

The questions of Hungarian Short Food Supply Chains

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Abstract: There is a growing interest in the topic of short food supply chains (SFSC) in the EU and Hungary. There is larger act in the EU's 2014-2020 programmes for the development of SFSC. There were some measures included shortening the distance between the producer and the consumer and the need for market-building to bring local products to local stores. The SFSC would be the tool of developing of peripheral areas. But it could help the village town relation. Current producer capacity, consumer demand and legal and regulatory conditions, short supply chains make fewer consumers available than potential consumers, may pose a food safety risk and are difficult to ensure the profitability of the legitimate food producer. It is necessary to develop this way to solve these problems.

Keywords: Short food supply chain, trust, local market, local food.

1 Introduction

We are living the years of change. It seemed as if the time was different, is going faster than in the 20th century. There are significant changes in many areas of life. The role and number of little ones varies, both in trade and in production. Food producing and trading chains dominate the markets. In recent years, decades of infections and food scams have overestimated the production methods and procedures in which the system provides or at least minimizes the risk that the product may be in the unobtrusive phase of the consumer or because of the confidence of the producer and the trader, if there is such a phase, replace it with a high degree of reliability. There is a consumer layer that can not afford to choose

between quality and need, but another part of consumers want reliable and high quality products to be consumed. To do this, you must build trust based relationships with local producers or have a production system with a reliable system that is controlled. However, the anomalies that have emerged in the food supply over the last decades indicate that the latter is not as reliable as it seemed. In this competition, smaller players want the chains in vain, they can not produce enough quantity and quality that would allow them to do so, while their liquidity is not such that would allow financing of delayed payments.

For them, the solution to the supply chain can be shortened and direct access to consumers. The achievement of this goal is important for the smallest players (Kiss and Takácsné György, 2017).

2 Material and method

As for a new and priority topic, the number of domestic sources of literature is not very significant. On the other hand, we find international studies and results because the EU prioritizes short food supply chains in rural development. First of all we applied secondary research, we tried to present the works of significant Hungarian and foreign studies. The aim is to present the characteristics of the SFSC and to give an idea of what features are present in our country today. The question is how we stand in this respect compared to the European countries that are leaders.

3 Results

A short food supply chain is defined as production, processing, transport and consumption are very close to each other in territorial terms, according to legal definition, a circle of 40 km radius. Or even when between the producer and the consumer there are none actors or few ones. (Kneafsey et al., 2013)

Forms of presentation may include:

- normal open market (market operated by farmers or local dealers, including biopiac, where appropriate);
- events, exhibitions, fairs;
- Producer sales area or producer market;

- direct sales by retailers;
- a basket or handbag service where the customer receives a finished product offering;
- community gardens where the consumer itself is the producer;
- Community agriculture where producers and consumers share the risk of production in some way and in proportion;
- public catering, source of supply is the local producer;
- guest table and other catering services. (Biró et al., 2015)

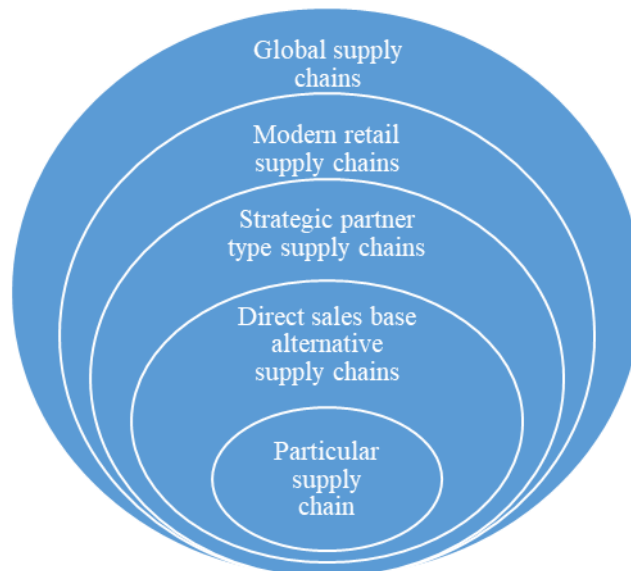


Figure 1

The place of the SFSC in food supply levels Source: Jensen, 2010.

