



SELLING LOCAL PRODUCTS IN SHOPPING COMMUNITIES IN HUNGARY

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1. INTRODUCTION

1.1 Relevance of the topic

Today's globalised social and economic processes are fraught with anomalies. Such anomalies include the long-distance transport of products, environmental pollution, and the loss of personal trust between seller and buyer. The vulnerability of globally organised supply was also highlighted by the Covid 19 crisis, which shocked the world economy. The problems at global level highlight the strategic importance for the national economy of the production and marketing of locally produced goods, especially food.

The short food chain is a worldwide distribution channel that could be a response to anomalies in organised global trade. The short supply chain is a movement that developed in Western Europe in the 20th century and is present in North America and Asia, as well as in Europe. In Hungary, the importance of local production and short supply chains has increased significantly over the last decade. Kujáni (2014 b) defined the short food chain as follows : "A re-emerging network of producers, processors and rural residents, which represents a renewed and shortened food production, processing, distribution and consumption system (Kujáni 2014 b 1. o) "In the last decade, local products have become one of the most important and characteristic products of the Hungarian countryside, which has become a real movement and has become accessible to a wide social stratum (Tóth-Kaszás et al 2017).

The emergence of direct selling, with its focus on the trust element, and the growing interest of customers, was followed by legislation. The Small Farmers' Regulation adopted in 2010 offered a number of new opportunities for those interested in the short supply chain, thus adding new elements and new actors to the short supply chain. Among the actors in the short supply chain, the role of intermediaries in facilitating the link between producers and consumers is not usually examined, although their role is essential. The importance of local solutions is demonstrated by the record number of orders for some forms of short supply chain marketing received in Hungary during the coronavirus emergency. This thesis aims to explore the territorial spread and functioning of shopping communities, a new type of short supply chain management, in Hungary. In the second decade of the 21st century, civic-based shopping communities have also appeared in Hungary. The so-called small producer regulation, which facilitated the production and sale of local products, also played a role in the spread of this element of the short supply chain in Hungary.

In addition to a legislative environment that is fundamentally supportive of short supply chain activities, the uptake of national and international good practices is important for the spread of shopping communities. However, there is not yet a uniform regulatory framework for shopping communities. As a consequence, new or existing communities have to deal individually with the functioning embedded in the current regulatory environment, so the adoption of good practices and local competences are even more important than in the already regulated issues of REL. In the national context, the Budapest Satyor shop and the Satyor Association, which runs it, are considered pioneers. This is why I consider it as a reference point in my thesis.

1.2 Problem definition

Several forms of short food chains have emerged in Hungary in recent years. The best known and most popular of these are the farmers' markets, of which there are already nearly 300 in the country. In addition, there are a number of schemes that support the implementation of producer sales, such as box schemes and shopping communities.

The analysis of the short supply chain elements is complicated by the fact that official statistical data collections do not summarise the short supply chain elements, unlike the conventional supply chain. This is mainly due to alternative solutions, whose operational characteristics are still poorly understood by official bodies and therefore difficult to collect data from. As there are many actors involved in the short supply chain, defining the main elements influencing its operation is difficult, and even the definition of REL itself is challenging. However, when studying the elements and actors of the short supply chain, it is easier to find the producers and intermediaries in person, to get to know them, to map them and to analyse the drivers of their operation, in contrast to the conventional economy.

The dissertation focuses on analysing and summarising the available definitions of local products and shopping communities that are analysed as part of the short supply chain. After the precise conceptual definitions, it is possible to develop a database of shopping communities in Hungary and to analyse the delimited shopping communities. After the inventory, I was able to identify 42 shopping communities that have started their operations in Hungary in the last years.

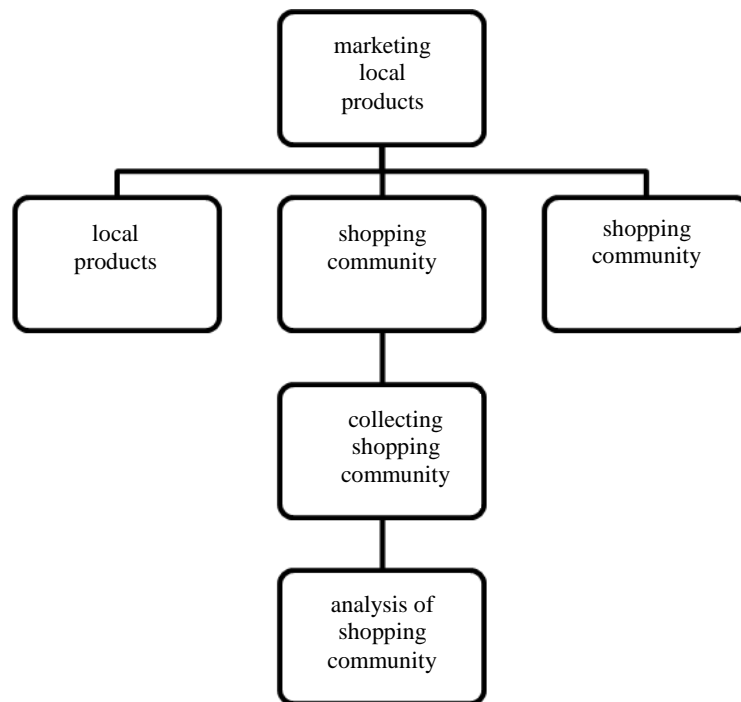
In my dissertation, I will briefly summarise the main characteristics of the short supply chain elements in Hungary. I will also present the spatial distribution of the short supply chain elements in Hungary in relation to the Hungarian settlement hierarchy.

Since spring 2020, the functioning of society and the economy has been greatly transformed by the coronavirus pandemic, which many believe has had a positive impact on the functioning of the short supply chain (Benedek 2021). In 2020, 8 new communities of immigrants were formed, more than ever before, typically in Hungary's major cities. The paper also examines the relationship between the shopping community start-up fever and the coronavirus epidemic.

1.3. Objectives

In my dissertation I made a situation study of the shopping communities operating in Hungary, in which the most important aspects of the study were the organisations providing the legal framework for the shopping communities and their sales characteristics. I aimed at a precise conceptual definition of the shopping communities, an analysis of their spatial location with special attention to their relationship with the Hungarian settlement hierarchy and the characteristics of the spaces they offer. I have also examined the location of the municipalities where production takes place, the composition of the offer of the shopping communities and the modelling of their organisation, as well as the impact of the coronavirus epidemic on the functioning of these communities. I also aimed to provide a more detailed description of the large number of shopping communities that were formed in 2020 (Table 1). The structure of the thesis is summarised in Figure 1 (Figure 1), covering the main topics.

Figure 1: Outline of the structure of the dissertation



Source: own editing

My research objectives can be summarised as follows:

Table 1: Objectives

C1	Establish a database of shopping communities operating or having operated in Hungary.
C2	Examining the distribution of shopping communities by settlement level in Hungary.
C3	Exploring the developmental patterns of shopping communities.
C4	How far are the products offered by the shopping communities from the region?
C5	What impact has the Covid-19 coronavirus had on the functioning of Hungarian shopping communities and on the creation of new shopping communities?
C6	Do the shopping communities have their own quality assurance system?
C7	What are the main factors influencing the practical functioning of the shopping communities?
C8	Do producers apply the territorial limits set by the Small Farmers' Ordinance in the operation of the shopping communities?

C9	What role does the online space play in the functioning of the shopping communities?
C10	Determining the impact of the coronavirus epidemic on the functioning of shopping communities and the dynamics of new community creation.

Source: Own editing

Based on the above objectives, the following hypotheses were formulated (Table 2):

Table 2: Hypotheses

H1	There are shopping communities that are not included in the official registers.
H2	. The distribution of shopping communities at the municipal level follows the national hierarchy of municipalities.
H3	The development of shopping communities can be modelled
H4	Partnerships are necessary to manage shopping communities
H5	The offer of each shopping community differs in terms of quantity and quality
H6	Shopping communities must have their own quality assurance system
H7	Producer actors in shopping communities result in a significant rural coverage
H8	Producer suppliers of the shopping communities meet the 50 km criterion of the small producer ren-deletion
H9	Presence in the online space is essential for the functioning of the shopping communities
H10	The coronavirus epidemic and the restrictions on the spread of the epidemic have had an adverse impact on shopping communities

Source: Own editing

2. MATERIAL AND METHODS

My research objectives can be summarised as follows:

2.1. A kutatás tárgya Subject of the research

The subject of the study is the shopping communities in Hungary that I have identified.

The shopping communities are the subject of my research. This was partly an incentive for my work. Obviously, due to the lack of statistical collection, it was also a challenge. In the absence of information, governmental bodies dealing with rural development and the agricultural economy also use a database created by an NGO, the Association of Conscious Consumers. I used this database as a starting point and developed it further.

2.2. Methods

Online content analysis

I analysed shopping communities in Hungarian cities using an online content analysis method.

I analysed the functioning of the shopping communities based on the existence of factors derived from the self-defined self-definitions of the shopping communities in Hungary. I collected the existence of these factors using online content analysis methods.

Penetration index

Penetration indices were used to characterise the location choices of shopping communities. The index was applied in several commercial studies in Hungary by Tibor Tiner (Tiner 2010).

Rank correlation - Kendall's concordance coefficient

In the course of the study, I created rankings of the offerings of shopping communities with webshops by product group. The determination of the closeness of the relationship between indicators and data can be done by calculating correlation, which aims to characterise the closeness of the relationship with a single indicator (Nemes Nagy 2005).

An ordinal scale is a measurement scale where the order of the variables matters, the difference between them does not. In my research, I used the Kendall's concordance coefficient, in which several rankings are examined, a so-called global agreement test. In the global agreement test, we are looking for an answer to the question of how consistent the rankings are.

Deep interviews

During the research, I conducted structured in-depth interviews with relevant people. I used Babbie's (2013) *The Practice of Social Research* as a se-guide for conducting the interviews.

