



**AgEcon** SEARCH  
RESEARCH IN AGRICULTURAL & APPLIED ECONOMICS

*The World's Largest Open Access Agricultural & Applied Economics Digital Library*

**This document is discoverable and free to researchers across the globe due to the work of AgEcon Search.**

**Help ensure our sustainability.**

Give to AgEcon Search

AgEcon Search

<http://ageconsearch.umn.edu>

[aesearch@umn.edu](mailto:aesearch@umn.edu)

*Papers downloaded from **AgEcon Search** may be used for non-commercial purposes and personal study only. No other use, including posting to another Internet site, is permitted without permission from the copyright owner (not AgEcon Search), or as allowed under the provisions of Fair Use, U.S. Copyright Act, Title 17 U.S.C.*

SZABÓ Dorottya\* and JUHÁSZ Anikó\*

## Consumers' and producers' perceptions of markets: service levels of the most important short food supply chains in Hungary

In recent years, there has been a rapid growth in new type, direct and short supply chains (SSC) Hungary, and the markets have proved to be globalisation-resilient, keeping their market share from sales of fast-moving consumer goods. We conducted a consumer and producer survey to identify the most important expectations and experiences about markets in Hungary. We applied a service quality model (SERVQUAL) to measure the consumers' and producers' opinions and satisfaction of Hungarian markets. A warning result of our study is that vendors estimate their level of service above that of the consumers' experiences which means that, in spite of the direct communication, they do not have an accurate understanding of their customers' requirements. Our surveys also showed that there is a substantial deficiency between the services expected and experienced at markets in all dimensions (environment, service, convenience and produce) that influence the choice of retail channel. The most important dimension proved to be produce quality which should thus remain in the focus of market developments. In recent years, new trends in urban local food movements have started to emerge in Hungary which could not be detected at the time of our survey (2012). Thus we intend to extend our survey in the future to see whether these new local-alternative food movements have formed a new consumer segment for farmers' markets in Hungary, and in what way should the market vendors modify their services to be able to ride this new trend.

**Keywords:** short supply chain, farmers' markets, service quality

\* Nemzeti Élelmiszerlánc-biztonsági Hivatal, Budapest, Hungary. Current address: Agrárgazdasági Kutató Intézet, Zsil utca 3-5, 1093 Budapest, Hungary. Corresponding author: szabo.dorottya@aki.gov.hu

### Introduction

In recent years, there has been a rapid growth in new type, direct and short supply chains (SSC) in Hungary (Benedek *et al.*, 2014; Csíkné Mácsai, 2014; Györe, 2014; Kujáni, 2014). These forms of sale have been defined as part of the 'new rural development paradigm' (Marsden *et al.*, 2000; van der Ploeg *et al.*, 2000; Renting *et al.*, 2003; Nemes, 2005). At the centre of this new approach to rural development lies the support of sustainable production and marketing as a way to comply with the growing interest of consumers in sustainability (Alkon, 2008; Seyfang, 2008). Benedek and Balázs (2014) concluded that SSCs "seem to offer a way to increase social cohesion, to generate consumer demand for healthy food as well as to halt the depopulation of rural areas" (p.22).

Policy-makers have also recognised SSC and the growing local food movement as a useful rural development tool. In the 2007-2013 European Union (EU) programming period the Rural Development measures, especially Leader Local Action Groups, could provide help to local producers and villages to start or improve SSC operations. National funding was also available in Hungary to build or develop farmers' markets for products coming from special rural areas dominated by isolated farmsteads. The current EU Common Agricultural Policy (2014-2020) provides an even more focused possibility for Member States to support SSC development. According to article 2m of EC (2013), "short supply chain means a supply chain involving a limited number of economic operators, committed to co-operation, local economic development, and close geographical and social relations between producers, processors and consumers". Hungary is one of the few Member States to have taken up the option of including a SSC thematic sub-programme in its Rural Development Programme for 2014-2020.

