Co-creation of business and marketing models for SMEs in short food supply chains in Lithuania, Latvia and Poland

Adam Oleksiuk and Katarzyna Rull Quesada
Department of International Marketing, SGH Warsaw School of Economics, Warsaw, Poland

Abstract

Purpose – The aim of this article is to identify the issues of short food supply chains (SFSCs) in three countries of Central and Eastern Europe, i.e. Lithuania, Latvia and Poland, to compare the barriers to shortening food supply chains and to indicate business models for short supply chains.

Design/methodology/approach – Within the AgroBRIDGES project, the authors organized local co-creation workshops from August to September 2021 in 12 European regions and countries, engaging 150+ agrifood stakeholders of the project’s local communities.

Findings – The development potential of SFSCs in Lithuania, Latvia and Poland is high and seems to be growing every year. Currently, the development potential of SFSCs in Lithuania, Latvia and Poland is stimulated more by social trends than by public support. Traditional business models based on the distribution of food products through local and regional markets have a definitely diminishing potential.

Research limitations/implications – Although this article covers an existing gap in the literature, it also has several limitations that may serve as an inspiration for future research. First, the results draw on a sample of agrifood value chain stakeholders in Lithuania, Latvia and Poland; hence, the findings might be industry specific. Therefore, future studies should explore this topic on wider target groups or different industries. Moreover, the method is qualitative and could be supplemented with additional quantitative analysis of similar tools or the experience of other agrifood companies from European countries.

Practical implications – The article seeks to build bridges between consumers and producers by supporting SFSCs through a systemic, holistic and multi-actor approach.

Originality/value – The study elaborates on the under-researched topic of SFSCs in the context of barriers to shortening food supply chains and business models for short supply chains in Lithuania, Latvia and Poland.

Keywords Small and medium-sized enterprises (SMEs), SFCS’s business models, SFCS’s barriers, Short food supply chains (SFSCs)

Paper type Research paper

1. Introduction

It is well known that small- and medium-sized enterprises (SMEs) contribute to the country’s economic growth and employment. With dynamic changes in the national environment, SMEs are forced to seek opportunities through cooperation and networking, which implies new challenges and opportunities for such entities. Both purely market issues and those related to the support of governments/municipalities are important here, which generates a new perspective for SMEs. The last few decades have seen a growing interest in the study of
SME activities geared toward cooperation and, thus, the co-creation of added value (McDougall & Oviatt, 2000; Knight & Cavusgil, 2004; Arranz & De Arroyabe, 2009; Lián, Paul, & Fayolle, 2019; Paul, 2020; Gherghina, Mihai, Hosszu, & Simionescu, 2020). SMEs are becoming increasingly important actors in the exchange of experience through cooperation both in the domestic and, increasingly, international markets (Freeman & Reid, 2006; Francioni, Pagano, & Castellani, 2016). The systematically accelerating globalization processes – including advances in the development of technology, communications and transportation – have reduced barriers to mutual cooperation and are generating changes in national and global value chains, including the shortening of supply chains. Firms interested in implementing agile production should focus on the agility management of supply chains, the skills and knowledge development of human resources and the implementation of agile manufacturing technologies (Sánchez, Pérez, & Vicente, 2019).

Agrifood companies operate in highly dynamic and fast-moving sectors, which rely on the rapid incorporation of innovative ideas into new products and services that can be provided to consumers in an efficient and agile way.

Moreover, consumer expectations in the context of food products are changing quickly, which is especially visible in younger generations such as Generation Z (born between 1995 and 2010) and Alpha (born between 2011 and 2025), which boast the highest technology literacy (Tafonao, Saputra, & Suryaningwidi, 2020) and the greatest engagement in technology. Thus, companies must answer these two generations’ constantly changing requirements with speed, dynamism and accuracy.

Recent global events have drastically impacted local and global trade, disrupting supply chains and affecting companies around the world. This impact was especially visible among the SMEs from the agrifood sector.

The coronavirus disease 2019 (Covid-19) pandemic has drastically impacted the essential flow of food from farms and producers to consumers. So, companies were forced to use the outbreak as a time to re-design their supply chains, including the reinforcement of local economies, which experienced less impact from international restrictions, are closer to consumers and are rooted in the territory (Cappelli & Cini, 2020).

