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# Short food supply chains: types of initiatives, inter-organizational proximity, and logistics – an intrinsic case study

*Krótkie łańcuchy dostaw żywności: rodzaje, bliskość międzyorganizacyjna, logistyka – autoteliczne studium przypadku*

## Abstract

Short food supply chains are one of the recently reinvented types of food supply systems that are recognized as a notable sustainable approach. The purpose of this article is to identify short food supply chains (SFSCs) in practice, focusing on their types of initiatives, inter-organizational proximity, and logistics. The study aims to address the following research questions: 1) What are the dominant types of initiatives and dimensions of interorganizational proximity in SFSCs? 2) What key logistics aspects can be identified in SFSCs? 3) Which activities determine the performance of SFSCs? This paper comprises three main sections. Firstly, it reviews the existing academic literature related to the types of initiatives in short food supply chains within the context of proximity dimensions and logistics, as well as the contributions of SFSCs to sustainability. Following that, it outlines the empirical research methodology employed and interprets the findings obtained. Lastly, it highlights the theoretical and practical implications arising from the research.

## Keywords:

supply chain, short food supply chain, intrinsic case study

## Streszczenie

Krótkie łańcuchy dostaw żywności są jednym z rodzajów systemów dostaw żywności, uznawanych za godne uwagi w ramach zrównoważonego podejścia. Celem niniejszego artykułu jest identyfikacja krótkich łańcuchów dostaw żywności (SFSC) w praktyce, z uwzględnieniem ich rodzajów, bliskości międzyorganizacyjnej i logistyki. Badanie ma na celu udzielenie odpowiedzi na następujące pytania badawcze: 1) Jakie są dominujące rodzaje działań i wymiary bliskości międzyorganizacyjnej w SFSC? 2) Jakie kluczowe aspekty logistyczne można zidentyfikować w SFSC? 3) Jakie działania determinują sprawność SFSC? Niniejszy artykuł składa się z trzech głównych części. Po pierwsze, dokonano przeglądu istniejącej literatury akademickiej związanej z rodzajami działań w krótkich łańcuchach dostaw żywności w kontekście wymiarów bliskości międzyorganizacyjnej i logistyki, a także wkładu SFSC w zrównoważony rozwój. Następnie przedstawiono zastosowaną metodykę badań empirycznych i zinterpretowano uzyskane wyniki. Na koniec podkreślono teoretyczne i praktyczne implikacje badań.

## Słowa kluczowe:

łańcuch dostaw, krótki łańcuch dostaw żywności, autoteliczne studium przypadku

JEL: L32

## Introduction

Discussions about supply chains have been ongoing for many years, with numerous publications dedicated to the subject, often presenting

varying and sometimes inconsistent concepts (Croom et al., 2000; Twaróg, 2015). Supply chains can serve diverse purposes, and as a result, supply chain management may have differently defined objectives. The significance of supply chains for

modern organizations is rooted in the growing importance of inter-organizational cooperation (Klimas, 2014) within a dynamically changing environment. Consequently, the operational conditions of contemporary supply chains differ significantly from those experienced many years ago. These changing conditions for modern supply chains are influenced by several key factors: 1) globalisation 2) technological progress; 3) economic and financial conditions; 4) political conditions; 5) climate and weather conditions; 6) the balance of economic power; 7) the geopolitical situation; 8) the epidemiological situation. These determinants collectively shape the landscape in which modern supply chains operate.

Therefore, it should come as no surprise that the functioning of supply chains is a current area of scientific research (Sołtysik & Świerczek, 2009). A crucial component of supply chain operation is the logistical support it receives. Logistics can be defined as the art of shaping material and informational flows through logistics management (Szołtysek, 2015). The logistical support for supply chain operation involves coordinating logistics processes and activities, which form the core of supply chain operation. From a logistics perspective, a supply chain is understood as a group of vertically coordinated organizations, all essential for the manufacturing and delivery of a product to the consumer. These organizations are connected by material and information flows aimed at delivering the product to the consumer under agreed-upon conditions (Twaróg, 2016).

Improving the functioning of supply chains, which involves achieving the objectives of supply chain nodes, is seen as having numerous benefits, typically aimed at enhancing their performance. This enhanced performance can manifest in improved effectiveness, benefits, or operational efficiency. The inter-organizational proximity hypothesis can significantly contribute to a deeper understanding of supply chain mechanisms and the attainment of higher performance levels. Emphasizing proximity within the context of supply chains is well-justified, considering it is often referred to as the 'decisive factor for competitive advantage' in supply chains (Hall & Jacobs, 2010), with its dimensions considered 'fundamental dimensions' of supply chain management (Carbone & Blanquart, 2013).