The number and use of both traditional (e.g. markets) and modern (e.g. community supported agriculture) forms

of SSCs has started to grow rapidly in Hungary in the last few years (Dezsény, 2013). This local food renaissance was driven by both consumer and producer demand and was strengthened by regulatory and support mechanisms. On the other hand the sustainability (all aspects, but especially the economic and social dimensions) of these initiatives was not fully taken into consideration. Although the literature draws attention to the importance of realistic planning and decision making (Marsden *et al.* 2000; Renting *et al.*, 2003; Brown and Miller, 2008; Stephenson *et al.* 2008; Juhász and Szabó, 2014), the monitoring and evaluation methods and procedures of SSC sustainability are neither standardised nor routinely used in Hungary.

The purpose of our research was to draw a clearer picture of the economic and social sustainability of markets in Hungary, and was stimulated both by the increasing national and EU policy actions and by the growing number of markets. Earlier research done by our team and other Hungarian researchers (e.g. Benedek *et al.*, 2014; Kujáni, 2014) concluded that SSC needs further but coordinated modernisation and knowledge sharing, especially in management, logistics and consumer loyalty. Our results also provide the opportunity for comparison with the findings of the small number of similar consumer satisfaction surveys conducted in other European countries (Lülfes-Baden *et al.*, 2008; Rosa, 2010 and Cassia *et al.*, 2012), namely that:

- Farmer-to-consumer direct marketing is a discrete business segment with its own factors of success. Consumers generally expected to find better food quality and lower prices. Quality, freshness and courtesy were the mostly appreciated attributes of this shopping experience, while criticisms were addressed to difficulties in parking and payment facilities;
- The farmers' markets are not standardised but stamped with the owner's personality;
- Store atmosphere as well as individual service must

reflect the farmer's unique approach. The store manager should create a special atmosphere that offers a positive alternative to the often cold, sterile design of modern supermarkets;

- The shoppers' satisfaction was not only influenced by tangible aspects, such as the product quality and the comparative price convenience, but that satisfaction is also influenced by the complementary impact of intangible factors.

In this article we address the following questions with the purpose to support decision making in SSC development: who are the customers of Hungarian markets and how many clear segments can be identified; are the consumers satisfied with the markets or could their loyalty be increased; how well do the producers know their customers' needs; do the consumers and producers confirm the shift of importance to social and environmental sustainability as the driving force behind the growing popularity of Hungarian markets or do other expectations and experiences lie behind their rapid growth.

Based on the above-mentioned results, our research hypotheses were as follows: (a) the economic reasons for farmers selling at markets are much stronger than the social and moral ones; (b) the farmers selling at markets are still not using fully the marketing opportunities of direct contact with consumers; (c) the buying decisions of consumers are most strongly influenced by the product characteristics; (d) the consumers of our survey will form distinct clusters and although there will be definite 'market enthusiast' and 'opposition' groups, most respondents will be in between, providing useful impetus for development plans.

## Methodology

### Sampling methods

Surveys to measure producers' and consumers' perceptions about markets in Hungary were carried out in 2012.

The opinions of consumers were measured with the help of a non-probability selection method, the unrestricted self-selected on-line surveys (Couper, 2011). We also provided a paper version of the questionnaire to reduce the bias of the sample inherent to this selection method. The validity concept of our selection was based on the demographic characteristics of consumers frequently shopping at markets (Henneberry and Agustini, 2004; McGarry Wolf *et al.*, 2005; Varner and Otto, 2008), which are quite similar to that of Hungarian Internet users (NRC Piackutató, 2011): educated, above-average status, higher income, urban population. We received 1029 questionnaires (78 on paper and 951 on-line), of which 851 were validly completed. Residents of Budapest and neighbouring Pest county, the higher educated, women and the 30-59 age group were strongly represented in the sample, meaning that the demographics of the respondents were similar to those of the Hungarian market shoppers.

In the producer survey we gathered answers from farmers that use direct sales channels (as well), especially markets.

