

SHORT SUPPLY CHAINS - A NEW PARADIGM OF AGRICULTURAL MARKETING

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Abstract

Short supply chains are a new approach to agricultural marketing, responding to the challenges posed by globalization and the complexity of traditional supply chains, and changing the way agrarian producers market their products and interact with consumers. This article explores the impact of short supply chains on agricultural marketing, and the results of the study show that these short supply chains bring numerous benefits. These include increased transparency, reduced costs, and strengthened relationships between producers and consumers. The study highlights that, through short chains, the efficiency of the marketing process is improved, and the actors involved benefit from better collaboration and mutual trust. The research presents a case study to highlight the trends and potential of this model in agricultural marketing. The findings highlight the need for a wider integration of short supply chains in agrarian marketing strategies, but also for improving the sustainability and resilience of farming systems.

Key words: short supply chain, agricultural marketing, sustainability, local agriculture

INTRODUCTION

Modern agriculture has faced significant challenges due to globalization and the expansion of supply chains. This led to an increase in the distance between producers and consumers, to a decrease in transparency, as well as to difficulties in maintaining the quality of agricultural products [12].

In this context, short supply chains have emerged as an alternative solution, capable of renewing the relationship between farmer and consumer by reducing the number of intermediaries. These short chains allow a more direct link between producers and consumers, thus contributing to improving transparency and increasing trust between them. Thus, the distribution process becomes simpler and more efficient, resulting in significant benefits for both farmers and consumers. [16].

Short supply chains are defined as distribution systems that involve a small number of intermediaries from the producer to the final consumer, or even direct sales from the producer to the consumer. These short chains effectively eliminate intermediate steps, thus

facilitating a faster and more transparent connection between the two main actors. In this way, producers have more control over the prices and quality of products, and consumers benefit from fresher and more affordable products [5], [4]. These may include local markets, cooperatives, direct sales at the farm, own stores or dedicated online platforms.

In this article, through the objectives of the research carried out, we set out to investigate: how short supply chains contribute to the paradigm shift in the field of agricultural marketing, how these short supply chains can be integrated into agricultural marketing strategies to ensure the sustainability of smallholder farmers and medium, but also what are the advantages and challenges of implementing short supply chains?

MATERIALS AND METHODS

To attain the objectives of this research, a qualitative methodology was used based on a series of studies from the specialized literature in the field of sustainable agriculture and agricultural marketing. Also, to better

understand the applicability and benefits of this model in the Romanian context, we considered a successful example of a short supply chain from Cluj county, Romania.

RESULTS AND DISCUSSIONS

In recent years, global agriculture has undergone significant transformations, being influenced by trends such as increasing demand for local and sustainable products, as well as concerns about environmental impact and food security [1], [2], [17]. Short supply chains offer an alternative solution to traditional long chains by reducing the number of intermediaries and promoting direct relationships between farmers and consumers [6], [20].

In the European Union, short supply chains are promoted through policies and support programs that aim both to support small farmers and to increase access to fresh and quality products for consumers [7], [13], [19]. In Romania, this model is becoming more and more important, considering the potential of local agriculture and the increased interest of consumers in local and traditional products [11], [15].

Short supply chains offer a unique opportunity to meet the demands of modern consumers who are increasingly concerned about the provenance of food and the ecological impact of the products they purchase [18]. In addition, they allow manufacturers to better control prices and build direct relationships with customers, which can lead to increased loyalty and better adaptation to market demands.

The National Rural Development Program 2014-2020 pays special attention to supporting short-chain projects. Support is envisaged to facilitate cooperation between actors involved in rural development, to help them overcome and address specific socio-economic problems related to business development and provision of services in rural areas [8].

In the 2014-2020 programming period, Sub-measure 16.4 supported horizontal and vertical cooperation between supply chain actors, for the establishment and development

of short supply chains and local markets, as well as for the implementation of related promotion activities in a local context. This measure aimed to strengthen collaboration between producers, processors and distributors, thus facilitating the creation of efficient structures to support the local economy and improve consumers' access to quality local products [10]. Promoting cooperation between local actors was the main objective of the measure, aiming at the marketing of agri-food products through short supply chains. The development of short supply chains in Romania can have significant potential for the development of rural communities. In the case of peasant households and small farms, the development of these short chains can represent an important factor of coagulation and stimulation of cooperation between producers, thus creating new development opportunities. By facilitating a more accessible and sustainable local market, these chains can contribute to improving economic and social conditions in rural areas, while encouraging innovation and adaptability in the agricultural sector.