Proximity is a multidimensional category, encompassing distinct analytical dimensions, including geographical, cognitive, institutional, social, organizational (Boschma, 2005), and communicational dimensions (Klimas, 2020). Operational improvement aligns with various concepts, strategies, or types of supply chains, as well as inter-organizational proximity. Research

studies on supply chains have developed concepts and strategies, such as virtual, agile, lean, resiliency, vulnerability, circular, sustainable supply chains, or various supply chain types, including humanitarian, blood supply, peer-to-peer supply, and food supply chains. Particular emphasis has been placed on the 'short' attribute. In the Farm to Fork Strategy (European Commission, 2020, p. 4), the European Commission acknowledged the increasing significance of short supply chains and local food systems. The Commission noted that the demand for shorter food supply chains has risen, especially during the pandemic, as it aims to strengthen the resilience of regional and local food systems. To achieve this, the Commission intends to provide support in reducing reliance on long-haul transportation (European Commission, 2020, p. 14). Additionally, the COVID-19 pandemic has underscored the significance of short food supply chains (SFSCs), as these chains can act as a critical safeguard for food security and nutrition during periods of economic uncertainty (FAO, 2020). Therefore, the focus of this paper is on short food supply chains. The purpose of this article is to identify SFSCs in practice, focusing on their types of initiatives, inter-organizational proximity, and logistics. This paper encompasses three main sections. Firstly, it reviews the existing academic literature pertaining to forms of short food supply chains in proximity dimension context as well as contributions of SFSCs to sustainability. Following that, it outlines the empirical research methodology employed and interprets the findings obtained. Lastly, it highlights the theoretical and practical implications derived from the research and proposes avenues for future investigations.

## Short food supply chain – types and proximity dimensions

Since the second half of the nineteenth century, globalization has had a substantial impact on the food system. One consequence of this impact was the decline and eventual disappearance of SFSCs after World War II. With the modernization and mechanization of the agriculture system and food distribution systems, direct relationships between farmers and consumers have been replaced by a complex system of actors, which includes several intermediaries (Dunane et al., 2011). As a result, the majority of food sales and distribution now occur through large conventional food supply chains, which form a network of food-related organisations facilitating the movement of products from producers to end customers (Todorovic et al., 2018, p. 1). Although the modern form of food

supply system and conventional agri-food supply chains have achieved tremendous success in alleviating the food crisis in recent decades, they are facing growing accusations of causing detrimental impacts on health (Llazo, 2014) and the environment (Mastronardi et al., 2015). Globalisation has resulted in the decline of biodiversity and ecosystems, a rise in obesity and food poverty, and the inability of consumers to access sufficient information regarding the origin and quality of food products (Paciarotti & Torregiani, 2021; Pulker et al., 2018). Consequently, this has led to a disconnection between farmers and final consumers, resulting in distant and anonymous relations (Hinrichs, 2000), an increase in information asymmetry and a decline in consumer trust (Meyer et al., 2012). Furthermore, intensive agriculture and industrial food production, driven by the goal of achieving high production volumes, standardization, and low food prices, have significant environmental consequences, including massive food wastage and a heavy reliance on fossil fuels (Mundler & Rumpus, 2012). Therefore, it can be noted that the preferences of both farmers and consumers towards conventional food supply chains are changing in a deteriorating trend (Wang et al., 2022, p. 77). Currently, consumers are increasingly conscious of the negative consequences associated with a globalised food system (Paciarotti & Torregiani, 2021; Hanus, 2020) and are inclined to re-establish a direct connection with farmers, show support for local communities, opt for healthier food choices (Duram & Cawley, 2012), and minimize the environmental impact of their food consumption (Bloemhof et al., 2015). Thus, a shift towards more sustainable farming methods has led to the emergence of local and shorter food supply chains.