Again, both on-line and paper questionnaires were used. For the on-line survey, we used the list-based probability sampling method (Couper, 2011) which meant that we used a representative producer database for the on-line survey and markets for the paper questionnaire. We sent out more than 500 questionnaires and collected 202 validly-completed forms from farmers. Our sample was biased, but towards the direct marketing channels; thus our results are relevant to this topic.

### Analysis methods and tools

The SPSS software package was used to perform cross tabulation, factor, cluster and variance analysis. To enhance our results we conducted several data transformations (with Recode, Count and Compute methods). The significance tests and the measured relationships between variables should be treated with caution as our samples are not fully representative.

We used the SERVQUAL (SERviceQUALity) model suggested by several authors (e.g. Parasuraman *et al.*, 1988; Lülfs-Baden *et al.*, 2008) as a tool to draw a comprehensive picture of the customer perception of farmer's direct sales service quality. The starting point of the SERVQUAL model is the assumption that the expectations of consumers about the given service and the perceived characteristics of the service are different. Using the original method, five areas were examined using 22 statements: material environment, reliability, customer-orientedness, warranty/trust and empathy. Rosa (2010) adjusted the categories to a study of Italian farmers' shops, retaining four of them and somewhat modifying the statements: quality of relationships, quality of conditions, quality of services and quality of produce. As most of the statements describing producer stores could be matched to the factors of our own study relating to shopping and markets, we combined them with ideas from other farmers' markets consumer surveys questionnaires and a focus group discussion. In addition to the analysis of expectations and experience, we also examined which parameters could be used to describe our group of respondents on the basis of their evaluation (using a five-point Likert scale (1=not true at all, 5=completely true)) of the criteria relating to the markets they visited.

The accuracy of the SERVQUAL model was somewhat influenced by the fact that in our questionnaire the factors affecting the selection of the location of shopping, i.e. the expectations, did not always correspond to the statements evaluating the markets, i.e. the experience. In both cases, it was possible to establish five dimensions, taking Rosa's study as a basis, but only four of them could be matched according to our focus group discussion. These were as follows: (a) environment (high-standard, clean environment, suitable lavatories and the experience and atmosphere of shopping); (b) services (eating facilities, possibility of pre-ordering, programmes, website and bank card payment facilities); (c) convenience (parking, opening hours, range of goods and easy accessibility); and (d) produce (quality, origin and freshness). These modified dimensions then were fit to test the hypothesis of our research.

## Results

### Assessment of markets from the producers' perspective

In the study of the assessment of markets by producers, farmers were firstly asked why they had chosen (also) to sell their produce on a market. The results show that the surveyed producers began selling on the market mostly in order to increase their income and profit and to reduce their defencelessness against merchants (Table 1). Selling on the market allows producers to obtain a higher income than they would in a longer supply chain. More lenient food safety requirements and taking advantage of subsidies motivated respondents the least in choosing this form of sale.

The surveyed producers evaluated the market as well as other vendors selling on the market and their produce. In connection with the market, respondents considered the opening hours of the markets the most satisfactory (Table 2). In addition, participants also found easy accessibility, good public safety and the possibility of shopping in a family-friendly atmosphere. Programmes and shopping carts and baskets scored the lowest as factors that were missing the most often from markets.

**Table 2:** Producers' ratings for the question "What is appropriate for the market?"

Factor	Mean	Standard deviation
Opening hours are convenient	4.4	0.88
Clean toilets are in the market or nearby	4.3	0.89
Easy access	4.1	1.08
Public safety is good	4.1	1.16
Easy to shop with children	4.0	1.00
Experience and mood for shopping is pleasant	4.0	1.04
Availability of parking for the market hall	3.9	1.35
Dealing with complaints is provided	3.8	1.12
Layout and cleanliness of the market is good	3.8	1.26
Meals are available	3.7	1.47
The market place is covered	3.5	1.60
The market has its own website	2.9	1.93
Programmes are organised in the market	2.7	1.66
Availability of shopping baskets/trolleys	2.0	1.71

