economy and food system. P8 participant from Weymouth Farm Market noted, *"These markets have become essential to our community, providing a place for people to connect and support local agriculture."*

4.2 Motivations of Local Farmers, Vendors, and Market Administrators

Economic incentives, social interaction, community engagement, provision of healthy farm produce, and local food resilience are significant motivators for participation in SFSCs. Participants from Swanage and Bridport Farm Markets highlighted the crucial roles local councils and community organizations play in managing these markets, ensuring consistency and fostering community engagement. The direct sales model allows farmers to receive fair prices for their produce, avoiding the low prices imposed by large distributors.

4.3 Structure and Operations of Local Farm Markets in Dorset County

Local farm markets vary in size and frequency, supported by local councils and community groups. These markets provide essential support to both farmers and consumers, ensuring smooth operations and vibrant community interactions. The size and frequency of the markets in Dorset County reflect the diversity of the region's agricultural and community landscape.

4.4 Challenges, Opportunities, and Strategies for Improving Local Farm Markets

Local farm markets in Dorset County face several challenges, including inconsistent vendor and customer participation, logistical difficulties, competition from supermarkets, and limited online presence. Maintaining consistent attendance, especially during bad weather, is a significant hurdle. Supermarket competition and logistical issues like transportation and

storage further complicate market operations. The absence of robust online platforms for pre-ordering and promoting local produce restricts consumer convenience and market reach.

Despite these challenges, significant opportunities exist to enhance these markets' effectiveness and sustainability. Key opportunities include improving marketing and communication strategies, investing in better infrastructure, and developing robust online platforms. Educational programs and workshops can enhance community engagement and promote local produce and sustainable practices. With supportive local policies, long-term partnerships among local councils, community organizations, and public/private institutions can also provide stable demand and support for local farmers.

5. Discussion

5.1 Key Practices and Operational Structures

Local farm markets in Dorset promote direct sales between farmers and consumers, supported by local councils and community organizations. These markets have grown into well-organized community events, emphasizing sustainability and supporting local economies. The direct sales model ensures fair pricing for both producers and consumers, fostering economic sustainability. These findings align with previous research that highlights the evolution and significance of farmers' markets in promoting local food systems (Manser 2022).

5.2 Challenges and Strategies for Enhancing Market Effectiveness

Key challenges include inconsistent participation, logistical difficulties, competition from supermarkets, and limited online presence. To address these challenges, strategies such as enhancing marketing and communication, developing robust online platforms, and introducing hybrid local food hubs are proposed. These initiatives can improve market reach, increase consumer convenience, and support local farmers more effectively. This approach is supported by Vilalta-Perdomo et al. (2022), who emphasize the importance of integrating technology and collaborative governance in improving food supply chains.

5.3 Contributions to Community Engagement, Economic Development, and Environmental Sustainability

Local farm markets contribute significantly to community engagement, economic development, and environmental sustainability. They serve as social hubs where community members interact, fostering social cohesion and local identity. The emphasis on traditional and organic products aligns with the principles of SFSCs, promoting environmentally sustainable and locally focused food systems. These markets enhance local economies by providing direct sales outlets for farmers, ensuring fair pricing and increased profitability. However, there is little contribution towards enhancing food social justice for the inclusive participation of the relevant vulnerable members of the community. This finding is consistent with the work of Manser (2022), who argues that farmers' markets often prioritize economic and community-oriented values over equity and sustainability.

5.4 Implications and Recommendations

Enhancing the sustainability and effectiveness of local farm markets in Dorset County requires addressing operational challenges, leveraging technological opportunities, and implementing supportive policies (Reina-Usuga et al. 2022). Effective management and operational improvements, such as better infrastructure and digital platforms, can increase market visibility

and engagement. Policymakers can support local farm markets by offering financial incentives, subsidies, and regulations that encourage local produce procurement by public institutions, creating stable demand. Continuous research and educational programs are essential to document the impact of local farm markets and raise awareness about sustainable practices, fostering a robust and resilient local food system in Dorset County (Bonfert 2022).