Furthermore, the war in Ukraine, high inflation, increasing unemployment rates and global migrations necessitate the development of new value chain interlinkages, a rethink of current business and marketing models, and the creation of new, more sustainable ones. The turbulent changes forced a rapid transformation of many businesses, which had to improve their ability to cope with challenges, build resilience and undergo transitions in a sustainable manner.

This is why agrifood companies constantly seek new businesses, collaborations and supply models. In this context, this article discusses a study that results from an international project conducted by agroBRIDGES, born from the need to stimulate the adoption of short food supply chains (SFSCs) in the European Union. The main objectives of the project were to empower farmers with practical knowledge and support in the creation of SFSCs to better connect producers with consumers and buyers, to provide decision support tools to facilitate the selection of the most sustainable business model to animate SFSCs, as well as to prepare the communication materials, training programs, event guides and digital tools that were to be made available through the agroBRIDGES Toolbox; finally, to establish regional and international stakeholders for the development, testing, validation and introduction of SFSC. This article identifies the issues of SFSC in three countries of Central and Eastern Europe – Lithuania, Latvia and Poland – to compare the barriers to shortening food supply chains and to indicate business models for short supply chains. Notably, the process of shortening the supply chains of SMEs is poorly elaborated in the literature; it is also difficult to explain this phenomenon properly from only one theoretical perspective. Thus, we believe that there is a strong need for research on the barriers to shortening supply chains through cooperation and
networking among SMEs. This article aims to fill this gap in the literature. We believe that it is particularly important for companies to have the right partners in collaborations, especially when companies seek to shorten supply chains in food markets.

Recognizing this gap, the article formulates three research questions (RQs) that can be summarized as follows:

**RQ1.** What barriers are blocking the shortening of food product supply chains in Lithuania, Latvia and Poland?

**RQ2.** What solutions can be implemented to minimize barriers to food product supply chains in Lithuania, Latvia and Poland?

**RQ3.** What business models are most expected in Lithuania, Latvia and Poland?

The article was based on materials including summary reports within the agroBRIDGES project and information available on the project website.

The article consists of two sections. The first section will present a critical literature review, while the second section—empirical research. The literature review will present the importance of SMEs in modern economies, the theoretical framework of SFSCs, the co-creation business model and the network perspective. The empirical section will consider food short supply chains barriers and success factors for SFSC business models. Discussion and conclusions will present the study findings.

### 2. Literature review

#### 2.1 Importance of SMEs in modern economies

SMEs are considered an important asset for almost all countries—both developed and developing countries—as they contribute to economic growth and employment (Penrose, 1959; Prahalad & Hamel, 1990; Andersen, 2011; Beck, 2005; Liñán et al., 2019; Paul, 2020; Gherghina et al., 2020). Globalization has made it even more difficult for SMEs to function and survive in a turbulent international environment while huge competition motivates companies to constantly cooperate (McDougall & Oviatt, 2000; Knight & Cavusgil, 2004; Freeman & Reid, 2006; Francioni et al., 2016; Oleksiuk, Pleśniak, & Kowalik, 2020). The SMEs that have a competitive advantage can cooperate with local competitors and other stakeholders despite the turbulent international environment (McDougall & Oviatt, 2000; Knight & Cavusgil, 2004; Arranz & De Arroyabe, 2009).

To stay competitive, SMEs tend to collaborate with academic, private, public and non-governmental organizations with the goal to increase innovation in manufacturing processes and the absorption of high-quality know-how, as well as gaining access to external resources, facilities, infrastructures and services (Kowalska & Kowalik, 2020). To name but one competitive advantage that every such organization should follow: it is competence in cooperation. Companies with strong international business competencies in networking can have positive results despite unfavorable circumstances in the domestic and international environment. In this context, we should consider the studies on networking competencies (Coviello & Munro, 1995; Fuller-Love & Thomas, 2004; Ritter and Gemunden, 2004; Knight & Kim, 2009). Innovation manifested in the shortening of supply chains, positively impacting SMEs’ performance, among other things (Knight & Cavusgil, 2004).

#### 2.2 Short food supply chains: definitions

SFSCs are gaining popularity throughout Europe (Augère-Granier, 2016), encompassing different typologies and operating models.
SFSCs serve as a suitable alternative to conventional food supplies, offering the possibility to sell produce to consumers in many ways, including off-farm, farmers’ market, food festivals, via public procurement to public institutions, to restaurants, hotels and private catering companies (HoReCa) or by using online marketplaces, own e-shops or social media (Belletti & Marescotti, 2020).