When selecting the interviewees, it was important to get a multi-perspective view of the functioning of the shopping communities in Hungary. Interviews were conducted with the founders of shopping communities in Hungary, with those who are currently supporting them, with volunteers of shopping communities who have gone beyond the zenith of their operation, with professional organisations supporting the operation of shopping communities, and with public actors supporting shopping communities. I was able to interview the founders of each of the shopping communities established in 2020 to compare them.

3. RESEARCH RESULTS

3.1. Test hypothesis

Test hypothesis H1: there are shopping communities that are not included in the official registers.

As I mentioned earlier in the methodological chapter, I did not find a complete set of official statistical registers when I examined the shopping communities operating in Hungary. Using the technique of online content analysis, as described earlier, I combined the information available online and compiled a cadastre (see methodology). One important result of my research was to show that there are significantly more shopping communities in Hungary today than in the official database. Using content analysis methods, I was able to identify a total of 41 shopping communities, which is more than twice the number of shopping communities previously known from the database, which was 15.

So my hypothesis was confirmed, but the research question really started from there: why is there such a discrepancy between the records and reality. In order to answer this question, it is important to stress that the legal framework for the functioning of a shopping community is typically provided by an NGO or a parish.

The relative transparency of shopping communities is explained by the fact that, although they are similar to food retailing, they are not yet commercial but have a marketing function. It is a typical experience that the authorities, including the NÉBIH and NAV, are not really able to define them. The main reason for their lack of definition is that it is very difficult to quantify and register them. However, it is obviously essential for the proper functioning of shopping communities that there is a conceptual and operational framework that can be understood by the authorities (based on an oral communication by Ildikó Palicz 2020).

H2 Testing Hypothesis The distribution of shopping communities at the settlement level follows the national settlement hierarchy

My starting point is that until 2019, shopping communities in Hungary operated exclusively in municipalities with urban status. This leads to the conclusion that the phenomenon is specifically urban.

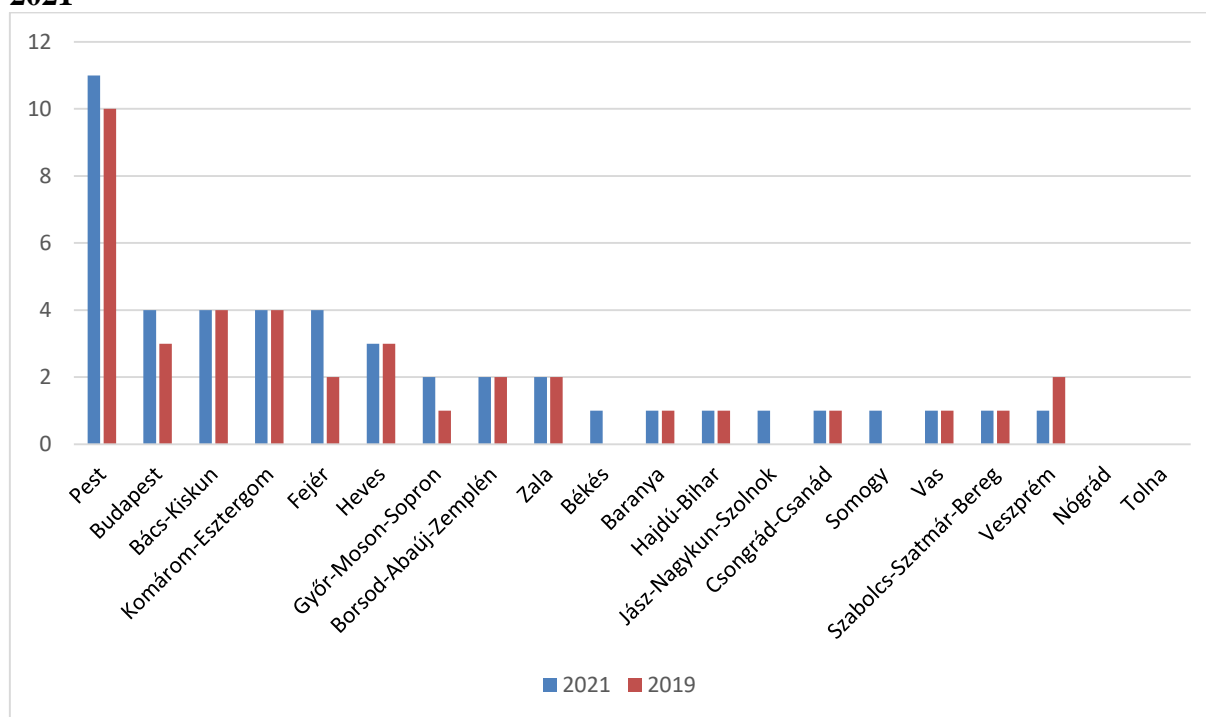
The reason for the phenomenon being specifically urban is certainly that, in general, the advantages of economies of scale are shifting towards municipalities with larger populations, due to the market economy and the role of the state. Cities therefore have strong purchasing power

and social capital. It is also true, of course, that our urban population does not always have this potential, as it is extremely heterogeneous in terms of both size and human and economic potential.

When we look at the spatial distribution of shopping communities, we find that it is not uniform across the country. Looking at the county level, we can conclude the following. At that time, 5 (castle) counties were still considered as "white spots": Nógrád, Vas, Békés, Jász-Nagykun-Szolnok Tolna. A re-survey in 2021 identified additional shopping communities that started operating in 2020, leaving only two counties (Nógrád and Tolna) without a shopping community at the time of my survey.

The largest number of shopping communities was found in Pest county, with 11 already operating in 2021. In 2019, there were 4-4 communities in the counties of Bács Kiskun and Komárom-Esztergom, but in 2021 there were already 4 shopping communities in Fejér county and Budapest (Figure 2).

Figure 2. Spatial distribution of shopping communities by county in Hungary 2019 and 2021



Own editing, data source: own collection

If we approach the spatial location of shopping communities from the perspective of the legal status of municipalities, the following main findings can be made:

According to the legal status of cities in Hungary, we distinguish between county capitals, cities with county rights, district seats and cities. There are 23 cities with county status and 170 cities with district status, while almost 150 cities do not have a special status.

According to my experience, in 2021 there were 16 county seats with shopping communities. It can be seen that this category of municipalities is the one where shopping communities catch up with the national coverage. I found 16 shopping communities in district seat towns with regional functions - only 10 percent of the district seat municipalities. Looking at the urban population as a whole, some towns have two shopping communities operating in the same municipality: Keszthely and Tata. These duplications tend to be short-lived. Shopping communities in the same municipality typically merge .

Relations between shopping communities and the Hungarian settlement hierarchy

During the research, I divided the Hungarian urban population into groups based on the population size of the settlements. Excluding Budapest, five groups were created (less than 10,000 inhabitants, 10-25, 25-50, 50-100, more than 100,000 inhabitants).

Using the penetration index, I examined the proportion of cities in each category with a shopping community for both 2019 and 2021. It can be seen that the penetration index (PEX) takes higher values for the municipalities in the larger size category, which are also higher in the hierarchy. Thus, the spatial distribution of shopping communities reflects the hierarchy of settlements in Hungary. The prevalence of shopping communities is highest in groups of settlements with a higher population density. Here, the penetration index can reach values around 1. The penetration of shopping communities within the population of a municipality depends significantly on the population of the municipality.

Between 2019 and 2021, the number of shopping communities in 2020, a year significantly affected by the crown virus, increased in all but 25 and 10 thousand inhabitants. The number of shopping communities and, with it, the penetration index took on higher values. The largest increase was in the 100 and 50 thousand inhabitants municipalities, where there are now 8 shopping communities instead of 4. In this category, the penetration index is expected to reach 1 (Table 3).

Table 3. Shopping communities in the Hungarian settlement hierarchy

Population size 1000 inhabitants	Number of settlements	Number of shopping communities 2019	Number of shopping communities 2021	PEX 2019	PEX 2021
1000	1	4	4	1	1,00
100 felett	8	7	8	0,88	1,00
100-50	10	4	8	0,40	0,80
50-25	28	7	8	0,25	0,29
25- 10	96	7	7	0,07	0,07
10 alatt	201	7	9	0,03	0,04

Source: own editing, data source own collection

Testing hypothesis H3: The development of shopping communities can be modelled

The history of the development of domestic shopping communities goes back to the second half of the 2000s. This is the time when the first domestic shopping community, the Szatyor community, was established. The Pannon Local Products Non-profit Ltd. was also an early but later emerging shopping community. It was also mentioned in the literature review that the Szatyor shopping community was considered as a model by several shopping communities outside Budapest. This model also included the organisation of the stall. The conscious recruitment took place in the countryside. By countryside in this case we mean settlements outside Budapest. Film screenings, awareness-raising presentations and the transfer of good practices were part of these programmes. The Kecskemét Szatyor shopping community also started after a recruitment campaign (Edit Rátkai 2018).

The analysis of the Hungarian Shopping Community Database can be used to model the development of shopping communities.

In the first group, shopping communities that are only a crustal initiative can be classified. These communities cannot set up a management organisation, do not have a constantly updated website, do not have an internet ordering facility and do not have the social media platform necessary for their activities. These shopping communities are typically self-founded shopping communities, in which case a single person wants to set up the organisation with a minimum of space, typically a blog or Facebook page, or perhaps some kind of press release. The majority of these organisations do not make it to the first delivery day, unable to find potential producers and customers.

In the second group are those initiatives that are most likely to be of a movement nature, i.e. set up by enthusiastic but typically insufficiently skilled organisers. The period of establishment of these shopping communities dates back to around 2010, when, following the introduction of the Small Producer Regulation, other elements of the short supply chain, in particular farmers' markets, multiplied in Hungary. It is therefore a less conscious circle with traces of a commercial approach.

The third level is represented by shopping communities where a pre-ordering platform is in operation; however, transfers are made with the participation of producers. These shopping communities can outperform the higher organised shopping communities in terms of their offer.