In doing so, either the producer goes to the consumer, or the commodity or the consumer goes to the producer or for the goods. In the basket or baggage service, the consumer pays a regular amount of money for which they regularly receive a basket of goods whose content varies depending on the season. So it's not permanent. It is similar to the concept of Community agriculture, which means that consumers choose to enter into a contract with a selected producer and then pay a fixed amount for which they receive weekly fresh goods. The risks are shared with this system as the burdens of potential unexpected damage are borne by consumers. The economy also offers community programs, eg. working visit, harvesting.

	Typical	Type of the producer	Type of the product	Type of the sales
	↓			
	↓	Local producer	Local product	Local sales
The participation of direct sale activity	↓	Agricultural small producer	Local small farmer's product	Food supply supported by local community
	↓	Agricultural SMEs	SMEs' product	
	↓	Food industrial SMEs	Handle product and traditional product	Diresct sales
	↓	Agricultural and food industrial Large companies	Industrial product	Short food supply chain
	Non typical			

Table 1.

Alternativ food supply chain systems Source Juhász et al. 2012.

What are the characteristics of SFSC?

- Shortness means that there is either a small geographical distance between the producer and the consumer or a small number of intermediaries;
- Acquaintance. It is very often a close relationship between the producer and the consumer, although this contradicts an investigation in which it was apparent that in the alternative markets the buyer and the seller knew only superficially. Apparently from sight. (Gao et al., 2012);
- Venue can be producer paci, biopiac, own yard direct home delivery, etc., which ensures the little sales person;
- Typically, very small producers take part in this, with small quantities and small farm sizes;
- For these growers, this can be one of the ways to survive;
- The origin of food has become important for consumers, and this is why confidence builds on the relationship or good quality gives the motivation to return;
- One aspect of sustainability appears. This can be environmental, social or other, which sometimes changes, mixes; (Benedek et al., 2014)

The latter point relates to Mardsen (1998) finding that a short food supply chain can be one of the keys to rural development. (Mardsen, 1998) By maintaining a producer on the one hand, it is economically viable, giving a livelihood to the producer and his family, and helping environmental responsibility, as local producers are expected to think in production in the longer term, so they act responsibly to their environment and want to protect it keep it in good condition in

the long run. It also raises social strength as it helps to maintain rural social funds by strengthening the relationship between producer and consumer. Furthermore, with a significant reduction in transport distances, the load on the environment is also significantly reduced and thus the environment is not burdened.

Mardsen et al. Distinguishes 3 main types of SFSC:

Face-to face: In this case, the producer and his goods are directly sold to the consumer. Physically, the relationship between the two players is created in one place, and the delivery of the goods appears.

Spatial promoxity: In this case, the product is produced in a particular place or region, which is why the product or market is often called a place.

Spacially extended: In this case, the goods are bound to the region, but the consumer no longer. Occasionally appear in the region or the goods will go out of the region and reach the buyer. (Mardsen et al., 2000)

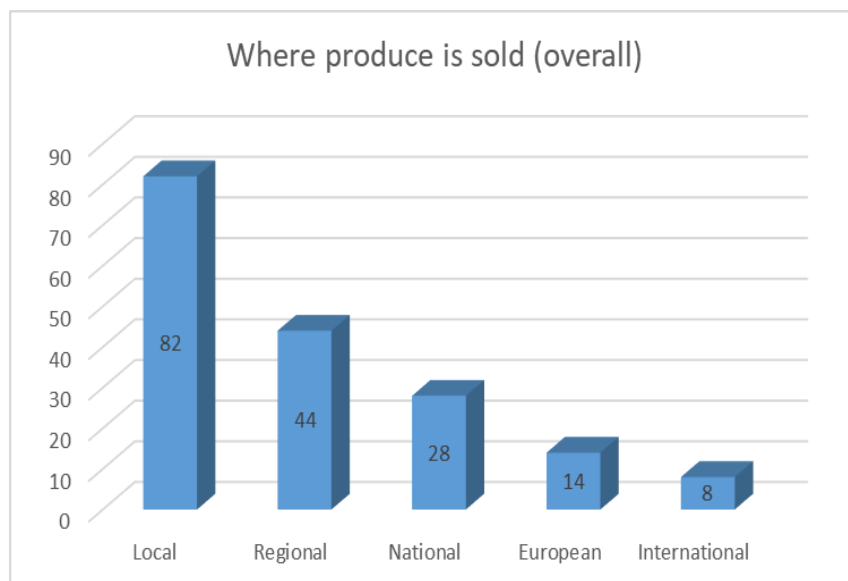


Figure 2

Scheme coverage (number of schemes) Source: Kneafsy, 2013.