Considering those diverse possibilities, the definition of SFSC remains unclear among academics and policymakers (Kawecka & Gebarowski, 2015), but they widely agree that this kind of supply chains should have the following characteristics: a limited number of economic actors, committed to cooperation, local economic development, along with close geographical and social relations between producers, processors and consumers (EU, 2013). Moreover, SFSCs promote the localization of food in an effort to preserve traditional livelihoods, farmed landscapes and rural heritage (Goodman, Dupuis, & Goodman, 2012).

The agroBRIDGES Project and authors of this article understand that SFSCs have as few links as possible between the food producer and the consumer/citizen who eats the food.

2.3 The co-creation business model
A business model is a set of propositions, analyses and design decisions that embrace all aspects of how an offering will be taken to market. The business model comprises value creation, promotion, delivery and capture. Combining these four elements is central to the design of business and market success. The business model is perceived as a boundary-spanning concept that explains how the focal firm embeds in and transacts with its surrounding ecosystem (Zott & Amit, 2010), and it can be characterized as the translation of a company’s strategy into a blueprint of the company’s logic of earning money (Høgevold et al., 2014).

Co-creation can be defined as a method, process or service used by the public sector, society, business or education institutions, understood as a participatory multi-stakeholder innovation process (Eckhardt, Kaletka, Krüger, Maldonado-Mariscal, & Schulz, 2021). Co-creation has a participative, cross-sectoral character distinguished by value collaboration with different stakeholders and the engagement of stakeholders in different innovation processes (Leclercq, Hammadi, & Poncin, 2016; Hochgerner, 2018). By connecting various stakeholders with diverse knowledge and stakes from various contexts, the creation of a collaborative platform allows for joint innovation processes (Oleksiuk, 2020). Co-creation may be used by SMEs for designing a sustainable business model based on SFSCs (Høgevold et al., 2014). This could be done by applying the co-creation concept defined as an interactive, creative and social process between stakeholders, which is initiated by companies at different stages of the value creation process, considered as a form of collaborative innovation (Roser, DeFilippi, & Samson, 2013).

European Union has been promoting those collaborative approaches defining the multi-actor approach (MAA) as an interactive innovation model that employs practitioners, scientists, advisers, enterprises, NGOs and other actors to jointly tackle specific problems or opportunities on a local, regional or national scale, thus gathering partners from several different professional backgrounds. This approach allows companies to consider different dimensions, including technical, organizational and social aspects in order to boost interactive and demand-driven innovation.

2.4 Co-creation and the network perspective
Innovation in the case of short supply chains can be defined as the ability to develop and introduce new processes. On the other hand, skills in marketing also become important in order to be as close to consumers as possible. Thus, we may say innovation is a company’s ability to create value for its customers (Malhotra, 1993; Andersén, 2011). Without strong and
well-defined marketing skills, a company would be unable to function efficiently or reach buyers with its products, as many studies confirmed that marketing skills form the foundations of strong companies, allowing them to overcome any barriers that appear in the market (Knight, 2000, 2001; Leonidou, 2004; Andersén, 2011).

The current geopolitical situation makes us believe that shortening supply chains in the food market is the key network perspective in business activities, which necessitates the cooperation and exchange of experiences between SMEs (Johanson & Vahlne, 2011). In a word, the term “network” denotes dependencies and the business relationships that connect them (Fobrun, 1982; Ritter & Gemunden, 2004). A network is a peculiar way of organizing business activities through coordination, cooperation and collaboration between companies to exchange experiences, share information and exchange resources. Companies must rely on the capabilities of many individuals and organizations, so the ability to combine external capabilities with their own needs can allow them to achieve distinct advantages. These partners need not be formally linked by any governance structure and can include a variety of entities such as suppliers, distributors, competitors and governments. Because of the linkages, the activities performed by companies and the resources they use in the network are interdependent (Coviello & Munro, 1995; Gulati, Nohria, & Zaheer, 2000; Coviello, 2006). Engaging in network relationships between companies primarily stems from the motivation to increase revenues and bind competitors as allies (Meyer & Skak, 2002; Fuller-Love & Thomas, 2004). Moreover, companies can gain access to complementary resources and capabilities, or they can closely coordinate the use of their resources. Through business networks, companies can reduce costs, thanks to economies of scale and scope, which can be achieved through joint research, marketing and production (Meyer & Skak, 2002; Fuller-Love & Thomas, 2004). This imbues companies with greater resilience even when faced with an unfavorably changing environment. In sum, the competitive advantage of a company that operates in this way can be based on networks. Thus, the network perspective is considered very important for reaching consumers more effectively with their products, which is emphasized by many researchers in business (Coviello & Munro, 1995; Gulati et al., 2000; Coviello, 2006).