Scores: 5 = completely true for the market, the vendors and their produce; 1 = not true at all  
Source: own data

**Table 1:** Producers' ratings of the factors influencing market sales.

Factor	Mean	Standard deviation
Increasing income	4.3	0.97
Increasing profit	4.0	1.23
Reducing vulnerability to merchants	4.0	1.49
Concrete consumers' need	3.9	1.35
Need for direct connections with consumers	3.8	1.47
Sale of unique quality products	3.8	1.54
Exclusion from other sales channels	3.4	1.44
Small quantity of products ready for sale	2.9	1.35
Capacity use	2.8	1.67
Idealism	2.6	1.59
Less strict requirements for food safety	1.9	1.20
Use of financial support	1.7	1.20

Scores: 5 = very important; 1 = not important at all  
Source: own data

**Table 3:** Producers' ratings for the question "Is this true about the vendors or their products?" (N=27).

Factor	Mean	Standard deviation
Tastes and appearance of the products are suitable	4.4	0.58
Availability of Hungarian products	4.3	0.84
Price/value ratios are appropriate (affordable)	4.0	0.96
Vendors/producers provide information about their products	3.9	1.07
Vendors weigh and calculate correctly	3.9	0.97
Wide range of products; everything is available in the same place	3.9	0.86
Food safety of products is appropriate	3.9	0.99
Local products are available	3.8	1.02
The origins of the products are sound	3.8	1.23
Tasting is possible	3.7	1.17
Organic products are available	3.3	1.49
Payment is possible with credit card	1.5	0.92

Scores: 5 = very true; 1 = not true at all  
Source: own data

Respondents considered it most often true about vendors and the produce on the market that, on the whole, the produce on their markets had satisfactory flavour and appearance (Table 3). This was followed by the supply of Hungarian produce<sup>1</sup> and the reliable origin of the produce. The supply of bio-products and bank card payment facilities were placed at the end as factors that were missing the most often from the services provided by vendors.

According to 69 per cent of respondents, the number and quality of services provided to producers by markets were only in part proportional to the level of the rent. They did not consider the layout of markets completely satisfactory either, and in the opinion of most of them, rivalry between the vendors also harmed the image of the market. At the same time, the majority considered the manager of the market to be rather cooperative.

On the whole, producers were less satisfied with factors on the markets that were independent of them, but directly affected their work, than with components relating to the service to consumers, be it either their own sales activity and produce or the conditions or services provided by the market.

Producers could mark factors that should be improved in their own sales activity and in respect of other vendors on the market. They most often marked their own website (37 per cent), followed by the widening of the range of goods (30 per cent) as factors to be improved. In connection with the conditions of the market, most would like to see improved parking facilities (26 per cent). In connection with other vendors and produce on the market, they would mainly increase the number of bioproducts (26 per cent) and the reliability of the origin of the produce (18 per cent). The fewest of them would change the price and quality of produce, and the range of goods (7 per cent for each factor).

<sup>1</sup> In the questionnaire, respondents were not asked to interpret the given terms, thus there may be differences in the interpretation of terms, such as 'local' or 'Hungarian', referring to origin of produce, but in our opinion, these do not affect the results significantly, because no explanatory model was built on the responses.



## Assessment of markets from the consumers' point of view

In our study of the assessment of markets by consumers, we were interested in the type of factors that influence consumers in deciding on a certain form of food procurement. For this, a combination of variables was devised, which summarised statements about the produce, vendors and the environment of shops and other considerations, for example convenience.

The surveyed consumers set requirements primarily for the produce: the freshness, reliable origin and appropriate price of the produce and a wide range of goods are the most important considerations for selecting the location of the purchase (Table 4). The services provided by the shop type were at the end of the list, i.e. respondents considered it less important that the shops have their own website or that they can order the food to be purchased in advance. On average, the provision of eating facilities received the lowest score among the statements.