An example of collaboration between farmers to capitalize on the products obtained through a short supply chain is the "Lunca Someșului Mic" Cooperative from Cluj County [9], [14]. In 2013, the "Lunca Someșului Mic" Cooperative was founded by a group of small farmers from the Lunca Someșului Mic Vegetable Basin, who joined forces to reduce production costs and create a short supply chain for agri-food products local. In the beginning, the cooperative cultivated vegetables on an area of 30 ha and had a limited range of products (cabbage, celery, cauliflower), but over time, as the client portfolio developed, the cultivated area also increased, reaching over 100 ha, cultivated in the field and protected areas. Also, in addition to the established products of the members of the cooperative: cabbage, cauliflower, celery, eggplant, lettuce, and potatoes, after 2019 when the recognition of a "Group of producers" was obtained, new products were introduced into the portfolio: tomatoes,

peppers (5 types of varieties), cucumbers, pumpkins, black radishes, beetroot.

In an increasingly competitive fruit and vegetable market, the competitive advantages of the "Lunca Someșului Mic" Cooperative were, on the one hand, that the products sold are fresh and can be used even on the day of harvest, and on the other hand, the diversity of products in the portfolio, which reaches 20-25 types of vegetables sold. These characteristics allowed the cooperative to differentiate itself on the market, offering consumers high-quality products, available quickly and in a varied range, which gives them a considerable advantage over the competition. In this way, "Lunca Someșului Mic" manages to meet market demands in an efficient and adaptable way.

Also, after 2019, the cooperative, through the development plan, proposed to attract European funds through submeasure 9.1 intended for groups of producers and to create their own storage space and offer them the possibility of development on the processing side. Also, three members of the cooperative accessed European funding for submeasure 6.1. intended for young farmers, through which they made purchases of machinery and investments in protected areas.

For the future, the cooperative's plans are directed towards the expansion of crops in protected areas, collaborations with new farmers and the production of some types of vegetables in an ecological system.

The present case study shows that capitalization through a short chain using a supermarkets as intermediary to offer consumers fresh vegetables and fruit has enabled smallholder farmers of the cooperative to access local markets and increase incomes and profit.

This cooperative achieves the minimum purchase limit imposed by the large supermarkets in Romania, so it practices the sale of fresh vegetables and fruits to consumers through the supermarket, which is a short supply chain that ensures the sale of large quantities on the basis of a contract and implicitly obtaining quick and sufficient income to increase net profit. So, the

marketing activity has a high economic efficiency (Table 1).

Table 1. Impact of production and marketing activity on turnover, net profit and share of net profit in turnover, "Cooperativa agricola Lunca Somesului Mic", 2013-2023

	Turnover (Thousand RON)	Net profit (Thousand RON)	Share of Net profit in Turnover (%)
2023	2,845.5	17.8	0.62
2022	2,708.2	108.0	3.98
2021	3,894.4	163.3	4.19
2020	2,686.5	78.4	2.91
2019	2,612.0	28.3	1.08
2018	1,547.4	1.9	0.12
2017	1,181.6	7.5	0.63
2016	1,042.7	0.6	0.05
2015	591.9	0.3	0.05
2014	557.8	1.3	0.23
2013	209.3	-75.4	-36.02

Source: Own calculations based on the data from Lista firme, 2024, Cooperativa agricola Lunca Somesului Mic,

<https://www.listafirme.ro/cooperativa-agricola-lunca-somesului-mic-31289775/>

Accessed on November 30, 2024.[21].

The data from Table 1 show that turnover increased in the analyzed period from 209.3 Thousand RON in 2013 to 2,845.5 Thousand RON in 2023, being 13.59 times higher. In 2021, the peak of turnover accounted for 3,894.4 Thousand RON.

Net profit also registered an upward trend from -74.4 Thousand RON (loss) to 17.8 Thousand RON in 2023.

The highest net profit was 163.3 Thousand RON and its share in turnover was 4.18%, the highest level in the analyzed interval.