2.5 Advantages and benefits of short supply chains
Notably, the literature accentuates that short supply chains bring numerous economic, social and environmental benefits (Hong & Jeong, 2006; McKenzie & Merrilees, 2008; Bosona & Gebresenbet, 2011; Aubert & Enjalras, 2016; Battini, Calzavara, Persona, & Sgarbossa, 2016; De Bernardi & Tirabeni, 2018; Jarzabowski et al., 2018; Collison, Collison, Myroniuk, Boyko, & Pellegrini, 2019). Notably, this includes increases in, for example, farmers’ income and their better connection with consumers, not to mention the reduction of middlemen, adequate satisfaction of public demand for safe and high-quality local food, as well as the reduction of the negative impact of agriculture on the environment (De Bernardi & Tirabeni, 2018; Jarzabowski et al., 2018; Collison et al., 2019). Furthermore, many farmers and consumers are still far from realizing their potential in shortening supply chains. At the same time, the literature emphasizes that shortening supply chains for SMEs encourage the introduction of specific business models, which are assets that determine the capabilities of an enterprise, especially a small- or medium-sized one that meets the needs of consumers (Taylor, 2005; Palovita, 2010; Saetta, Caldarelli, & Tiacci, 2015; Jarzabowski et al., 2018; Schmitt, Dominique, & Six, 2018). Thus, SFSCs between local companies and consumers in the domestic market gain particular importance in the era of turmoil in international markets (Chenardides, Manfredo, & Richards, 2021; Hobbs, 2021). The lessons learned from comparable practices in international contexts between nations suggest that, in the future, the abilities and expertise of the local companies we discuss may serve as the driving force behind a unique method of delivering food products to domestic consumers.
The ever-changing business environment – resulting no longer simply from globalization and market liberalization but also from external factors such as the Covid-19 pandemic – is increasingly forcing SMEs to respond at the ever-increasing pace of changes and to adapt appropriate business models in order to shorten supply chains and circumvent the barriers to introducing shorter supply chains (Hobbs, 2021; Thilmany, Canales, Low Sara, & Boys, 2021).

3. Methodology

3.1 Methods and sample

The AgroBRIDGES project organized local co-creation workshops from August to September 2021 in 12 European regions and countries, engaging more than 150 agrifood stakeholders of the project’s local communities called agroBRIDGES Multi-Actor Platforms (MAPs). The workshops were organized by the project partners responsible for stakeholder engagement and research activities. To produce comparable and meaningful results, the workshops followed a common methodology provided in the format of guidelines to support the effective and efficient organization of the co-creation workshops, digital tools, facilitation roles, indicative baseline structures and reporting templates. After local co-creation workshops, an online pan-European workshop was organized to further discuss, compare and generate macro-trends from regional insights. The project thusly organized 12 co-creation workshops. The UNIMOS Foundation was responsible for conducting three workshops in Central and Eastern Europe for Polish, Lithuanian and Latvian MAP members. In total, 50 participants representing SMEs, research, consumers, clusters, policymakers, business support organizations and other agrifood actors participated in three co-creation workshops organized in virtual (Poland and Latvia) and hybrid formats (Lithuania). The Polish workshop gathered 29 participants, the Latvian one – 12 and the Lithuanian one – 17. Three core topics were discussed and related to the ranking and evaluation of good practices and success cases of SFSCs identified in each region, along with the identification of barriers impeding the development of regional SFSCs and proposing solutions for the development and improvement of sustainable business models for SFSCs.

3.2 Participant observation

The data collection method used in the methodology included participant observation by both authors. This approach sought to gain a close and intimate familiarity with the groups of stakeholders from three selected countries. Katarzyna Rull Quesada acted as a senior expert in the agroBRIDGES project, responsible for coordinating the cross-border network of MAPs in Poland, Latvia and Lithuania. Adam Oleksiuk is a formal member of the Polish MAP, representing the academic stakeholders and providing insights on the co-creation and validation of the toolbox to adjust them to the Polish needs.