Short food supply chains (SFSCs) are one of these recently reinvented types of food supply systems that are recognized as a notable sustainable approach (Kumar et al. 2019; Wang et al., 2022). SFSCs function like a local food system but shortens the traditional long food supply chains. It is crucial to emphasize that 'short' does not only refer to the close geographical proximity but also to the direct social connections between producers and consumers (Renting et al., 2003; Aubry & Kebir, 2013). Hence, two basic criteria needed to define SFSCs are physical/geographical and social proximity (Galli & Brunori, 2013). Because of the regional and cultural diversity of food systems, boundaries of such supply food chains vary (Kebir & Torre, 2013) and their metrical and physical boundary interpretations differ. However, geographical proximity and location remain significant, as 'short' is primarily perceived as something that is

comparatively close physically and/or produced and grown in a specific region or locality (Galli & Brunori, 2013). Social distance (proximity) is expressed as the number of intermediaries between producer and consumer and in the SFSC this number is zero or very few (Galli & Brunori, 2013). Social proximity also involves the chain's capacity to create a communication channel between producers and consumers, allowing producers to control the information provided to the end consumers and receive feedback from them. This feedback covers not only the producer's identity, food quality characteristics, or farming practices but also the ethical and social values associated with the entire process (Marsden et al., 2000). In this manner, information asymmetry can be minimised, leading to the establishment of loyalty and trust between producers and consumers (D'Amico et al., 2014; Giampietri et al., 2016). One of the objectives of creating SFSCs is to strengthen local food networks, involving both producers and consumers actively. Producers can regain an active role in the value creation of such a chain and the product itself. The solution reduces the number of links and intermediaries, shortening the route that food has to take to reach the consumer – food miles (Galli & Brunori, 2013). This situation can be beneficial for the functioning of the supply chain, especially considering its costs, particularly the relationships and dependencies related to transport and external costs. Due to the nature and character of the products (often low-processed food products), the intermediate elements of the chain, which generate costs, can be eliminated (Tundys, 2015). Typology of SFSCs initiatives include various activities such as: direct selling (on farm sales, farmers' market, pick-your-own, producers' shop, etc.), box schemes, community supported agriculture, collective points of sale, consumer cooperatives, direct internet sales, supermarkets provisioning and e-commerce (Kebir & Torre, 2013). Each is linked in a different way, with more or less intense geographical proximity and social proximity reflected in producer–consumer relations. However, there are primarily three distinct categories: "face-to-face" initiatives (such as on-farm sales, farm shops, and farmers' markets), "spatially proximate" initiatives, where both production and retailing occur within the same region, and finally "spatially extended" initiatives, where products are sold to consumers located outside the production area (Renting et al., 2003). SFSCs can also be classified into nine categories based on the varying levels of commitment adopted by consumers or producers (low, medium, and high), as outlined by Mundubat (Jarzębowski et al., 2020). Additionally, SFSCs can be distinguished based on their operational scale,

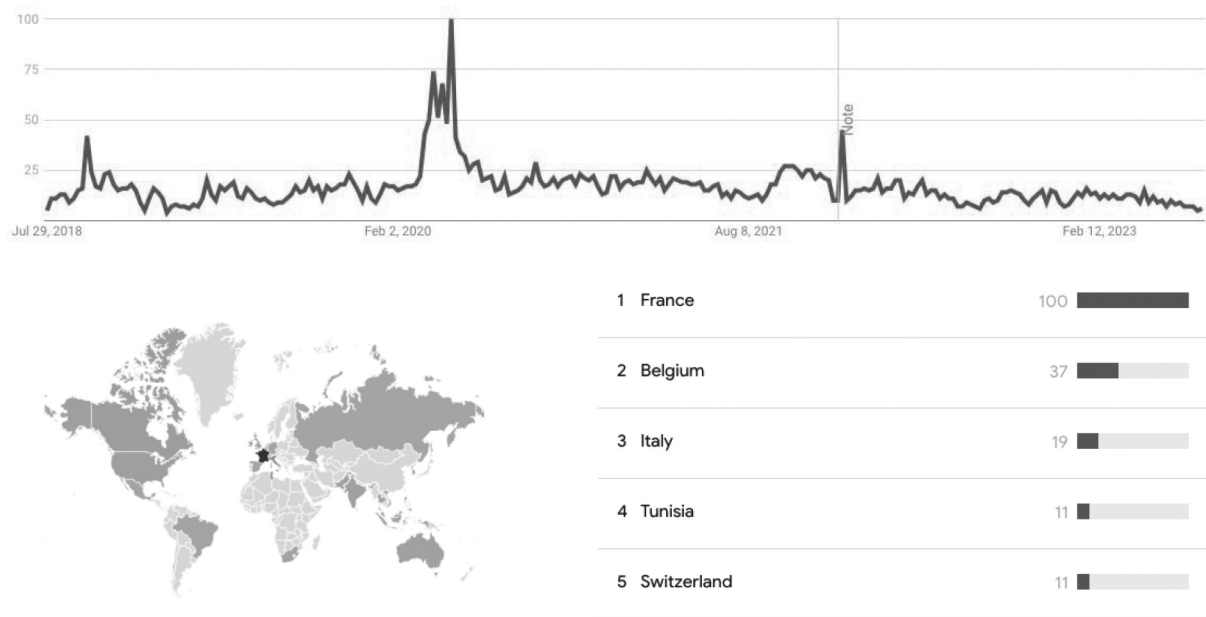
including local food systems, hyperlocal food systems, and ultralocal food systems, as discussed by S. Jarzębowski et al. (2020).