This good financial situation could not have been achieved if the producers from the cooperative had tried to sell their products by themselves.

Through the support of European funds and local cooperation initiatives, farmers have managed to overcome some obstacles and create sustainable opportunities for the development of rural communities.

Short supply chains - a new perspective in agricultural marketing

Short supply chains are fundamentally changing agricultural marketing, transforming it into a model based on direct relationships,

sustainability and the valorization of the local. These changes contribute to a more resilient, fair and transparent agricultural economy, allowing farmers to become not only producers but active marketers who promote their products directly to the community.

At the same time, consumers are attracted by access to authentic, traceable and local products. These characteristics contribute to the creation of a new paradigm in agricultural marketing and provide confidence to consumers, who want to know exactly where the products they purchase come from and support local economies. Thus, agricultural marketing is transforming, emphasizing transparency and promoting the values of authenticity and sustainability, aspects that are increasingly appreciated in a society increasingly aware of the impact of its choices on the environment and community (Fig. 1).



Fig. 1. Model of a short supply chain

Source: own processing.

Short supply chains are contributing to a paradigm shift in agricultural marketing through some critical transformations that influence the way agricultural products are produced, distributed and consumed:

- Focusing on the direct relationship between producer and consumer: one of the fundamental aspects of short supply chains is the elimination of intermediaries or the drastic reduction of their number. This means that farmers sell their products directly to consumers, which changes the traditional

agricultural distribution structure. Thus, farmers are no longer just suppliers of raw materials but also become marketing actors, having direct contact with consumers and better understanding their requirements. This direct relationship fosters trust and loyalty to products and farmers.

- Focus on local products and sustainability: Short supply chains promote local products, which shifts the focus of agricultural marketing from quantity to quality and origin. Consumers are increasingly interested in local products and their impact on the environment, which brings concepts such as organic or traditional products to the fore. Small and medium-sized farmers are thus encouraged to produce sustainably and capitalize on the unique elements of their region, which increases the added value of the products.

- Marketing based on authenticity and traceability: Short supply chains are changing the paradigm with marketing focused on authenticity, transparency and traceability. Modern consumers increasingly demand to know where their products come from, how they are grown and who produces them. Through short supply chains, farmers can communicate this information directly to consumers, giving them a more personalized and authentic experience. This aspect increases the confidence of consumers and makes them loyal.

- Reduction of distances and efficiency of distribution chains: Short supply chains encourage proximity between the place of production and the place of consumption, which reduces logistics costs, carbon footprint and food waste. This aspect also allows farmers to react more quickly to market demands and deliver fresh produce. This change from the traditional model, where products are transported over long distances, brings a competitive advantage to local farmers and strengthens the connection between consumer and producer.

- Marketing based on community values and social sustainability: short supply chains are based on supporting local communities and developing a circular economy. By promoting local producers, consumers contribute to the maintenance and development of small farms

and rural economies. In traditional marketing, the focus is on maximizing profits and the efficiency of global supply chains, while short supply chains shift the focus to social sustainability, maintaining jobs and promoting a healthy and fair lifestyle.

- Flexibility and adaptability: Short supply chains allow greater flexibility for farmers in how they plan their production and capitalize on their produce. Instead of being pressured by large distribution chains, farmers can adapt their supply to local demand and promote seasonal produce. This capability is a significant asset, allowing farmers to create personalized offers and respond more quickly to changes in consumer preferences.

Integrating short supply chains into agricultural marketing strategies can play an important role in ensuring the sustainability and resilience of small and medium farmers (Fig. 2).



Fig. 2. Integrating short supply chains into agricultural marketing strategies

Source: own processing.

To achieve this, farmers need to adopt new and innovative approaches to marketing, work more closely with consumers and focus on building strong and sustainable relationships [3]:

- Short supply chains can capitalize on local identity and agricultural traditions specific to a region. By integrating the concepts of origin and authenticity, small and medium-sized farmers can create a brand based on the quality and uniqueness of their products,

through different agricultural marketing strategies: clearly labeling local products and emphasizing the health benefits and low environmental impact of the products; using quality certifications, such as Protected Geographical Indications (PGI) or Protected Designations of Origin (PDO), to differentiate products and attract consumers concerned about the provenance of products; promoting farmers' personal stories that give consumers an emotional connection to the products and the community they come from.