4. Results

4.1 Food short supply chain barriers and solutions to mitigate them

4.1.1 Lithuania. As a result of co-creation activities with Lithuanian SMEs, farmers and other agrifood actors, the primary identified barrier was that of low awareness and knowledge levels about short supply chains. We found a need for a continuous information campaign about the benefits of SFSCs for the consumer, country and the environment, which could be done, for example, via training provided in kindergartens and schools about healthy eating and living (Besagirskas, Rull Quesada, & Zolnierski, 2021). Another significant barrier was the lack of cooperation between producers and consumers, which is connected to the lack of places where producers and consumers could meet, meaning we found a scarcity of networking events for local producers – potential providers to HoReCa sectors.
(hotels, restaurants, catering; Besagirskas et al., 2021). Another obstacle was linked to insufficient procurement resources to support SFSCs, as currently SFSCs are not included in public procurement, and there are no incentives to purchase local products from local producers and small farmers. The introduction of appropriate standards that would make it easier for municipalities and other public institutions to purchase local products for hospitals, the police, the military, schools and kindergartens was mentioned as one of the mitigation measures (Besagirskas et al., 2021). Moreover, we noted a low level of demand, as consumers preferred to choose cheaper low-quality products. Thus, we surmised it advisable to introduce an information campaign aimed at motivating consumers to read labels to learn about food product composition. Another identified challenge referred to transportation, as farmers reside in rural areas and consumers mostly in large towns. There is a need to increase consumer perception of the higher value of local farmers’ produce (Besagirskas et al., 2021), as the latter currently shows insufficient levels of awareness about the power of branding and digital marketing among farmers and SMEs. As accelerating digitalization makes it difficult for local producers to keep pace with the demands of the modern world, we should fortify farmers’ competencies in marketing and communication, including digital tools (Besagirskas et al., 2021).

4.1.2 Latvia. In Latvia, one of the most important barriers identified in co-creation activities was the high cost of logistics related to bringing manufactured products from the countryside to cities (Menjoks & Dolmate, 2021). Small farmers did not have competitive prices compared with those closer to larger towns, and the former are forced to bring their goods to regional centers on their own. Mitigation measures like car sharing for the collection of goods from different producers would allow sharing costs among all participants, making more profit, growing businesses and reducing CO₂ emissions from transportation. Another challenge identified in the Latvian workshop was the relatively small and poor market (Menjoks & Dolmate, 2021). Therefore, the difficulty is to introduce cost reductions by raising production volume. Many consumers were unaware of the possibility to buy straight from local farmers (Menjoks & Dolmate, 2021), so the authorities should strengthen farmers’ markets in the regions. This could be done by holding so-called farmers’ days in town centers and by educating with diverse media, especially educating students about healthy food and SFSC principles (Menjoks & Dolmate, 2021). In Latvia, another challenge resided in the delivery of fresh, organic produce through short point-of-sale delivery channels and the centralization of wholesale procedures for retail chains (Menjoks & Dolmate, 2021). A possible solution may be to place organic products for their customers in specialized areas designated for healthy and organic foods, but there are regulations issues that should first be solved (Menjoks & Dolmate, 2021).

Another barrier identified in Latvia was linked to digital literacy, as small farmers have low digital skills, thus further hindering the use of agile ordering, logistics and planning tools (Menjoks & Dolmate, 2021). So, support in e-commerce platforms and training would be needed to mitigate the situation. In terms of public procurement procedures, scholars identified inefficiency, proposing the development of a new type of standards for municipalities and other public institutions in order to facilitate buying from local producers. Finally, the last barrier identified was food safety regulations, as currently due to the requirements of the local communities, government, and self-government bodies, a relatively large amount of time is spent on identifying chemical and microbiological contaminants. The authorities should establish an expedited process for ensuring food safety (Menjoks & Dolmate, 2021).