The fourth level of organisation is shopping communities where a pre-ordering platform is in place and the members of the shopping community assemble the ordered products before the delivery day, in which case the communication between the buyer and the producer is exclusively redirected to the online space.

Testing hypothesis H4: Partnerships are necessary to manage shopping communities

One of the prerequisites for the functioning of shopping communities is the establishment of some kind of organisational framework. Under the Small Producers' Regulation, producers themselves cannot sell other producers' products, so they have to rely on themselves. If small producers were to sell their products through retailers, VAT would already be charged on the products, and small producers would only be able to sell certain products through retailers. All this leads to the conclusion that the organisation of a short supply chain for small producers indirectly supports the introduction of intermediaries to reach customers.

Shopping communities are typically coordinated by some form of non-profit organisation, as for-profit organisations are in many respects not suited to this form of awareness-raising activity. For-profit organisations are not suited to running shopping communities mainly because of the following factors: their limited involvement in the marketing of small producers' products and the operating mechanisms of shopping communities, such as a high proportion of voluntary work, possible intermittent operation and discontinuous income. None of the shopping communities operating in Hungary are run by profit-making organisations.

Shopping communities are typically run by an NGO. The NGO is a legal entity and can therefore provide the necessary organisational framework. In most cases, the shopping community is run by a foundation or association. If the organisation of the shopping community starts from the bottom up, it is advisable to start with the creation of the NGO. There are also a number of shopping communities which have been set up as part of an extension of the profile of an existing NGO. One such organisation is the Esztergom Environmental Culture Association, which runs the Kiskosár Shopping Community in Esztergom. The Association was founded in 1994 as an environmental organisation. Today, most people know it through the operation of the Kiskosár.

The involvement of church organisations is one of the highlights of rural development efforts. In the case of shopping communities, there is also church involvement. The reason for this is the social ambitions of the church, the desire for a more communal approach to small-scale production. Let's not forget that monastic orders have been self-sustaining for almost two millennia. Religious organisations provide a suitable place for several shopping communities to operate. The best known is the Kiskosár Community in Esztergom, where a parish of the town, which is the centre of the Hungarian Roman Catholic Church, is the venue for the handover day.

Test hypothesis H5: there are quantitative and qualitative differences in the offer of each shopping community

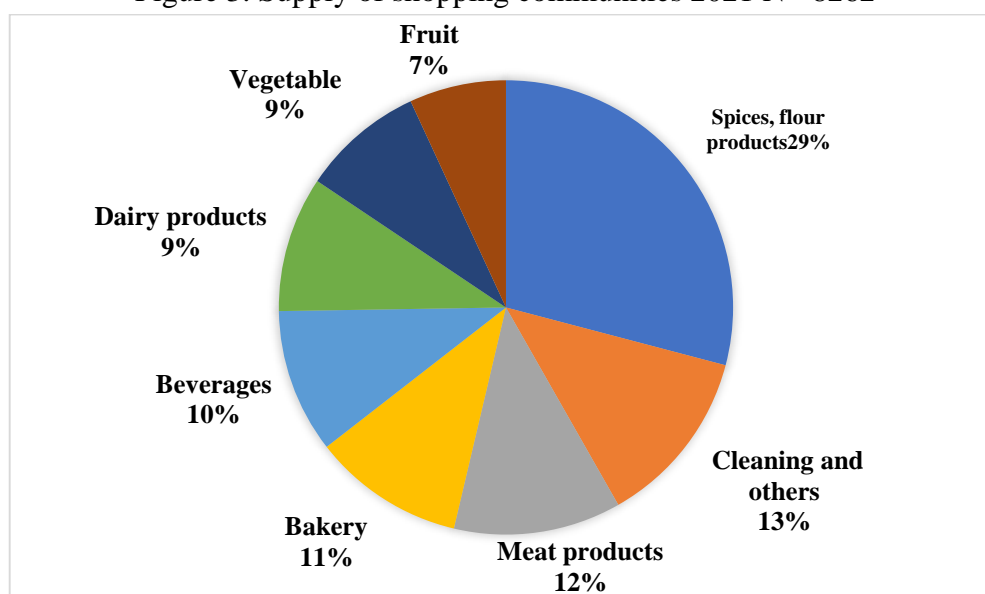
The first and very important step after the creation of a shopping community is the development of its offer. The basic expectation of shoppers is that the products available in the farmers' markets should not be absent from the range of products offered by the shopping communities.

Both small and small-scale producers are subject to the territorial restrictions laid down in the Small Farmers' Ordinance, which means that each buying-in community may seek small producers in the area of sale. An exception to this is the case of the Budapest-based buying groups, which can draw small producers from all over the country. Shopping groups may involve not only small and family producers, but also entrepreneurs who are no longer subject to the territorial restrictions applicable to small producers.

In my independent research, I analysed the supply of these shopping communities. The data was collected in the months of February and March 2021. The scale of the work is illustrated by the fact that in a single average week, the shopping communities offered the possibility to order nearly 8,000 products. Summarising the offer of the shopping communities, I found the following. In terms of the number of products on offer, spices and tea blends, flour, sweets and various creams stood out, with more than 2 000 products on offer. They account for 30% of the total range. These products are therefore typically processed products and therefore have a high added value. Producers try to express their own creativity and individual tastes - and of course to market them. They are followed by meat products (12%), detergents and other non-food products (11%), bakery products (11%), beverages (10%), dairy products (10%), vegetables (9%) and fruit (7%) (Figure 17).

With regard to the relatively high proportion of cleaning products in the supply, it is important to note that their presence is probably linked to the coronavirus epidemic. They were not even mentioned in the most popular products in the "Eat with us" publication in 2019.

Figure 3. Supply of shopping communities 2021 N= 8262

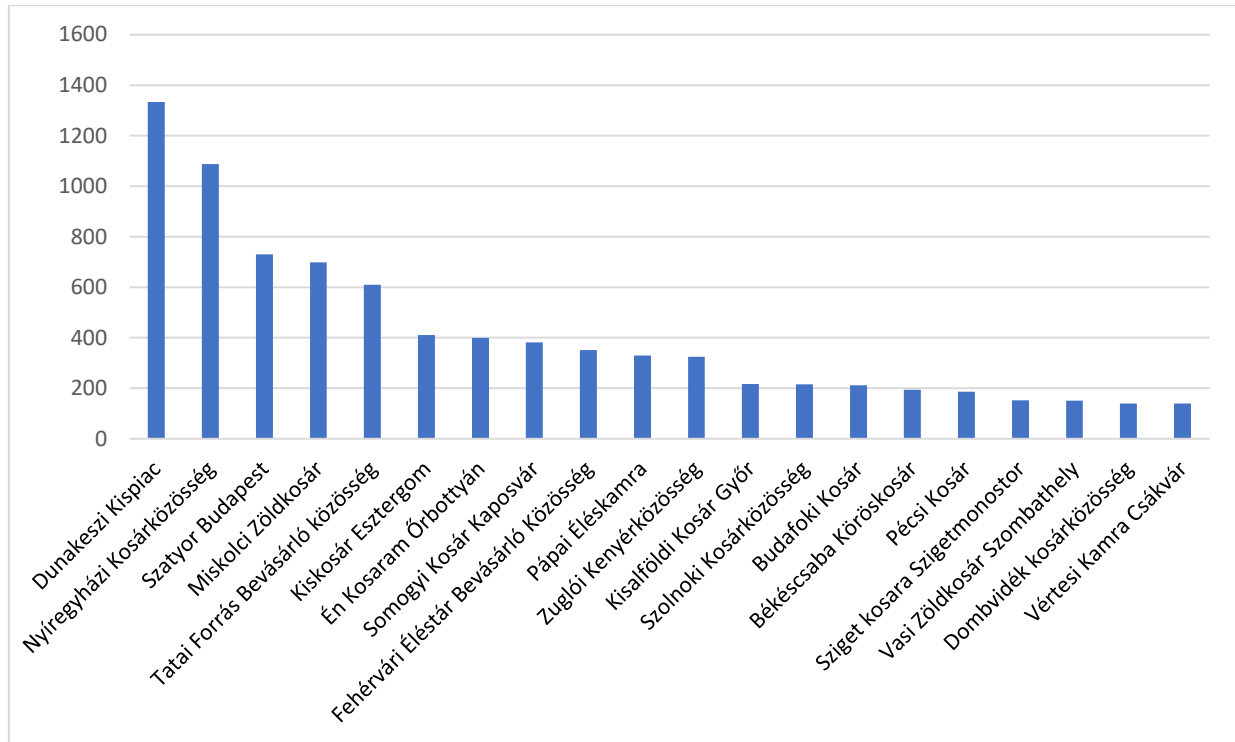


Source: own editing, data source: own collection

The smallest shopping community in terms of product range was the Vértesszőlő Chamber of Commerce, where 139 products were offered for sale. It can be concluded that the minimum number of products for which the pre-ordering interface of the shopping communities can be operational ranges between 130 and 140 products. In terms of product range, the largest ones can offer almost 10 times as many products as those offering the fewest. In addition to the organisation,

the size of the shopping community's population - or more precisely, the population of the municipalities themselves - also plays a role in the size of the range. Generally speaking, the shopping communities in the smallest municipalities cannot compete with those in the largest cities. The average number of products offered by shopping communities is 381, with 12 below average and 10 above average (Figure 4).

Figure 4. Supply of shopping communities 2021



Source: own editing, data source: own collection

Based on the number of products offered in the shopping communities by product group, the shopping communities were compared with the webshop using the Kend-all concordance coefficient. My aim was to visualise the relative offerings of the shopping communities. The shopping community with the highest number of products, sorted by product group, was given the highest ranking, and then the ranking of the combined offerings of the shopping communities was determined by comparing the different rankings using Kendall's concordance coefficient.