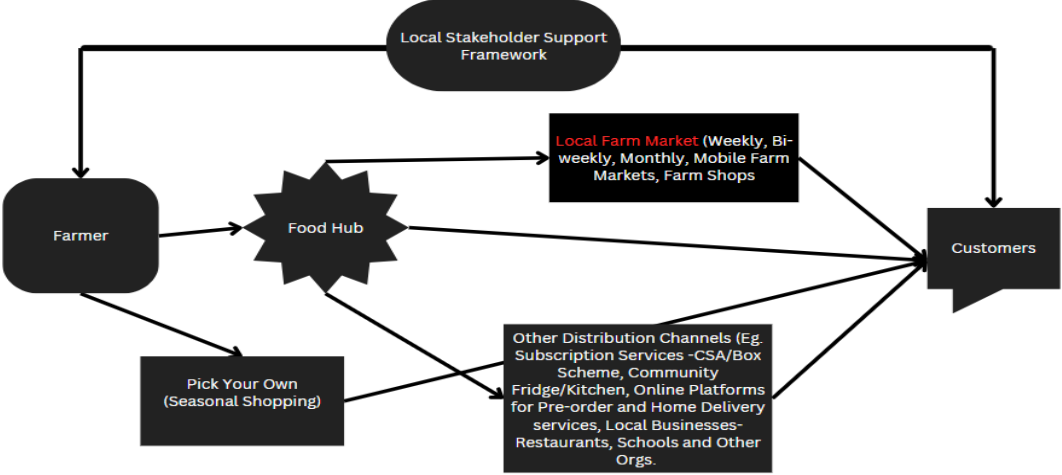


Figure 4: Proposed Hybrid Food Hub for Dorset County (Source: Authors)

5.5 Proposed Hybrid Food Hub for Dorset County

The hybrid food hub model proposed for Dorset includes roles for farmers, local food hubs, online marketplaces, mobile farm markets, and community kitchens and fridges to improve scalability and quality (see Figure 4). Support through local policies, education, training, partnerships, and infrastructure is crucial. This approach aligns with successful examples of food hubs and partnerships globally, such as the Toronto Food Hub, the Manchester Veg People cooperative, and California farm-to-school programme with \$30M in grants and an additional \$60M available for future projects, highlights the potential impact of well-supported local food systems (Improve Children's Health & Well-Being, 2023).

We envisage that the proposed hybrid food hub will enhance local farm produce distribution through a network of farmers, food hubs, and various distribution channels, focusing on local sourcing, direct sales, and community engagement (Vicente-Vicente, 2023). Key steps include establishing food hubs, engaging farmers with incentives and training, and developing distribution channels like farmers' markets and online platforms. Community kitchens and fridges will use surplus produce and engage volunteers. Promoting consumer engagement involves educational programs and community events (see Figure 5). However, challenges include securing funding, coordinating stakeholders, adopting new technologies, ensuring cost-effective logistics, and navigating food safety regulations (Matacena & Corvo, 2019; Vittersø et al., 2019; Manser, 2022). Continuous education is crucial to shift consumer behaviours towards locally produced food (Bonfert, 2022).

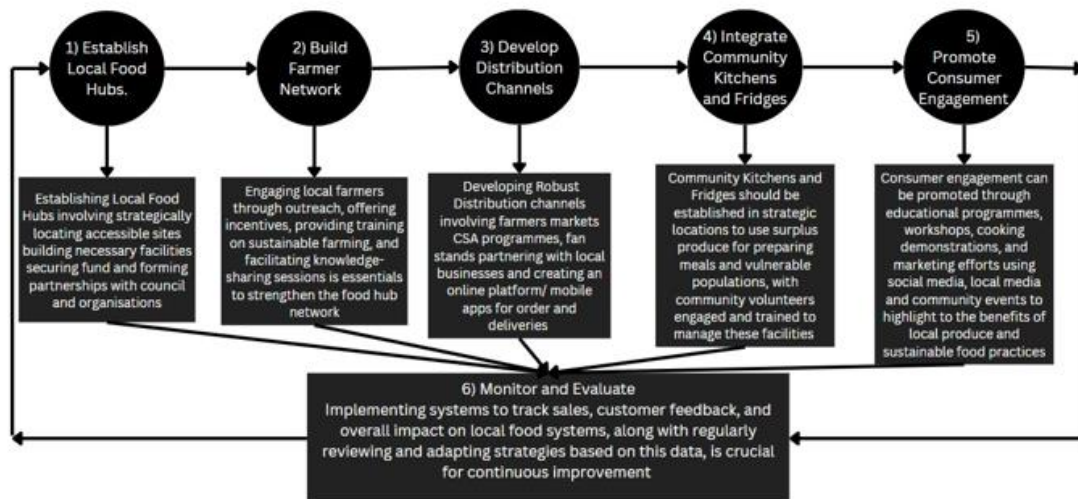


Fig 5: Proposed Hybrid Food Hub Implementation strategy (Source: Authors)

6.0 Conclusion

This study offers an in-depth look at local farm markets in Dorset County, emphasising their evolution, practices, challenges, and opportunities. Key findings highlight the crucial role of these markets in promoting direct sales between farmers and consumers (Vittersø et al., 2019), supported by local councils and community organisations ensuring fair pricing and fostering economic sustainability and community engagement (González-Azcárate et al., 2023). Identified challenges include inconsistent participation, logistical issues, supermarket competition, and limited online presence, with suggested solutions such as improved marketing, robust online platforms, and hybrid local food hubs (Vittersø et al., 2019; Vicente-Vicente, 2023; Vilalta-Perdomo et al., 2022). Despite these insights, the study's limited sample size and focus on Dorset County may not capture broader regional dynamics, and temporal constraints might overlook seasonal and long-term trends. Future research should include more diverse markets and stakeholders and a longer data collection period to enhance generalisability and provide a comprehensive understanding of local farm markets' dynamics.

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