4.1.3 Poland. In the case of Poland, the first barrier identified was transportation, whose cost was a significant challenge for the development of local SFSC-based businesses, along with packaging standardization (Bialik & Bober, 2021). Distance to markets with high demand potential was another obstacle to the delivery of fresh high-quality products through
short distribution channels to points-of-sale distant from production sites (Bialik & Bober, 2021). The mitigation measures could reside in the use of a business model based on selling products through specialized organic food stores. Another important challenge identified in Poland was the issue of packaging, especially in terms of shelf life and the ability to preserve the freshness of stored products. The cost of packaging accounted for a significant percentage of the product cost, which thus emerged as an important limiting factor of consumers’ ability to buy the produce (Bialik & Bober, 2021). As another challenge, the project identified biodegradability, which typically ensures food safety and quality, while successful SFSC strategies require the establishment of new common standards for packaging and packaging materials. Waste and its management are further challenges indicated in the co-creation workshop. In this context, the authorities should strive to shorten supply chains and create channels that use strategies to minimize waste. Payment bottlenecks are another important difficulty faced by small producers in Poland under SFSCs (Bialik & Bober, 2021). Partners’ liquidity and the reliable fulfillment of trade obligations by vendors shape producers’ ability to operate. A frequently used solution was the grouping of producers into larger cooperatives and producer organizations. The creation of such networks increases bargaining power in the distribution channel. Marketing and marketing communications were mentioned as further obstacles (Bialik & Bober, 2021). The use of social media seemed to be insufficient for the effective marketing communication of producers in SFSCs. In this context, we should consider the introduction of clear regional labeling and identification of packaging, indicating the place of origin and emphasizing the taste and freshness of products. During co-creation activities, cooperation with the research and development (R&D) environment, business organizations and public administration was indicated as further challenges (Bialik & Bober, 2021). We argue that their solution resides in the creation of stronger cooperative ties between producers and network organizations (associations and clusters). R&D expenditures emerged as equally important for Poland (Bialik & Bober, 2021). What could help collaborate with R&D centers both inside and outside the region are joint R&D projects focused on regional products and the creation of an offer with high-quality organic products. With this goal in mind, the authorities should improve communication between R&D units and producers, as one should always include the needs of local producers and the local market.

4.2 Success factors for SFSC business models

4.2.1 Lithuania. In the co-creation workshop, the first business model proposed for short supply chains in Lithuania was selling to the HoReCa sector, diversifying sales channels for producers (Besagirskas et al., 2021) and bringing them closer to consumers (tourists, visitors and food enthusiasts) with differentiating value, thanks to novel and niche nature of local food products. The model required good organization, coordination and facilitation activities among farmers and food producers due to demand from hotels (Besagirskas et al., 2021), as customers expected the products will meet requirements and will be served in an exquisite and sophisticated manner. As demand for regional organic and traditional food in hotels and restaurants is growing, entering into the HoReCa sector would allow producers to build their competitive advantage based on unique, local and niche flavors that are not readily available in the market. Moreover, consumers are interested in new, local, traditional and high-quality food, and they are usually willing to pay a premium price for these top-quality products. Brokerage events connecting farmers, SMEs and HoReCa managers responsible for food purchasing would further support the development of this model (Besagirskas et al., 2021).

Another model proposed in the Lithuania workshop was the local food tracking system that should be based on blockchain to allow consumers to track food from producers via a QR code (Besagirskas et al., 2021). The ability to instantly track the entire life cycle would increase farmer credibility, efficiency and safety. Moreover, the system could also present
satellite images showing where a product was grown or produced. Such a system could serve to better deal with identifying disease outbreaks through preventive methods that could help minimize food testing expenses and improve margins. Blockchain implementation requires the participation of all involved parties and points of contact. Developing robust traceability mechanisms can be challenging due to the complexity and fragmentation of food supply chains (Besagirskas et al., 2021), so in addition to orchestration capabilities to engage all parties, technical expertise is needed to put it into practice.

Yet another business model for SFSCs proposed in the Lithuanian workshop was direct delivery to local schools, hospitals and municipal institutions (Besagirskas et al., 2021). Let us keep in mind that food service could be an important distribution channel for small organic food producers and the growing demand for healthy food should be supported by local governments. Therefore, the public procurement system becomes particularly important in this model, which should minimize such inconveniences as shortages of organic products, varying quality of organic products, complicated logistics in traditional distribution channels, poor availability of organic food for the elderly, schoolchildren and students, and niche market prices. According to research, demand for organic food in food service will likely grow in the coming years (Besagirskas et al., 2021). Many customers of food service companies reported an increasing demand for organic food, including in hospitals, social service centers, schools and universities. Notably, this model requires the use of direct marketing and promotion of localized food systems, along with assistance in developing infrastructure like processing plants and kitchens in municipal institutions. To put it in practice, it is important to develop local-scale projects funded or co-financed by local government institutions (Besagirskas et al., 2021).