After this, regular market customers who completed the questionnaire were asked to evaluate the conditions and accessibility of the markets they visited, the produce sold on the market and the vendors. On average, respondents were satisfied mainly with the accessibility of the markets, and then by the products on offer (Table 5). Participants gave the conditions of the markets and the vendors very similar average scores. The overall score for the markets of 3.3 does not indicate general satisfaction of them among consumers.

Consumers tend to be satisfied only with the responsibilities of vendors on the market taken in the narrow sense; other services that may be provided by them (such as the possibility of tasting, and other information about the produce) are not generally available. A breakdown of the subject areas is as follows: Respondents considered the accessibil-

**Table 4:** Consumers' ratings of factors influencing the choice of the shopping venue.

Factor	Mean	Standard deviation
Fresh products	4.7	0.63
The quality of products is right	4.5	0.73
The origins of the products are sound	4.4	0.90
Product prices are affordable	4.3	0.81
Wide range of products, everything is available	4.1	0.99
Clean and organised environment	4.1	0.85
The market is close to your home/workplace	3.8	1.10
Payment is possible with credit card	3.8	1.39
Discount products are available	3.5	1.14
Parking places are in easy reach	3.5	1.41
Experience and environment of shopping are pleasant	3.2	1.20
Vendors/producers provide information about their products	3.1	1.27
Clean toilets are in the market or nearby	3.0	1.35
Possibility of purchasing own-brand products	2.4	1.23
Shop has its own website	1.9	1.08
Pre-ordering is possible	1.6	0.87
Meals are available	1.4	0.80

Scores: 5=very important; 1=not important at all  
Source: own data

ity of markets the most satisfactory out of the factors listed and, in their opinion, vendors were usually accessible on the markets. They believed it to be true that the produce of the vendors had not been imported, and were also satisfied with the quality of the produce. It was not characteristic of the markets visited by the participants that they would organise programmes for their customers. They usually did not have their own websites, and only a few large market halls tried to assist shopping by providing shopping baskets and carts. Respondents did not find organic products on the markets to be characteristic, and at the majority of vendors it was not possible to pay with bank cards.

**Table 5:** Consumers' ratings of the factors related to market services, market availability, the vendors at the market and the products on offer.

Factor	Mean	Standard deviation
<b>Market services</b>		
The market is clean and well organised	3.7	1.03
There is a dining place available	3.7	1.28
Good public safety	3.7	0.97
The market is covered	3.6	1.42
The experience and ambiance of shopping are appealing	3.4	1.11
It is easy to shop with children	3.0	1.21
Complaint handling is solved	2.8	1.34
There is a clean toilet at or near the market	2.7	1.38
There are programmes at the markets	1.7	1.07
The market has a webpage	1.6	1.18
Shopping carts are provided	1.2	0.69
Average of the category	2.8	1.15
<b>Market availability</b>		
It is easy to reach (with car and public transport)	4.2	1.04
The opening hours are convenient	4.0	1.09
There is a car parking facility at the market	3.5	1.25
Average of the category	3.9	1.13
<b>Vendors at the market</b>		
They are usually available at the market	4.1	0.81
They are ready to answer the customer's questions	3.8	0.97
They are weighing and calculating accurately	3.6	0.90
There are tasting opportunities	2.9	1.16
The vendors always give a receipt	2.7	1.18
The vendors provide information about the products	2.5	1.25
Bank cards are accepted	1.3	0.64
Average of the category	3.0	0.99
<b>Products on offer</b>		
Hungarian products are available	4.1	0.80
The products are fresh and tasty	4.0	0.74
The food safety (hygiene) of the products is appropriate	3.7	0.83
Local products are available	3.6	1.02
The prices of the products are appropriate	3.6	0.87
The assortment is wide, one-stop shopping is possible	3.6	1.01
Organic products are available	3.0	1.16
Average of the category	3.7	0.92

Scores: 5=completely true for the market, the vendors and their produce; 1=not true at all  
Source: own data

**Table 6:** Demographic characteristics of consumer clusters created according to their attitude towards markets and the average ratings of their market evaluations.