As SFSCs are currently widely viewed as a progression towards sustainable agriculture, various authors use the classical sustainable development framework, structured around the three pillars of sustainability (economic, social, environmental), in order to examine the benefits of SFSCs (Schonhart et al., 2009). In a similar perspective, P. Mundler and S. Laughrea (2016) constructed a model that classifies the contributions of SFSCs into four interacting dimensions: farmers welfare, local development, welfare of the community, and environmental protection. Regardless of the approach, the emphasis in SFSCc is always placed on the nature of the relationship (Aguiar et al., 2018), interaction between farmers and consumers (Hinrichs, 2000), along with the significance of this relationship in creating value (Marsden et al., 2000) and meaning (Chiffolleau, 2009). Therefore, SFSCs have the potential to drive territorial development, leading to increased income and territorial value added in rural areas (Aubry & Kebir, 2013; O'Neill, 2014) as well as promote sustainability in agriculture by reducing transportation costs and CO<sup>2</sup> emissions, promoting biodiversity, and implementing peri-urban agriculture (Canfora, 2016). Nonetheless, it is essential for local authorities to offer the required support to producers to continue their efforts in

advancing their initiatives (Pato, 2020). This assistance plays a crucial role in facilitating knowledge exchange and providing improved training opportunities for both producers and consumers engaged in SFSCs, particularly in regions that necessitate marketing, promotion, and communication expertise (Kneafsey et al., 2013). Without adequate policy backing, certain rural businesses may face closure, posing a threat to a vital aspect of rural life (Pato & Teixeira 2018). Logistics is the main challenge to be faced for the development of short food supply chains that are able to represent a concrete alternative to the globalised food model (Nsamzinshuti et al., 2017). Logistics is one of the six core processes that contribute to the functioning of SFSCs (Maciejczak, 2014). Logistics are also strategic coordinating mechanisms that enable the cooperation between SFSCs stakeholders (Paciarotti & Torregiani, 2021).

The growing interest in the topic of SFSCs is also reflected in the grey literature. Nowadays the use of internet data has become an integral part of scientific research over the past decade, with online sources becoming increasingly available and providing data that can be useful in analyzing. Currently, the most popular tool using Internet data is Google Trends (GT), which acts like reverse engineering the data to gather data on users' searches, which in this case are interested in the short food supply chain (Figure 1).

Figure 1  
Global interest in the concept of "short food supply chain"



Source: own elaboration using Google Trends.

Google Trends is an open online tool that provides information about current and past trending topics based on real user queries. It offers a wide range of options (Mavragani & Ochoa, 2019). The methodology follows the principles presented by A. Mavragani and G. Ochoa (2019), which describe how to select the appropriate keyword(s), region(s), period, and category. Data is collected from Google Trends and then normalized<sup>1</sup>. Interest in SFSCs is experiencing an upward trend, especially in Europe, particularly in countries like France, Belgium, and Italy.

## Methodology

The study served to answer the following research questions:

1. What are the dominant types of initiatives and dimensions of interorganizational proximity in SFSCs?
2. What key logistics aspects can be identified in SFSCs?
3. Which activities determine the performance of SFSCs?

Finding answers to the questions posed and realizing the purpose of the research, in order to be in accordance with the criterion of truthfulness of its results, requires the use of a specific research method. Given the explanatory nature of the research, a literature review and exploratory qualitative analysis were used. The method used was: a scoping literature review (Pham et al., 2014) and an intrinsic case study (Stake, 2009), with the goal of better understanding the case (Baxter & Jack, 2008). The case selection was purposeful – Municipality of Mozzo, Italy – and justified for several reasons: a) relevancy of the organization (the selected organization has unique characteristics that are relevant to the research question; b) practical relevance (the selected organization has significant practical relevance to the research field, as it is one of the pioneering short supply chain delivery companies that has been successful, and c) availability of data (the selected organization provides access to relevant research data, which is key to successfully conducting the case study and providing solid conclusions). We employed participatory observation as the primary data collection method, engaging directly with the subjects in their natural environment during a four-day study visit in the Municipality of Mozzo in November 2021. This approach allowed us to gain a comprehensive understanding of their experiences and behaviours. Additionally, we complement our findings with a case study