The Rural Development Policy 2014-2020 use the SFSC with priority. The new PAC is to „promote the organization of the food supply chain and the management of the risks of the agricultural sector, with particular attention towards: a better integration of the primary producers in the food supply chain in accordance with quality assurance schemes, the promotion of the products in the local markets, the short supply chain, the producers’ associations and the inter-professional

organizations.” According to EU the short food supply chain is „formed by a limited number of economic operators who focus on the promotion of the cooperation, the regional development and the tight social and territorial relationships between producers and consumers.” And „the support to short supply chains ceases to be a simple means supporting a marginal and non competitive kind of agriculture and becomes an important tool for achieving general goals concerning the rural development and the maintenance of the vitality of the rural areas.” (Brunori , Bartolini, 2013)

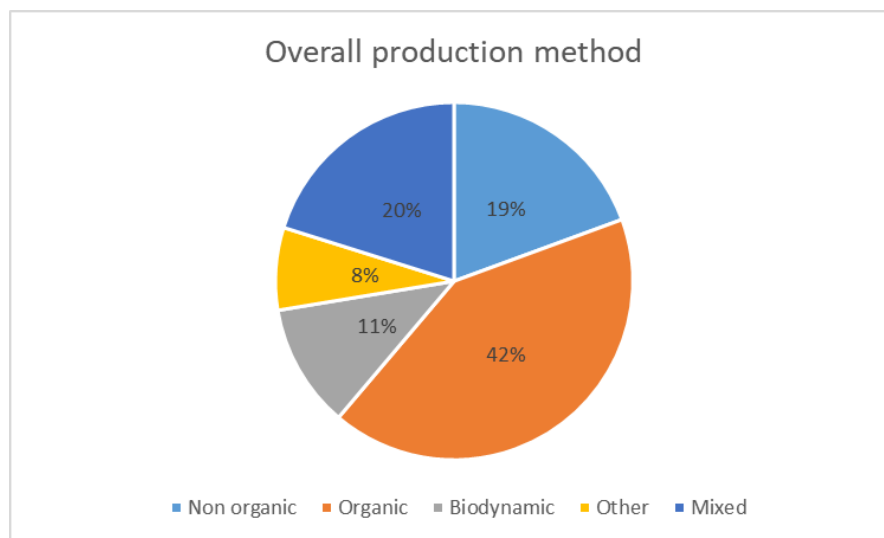


Figure 3

Number of scheme by production method Source: Kneafsy, 2013.

As the extension of the supply chain has caused a decrease of its share of value added to the benefit of the farmers and has excluded many small producers from the markets and caused a negative impact on rural areas (unemployment, depopulation and frustration). Looking at the side of consumers, information asymmetry can arise as the information is at one party, the other party does not fit. Its result may be the deterioration of quality, the consequence of which is that production processes are increasingly standardized. (Fazio, 2016)

Lee and Yun (2014) study in their study that one of the main determinants of consumption of organic products in organic agriculture is the utilitarian and hedonic behavior of consumers in one of the short supply chains. Their model is based on Nutritional content, natural content, ecological welfare, sensory appeal and price. They are examined by the consumer, and if they are well-formed, these parameters decide on the purchase.

We see that the aggregation of producers is low because they are distrustful, lack sufficient information or want to maintain their independence. (Baranyai and Szabó G., 2017.) They would, however, be in need of it, as they would only be able to compete with large food supply chains. By omitting this, they may be in a very difficult position in the longer term, as lower capitalization and tiny planting structures make it difficult to lose weight and endanger its own operation. What would it take to make that change? Building and building trust is not an easy task. We could also say it's difficult. In addition to the engagement of the contractor himself, it is necessary to trust the fairness of the market, the fairness of competitors and economic governance, and the market will respond properly to its business. If you strive to join forces with your competitors, you need strong confidence that the agreements will be successful and will be respected. But what does it take for a competitor to act fairly? Responsibility and belief that fairness and honesty will be rewarded while giving incorrect, fraudulent conduct or bad feeling to someone you do not want to experience or believe that action has some kind of feedback and you do not want to experience incorrect behavior with yourself in the future. Providing sufficient information also requires trust and openness. You have to go to the other, address and open it with the hope that this behavior will be rewarded. Without this, it is difficult to carry out the flow of information freely. Obviously, one word says information is power and therefore people are afraid to share it because they are afraid of losing control, power or market positions. But in order to move smaller producers and shorten the supply chain change required in the mentality.