Demographic characteristic	Clusters					Mean
	Anti-market	Distancing	Experience seekers	Produce focused	Market lovers	
Number (persons)	6	45	50	48	11	
Share of total sample (%)	3.8	28.1	31.3	30.0	6.9	
Females (%)	66.7	73.3	46.9	66.0	63.6	63.3
Average age (years)	50.3	37.8	43.6	43.3	43.4	43.7
Married/in relationship (%)	100.0	64.4	73.5	74.5	81.8	78.8
Economic status (factor score average)	-1.12	-0.06	0.01	-0.23	-0.08	-0.30
Economically active (%)	50.0	84.1	79.6	60.0	72.7	69.3
Graduates (%)	33.3	73.3	75.5	74.5	90.9	69.5
Residents of Budapest (%)	16.7	24.4	33.3	19.1	45.5	27.8
Residents of urban areas (%)	50.0	62.2	52.1	53.2	27.3	49.0

For descriptions of the clusters see text  
Source: own data

### Clusters of consumers according to their attitude towards markets

Only the respondents who gave valid answers to all 28 questions about the subject were included in the cluster analysis prepared on the basis of the evaluation of markets. Consequently, groups were identified on the basis of only 18.8 per cent of the research participants (160 respondents). Despite the low response rate, using k-means clustering, five well-defined groups can be distinguished among the participants (Table 6).

Although only six respondents comprised the first cluster ('anti-market consumers'), they represented such a markedly negative position in the assessment of markets that their scores cannot be ignored. The demographic characteristics of the different groups were compared using primarily ratios, thus the results had to be interpreted in the light of the small number of sample units. On average, anti-market consumers were the oldest among the five groups, and all were married or lived with a partner. Their economic status was the lowest and, in addition, the proportion of economically-inactive respondents was the highest, and the proportion of those with a high educational level and living in Budapest was the lowest among them. They rated four out of the five dimensions of the market with the lowest scores and, in general, they graded this shopping option at only 1.9 on a scale from 1 to 5.

The second cluster is the group of 'consumers distancing themselves from the market', which included 28.1 per cent of the respondents. Out of the five groups, the proportion of females is the highest among them and, in addition, this cluster is the youngest with an average age of 37.8 years. The members of the group were mostly economically active urban residents, with the highest proportion of single individuals compared to the other groups. Their economic status is the second highest, although the average value of the main component representing economic status was negative<sup>2</sup>. Similarly to the anti-market consumers, 'consumers distancing themselves from the market' had a negative assessment of the market in terms of every dimension, but to a lesser extent. In general, they rated this

shopping option at 2.6. Within that, they were the least satisfied with the dimension of services; this is the only area that they gave a score even lower than the previous group. Out of the five dimensions, they were mostly satisfied with produce-related factors and convenience considerations, but the corresponding averages are not higher than 3.3. The assessment of the environment and vendors on the markets does not even reach a medium value. Therefore, all in all, despite their assessment of the markets similar to the first group, they represented a cluster with completely different characteristics.

The third cluster, described as 'experience seekers' is the largest: 31.3 per cent of the respondents belonged to this cluster. This is the only group where males are in the majority. In addition, they had the highest economic status among the five groups. Collectively, this group gave the markets an above-medium score (3.2). They rated positively primarily the dimension of convenience, and were also more satisfied with the environment of the markets than the first two groups. Although the rating of the services provided by the markets is below 2, this dimension still received the second-highest rating on average from the members of the third cluster.

The fourth cluster is that of 'produce-focused consumers' (30 per cent of the participants). In terms of demographics, it deviated from the overall average of the groups only in the low proportion of those living in Budapest. For them, satisfaction with the quality of the produce clearly represents the main attraction of shopping on a market; they gave the highest rating among all groups to the dimension of produce. In addition, they also evaluated convenience considerations positively as opposed to services, which this group was the least satisfied with. In general, they rated this shopping option at 3.4.