Based on the analysis, the experience is that the Nyíregyházi Basket community is dominant in most product groups, but this dominance is not exclusive. There are several exceptions, where the shopping communities with the widest range of products do not provide the largest selection within a given product category. These include the Köröskosár in Békéscsaba for vegetables, the Én Kosaram in Órbottyán for meat products, the Somogyi Kosár and the Forrás Shopping Community in Tatai for cleaning products and other handicraft products. It can be concluded that the results of the study were significant. The significance level is below 5 percent, so the results obtained were meaningful.

The coefficient obtained is above 0.5, indicating a medium relationship. This high value of the coefficient (W) indicates a medium degree of similarity of the responses, i.e. there are differences in the rankings of the different mutations. This is typically striking in the ranking of average ranks for the top shopping communities. The ranking is completed by the export of the previously established Chamber of Commerce of the Vértess, which was established in 2020 and 2021 respectively. Of the last eight shopping communities in the ranking, 7 are new. The Vasi Green Basket ranked last in the comparison with an average rank of 5.63, but this value shows that it is not an outstanding last place - it would have been ranked around 1. Even for those with a smaller range, there are product groups or producers that can offer a wide variety of products (dozens) (Table 4).

4. Ranking of shopping communities by the number of types of products offered, based on average rankingsok alapján

Name of the shopping community	Average rank
Small market Dunakeszi	18,75
Nyíregyházi Basket Community	18,38
Szatyor Shopping Community	15,63
Miskolc Green Basket	14,75
Tatai Forrás shopping community	12,88
Kiskosár Shopping Community	12,75
My basket Órbottyán Shopping Community	12
Fehérvári Éléstár Shopping Community	11,13
Somogyi Basket Kaposvár	11,13
Zugló Bread Community	10,75
Shopping Community of Pápa	9,13
Békéscsaba Köröskosár Shopping Basket Community	9
Kisalföld Basket Shopping Community	8,38
Budafok Basket Shopping Community	7,63
Pécs Basket Shopping Community	7,5
Szolnok Basket Shopping Community	7
Dombvidék Basket Shopping Community	5,88
Sziget Basket Shopping Community	5,88
Vértess Chamber Shopping Community	5,88
Vas County Green Basket Shopping Community	5,63

Source: own collection

Test hypothesis H6: Shopping communities should have a specific quality assurance system

Quality assurance is a field of activity that permeates today's production mechanisms, whatever the product. Continuous quality control is present. Quality assurance of local products is also typically regulated in a permissive way at European level (Veraes 2015). In the case of local products, most of which are known to be food, the legislative environment imposes precise quality requirements in terms of direct impact on human health. The Small Producer Regulation and the associated food and food safety standards are considerably more permissive for producers of local products than those required of operators of professional large-scale food production.

The introduction of a trademark is recommended as part of quality assurance for rural development support agencies, local products and short supply chain elements. It is common practice that trademarks are available separately for each product. In Hungary, however, trademarks certifying the short supply chain elements are not yet available. The reason for this may be that the introduction of official trademarks is a significant cost in relation to the amount of money that flows through the short supply chain elements, with the cost of the procedure exceeding HUF 100 000.

It is necessary for the shopping communities to carry out quality assurance and quality control on the basis of their own rules. It is common practice to ensure an open economy for short supply chain elements. In an open farm, producers undertake to allow shoppers to visit the farm at set intervals, meet the producers and see how the local product is made.

Presentation of the producers

In line with the above, shopping communities aim to make producers as familiar as possible to consumers. This is particularly important as the personal relationship between producers and buyers, which is an important element of the short supply chain approach and the Small Farmers' Regulation, is shifting to the online space for shopping communities due to the online ordering platform and organised deliveries. Thus, a detailed presentation of the producers, covering the location of production, the production methods, the personal motivation of the producer is of paramount importance in the operation of the shopping communities. For all the shopping communities with a webshop, the producers' profiles are public and can be consulted at any time by the customer in the ordering interface (table).

Farm visit

In the case of shopping communities, a meaningful message to customers is for members of the shopping community to visit producers and report on their experiences of visits to producers. Visits are inherently a confidence-building exercise, but there have also been examples of producers being excluded by the shopping community after their visit experience due to poor hygiene conditions. I have not yet found examples of open farm provision being documented and publicised as widely as possible in Hungarian shopping communities. In my opinion, it would greatly improve the social image, visibility and recognition of shopping communities if

the communities were to publish the operation of open farms on a regular basis and according to objective criteria, indicating at which time and place the producer was visited and the stage of product production viewed. Ad hoc reports of producer visits to quality assurance efforts can be found on the social media platforms of several shopping communities. Some examples are, but not limited to, the Zugló Bread Community. The case of Nyíregyházi Kosárközösség, Vértesi Kamra.

Quality assurance in shopping communities is linked to the issue of the price of local products. This is perceived to be expensive. For local products sold in short supply chains, there is no generally accepted quality rating in this respect. The pricing policy is not uniformly formulated. Some products are sold in a shopping community because of their simplicity, others because of their novelty, their production using quality raw materials or even their organic certification.

General terms and conditions

General terms and conditions for purchases, details of the shopping community, general terms and conditions for ordering, payment, returning products, complaints procedures were displayed on the shopping interface by 44% of the shopping communities with a webshop.

Product rating system

The aim of the product rating system is to enable producers and shopping community organisers to evaluate the products on offer on the basis of a complex set of criteria. I have already presented the Product Marketing Rating (TMR) system, created by the Arrowroot House Shopping Community and available to shopping communities. The product rating system is used by 22% of shopping communities with a webshop.

Data protection information

Over the last decade, the protection of personal data has become an important issue at European level. In Hungary, the so-called GDPR regulation has been in force since 2016, which deals with the protection of personal data and data management. Shopping communities have access to the personal data of customers during their operation, as the customer is required to provide personal data when placing an order, and the online shopping community interfaces require registration in most cases. For 44% of the shopping communities with a webshop, a privacy notice is available on their online platform, explaining the purpose of data processing and the storage of data.

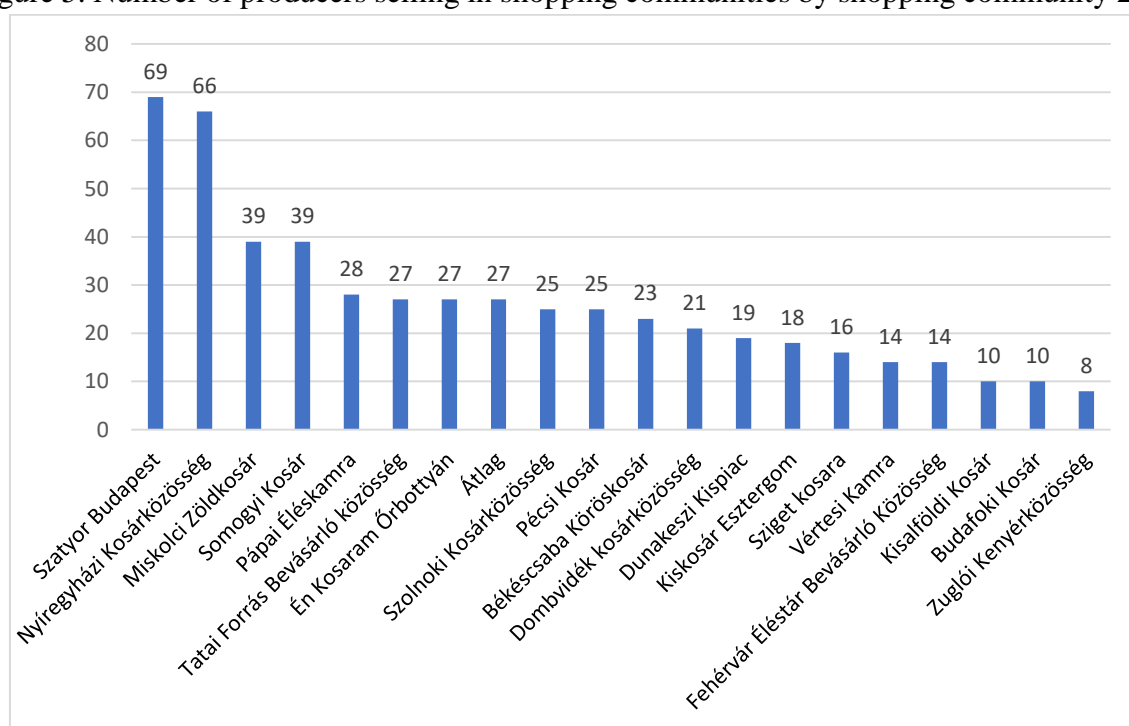
Price guarantees have not been widely taken up by shopping communities. The product certification system introduced by the Nyíregyháza Shopping Community and made available to the shopping communities is not used by other shopping communities, which is labour-intensive and requires knowledge. In contrast, the price guarantee facility is used by two thirds

of the shopping communities. The data management information and the general terms and conditions are not available for most of the shopping communities, which I consider a serious shortcoming.

Testing hypothesis H7: Producer actors in shopping communities result in significant rural coverage

In addition to shoppers and organisers, the third actor in shopping communities are producers. A database of all producers in shopping communities with a webshop was created. This shows that at the time of the survey - February 2021 - more than 300 producers were involved in the operation of the shopping communities. Most producers are involved in the Budapest Szatyor Shopping Community and the Nyíregyháza Shopping Community. Here, shoppers can choose from nearly 70 producers' products. Next in line are the Miskolc Green Basket, with half as many producers as the leading ones, and the Somogyi Basket, established in 2020. The Pécs Basket, launched in 2020, the Gödöllő-based Dombvidék Kosárközösség and the Pápai Éléskamra also integrate an above-average number of producers. It can be said that the number of producers does not depend on the number of years the community has been in operation. As a newcomer, there is also the possibility of a wide range of products and of involving more producers. On average, 27 producers belong to a shopping community. Zugló Bread Community has the lowest number of producers: only 8 producers offer their products, but these 8 producers can offer more than 200 different products. It can be concluded that with 8-10 producers, the shopping community can be operated on a multiannual basis (Figure 5).