approach, providing in-depth analysis and contextualization of specific instances that exemplify the broader patterns observed during participatory observation. To avoid accusations of anecdotalism, data triangulation (individual level) was used. The research material and data for the analysis were collected as part of the international project *Social Economy for a Just Green Transition (JustGreen)*<sup>2</sup> financed by the European Union through the COSME program (Grant Agreement number 101015873), in which one of the authors of this paper was involved in 2021 as a facilitator and country expert. JustGreen project aimed at promoting the transition of social economy organisations into a greener and fairer economy and society, following the United Nations Sustainable Development Goals slogan of "leaving no one behind". One of the key themes explored within this objective was fostering short food supply chains and agroecology. One of the project's most crucial assets was the utilization of effective methodologies. These methodologies, known as good practices, serve as potent tools for learning and inspiration, fostering the creation of innovative approaches and promoting the adoption of practices deemed suitable for addressing modern challenges in cooperation and development. A good practice goes beyond being merely beneficial; it has been thoroughly assessed and proven to yield favourable outcomes, making it an endorsed model. Such practices represent successful, extensively validated experiences that have been replicated and warrant sharing so that a wider audience can embrace them (FAO, 2016).

## Research results

The municipality of Mozzo is located in the province of Bergamo in the Lombardy Region in northern Italy. Lombardy Region is the leading Italian region in terms of economic importance as it alone contributes around one fifth of Italy's GDP, being active in various sectors: livestock farming, agriculture, industry, services and even in the tertiary sector. The territory of Mozzo was predominantly agricultural until after World War II, and it was only in the 1980s that it experienced significant urbanization. The existence of the Parco dei Colli, one of the largest parks in the Lombardy region, has restricted intense development over time and enabled the Municipality of Mozzo to preserve a special connection with the agricultural and natural landscapes. The municipality is actively engaged in various projects aimed at promoting actions to safeguard and enhance the agri-

environmental, naturalistic, and historical-cultural heritage. These initiatives aim to highlight the significance of third-sector organizations in contributing to these efforts. Some examples include:

- Parco Regionale dei Colli di Bergamo,
- the BioDistrict of Social Agriculture of Bergamo,
- the Environmental Ethics Centre of Bergamo,
- Porta del Parco community space.

In September 2021, the Social Solidarity Economy District (DESS) project was initiated in Bergamo, involving over 50 organizations in the province. This collaborative effort brings together purchasing groups, agricultural support communities, time banks, associations, and social enterprises operating in various domains, including ethical finance, fair trade, sustainable building and tourism, as well as organic and local agriculture.

The following section of the paper presents a description of the general five good practices collected during the project period. The good practices were consolidated in tables 1 and 2 to provide a synthesis. The tables also highlight the most significant aspect from a project perspective, which is the social or environmental impact generated by each practice.

The different stakeholders in supply chains involved in the Municipality of Mozzo are:

- consumers: people committed to the farmers' market, local food, traditions and sustainable farming practices;
- processors: people, collectives, associations, cooperatives or small organizations;
- producers: farmers and agricultural collectives, associations, cooperatives or small organizations;
- logistics organizers: people responsible for logistical and managerial work.

In the peri-urban area in question Commune di Mozzo itself serves an important role which meets the requirements of the coordinator. In this case, the coordinator manages interdependencies (Malone & Crowston, 1991), with the goal of increasing the performance of the collaboration in entire supply networks that consist of several independently short food supply chains operating in the area. A description of the organization is provided in table 2.

## Discussion and Conclusion

The results of the research conducted show a wide range of activities carried out in Commune di Mozzo, Italy in order to foster cooperation between different SFSCs actors. The main types of SFSCs initiatives are presented using the word cloud tool (Figure 2). The dominant ones in the study area are: collective points of sale (relevance

1.0) and community supported agriculture (relevance 0.82).