The fifth cluster is the 11-member group of 'market lovers'. They constituted a group of respondents who typically live in Budapest, hold a university degree, are married or live with a partner, are economically active and have formed a highly positive opinion about the market factors in all dimensions. Within that, convenience considerations received the highest average value, but this group was far the most satisfied also with the dimension of the environment. The lowest rating was given to the dimension of services, but the aver-

<sup>2</sup> Overall, the 160 participants answering the combination of variables had a lower than average economic status anyway, with a value of -0.295.

age value of 3.3 still highly exceeds the rating given by the other clusters. They were the only group who collectively rated the markets with a score above 4.

### Results of the SERVQUAL model: differences between consumer expectations and experiences

According to our results, in selecting the location of their shopping, the consumers participating in the study had higher expectations of the shop type concerned according to all four dimensions (environment, service, convenience and produce) than those they usually experienced when visiting markets (Table 7).

The combined average of the scores of the expected factors from 1 to 5 is 0.26 higher than the score given to markets. The produce on the markets met the expectations of the respondents the least; the difference between the scores of the expected and the experienced factors was the highest in this case (0.5). Convenience considerations were the closest to the expectations of consumers; the average of the expected factors was only 0.11 higher than the factors experienced. Notwithstanding the fact that the difference between the expected and the experienced factors was not significant (although in the absence of the representativeness of the study, the result of significance analysis has no methodological importance), the results are in no way negligible from the point of view of the operation of markets.

The expectations about shopping of anti-market consumers and consumers distancing themselves from the market were the farthest from their experience of markets; the difference between the values was nearly 1. Experience seekers and produce-focused consumers were less unsatisfied; with similar values, the rating of their experience fell short of the expected value by about 0.3. However, the opinion of market lovers about markets greatly exceeded their expectations; on average, they rated markets with scores 0.7 higher than the expected figures (Table 8).

Of the components determining the conditions of the market, the highest percentage of respondents marked the provision of appropriate lavatories available on the market or in its vicinity (24 per cent). About one-fifth of respondents were not satisfied with the layout and cleanliness of the market, and 14 per cent of respondents did not consider the facilities available to consumers with small children satisfactory either. The lowest number of respondents (6 per cent) marked the provision of eating facilities. The most often marked factor concerning the accessibility of markets was the improvement and expansion of parking facilities (25 per cent), as markets usually were built in the settlement centres and before widespread motorisation. It was followed by the provision of appropriate opening hours, which 16 per cent of the respondents would have changed, but 12 per cent of them would also have improved the accessibility of markets.

In connection with the produce sold on the market, most consumers urged the introduction or expansion of the range of organic products, but there also seemed to be demand for expanding the range of local produce. In this area, too, the last place was taken by the factor which consumers are generally satisfied with, i.e. the quality of produce offered on the market. Bank card payment facilities were not frequently avail-

**Table 7:** The aggregated result of SERVQUAL model (N=160).

Dimension	Expected	Experienced	Difference (experienced – expected)
	Averages of rankings		
Environment	3.4	3.2	-0.26
Service	2.1	1.9	-0.17
Convenience	3.6	3.4	-0.17
Produce	4.2	3.5	-0.75
Aggregated sample	3.3	3.0	-0.34

Scores: 5=absolutely true; 1=not true at all  
Source: own data

**Table 8:** The SERVQUAL model results according to the consumers cluster relying on their attitude towards markets.

Clusters	Expected	Experienced	Difference (experienced – expected)
	Average of ratings		
Anti-market	2.7	1.9	-0.87
Distancing	3.5	2.6	-0.98
Experience seekers	3.5	3.2	-0.27
Produce-focused	3.6	3.3	-0.31
Market lovers	3.3	4.1	0.73
Aggregated sample	3.3	3.0	-0.34

Scores: 5=absolutely true; 1=not true at all  
Source: own calculations

able on markets. The surveyed consumers missed mostly this alternative from the services provided by vendors; in addition, the fulfilment of the obligation to issue invoices and reliable weighing and counting were also at the top of the list. The fewest responders would change the market presence of vendors, which otherwise they rated to be the most satisfactory.