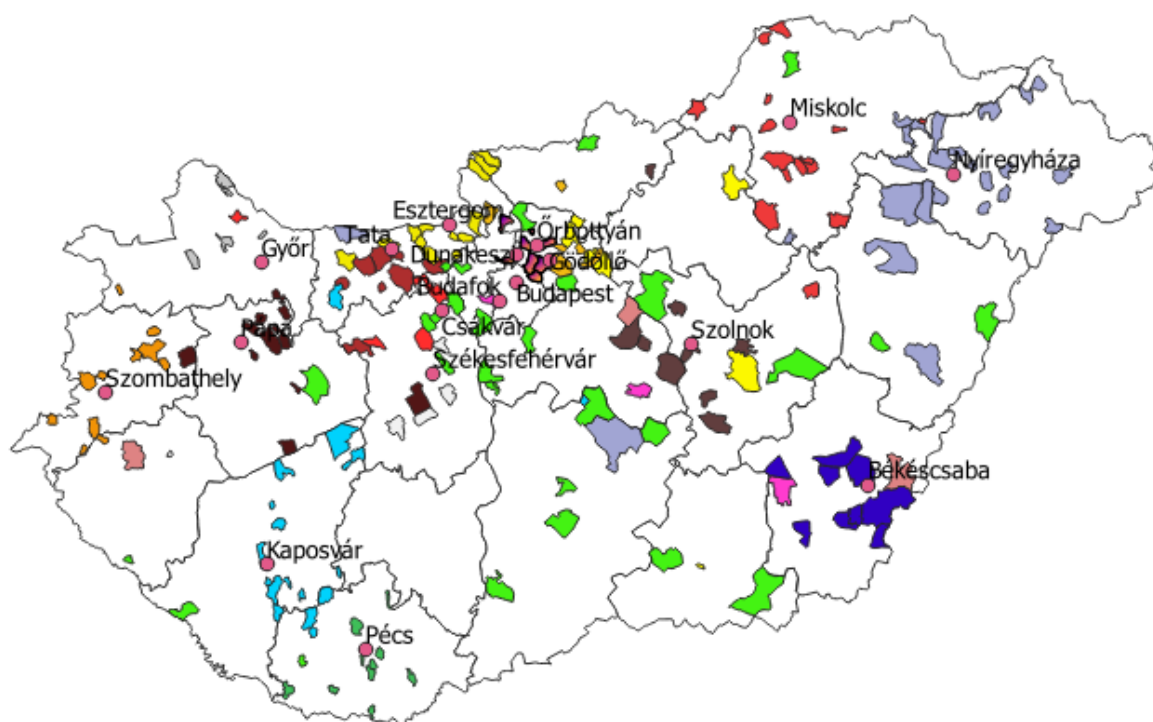
Figure 5. Number of producers selling in shopping communities by shopping community 2021















Own editing, data source: own collection

Shopping communities provide sales opportunities for nearly 400 producers. The producers come from 160 different municipalities. The map clearly shows that the rural shopping communities are typically a market for producers from the surrounding municipalities. There are well-defined districts around the towns, a kind of agglomeration ring of rural producers surrounding the towns. The map does not show producers who are active in the municipalities where the shopping communities are located. Shopping communities in the capital are even expecting producers from more distant municipalities in the country, so this is an exceptional situation (Figure 6).

Figure 6. Producers selling in shopping communities by municipality 2021



Jelmagyarázat							
	Szatyorbolt Budapest		Budafoki Kosár		Pécsi Kosár		Fehérvári Éléstár
	Köröskosár Békéscsaba		Kiskosár Esztergom		Zuglói Kosárközösség		Somogyi Kosár
	Szolnoki Kosár		Kisalföldi Kosár		Forrás Bevásárlóközösség Tata		Vasi Zöldkosár

Forrás: Saját gyűjtés, saját szerkesztés

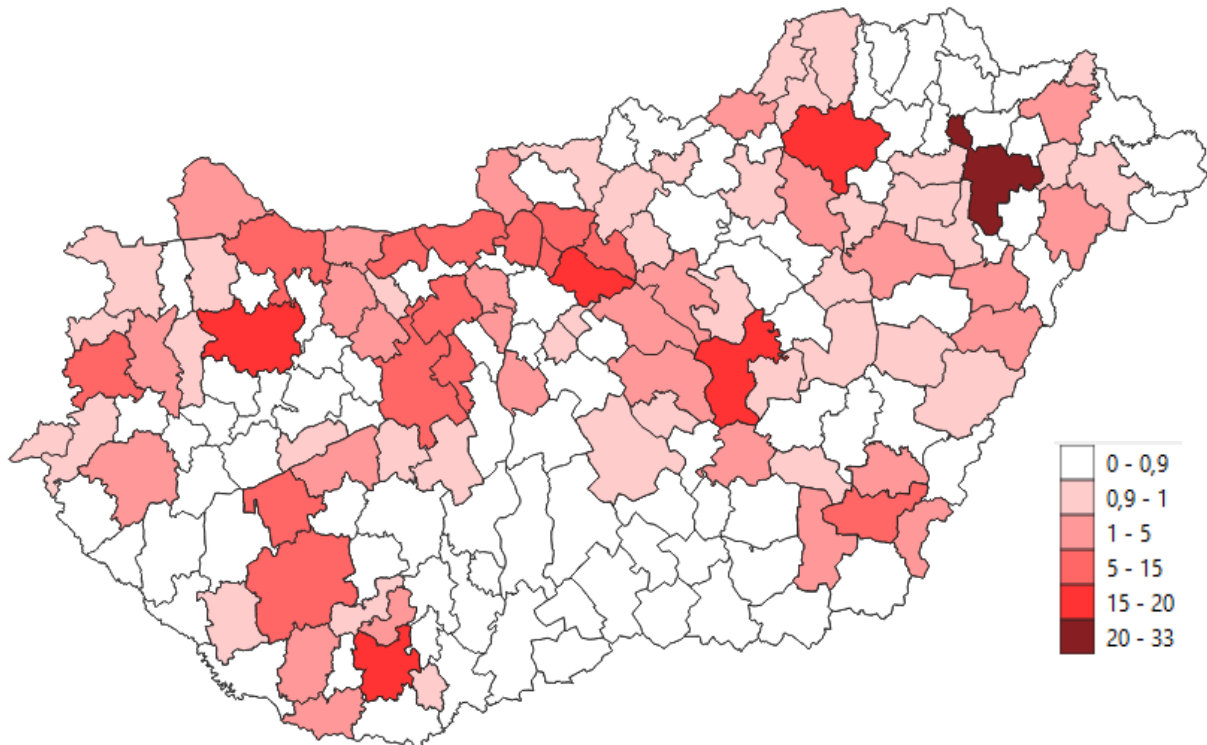
Shopping communities by producer districts

Producers in the shopping communities with a webshop come from 87 districts, representing 49.6 percent of the national districts.

The districts of Pécs, Szolnok, Pápa, Gödöllő and Miskolc stand out as the districts with a shopping community. In these districts, at least 15 producers per district have a value-added shopping community. Nearly 70 districts were found where no shopping community exists, but where at least one producer per district sells through a shopping community. This means that products and producers from disadvantaged, typically rural areas such as Edelényi, Sellyei and Nyírbátor districts are also supplied to the online marketplaces of the shopping communities. In the districts where the shopping communities with online shops are located, and therefore where the delivery day takes place, my experience was that at least 8 producers sell in the

"competent" shopping community in the area. Most of the producers were from the Nyíregyháza district, where 33 producers sell through a shopping community. In the southern part of the country, mainly the districts of Bács-Kiskun and Csongrád counties make up the areas where there are no producers selling through a shopping community. I have also mapped the producers on a thematic map (Figure 7), and Kreme & DeLiberty (2011) mention thematic mapping as an effective tool for identifying the potential of local food systems.

Figure 7. Distribution of producers selling in purchasing communities by district 2021



Source: own editing, data source: own collection

Test hypothesis H8: producers and suppliers in shopping communities meet the 50 km criterion of the Small Producer Regulation

The origin of the products, and more precisely the place of production, makes it possible to determine how many kilometres a product has "arrived" in the supply of the shopping community. This makes it possible to determine the extent to which the products offered by a given shopping community can be described as local products. In this respect, the 50-kilometre territorial delimitation laid down in the Small Producers' Ordinance is considered to be the relevant territorial delimitation for local products. Shopping communities with a webshop were included in the study. This represents 18 shopping communities. In the case of the shopping communities operating in Budapest (Zuglói Kenyérkö-zösség, Szatyorbolt), the products are generally delivered from further away than in the case of the communities outside the capital.

Based on the production (transport) distance of the products sold through the shopping communities, the average distance from the products offered in a given shopping community to the delivery points was determined. It is thus possible to compare shopping communities. It is possible to assess the extent to which the assumption that local products are sold in the shopping communities is true on the basis of the distance of sale. In this respect, the Sziget Kosara shopping community in Szentendre-Szigete is the most "local", with an average delivery distance of 6 km for all the products offered. In addition, there is one other shopping community where the products offered are delivered from a distance of less than 10 kilometres, this is the Dunakeszi Small Market. The shopping communities in the capital have the longest delivery distances of more than 50 kilometres. The Szatyor shopping centre is 60 kilometres away and the Zugló Bread Community is 102 kilometres away.

At the same time, it is in line with the Small Producer Regulation that the Budapest shopping cooperatives have a greater purchasing distance, since the same government decree allows the sale of small producer products in the capital regardless of where the place of production is located. The average purchasing distance for products offered in shopping communities is, according to my calculations, 30 kilometres. It can be concluded that, with the exception of the capital, shopping communities do indeed sell local products because of the territorial regulation (Table 5).