In terms of the dimensions of interorganizational proximity in SFSCs, both geographical and social proximity play equally important roles. The SFSCs in the peri-urban area of Commune di Mozzo characteristics are related to the development and, principally, to the renewed link between the producer, consumer, processor and logistics organizer. Material and information flows are shaped between actors in the supply chain, through logistics management (whether conscious or not). Two of the three phases of supply chain construction are represented, i.e. the production phase with the dominant distribution phase. The procurement phase went unnoticed. Importantly, within the framework of strategic and logistical management, an important function is performed by an elected coordinator whose activities are closely related to achieving performance. The design of SFSCs has a substantial influence on the performance of the short food supply chain. Suitable logistics solutions hold significant potential for enhancing the environmental impact of SFSCs, as demonstrated by M. Kneafsey et al. (2013). Additionally, they can contribute to the improved economic and social performance of short food supply chains, as highlighted in the study by C. Blanquart et al. (2010). However, logistics constraints result in consumers facing uncertainty regarding how and from whom they can acquire food products through short supply chains (Paciarotti & Torregiani, 2021; González-Azcárate et al., 2021). Moreover, collaboration among producers appears to offer a viable means of reducing logistics costs (Galli & Brunori, 2013; Paciarotti & Torregiani, 2021). Similarly, digital technologies may help in overcoming some of the logistical and marketing challenges faced by SFSCs (Kneafsey et al., 2013; Todorovic et al., 2018; Michel-Villarreal et al., 2021). The above observations demonstrate that the effectiveness of short food supply chains and local food systems in Commune di Mozzo relies on the instruments employed, as evidenced by various implemented practices. The municipality holds a crucial role in fostering the development of SFSCs and LFS, underscoring the significance of local governance in ensuring successful SFSC development initiatives. The hallmark of the case presented here undoubtedly lies in the involvement of various organizations in the short food supply chain, including non-profit organization, social enterprise, and community cooperative. The participation of these entities signifies the promotion of short food supply chains and agroecology within the social economy, aiming to enhance sustainability while

Table 1

Description of good practices pertaining to the functioning of short food supply chain in Mozzo

Organisation		Il Sole e la Terra	Comune di Mozzo and Oikos and Alchimia social cooperatives
Year		1979	2013
Practice		Food co-op shop	La Porta del Parco
Short description		<p>Il Sole e la Terra is a non-profit consumer cooperative that offers its members quality products at fair prices for both buyers and producers. It currently has about 13,000 members of which more than half are active. The primary mission of the cooperative is to provide members with access to healthy food while promoting sustainable production methods, environmental consciousness, and fostering social connections within the community. The cooperative serves as a vital resource for local organic producers, serving as a primary market outlet for many of them. Its strong and short food chain facilitates direct links between producers and consumers, promoting local production and enabling viable businesses in the region while encouraging the growth of new productive ventures. Among the suppliers, there are numerous retailers operating in the third sector, providing employment opportunities to vulnerable groups, including people with disabilities and long-term unemployed individuals</p>	<p>La Porta del Parco is a community project with the aim of enhancing the value of an agricultural area and promoting sustainable practices involving citizens. It is the result of a collaboration between the Oikos and Alchimia social cooperatives, who acquired the land through a public tender.</p> <p>The project includes various components, such as a vineyard that has gradually transitioned to organic cultivation, managed by the Oikos cooperative and providing opportunities for vulnerable individuals to be involved. There are also social and collective vegetable gardens managed by families, a didactic orchard, and a bar/restaurant/pizzeria. Additionally, a children's play area adds to the project's inclusiveness and appeal.</p> <p>La Porta del Parco serves as a meeting place where numerous cultural events take place, and every Saturday, a farmers' market featuring small local producers is held, further strengthening the community's ties and supporting the local economy</p>
Impact		<b>Social,</b>	
		<p>Social impact includes promoting organic and social agriculture, as well as non-profit activities. The cooperative uses the mark-up applied to products to cover expenses without generating profit, emphasizing their commitment to community welfare and sustainability.</p> <p>Environmental impact includes a variety of activities, such as selling bulk products and reusing packaging to minimize waste. The cooperative also utilizes energy from renewable sources and employs packaging (bags, tubs, etc.) with low environmental impact that are recyclable and compostable.</p> <p>Moreover, they serve lunches by weight to reduce food waste</p>	<p>Social impact includes (1) promoting a participatory urban regeneration project that engages local institutions and other stakeholders, fostering a sense of belonging to the territory and the community. Also the project (2) provides support by offering employment opportunities to vulnerable individuals, facilitating their reintegration into society through traineeships and regular contracts. Environmental impact includes (1) protection of the agricultural area, preserving its natural and ecological value, and (2) converting agricultural land into organic crops, thereby promoting sustainable agricultural practices that benefit the environment. Lastly, (3) supporting food supply chains, reducing the environmental footprint associated with food transportation and distribution</p>
Types of SFSC initiatives		Community supported agriculture, collective points of sale, consumer cooperatives	Community supported agriculture, collective points of sale, supermarkets provisioning
Proximity		<b>Geographical,</b>	
Logistics	Flow	Materials and information	Materials and information
	Place	Distribution	Production and distribution
	Role & Category	Customer, processors	Producers, processors, logistics organizers
	Integration	Vertical	Vertical

Source: own elaboration based on JustGreen project documents.