- Direct relationships with consumers: One of the biggest advantages of short supply chains is that producers and consumers can interact directly, eliminating middlemen. This can be turned into an effective marketing strategy through: community events local fairs, and flea markets. Instead of competing with supermarket chains on price, farmers can build a sustainable relationship based on transparency, traceability and product quality. Consumers appreciate the opportunity to interact directly with those who produce the food and are more willing to support such initiatives.

- Small and medium-sized farmers can become more resilient if they adopt cooperative or partnership models. This allows them to share costs and risks, access larger markets and increase their bargaining power. In this sense, agricultural marketing can be improved by: Agricultural cooperatives, groups of farmers who collaborate to sell products have the advantage of reducing distribution costs and creating a common brand image. Co-ops are more attractive to large urban markets and restaurants looking for consistent quality products. Creating direct partnerships with restaurants, schools or grocery stores that prefer local products can be an effective marketing strategy to increase sales. Farmers can become regular suppliers to these businesses, securing stable contracts and regular income.

- A modern integration of short supply chains in agricultural marketing involves the adoption of digital technologies and online platforms to attract new consumers and increase product visibility. This may include

online stores dedicated to local products to sell directly to consumers; social media are powerful tools for promoting local agricultural products and allow farmers to present their story and build a loyal audience through constant updates and direct consumer engagement; home delivery and subscription services, where consumers subscribe to receive regular baskets of fresh produce from local farmers. They allow farmers to have steady income streams and cultivate a loyal customer base.

Integrating short supply chains into a well-thought-out agricultural marketing strategy based on authenticity, localism, cooperation and the use of digital technologies can ensure the sustainability and resilience of farmers.

By connecting directly with consumers, short supply chains offer a sustainable and stable development path for Romanian farmers. These chains allow farmers to more efficiently value their products, reducing dependence on intermediaries and obtaining fairer prices. At the same time, they contribute to the development of local economies, encouraging responsible consumption and supporting organic and traditional agriculture. Thus, short supply chains represent an opportunity for sustainable economic growth for farmers and rural communities in Romania.

Advantages and challenges of implementing short supply chains

On the one hand, the advantages include better transparency in the marketing process, reduced costs and closer proximity between producers and consumers, which contributes to the development of local economies. On the other hand, there are challenges related to insufficient infrastructure, the lack of clear support policies and the limited capacity of farmers to adopt new technologies or marketing practices. These factors can affect the efficiency of short chains, but with well-thought-out strategies, they can become a powerful tool for revitalizing local agriculture. Advantages of implementing short supply chains (Fig. 3):

- it cuts out middlemen, which allows farmers to get better prices for their produce. In a traditional chain, a large part of the profit goes to the middlemen, while in the short chain, the

producers keep a significantly higher percentage of the selling price. Farmers can thus obtain a higher profit from direct sales, without being subject to the pressure of low prices imposed by supermarket chains.

- facilitate farmers' access to local and regional markets. These markets allow the direct sale of fresh, seasonal produce without the need for large production volumes. Local fairs and markets, and flea markets offer farmers the opportunity to market their produce directly to consumers.

- supports agri-food diversity and gastronomic heritage. Short chains support local agriculture and traditional products, giving farmers the chance to promote varieties and cultivation methods specific to different regions in Romania.

- short chains help to reduce the carbon footprint by shortening the transport distances between the place of production and the place of consumption. This means less carbon dioxide emissions and a reduction in negative environmental impact.

- through direct sales, farmers can establish a closer relationship with consumers, which increases trust and loyalty to local products.



Fig. 3. Advantages of implementing short supply chains

Source: own processing.

Consumers have access to information about how food was grown or produced, a highly valued aspect in the current context of increasing demand for transparent and sustainable products.

The challenges of implementing short supply chains are shown in Fig. 4.