Table 5. Average delivery distance of products offered in shopping communities by purchasing community 2021 (km)

Bevásárló közösség	Átlagos távolság /km/
Sziget Kosara Szigetmonostor	6
Dunakeszi Kispia	8
Dombvidék Gödöllő	11
Békéscsabai KörösKosár	14
Tatai Forrás Bevásárló Közösség	16
Vértesi Kamra	16
Pécsi Kosár	18
Kisalföldi kosár	19
Vasi Zöldkosár Szombathely	23
Én Kosaram Órbottyán	25
Fehérvári Éléstár Bevásárló Közösség	28
Miskolci Zöld Kosár	28
Pápai Éléskamra	30
Budafoki Kosár	31
Kiskosár Esztergom	32
Szolnoki Kosár Közösség	42
Nyíregyházi Kosárközösség	48
Somogyi Kosár Kaposvár	49

Szatyor Budapest	60
Zuglói Kenyérközösség	102
Átlag	31

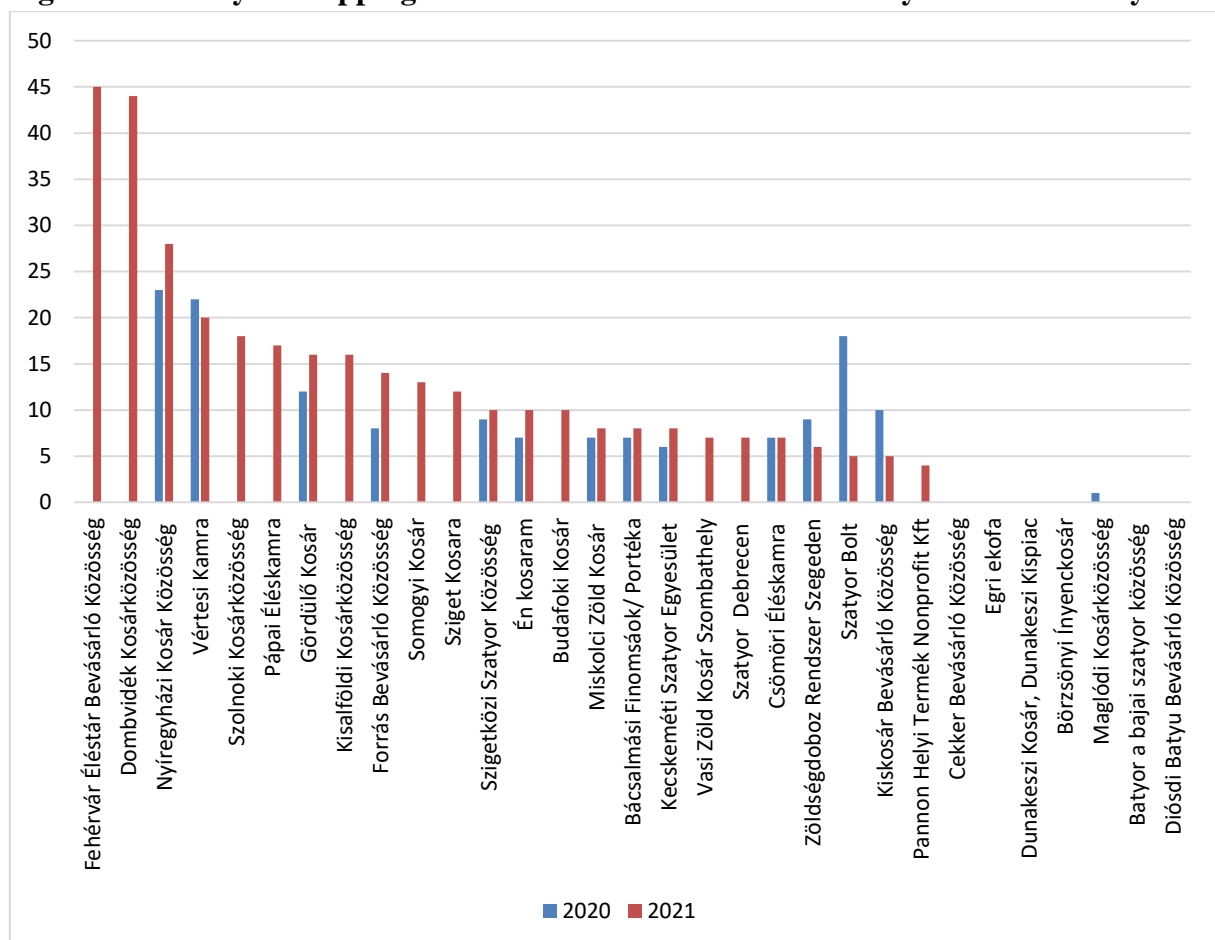
Source: own editing, data source: own collection

H9: Online presence is essential for the functioning of shopping communities

The emergence of the internet has brought about a major transformation in commerce worldwide. The role of geographic proximity distance has been reassessed (Sikos 2019). This is also true for the trade of local products, but for producers of local products, the reduction of geographic proximity distance is limited by the legal regulation on selling distance (Small Producers Regulation).

The main online platforms for shopping communities are the online shop (homepage) and social media. The existence of online interfaces for shopping communities is the basis for the functioning of the communities, and the results of empirical research, both content analysis and interviews, confirm the claim that if a shopping community does not have an online interface it does not function.

Figure 8. Activity of shopping communities on Facebook February 2020 - February 2021



Source: own collection, own editing

Testing hypothesis H10: The coronavirus epidemic and the restrictions on the spread of the epidemic have had a negative impact on shopping communities

The year 2020 has drawn attention to the vulnerability of globally organised supply chains (Jiwa et al 2021). The severe crisis has presented new challenges and perhaps opportunities for short supply chain operations, including shopping communities. In Hungary, government measures to control the coronavirus epidemic have also helped to expand online trade. The elements of the short supply chain, apart from the shopping community, are based on personal contact. Following the introduction of curfew restrictions following the COVID epidemic, municipal governments closed local farmers' markets in several municipalities (Nagymaros, Tihany.) The most important venues for selling local products, local farmers' markets, reacted sensitively to the unexpected situation. The expression of thanks formulated and published by a shopping community after the curfew restrictions in the most difficult pandemic period is telling: Shopping communities have also sought to turn distance and outreach into a competitive advantage during the pandemic.

Most of the shopping communities were also active during the outbreak prevention measures, and these organisations also tried to reduce face-to-face encounters, introduce preventive hygiene measures and in several cases started to deliver products to the door.

Preventive measures included, for example, the introduction of pre-registration to facilitate participation on the delivery day, as in the case of the Zuglo Bread Association.

In Esztergom, on the delivery day of the Kiskosár Shopping Community, volunteers handed over the ordered products to the customers in a packed state, and customers could pick up the products one by one.

Overall, it can be concluded that with adequate infrastructure and branding activities, the shopping communities were able to operate effectively in the face of the coronavirus emergency. In some cases, they have had a high turnover, but they have not been able to take full advantage of the niche market (the closure of a large number of farmers' markets). As a large number of volunteers are needed to operate, the community was not able to meet the increased demand for shopping communities during the epidemic beyond a certain level of turnover. It would therefore seem that the number of volunteers can be a limiting factor in the operation of shopping communities if the "business" becomes too large.

4. CONCLUSIONS, PROPOSALS, NEW SCIENTIFIC RESULTS

4.1.

Conclusions and proposals

My conclusions are drawn from the results of the research carried out for each hypothesis. This will also allow me to verify my hypotheses. Where justified by the conclusions, I will also include my recommendations.

Hypothesis 1:

There are some shopping communities that are not included in the official registers.

Result: confirmed

Shopping communities are mentioned by several official organisations as a good practice and an example to follow... Despite this, no official database has been created. This does not mean, of course, that there is no information available on shopping communities. There are several databases available on the Internet, published by various NGOs (such as the Association of Conscious Shoppers, Nyíregy-House Shopping Community, Kiskosár Shopping Community), which are typically based on personal contacts.

In order to prove my hypothesis, I aimed to compile a database of shopping communities operating in Hungary by conducting an online content analysis in 2019 and 2021, covering all Hungarian municipalities with urban status. Already during my first research I was able to identify significantly more shopping communities than the number of previously known shopping communities. I repeated the study in 2019 in 2021 to assess the impact of the coronavirus epidemic.

Hypothesis 2:

The municipal distribution of shopping communities follows the national hierarchy of municipalities.

Result: confirmed

The fact that the spatial distribution of shopping communities reflects the settlement hierarchy is confirmed by my analysis using the penetration index. It shows that the proportion of shopping communities is higher in municipalities with a larger population density near the capital.

However, shopping communities do not cover the population of municipalities at the level of several hierarchies of municipalities. Out of 8 municipalities in Hungary with a population of more than 100 thousand inhabitants, shopping communities are found in 7. In terms of their legal status, shopping communities are more numerous in the county capitals and in the district municipalities.

3. Hypothesis:

The development of shopping communities can be modelled

Result: confirmed

Shopping communities come in many forms. Their activities can be used to model the functioning of the main types. This was illustrated by analysing a database of Hungarian shopping communities. Basically, I found four types of structures, with visible differences in their organisation and viability. There are shopping communities that cannot set up a management organisation, do not have a constantly updated website, do not have an internet ordering facility, and do not have the social media interface necessary for their activities. These are generally found to be crude. These shopping communities are typically individually founded. Where a single person wants to set up the organisation, there is minimal internet access, typically a blog or Facebook page, or some kind of press product used for news. The majority of these organisations do not make it to the first delivery day and cannot find potential producers and buyers.