Fondazione Opera Bonomelli Onlus in Bergamo	I Raís
2013	2016
BiOrto	Community Cooperative
BiOrto offers employment opportunities for vulnerable groups in the farming sector. Moreover, BiOrto seeks to foster "social sustainability" by producing and distributing organic products, thereby strengthening connections between local stakeholders. These organic products are subsequently made available at local farmers' markets, solidarity purchase groups (Gruppi di Acquisto Solidale – G.A.S.), and through direct sales at the vegetable garden or the shop in Bergamo	I Raís Community Cooperative was established by the group of young people with the goal of revitalizing and fostering development in a challenging mountainous region. Their primary objectives are to provide additional services to residents, making their stay in the mountains more convenient, and to attract non-residents to appreciate the territory by visiting it, thereby creating a tourist economy beneficial to the entire community. These objectives are achieved through the production of goods and services that stably affect fundamental aspects of the quality of social and economic life. Apart from providing services to residents and promoting sustainable tourism, I Raís runs 'Trattoria Alpina' with traditional dishes and local products and produces cheese 'Ol Minadur'. This flagship product produced by 5 local farms since 2016 is aged for three months in restored local mines. Constant temperature and humidity give it a special intense and nuanced taste

**Environmental**

Social impact includes (1) promoting a sense of belonging to a territory and a community, (2) providing support by offering employment opportunities to the most vulnerable individuals to reintegrate them into society, and (3) valuing local organic and social farming practices. Environmental impact includes (1) reducing the ecological footprint associated with food consumption, particularly in terms of transportation and distribution. It also involves (2) promoting local and organic products and (3) supporting short food supply chains	Social impact includes (1) promoting a sense of belonging, making people feel connected to their village and community, (2) creating job opportunities, which provides individuals and families with reasons to stay in the area, fostering sustainable livelihood. Additionally, social impact includes (3) offering support and assistance to the elderly, ensuring their well-being and inclusion in the community. Lastly, it entails (4) enhancing local organic and social farming practices, contributing to the economic and environmental sustainability of the region. Environmental impact includes (1) reducing the ecological footprint associated with food consumption, particularly in terms of transportation and distribution. It also involves (2) promoting local and organic products and (3) supporting short food supply chains
Direct selling, community supported agriculture, collective points of sale, supermarkets provisioning	Direct selling, community supported agriculture, collective points of sale, supermarkets provisioning

**Social**

Materials and information Production and distribution Producers, processors, logistics organizers Vertical	Materials and information Production and distribution Producers, customers, processors, logistics organizers Vertical and horizontal
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**Table 2**  
**Description of coordinator**

Organisation	Commune di Mozzo
Year	2019
Practice	Circular agriculture
Short description	<p>Rural areas, particularly peri-urban regions, serve not only an agricultural function with traditional crops but also offer essential services for daily life, health and quality of life. The practices undertaken by Commune di Mozzo align with the recent provisions of the Common Agricultural Policy, focusing on the following objectives: enhancing biodiversity, promoting responsible land use, and supporting rural areas in producing services of collective interest. These efforts contribute to the overall well-being and sustainability of the community and its surroundings. Commune di Mozzo is implementing a comprehensive approach through various actions:</p> <ol style="list-style-type: none"> <li>1) Creating networks among local stakeholders, including farms, consortia, landowners, municipalities, and parks.</li> <li>2) Facilitating agreements between farms, municipalities, and landowners to promote the implementation of circular rurality projects.</li> <li>3) Active involvement in the Biodistrict (Solidarity Social Economy District of Bergamo) and participation in the Food Policy Table.</li> <li>4) Organizing cultural events centered around the theme of circular rurality.</li> <li>5) Revitalizing abandoned agricultural areas.</li> <li>6) Undertaking territorial marketing initiatives, including the establishment of a territorial valorization trademark.</li> <li>7) Conducting training courses for agricultural enterprises, enhancing their capabilities and knowledge.</li> </ol> <p>Through these integrated efforts, CDM is working towards fostering sustainable rural development, preserving natural resources, and supporting local communities and agricultural enterprises</p>
Impact	<p>The social impact involves (1) the regeneration of the territory by fostering networks among all actors and stakeholders in the social economy, as well as (2) enhancing the natural, social, and cultural heritage of the area, promoting a sense of community and preserving valuable aspects of the local identity.</p> <p>The environmental impact is closely linked to the neo-rural approach, as it emphasizes the importance of respecting biodiversity and implementing sustainable agricultural practices. Additionally, efforts are directed towards enhancing the value of local crops, contributing to the preservation of the natural environment and promoting eco-friendly agricultural methods</p>