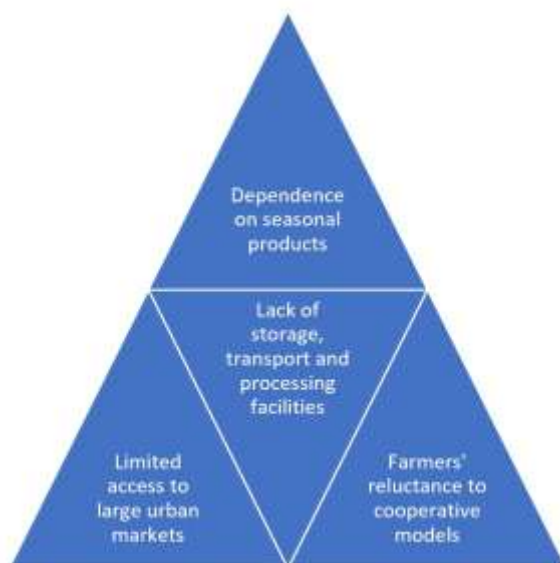


Fig. 4. The challenges of implementing short supply chains

Source: own processing.

They are the following ones:

- one of the main challenges for farmers is the lack of infrastructure to store, transport or process agricultural products. Many small farms do not have facilities for storing products in optimal conditions or for transporting them to local or regional markets. Without adequate logistics infrastructure, farmers face difficulties in maintaining product quality.

- short chains often depend on seasonal products, leading to fluctuations in supply and difficulty in maintaining a consistent market presence throughout the year. Farmers who produce fruits and vegetables have limited sales periods depending on the harvest season.

- farmers have difficulty accessing large urban markets where demand for fresh produce is high. Supermarkets dominate large urban markets and small producers face challenges in finding a place in this competitive market.

- although there is European funding that supports the formation of cooperatives, farmers in Romania are still reluctant towards this organizational model. These structures would facilitate access to larger markets, reduce production costs and increase farmers' competitiveness.

To overcome these challenges, better organization of farmers in cooperatives, investment in storage and transport

infrastructure, as well as support for agricultural education and the use of modern marketing technologies are needed. Solving these problems could transform short supply chains into a central element of agricultural marketing and the rural economy in Romania.

CONCLUSIONS

In Romania, short supply chains have started to gain ground in recent years, due to the increased demand for local and healthy products. Farmers benefit from more direct market access, cutting out middlemen and getting better prices for their produce.

Short supply chains are a viable alternative to traditional long supply chains, offering multiple advantages for farmers and consumers. In Romania, short supply chains have contributed to increasing farmers' incomes, improving relations with consumers and developing the local economy. However, there are major challenges such as lack of infrastructure and seasonality of production that need to be addressed to maximize the potential of this model.

The support of the European Union is essential for the development of short supply chains in Romania, both through access to funds and through the creation of a legislative framework that facilitates collaboration between farmers and urban markets. Going forward, the focus needs to be on investing in rural infrastructure and educating farmers to take full advantage of this supply model..

REFERENCES

- [1]Chiffolleau, Y., Dourian, T., 2020, Sustainable Food Supply Chains: Is Shortening the Answer? A Literature Review for a Research and Innovation Agenda. *Sustainability* 2020, 12(23), 9831, <https://doi.org/10.3390/su12239831>
- [2]Chiffolleau, Y., Millet-Amrani, S., Canard, A., 2016, From short food supply chains to sustainable agriculture in urban food systems: Food democracy as a vector of transition. *Agriculture*, 6(4), p.57. <https://www.mdpi.com/2077-0472/6/4/57>
- [3]European Commission, Innovative Short Food Supply Chain Management. <https://ec.europa.eu/eip/agriculture/en/content/innovative-short-food-supply-chain-management.html>, Accessed on September 4, 2024.