3. Hypothesis:

The development of shopping communities can be modelled

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Shopping communities come in many forms. Their activities can be used to model the functioning of the main types. This was illustrated by analysing a database of Hungarian shopping communities. Basically, I found four types of structures, with visible differences in their organisation and viability. There are shopping communities that cannot set up a management organisation, do not have a constantly updated website, do not have an internet ordering facility, and do not have the social media interface necessary for their activities. These are generally found to be crude. These shopping communities are typically individually founded. Where a single person wants to set up the organisation, there is minimal internet access, typically a blog or Facebook page, or some kind of press product used for news. The majority of these organisations do not make it to the first delivery day and cannot find potential producers and buyers. My research also showed that shopping communities are typically coordinated by some kind of non-profit organisation, as for-profit organisations are in many ways not well suited to this form of awareness-raising. For-profit organisations are not suitable for the operation of shopping communities mainly because of the following factors: their limited involvement in the sale of small producers' products, and the operating mechanisms of shopping communities, such as a high proportion of voluntary work, possible intermittent operation, and discontinuous income, are not favourable to them. None of the shopping communities operating in Hungary are run by profit-making organisations.

Hypothesis 5:

The offer of each shopping community differs in quantity and quality

Result: confirmed

Through my content analysis, I was able to examine the quantitative and qualitative offerings of the shopping communities. In a single average week, the shopping communities offered the

possibility to order nearly 8,000 products. Summarising the offerings of the shopping communities, I found the following. The most important products in terms of range were spices and tea blends, flour, sweets and various types of cream, of which more than 2 000 were offered. These products account for 30 % of the total range. These products are therefore typically processed products and therefore have a high added value. They are a way for producers to express their own creativity and individual tastes - and, of course, to sell them. This is followed by meat products (12%), detergents and other non-food products (11%), bakery products (11%), beverages (10%), dairy products (10%), vegetables (9%) and fruit (7%).

Hypothesis 6:

Shopping communities should have a specific quality assurance system

Result: confirmed

Regarding the quality assurance initiatives of the shopping communities, it can be concluded that soft systems are mainly used; these are mainly producer visits and producer demonstrations. Price guarantees have not been widely adopted by the shopping communities. The product certification system introduced by the Nyíregyháza Shopping Community and made available to the shopping communities is not used by other shopping communities, which is labour-intensive and requires knowledge. In contrast, the price guarantee facility is used by two thirds of the shopping communities. The data management information and the general terms and conditions are not available for most of the shopping communities, which I consider a serious shortcoming.

Hypothesis 7:

Producer actors in shopping communities lead to significant rural coverage

Result: confirmed

Based on the content analysis I conducted, the shopping communities I identified provide outlets for nearly 400 producers, whose areas of operation, illustrated by a map, were found to be rural. The producers come from 160 different municipalities. Rural shopping communities are typically a consumer market for producers from the surrounding tepe settlements. As far as the cities are concerned, rural markets form a ring around the cities, forming a kind of supply circle. According to my results, of the nearly 400 producers selling in the 20 shopping communities I studied, which have 20 webshops, 81 come from 81 districts, with one shopping community receiving producers from an average of four districts. Shopping communities also have a regional impact.

8.Hypothesis:

Producer suppliers in shopping communities meet the 50 km criterion set out in the Small Producer Regulation

Result: Confirmed

Based on the production (transport) distance of the products sold by the shopping communities, the average distance of the products offered in the given shopping community to the delivery points was determined. Based on my results, it can be assumed that the Sziget Kosara shopping community in Szentendre-Szigete is the most "local", with an average transport distance of only 6 km. In addition, there is one more shopping community where the products offered are delivered from a distance of less than 10 kilometres, this is the Dunakeszi Small Market. The shopping communities in the capital have the longest delivery distances of more than 50 kilometres. In the case of Szatyor it is 60 kilometres, and in the case of the Zugló Bread Community it is 102 kilometres. However, it is in line with the Small Farmers' Ordinance that the shopping communities in Budapest have a greater distance to supply, since the same government decree allows the sale of small farm products in the capital regardless of where the place of production is located.

The average purchasing distance for products offered in shopping communities is 30 kilometres. It can be concluded that, with the exception of the capital city, the shopping communities are indeed selling local products due to the territorial regulation.

Hypothesis 9:

The presence in the online space is essential for the functioning of shopping communities

Result: Confirmed

The existence of online platforms for shopping communities is the basis for the functioning of the communities, and the results of empirical research, both content analysis and interviews, confirm the claim that if a shopping community does not have an online platform, it does not function.

According to my research, 41 shopping communities have been established in Hungary in the last 12 years. This is how many shopping communities have appeared online. In my research I found 2 shopping communities that have both a webshop, a public Facebook social media group and a Facebook page. 23 shopping communities in Hungary have an online presence: this is exclusively a Facebook page. I did not find any shopping community with a webshop or Facebook group but no Facebook page. However, there is a shopping community that has a group and a webshop but no Facebook page - this is the Pécs Basket Community.

10.Hypothesis:

The coronavirus epidemic and the restrictions on the spread of the epidemic have had a negative impact on shopping communities

Result: not confirmed

Restrictive measures were introduced following the emergence of the coronavirus outbreak in Hungary. These measures, such as closure of establishments, curfew, official quarantine, did not affect the shopping communities as severely as other actors in the short supply chain. This is due to the fact that the shopping communities were able to enforce the rules of restraint and contact during the coronavirus epidemic. In a very pro-active way, during the first wave of the coronavirus epidemic in Hungary, in March 2020, the Kislépték Association proposed, for example, to amend Government Decree 71/2020 (III.27) on curfew restrictions by allowing the possibility to deliver products at a point of sale (e.g. to shopping communities) in addition to market and grocery shopping.

Most of the shopping communities were also operating during the outbreak prevention measures. Some shopping communities were able to operate effectively during the coronavirus emergency, with outstanding turnover. It is also true, for example, that the temporary closure of farmers' markets created a gap in the market, which they were unable to exploit fully. The main reason for this is the way in which the shopping communities function as a community. Since a large number of volunteers are needed to help with the operation, the community was not able to meet the increased demand for shopping communities during the epidemic beyond a certain level of turnover. It would therefore appear that the number of volunteers can be a limiting factor in the operation of shopping communities if the "business camel-load" becomes too large. Another beneficial effect of the epidemic has been the spread of a number of important innovations: the number of online shops has increased, home delivery and drive-in collection have become more widespread. The time band for older and younger age groups to shop also required adaptation, as did the precautionary headcount restrictions.

4.2. Suggestions

J1. When looking at the functioning of shopping communities, it would be particularly important to develop a less time-consuming practice to create a legal framework for the organisation of the bodies. Today, the lengthy procedure still hinders the start of meaningful community activities. The process of registering an NGO can take up to one year from the date of application for registration. However, the status of legal entity is essential for the functioning of a shopping community. In order to provide a legal basis and thus speed up the start of the activities of the shopping communities at local level, it would be advisable to set up a national NGO or to make the statutes and objectives of an existing organisation valid at national level. The organisers of the newly formed shopping communities could also be members of the national organisation. Another workable solution to avoid the large number of members and the slower decision-making that this implies, which would make practical operation difficult, would be to have the leaders of the local shopping communities as employees of the shopping community on a voluntary contract basis. In the case of NGOs with a national scope, local communities would be spared the bureaucratic hassle of setting up a management organisation.

Newly established organisations could pay more attention to promoting local products, finding new producers and buyers. Operating under a national organisation would reduce the administrative costs for a community, especially accounting costs. This form of operation would be very similar to the mechanism for setting up a basic organisation in a special form of NGO, the political party. However, it should be pointed out that the form of organisation described above would simplify the activities of local organisers and communities, thus speeding up the start-up of the practical work of new communities, but would also reduce the autonomy of local communities. In this case, however, thanks to the centralised operation, the local community would not be expected to do too much legal preparation before setting up, i.e. knowledge of the laws affecting the operation of NGOs would not be a bottleneck to setting up. A problem with the operation of a simplified system could be that it could also make it more difficult to communicate with local authorities, such as NAV or Nébih.

J2: In addition to facilitating the creation of shopping communities, it would be absolutely necessary and desirable to introduce mandatory training for those who join. At present, the best training programme for the organisation of shopping communities at national level is the one implemented by the Nyíregyháza Shopping Community.

J3 Shopping communities are grassroots, but they have also been successful in learning from each other in the past. Learning from each other should also be built up in a systematic way. It would be useful to include in this networking system the departments of academic and research institutions dealing with short supply chains and their practical functioning.

J4: A Nyíregyházi Kosárközösség európai uniós forrásból megvalósított egy webshop fejlesztést, egy ú.n. „bevásárló közösség szoftvert”. Ezt számos Közösség számára elérhetővé tették már, Ezt volna célszerű tovább népszerűsíteni.

J5: A rövid ellátási lánc elemeinek statisztikai mérése napjainkban még rendkívül kiforratlan. Hiányoznak az adatok a termelőkről, a termékekről, az értékesítési helyszínekről és értékesítési csatornákról. A REL szereplőinek több esetben is van regisztrációs kötelezettsége, ezáltal e kötelezettségekből hivatalos adatbázisok létrehozására is lehetőség nyílna. A rövid ellátási lánc, azon belül a bevásárló közösségek tevékenységének statisztikai célú mérését lehetővé tenni azért is célszerű volna, mivel fontos lenne tudni ennek nemzetgazdaságban betöltött szerepét.

J6: A bevásárló közösségek helyi szinten kevés együttműködést alakítottak ki más területeken tevékenykedő civil szervezetekkel, helyi közintézményekkel, egyházakkal. Ahol megkezdődött az együttműködés, láthatóan jobb eredményeket értek el. A bevásárló közösségek mélyebb társadalmi beágyazottsága érdekében széleskörű partnerség kialakítását lenne célszerű elérni, hogy ne egy viszonylag szűk réteg körében legyenek ismertek és elismertek.

J4: The Nyíregyházi Kosárközösség implemented a webshop development, a so called "webshop", with EU funding. "shopping community software". This has already been made available to several communities, it would be useful to promote it further.