According to Benedek et al., Market vendors are typically middle-aged while farmers are older and less skilled. The size of the farm is relatively small and even the smallest farm-size producers choose local markets in general. Tradition and tradition are of the utmost importance to those who go there. (Benedek et al., 2014)

SFSC pursues a profit maximization instead of maximizing profits, but it also requires that both the market and the products are in place, ie training, consultancy and development are needed. (Bíró, 2015)

In supply chains, trust, risk taking and information technology play an important role. There is a great deal of cooperation between the actors in the chain. (Kozma et al., 2017) So if they are able to align and coordinate their activities, they can gain competitive advantage, but if that does not succeed, their competitive disadvantage over more effective organizations remains.

Among the advantages of the SFSC, we should mention the possibility of cooperation and the sharing of resources. Increasing the product base, which

means serving larger volumes of end-users. It is possible to share maintenance costs, strengthen interest representation, reduce competition, mutually support, strengthen social trust and enhance health awareness. (Kozma et al., 2017)

SFSC has a positive impact on the environment and the local economy. (Migliore et al., 2014) There is less transport cost and load, and the traffic generated by local producers can keep, maintain them both economically and socially.

SFSC can build a new kind of trust between the producer and the consumer. And since consumption of this kind is growing in the EU, this form is becoming increasingly important. (Giampietri et al., 2018)

In our country, agriculture is approx. Contributes to GDP by 5%, and There are 626 thousand farms. Compared to the area, an average area of 29 hectares per unit is an average of 209,000 FTEs. The estate structure was very fragmented. Individual farmers are working almost half of the areas with an average area of 9.05 hectares. Co-operatives use 7% of the cultivated land, here the average estate size is 360 hectares. Companies use 40% of the area, with an average area of 303 hectares. Because of this, small farms can only survive with some support. There is a change in which SFSC is in the foreground. This depends mostly on which social layer we are investigating. Urban, educated layers prefer the special forms of REL. For example, package or a community garden. (Kneafsy et al., 2013)

As I mentioned today, SFSC is a very important area, both at national and EU level. The new agrarian and rural development strategy prioritises areas of the agri-economy, rural development, the environment or the food economy. And its aim is to maintain food safety and good quality along with sustainable cultivation.

In 2012, there was a survey about food consumption patterns in Hungary. (Median, 2012). 1200 persons was interviewed in 2012 July. Hungarians often buy food either in local small food shop or in super- or hypermarkets. 50% of population prefer hypermarkets and markets while 37% prefer discount shops. Only 13% buys food from farmers directly on a regular basis. People over 60 rarely go to supermarkets or discount shops. Only 9 % who buy food from supermarkets younger than 40. 30% belongs to the highest household income category. (Median, 2012)

Conclusions

There are many signs that SFSC can play a key role in boosting local economies and rural development in Hungary as well. It is not a coincidence that the EU is giving priority to this issue and increasing attention, support for the area. For the consumer, in return for reliability, he pays a higher price for these products, or at least assumes he is getting higher quality for the same amount of money. A social

relationship emerges in many cases between the consumer and the producer, which deepens this trust and can even lead to the perception of consumer perceptions, which is to say that he is willing to tolerate and overwhelm the inferior quality, to explain to himself. Does the producer have a number of benefits for the producer. Being able to survive, able to team up with others, builds a new level of confidence with both the consumer and the competitors, as well as with the various actors in the chain. Helps risk sharing. Not only does the producer wear it. Preservation and conservation of the environment is a priority, as local production and a shorter supply chain help it. It can also promote social responsibility, as it does not generate profits for an unknown owner, but is traded by a well-known producer.

To exploit these benefits, it is necessary to support both EU and resource distributors, both professionally and financially, but provide a more stable local food supply.