- [4]European Commission, Short Supply Chains in Agriculture, <https://ec.europa.eu/eip/agriculture/en/content/innovative-short-food-supply-chain-management.html>, Accessed on September 6, 2024
- [5]European Network for Rural Development (ENRD), Local Food and Short Supply Chains <https://enrd.ec.europa.eu>, Accessed on August 08, 2024.
- [6]Grando, S., Carey, J., Hegger, E., Jahrl, I., Ortolani, L., 2017, Short food supply chains in urban areas: Who takes the lead? Evidence from three cities across Europe. *Urban Agriculture Regional Food Systems* Vol. 2(1), 1–11.
- [7]Kneafsey, M., Venn, L., Schmutz, U., Balasz, B., Trenchard, L., Eyden-Wood, T., Bos, E., Sutton, G., Blackett, M., 2013, Short Food Supply Chains and Local Food Systems in the EU. A State of Play of their Socio-Economic Characteristics. Publications Office of the European Union.
- [8]Ministry of Agriculture and Rural Development, RNDR, 2015, Lanțul Scurt Alimentar, Thematic Publication No. 29. <https://madr.ro/docs/dezvoltare-rurala/rndr/buletine-tematice/PT29.pdf>, Accessed on 23.08.2024
- [9]Modernbuyer. Agricultural Cooperative Lunca Somesului Mic, an increase of sales by 73% in 2019, <https://modernbuyer.ro/cooperativa-agricola-lunca-somesului-mic-crestere-cu-73-a-cifrei-de-afaceri-in-2019>, Accessed on 01.09.2024.
- [10]Mundler, P., Laughrea, S., 2016, The contributions of short food supply chains to territorial development: A study of three Quebec territories. *Journal of Rural Studies*, Vol. 45, pp.218-229.
- [11]Puiu, F., Turek-Rahoveanu, A., 2024, Short food supply chains: key concepts, benefits, risks, European Union support, models from Romania, strategies of development. *Scientific Papers. Series "Management, Economic Engineering in Agriculture and Rural Development"*, Vol. 24(1), 819-828.
- [12]Rucabado-Palomar, T., Cuéllar-Padilla, M., 2020, Short food supply chains for local food: A difficult path. *Renewable Agriculture and Food Systems*, Vol. 35, 182–191.
- [13]Stanciu, M., Popescu, A., Rasvan, R.I., 2022, Short food supply chains and young people's attitude towards healthy eating. *Scientific Papers. Series "Management, Economic Engineering in Agriculture and Rural Development"*, Vol. 22(1), 625-636.
- [14]Știri de Cluj, Vegetables from the Cluj garden, this is the slogan of the agriculturists from the Cooperative Lunca Somesului Mic, <https://www.stiridecluj.ro/economic/legume-din-gradina-clujului-acesta-este-sloganul-agricultorilor-din-cooperativa-agricola-lunca-somesului-mic>, Accessed on Sept.2, 2024.
- [15]Tanasă, L., Brumă, I.S., Doboș, S., 2015, The role of short food supply chains in the development of small-scale local producers case study: Harghita County, In *Agrarian Economy and Rural Development - Realities and Perspectives for Romania*. 6th Edition of the International Symposium, November 2015, Bucharest, pp. 286-293.
- [16]Tanasă, L., Bruma, I.S., Ulman, S.R., Hoha, G.V., 2022, Theoretical approach with regard to the main benefits of short supply chains. focus on small producers and local communities. *Scientific Papers. Series "Management, Economic Engineering in Agriculture and Rural Development"*, Vol. 22(3), 743-752.
- [17]Todorova, S., 2020, Short food supply chains as drivers of sustainability in rural areas. *Scientific Papers. Series "Management, Economic Engineering in Agriculture and Rural Development"*, Vol. 20(2), 483-492
- [18]Tundys, B., Wiśniewski, T., 2020, Benefit optimization of short food supply chains for organic products: A simulation-based approach. *Applied Sciences*, 10(8), p.2783.
- [19]United Nations Industrial Development Organization – UNIDO, 2020. Short Food Supply Chains for Promoting Local Food on Local Markets; <https://tii.unido.org/news/strengthening-resilience-food-systems-role-short-food-supply-chains>, Accessed on August 30, 2024
- [20]Vittersø, G., Torjusen H., Laitala K., Tocco B., Biasini B., Csillag P., Duboys de Labarre M., Lecoœur J.L., Maj A., Majewski E., Malak-Rawlikowska, A., Menozzi, D., Török, A., Wavresky, P., 2019, Short Food Supply Chains and Their Contributions to Sustainability: Participants' Views and Perceptions from 12 European Cases, *Sustainability* 11(17), 4800. <https://doi.org/10.3390/su11174800>, Accessed on August 28, 2024.
- [21]***Lista firme, 2024, Cooperativa agricola Lunca Somesului Mic, <https://www.listafirme.ro/cooperativa-agricola-lunca-somesului-mic-31289775/> Accessed on November 30, 2024.