J5: The statistical measurement of short supply chain elements is still very immature. There is a lack of data on producers, products, sales outlets and distribution channels. In several cases, REL operators are obliged to register, which could be used to create official databases. It would also be useful to allow the statistical measurement of the activities of the short supply chain, including shopping communities, as it is important to know their role in the national economy.

J6: At local level, shopping communities have established little cooperation with NGOs, local public institutions and churches active in other areas. Where cooperation has started, it seems to have produced better results. In order to deepen the social embedding of shopping communities, it would be desirable to develop a broad partnership, so that they are not known and recognised by a relatively narrow group of people.

4.3 New scientific results

1. Based on the available, but unofficial, shopping community databases, I created a database of shopping communities for all municipalities in Hungary with urban status. Thus, in May 2019, I was able to identify 35 active shopping communities, but repeating the study in 2021, I identified 41 communities.

2. It can be concluded that shopping communities are more prevalent in municipalities with a larger population size than in the capital.

3. The purchasing distance of the products offered in Hungarian shopping communities is less than 50 km from the centre of the shopping community - the place of delivery, with the exception of the Budapest shopping community.

4. I have explored the he-hole of origin of the products sold in the shopping communities.

5. I ranked the shopping communities according to the product groups offered using the Kendall coefficient of concordance.

5. SUMMARY

Short supply chain elements for the production and sale of local products have made spectacular inroads in Hungary over the last decade. Local produce is not only a concept, but also a weekly offering in hundreds of outlets throughout the country.

The shopping community is one element of the short supply chain. The shopping community should be defined as an organisation/grouping committed to the development of the short supply chain, using marketing and communication tools to help establish links between producers and consumers, to display the offer and to maintain a distribution channel (webshop, farmers' market and shop).

The first part of the thesis was devoted to the processing and structuring of the literature. In this context, the topics of short supply chains, local products and local economic development were discussed in detail. The definition of local products is not a simple task, despite their widespread use. Since case study research on practical implementation is more typical than work on theoretical foundations, I have based my research primarily on this. The definition of local product as a concept is important in this thesis, as it is the basis for the functioning of shopping communities.

The main objective of this dissertation was to define the concept of domestic shopping communities and to analyse their spatial location, with particular reference to their relationship with the hierarchy of settlements in Hungary.

My research was fundamentally determined by the fact that, with few exceptions, no official statistical sources are available on the topic under study. For this reason, the focus of my primary research was on building a database. In addition to data collection and analysis, I conducted a content analysis of the online interfaces of shopping communities along specified criteria and involved the organisers of shopping communities in structured in-depth interviews.

In my dissertation, I present my results after the chapter on research methodology. Since there is no official statistical data collection on this activity in Hungary, I obtained data through the NGOs that run the shopping communities. I conducted a search for the five Hungarian cities, from which I created my database.

By examining the spatial distribution of shopping communities using the penetration index, it is shown that the distribution of communities reflects the national settlement hierarchy. Shopping communities, like other services that meet the needs of society, show a spatial distribution that corresponds to the settlement hierarchy. The penetration index was also constructed for 2019 and 2021. It can be seen that the newly formed shopping communities also follow the settlement hierarchy. Shopping communities are clearly present in municipalities with a larger population, decreasing after the capital in cities with more than 100,000 inhabitants and then

gradually in municipalities with a smaller population. In 2020, however, the first shopping community operating in a rural area, the Sziget Kosara shopping community in Szentendre-Szigeten, was established, which also shows that shopping communities can appear at lower and lower levels of the settlement hierarchy.

Pre-ordering is an important and almost indispensable feature of shopping communities. Currently, 20 shopping communities can offer this to their customers. There are, however, several shopping communities where pre-ordering is not possible. I have identified 15 shopping communities which have not been able to start selling or are no longer active. In these cases, either the community could not become operational, or a professional management was involved in the development of the organisation in the context of a project or a tender, which led to the discontinuation of the operation as resources were exhausted. To the best of my current knowledge, there is no project-based external funding for community shopping.

The paper analyses in detail the offer of the shopping communities, the size of the offer available and its variety. The paper pays particular attention to spatiality, to the localities from which the products are brought to the communities. At the time of the study, more than 8,000 products were available for purchase in shopping communities nationwide. The products are selected from six main groups. The shopping community with the largest range of products (Dunakeszi Kispiac) had 1344 products available, while the shopping community with the smallest number of products, Vértesi Kamrá in Csákvár, had only 139 products to choose from. The most common products were spices and other processed foods such as spreads, sauces and sweets, which accounted for 30 percent of the total offer. The other product groups are close to the normal distribution, with meat, vegetables, dairy products, fruit, bakery products, beverages, cleaning products and other non-food products accounting for between 7 and 12 percent of the total supply. As a result of the coronavirus epidemic, cleaning products have become a large part of the supply in shopping communities.

The shopping communities were ranked according to the product groups offered using Kendall's coefficient of concordance. The analysis was carried out using the SPSS mathematical-statistical software. As a result of the study, the overall average ranking was topped by the Nyíregyháza Shopping Community, the Dunakeszi Small Market and the Budapest Shopping Community Szatyor. The study showed that there is a moderately strong relationship between the shopping communities' offerings in terms of product group rankings. It can be concluded that the shopping communities have a large number of products in their offer, hence the difference in rankings, even if there is no shopping community specifically dedicated to the sale of one product.

In terms of the number of producers, significant differences are found between the shopping communities. In the community with the most producers, there are nearly 60 producers to choose from, while in the Zuglo Bread Community only 8 producers provide products.

I also looked at the geographical location of producers separately. I have grouped producers at district level. I found that the 370 producers selling in the shopping communities I studied come from 87 districts in Hungary. Most of the producers are located in districts where a shopping community has its headquarters or transfer point.

The average transport distance of the products offered in shopping communities is 30 km from the delivery point of the shopping community. The minimum distance is 6 km and the maximum 102 km. In shopping communities outside Budapest, the average distance for the delivery of products is less than 50 kilometres. It can be said that the shopping communities are indeed selling local products.

The coronavirus epidemic also affected the functioning of shopping communities. In terms of organisation, orders, and interest, the epidemic situation had no real non-negative impact on the functioning of the shopping communities. Existing shopping communities have encouraged organisers to adopt new improvements. These included the introduction of a home delivery service, the development of an online ordering interface, time-limited shopping and drive-in shopping. Existing shopping communities have responded flexibly to the new situation created by the coronavirus epidemic. 2020 is also a special year for shopping communities, as it is the year in which the largest number of shopping communities have been established since their launch in Hungary in 2008, with a total of 8 new communities starting their operations. To explore the establishment and operational characteristics of the shopping communities established in 2020, I conducted structured in-depth interviews with the founders of all the newly established shopping communities. Based on this, I made sure that the emergence of the shopping communities is not "due to" the coronavirus epidemic, but to the networking of the shopping communities and the initiative of territorial expansion, which was launched by the Nyíregyháza Shopping Community.

Founded in 2013 and considered to be one of the first in terms of organisation and offer, the community-based training series and peer-to-peer platform will help to provide a basic training on the details of the organisation and functioning of shopping communities. Participants in the training will become local actors, able to organise the communities in their own localities. The eight shopping communities launched in 2020 were all linked to the Nyíregyháza Shopping Community.

The online space is the primary organisational platform for the shopping communities. Newly started shopping communities have online platforms already at the moment of their launch, before they start their actual operations, which is an important forum for co-organising in their case. In the rest of the research, I focused on the operational indicators of shopping communities with a webshop, mainly focusing on their marketing and communication channels, their offer, with a particular focus on the producers and the place where the products are produced.

The online space is the primary organising platform for shopping communities. New shopping community start-ups already have online spaces before they actually start operating, which is an important forum for co-creation in their case. In the rest of the research, I mainly focused on the operational characteristics of shopping communities with a webshop, focusing on their marketing and communication channels, their offer, with a particular focus on producers and the place where the products are produced.

The existence of online interfaces is a characteristic feature of shopping communities. A specific sub-chapter in this thesis deals with the analysis of the online interfaces of the shopping communities. These platforms are used by shopping communities to try to establish a personal link between producers and buyers and to provide more information from producers to buyers. More shopping communities have a social media platform than a webshop. The social media platform can also be seen as a kind of zero step in the formation of a shopping community. The shopping communities that started in 2020 confirmed that in many cases the story starts with an enthusiastic volunteer setting up a social platform for the purpose of co-marketing before the community is organised, or more precisely, for the purpose of organising it. The post of shopping communities has been transformed over the past year. Newly created shopping communities are more active on social media. Larger social media sites with up to 10,000 followers are more active.

Quality assurance, like the short supply chain elements in shopping communities, is based on personal familiarity and trust. This trust is being built through online communication and an open economy, using the TMR and price guarantee options developed by the Nyíregyháza Basket Community. Some shopping communities have also drawn up detailed contractual terms and conditions similar to those of market-based retail outlets.

At the end of the paper I first summarised my conclusions. Using the results of the research, recommendations for the operation and regulation of shopping communities were formulated.

I have stressed that the regulatory environment for the operation of the shopping community is not yet very supportive. The National Tax and Customs Administration (NAV), which also oversees the short supply chain element, and the National Food Chain Safety Authority (NÉBIH) require shopping communities to demonstrate at local level that their activities comply with the legal framework. This will increase the preparedness of the communities and is in line with the principle of subsidiarity. They do indeed have to solve their problems locally, but a comprehensive and clear regulation would make it easier for both the community and the authorities to set up and manage shopping communities.

In my opinion, within a few years, shopping communities will reach a level of organisation and a national - or at least a national presence in larger cities - that will bring with it a clear and presumably supportive regulatory environment similar to that of farmers' markets. This is likely

to create more shopping communities, although it would be good if organisers could be relieved of the administrative coordination at local level. However, it should be borne in mind that a clearer regulatory environment for shopping communities could lead to the exclusion of some producers or products from this market. I plan to continue researching these innovative communities, which bring not only economic but also social benefits, and their development trajectories, and to use my research findings to