References:

- [1.] Benedek, Zs. et al.: Termelői heterogenitás a rövid ellátási láncokban: A paicokon értékesítő gazdák jellemző különbségei, Gazdálkodás 58. évfolyam 4. sz. 2014. p. 307-319.
- [2.] Benedek, Zs.: A rövid ellátási láncok hatásai, Műhelytanulmányok MTA KRTK KTI, 2014/8
- [3.] Biró, Sz. - Rácz, K.: Agár- és vidékfejlesztési együttműködések Magyarországon, Agrágazdasági Kutató Intézet, 2015 p 89-106.
- [4.] Brunori G.-Bartolini, F.: La filiera corta: La opportunita offerte dalla nuova PAC. Agriregioneuropea anno 9 n 35. 2013
- [5.] De Fazio, M.: Agriculture and sustainability of the welfare: The role of the short supply chain. Agriculture and Agricultural Science Procedia 8 p. 461-466, 2016.
- [6.] Gao, Z et al.: A new look at Farmer's markets: -----consumer knowledge and loyalty. Hortscience, 2012. 47(8). p. 1102-1107.
- [7.] Giampietri, E. et al.: A Theory of Planned behaviour perspective for investigating the role of trust in consumer purchasing decision related to short food supply chain, Food Quality preference 64 (2018) p 160-166.
- [8.] Jensen, J.: Local and regional Food systems for Rural futures. RUPRI, Rural futures Lab Foundation Paper No. 1. 27 p.
- [9.] Juhász, A. edit: A közvetlen értékesítés szerepe és lehetőségei a hazai élelmiszerek piacrajutásában, Agrágazdasági Kutató Intézet, 2012

- [10.] Kiss, K- Takácsné Gyögy, K.: Lehet-e termelői összefogás a REL-ek mentén? – egyfelmérés eredményei pp. 271-290 in Szabó G, G-Baranyai, Zs. edit: A szövetkezés-együttműködés akadályai, feltételei és fejlesztési lehetőségei a magyar élelmiszer-gazdaságban. Agroinform Kiadó, Budapest, 2017. p. 359.
- [11.] Kneafsy, M. et al.: Short Food Supply Chains and Local Food Systems in the EU. A State of Play of their Socio-Economic Characteristics JRC Scientific and policy reports. 2013. ISBN 978-92-79-29288-0, ISSN 1831-9424, doi 10.2791/88734 download 04.01.2018.
http://agrilife.jrc.ec.europa.eu/documents/SFSCChainFinaleditedreport_001.pdf
- [12.] Kozma, T et al. : Gazdaságélénkítés a rövid ellátási láncok tükrében, XXIII. Ifjúsági Tudományos Fórum, Keszthely, 2017.
- [13.] Lee, H-J - Yun, Z-S: Consumers' perceptions of organic food attributes and cognitive and affective attitudes as determinants of their purchase intentions toward organic food, Food Quality preference 39 (2015) p 259-267
- [14.] Mardsen, T.K.: Food supply chain approaches: Exploring their role in Rural development. Sociologia Ruralis, Vol 40, Number 4, October 2000. p 424-438.
- [15.] Mardsen, T.K.: New rural territories:regulating the differentiated rural spaces. Journal of rural studies 1998. 14 p.107-117
- [16.] Median: Attitudes towards the social effects of food purchasing . Reports for ESSRG. Manuscript in Hungarian in Balázs, B.: Local Food System Development in Hungary. Int. Jnl. of Soc. of Agr. & Food, Vol. 19, No. 3, 2012. pp. 403–421 download 04.13. 2018.
<http://www.ijf.org/archive/19/3/balazs.pdf>
- [17.] Migliore, G et al.: Opening black box of food quality in the short supply chain: Effects of conventions of quality on consumer choice, Food Quality preference 39 (2015) p 141-146.
- [18.] Szabó G, G-Baranyai, Zs. edit: A szövetkezés-együttműködés akadályai, feltételei és fejlesztési lehetőségei a magyar élelmiszer-gazdaságban. Agroinform Kiadó, Budapest, 2017. p. 359.
- [19.] Szabó, D. et al.: A rövid ellátási láncok helyzete és lehetőségei Magyarországon, 2012.