Source: own elaboration.

**Figure 2**  
**Dominant types of initiatives**

collective community      points supported      of sale  
consumer cooperatives      direct selling      supermarkets      provisioning  
agriculture

Source: own elaboration using TagCrowd.

creating new economic opportunities and fostering local development. These strategies leverage the role of social economy organizations in promoting sustainable and local development through their involvement in the agrifood sector, thereby contributing to the dignity of labour for farmers and advancing local sustainability. Furthermore, they place value on the products and knowledge derived from biodiversity.

Short food chains are experiencing widespread development, growing in popularity, and showcasing distinct characteristics. Being an alternative type of supply chain, they have the potential to make a substantial contribution to the advancement of sustainable agriculture (Galli & Brunori, 2013), urban farming (Chiffolleau et al., 2016), small-scale farmers (Benedek et al., 2018), family farming (Aguiar et al., 2018) and territorial

development in general (Mundler & Laughrea, 2016). The development of new supply chain relationships is a key mode of rural development through which this can be achieved. However it is also one that suggests a heterogeneous and diverse set of rural development outcomes rather than a clearly generalizable model of convergent spatial development (Marsden et al., 2000). In terms of development, the short chains are inclined to be a stimulus to the local economies, and increase the autonomy of the producers. In this context, the unique features such as locality, transparency, and quality aptly describe the products of short food chains, fostering a reconnection with the consumers who become more conscious of the product's origin. This reconnection is facilitated through the proximity observed in marketing through short circuits, such as fairs, direct sales, and other venues that allow consumers to understand where the products come from. Other characteristics of short chains encompass proximity and connection, which embody a concept of "retro-innovation" (Aguiar et al., 2018). This involves conveying certain aspects of the production practices to retailers and consumers in a critical manner, establishing a strong connection with the traditions specific to the food or the context of its production. This becomes a unique selling point for the product, particularly given the current circumstances experienced by the agriculture sector. Research on SFSC is mainly geographically focused, hence future directions would be worth expanding to include regions with different contexts: institutional, economic, cultural, technological and social. It would also be

worthwhile to link the mentioned contexts to inter-organizational proximity of supply chains (Klimas & Twaróg, 2015) by operationalizing them. Another promising research avenue could involve a closer examination of the role of the social economy organizations within short food supply chains as a means to enhance sustainability, create new economic opportunities, and foster local development. Moreover, there is also a need for further investigation into the role of digital technologies in SFSCs.

The main limitations of the presented study stem from the adopted methodology, which focuses on analysing existing practices and literature rather than conducting primary data collection. While this approach offers valuable insights, it may lack the contextual understanding that could be achieved through in-depth interviews or surveys. Additionally, the data collection process primarily focused on internal stakeholders, and the study would have undoubtedly benefited from incorporating interviews with external stakeholders, such as municipality officials, the local community, or other recipients of the initiatives under investigation. Consequently, the authors approach the interpretation of the obtained results and their applicability with caution. Furthermore, the authors acknowledge that the paper does not fully exhaust the research problem but rather makes a valuable contribution to future research. Nevertheless, the study's findings offer valuable insights for business practices and can be effectively utilised by local municipalities, logistics managers/coordinators.

## Notes/Przypisy

<sup>1</sup> The normalization of data indicates that the values vary from 0 to 100, where 100 represents high interest, while 0 indicates either a lack of interest or insufficient data. GT provides data from various geographical locations, and allows users to set custom time ranges (from 2004) and selecting the appropriate category.

<sup>2</sup> The project involved four municipalities, namely the Municipality of Vila Nova de Famalicão from Portugal, Comune di Mozzo from Italy, Gmina Świętochłowice from Poland, Budapest-Terézváros from Hungary and one European network – European Network of Social Integration Enterprises (ENSIE).

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