4.2.2 Latvia. The co-creation activities in Latvia introduced the business model of shared logistics for farmers and producers (Menjoks & Dolmate, 2021). In this approach, effective collaboration with other industry players to develop a business model would lower costs for producers and increase revenues for already established companies, such as food logistics supply companies. The main value would come from generating cooperative relationships that reduce transportation costs, maintain high product standards and allow bringing products to customers by way of stores, online platforms and even retail chains in large cities (Menjoks & Dolmate, 2021). The approach includes the development of partnerships with existing companies and technology solution providers, without the need to have a new fleet and infrastructure (Menjoks & Dolmate, 2021). Let us emphasize that so far practically every farmer and SME bring their goods by own transport to cities and regional centers, often traveling more than 200 km, which is not cost- and logistics-efficient (Menjoks & Dolmate, 2021). By combining orders from different farmers and producers, transportation would become more logistically efficient, as it would lower costs and reduce CO₂ emissions.

The second business model proposed by the Latvian workshop is the adaptation of existing solutions for cross-border partnerships (Menjoks & Dolmate, 2021). The model would be based on a single platform used for B2C and B2B purposes, aimed at selling only healthy and organic products from the participating countries in the Baltics and Poland. In this case, customers could include retail chains, small stores, wholesale groups and individual consumers (Menjoks & Dolmate, 2021). Notably, there already are online platforms like www.svaigi.lv, which could be easily adapted to the markets of Poland, Lithuania and other countries without the need to build something from scratch. Logistics could also be outsourced, but if the volume of products is sufficient for transportation, the platform could find many potential partners. For smaller regional farmers and producers, this could be an important boost to investing in their business, as they would have assured sales and deliveries, which would allow them to instead focus mainly on producing healthy and organic products. Moreover, this model could help farmers and SMEs develop export strategies and advertise organic food to consumers (Menjoks & Dolmate, 2021). Currently, farmers in Latvia
are unable to meet the volume needs and supply the necessary amount of products to consumers and retail chains. Noteworthy, the potential for SFSC development in Latvia is small and seems to have reached its maximum. Nevertheless, government organizations and local authorities are open to cooperation and ready to work on legislative issues that would implement appropriate business models, provided that the industry is ready to cooperate and introduce new strategies following SFSC principles (Menjoks & Dolmate, 2021).

4.2.3 Poland. In Poland, the business model identified by the workshop was direct deliveries to local institutions: hospitals, social welfare centers and schools (Bialik & Bober, 2021). Catering is an important sales channel in the Polish market, as about one-third of food expenditures come from large recipients (Bialik & Bober, 2021). Notably, the demand for organic food in Poland is growing, with many customers even demanding organic food, including in hospitals, social welfare centers, schools and universities. The business model requires the use of direct marketing and promotion of local food systems (Bialik & Bober, 2021). Increased consumer awareness and demand, growing ordering and distribution infrastructure allow for the much easier integration of local organic food producers, along with the development of local-scale projects funded or co-financed by local governments and government institutions.

The second co-created business model proposed organic food vending machines that should be equipped with organic foods, snacks, fresh fruits or drinks and be placed in hospitals, healthcare facilities, schools, colleges, universities, social welfare centers, as well as public administration buildings (Bialik & Bober, 2021).

The third model to be introduced in Poland was the joint transportation of perishable organic products delivered to such places as organic food stores, canteens, companies, schools, universities and individual recipients (Bialik & Bober, 2021). This model would require coordination activities by a network organization of manufacturers to orchestrate effective cooperation, create joint opportunities, focus on the unification of packaging and create integrated transportation to the points of sale or end users. This approach would not only reduce transportation costs and cut down on middlemen – such as trucking companies and parcel companies – but also support easier maintenance of quality standards and standardized packaging for product freshness (Bialik & Bober, 2021). Thus, cooperation is of particular importance in this business model, especially in terms of performing joint activities, such as joint orders for packaging to reduce producers’ operating costs or establishing manufacturers’ own (joint) transportation companies. In this case, infrastructure costs will be high in the initial period, which will nevertheless be offset in the future by reduced distribution costs (Bialik & Bober, 2021).

The fourth business model referred to the creation of a new organization that would act as a single intermediary between existing retailers and agrifood producers. This model would be based on collecting orders from specialist stores and marketplaces that sell directly to end customers in cities, while technological solutions would be helpful in the process of organizing sales, collecting orders and marketing. In this model, what would be the important criteria for value creation would be geographical proximity to suppliers, freshness of products and product quality (Bialik & Bober, 2021).

5. Discussion and conclusions
SFSCs are currently gaining popularity. They are based on interrelations between actors directly involved in the production, processing, distribution and consumption of food products (Renting, Marsden, & Banks, 2003). The SFSCs are known as alternative food supply chains (Vuylstekte & Van Huylenbroeck, 2007), alternative food networks (Edwards, 2016) and sustainable food chains (Roep and Wiskerke, 2006), defined as alternative modes of food supply and consumption, in opposition to more conventional industrial modes (Marsden et al., 2000).
Although the SFSCs encourage cooperation among farmers, create better relations between farmers and customers, reduce transport costs, lower CO₂ emissions and hold promising potential for sustainable development in agriculture, there are also several diverse barriers related to SFSC development. From a business viewpoint – apart from the different approaches, motivations and actors involved – the challenges are mostly connected with product development, access to markets, logistics, distribution, and differences in skills and knowledge among farmers and food producers (EIP-AGRI, 2015). As special skills that are new or unfamiliar to farmers are required to stimulate and manage SFSCs, there is a need for systemic support and toolbox that will support farmers in new business and marketing models design and co-creation of collaborative structures. Furthermore, the need for stable funding, more collaboration, competition with local businesses and competition with similar initiatives has been also identified as barriers for SFSC development (Mount et al., 2013). Meanwhile, the consumer perspective is burdened with the perception of high prices of local food, lack of trust in the authenticity of local (SFSCs) food and the lack of motivation (Mesić, Petljak, Borović, & Tomić, 2021).

This confirms the need to create collaborative spaces in which diverse stakeholders representing various viewpoints can jointly work on new business, collaboration and supply models in Lithuania, Latvia and Poland (see Table 1).

The development potential of SFSCs in the three studied countries remains high and seems to be growing every year. Currently, the potential is stimulated more by social trends than by public support, including sustainability trends, environmental awareness, zero waste movements and local food renaissance. Suffice it to consider the increasing number of TV cooking shows in Poland, which suggest meals from high-quality organic products, thus not only perfectly aligning with but also strongly reinforcing the SFSC-oriented trend. Moreover, interest in ecological products reveals the increasing affluence of potential customers.

Consumers are increasingly aware of possible healthy lifestyles, and there is a growing interest in the place of origin of products. However, the potential of SFSCs in the countries under discussion stems not only from the influence of economic factors or social trends.

Environmental factors – mainly those related to ecology – are also an important element in building SFSC potential in Lithuania, Latvia and Poland. Most food products offered by SFSCs come from green and clean regions of Lithuania, Latvia and Poland. Both the freshness and high quality of the products are closely linked to how they are produced, and most SFSC producers use sustainable production methods. In all three countries, it is essential to launch a consumer information campaign, encouraging customers living in large cities to buy products from farmers close to their homes at least once a month. It is important to educate people about the harms of junk food and create an advertising campaign that “healthy eating is fashionable.” Some solutions include cooking courses for children and young people. In our opinion, the central and local governments should clearly give preference to local farmers through public procurement.

The Covid-19 pandemic has forced many food producers – both individual and organized in cooperatives – to quickly digitalize their operations, along with marketing communications, transportation and deliveries. Many producers using social media marketing communication solutions have developed both competencies and potential of their businesses. At the same time, traditional business models based on the distribution of food products through local and regional markets have definitely limited their potential. There was a clear trend toward developing business models based on marketing communications via the Internet. The Internet has also become an important market for many organic food producers. This aspect was further related to the need to develop digital skills and competencies in business management. Moreover, trade in local food was very limited, and only large retail chains were allowed. Hence, this aspect motivated producers to find alternative ways to deliver food to consumers. Furthermore, other technological factors –
including new production lines, packaging or transportation infrastructure itself – require much more investment, joint R&D projects with scientific institutions and universities.

Let us not forget about the current instability of the legal environment and deteriorating macroeconomic conditions for doing business: inflation, employment and the potential instability of the banking system. All these factors may negatively impact the real potential of SFSCs in Lithuania, Latvia and Poland in the near future.

References


Vuylsteke, A., & Van Huylenbroeck, G. (2007). Understanding the system context of alternative food supply chains, article prepared for presentation at the 1st International European Forum on Innovation and System Dynamics in Food Networks Officially endorsed by the European Association of Agricultural Economists (EAAE), Innsbruck-Igls, Austria.


Further reading

AgroBridges (2021). D1.2 Report on European and regional analysis of producer and consumers needs and barriers towards SFSCs implementation WPI. Responsible Partner: TGC.


Corresponding author

Adam Oleksiuk can be contacted at: aoleksi2@sgh.waw.pl