It was also possible for respondents to propose other services not included in the above list, to which 113 entries were received. Respondents most often (18 per cent) raised the possibility of tasting products provided in various forms, and, within that, a form of catering where food made with ingredients available on the market can be purchased and consumed. In addition, there is a demand for product brochures and instructions for use. Respondents would be willing to become more familiar with producers, even within the framework of programmes organised for this purpose.

The second most frequent subject was finding a solution to parking issues, including appropriate bicycle parking. Seven respondents separately mentioned here the need to use shopping carts and three mentioned bank card payment facilities. The need to have catalogues about the vendors on the market, a clear separation of merchants and producers on the market, the possibility of using control scales, the redemption of meal vouchers, more favourable opening hours and the installation of seating were sometimes also mentioned.

Proposals were also received for establishing services independent of markets, but available in their immediate vicinity. Such services are, for example, ATMs, a shoemaker, a dry cleaner's, a post office and a shop where products missing from the market can be purchased. We also received a few comments drawing attention to the fact that markets are only a location for shopping, and that therefore it is not necessary to provide any other service.

## Discussion

### Comparison of assessment by consumers and producers

Shopping on the markets was primarily based on trust towards producers/vendors and their produce. The existence of trust is the most important attraction of this sales channel. At the same time, its absence is the most important factor restraining purchasing power.

According to our results, in general, producers assessed the market to be more satisfactory than consumers. It can be inferred from this that vendors on the market overrated their own situation and, despite a direct relationship, they did not rate the consumers' needs completely realistically. This may be dangerous for the future of market sales and draws attention to the need for training and consultancy in practical marketing issues.

According to consumer and producer experiences examined in the light of consumer expectations, the expectations about markets could be included in four different groups:

- 'Decisive and to be improved': This group included the considerations that consumers felt to be the most important but the rating of the experience of both consumers and producers about the markets remained below the desired value. It included produce characteristics primarily: tastefulness, freshness, food safety, appropriate price and product range. The requirement of a clean environment with a good layout also belonged to this group;
- 'Important and missing': Only a single factor, namely bank card payment facilities, was included in this group, for which there would be a much higher demand on markets than their current availability;
- 'Overrated but satisfactory': This group included convenience factors that reached or surpassed consumers' needs according to both producers and consumers;
- 'Overrated but less important': This covered, firstly, the group of factors that were the least important for consumers, which included considerations other than the methods of production and possibilities of use of producers' produce, i.e. the provision of information to customers, appropriate lavatories and the existence of the market's own website. Secondly, producers gave much higher scores to these considerations than consumers.

These results provide important warning signals and a few ready-to-use management ideas for the markets if they want to capitalise on the current urban local food trend and consolidate their position in the otherwise fiercely competitive Hungarian retail market. Markets are ideal places to satisfy the urban local food movements but they need to be more honest with themselves as our SERVQUAL model results quite clearly show an over-estimation: every category is over-rated by the vendors compared to the consumers and the consumers also report negative experience in every category. It would be important for market managers to bear in mind that the core feature of the markets is the quality

of products (freshness, price, origin etc.) which should be enhanced and guaranteed. All the other services which are also important (availability, conditions, programmes) can only be built on the trusted quality of products.

### Comparison with international research results

Rosa's (2010) research results in Italy – with farmers' shops – on the segmentation of consumers according to their attitude toward SSCs are in line with our own findings, although there are some different characteristics which can be ascribed to the substantial differences in the economic and social situations of the two countries. There are also other differences, for example our segmentation is less detailed as we could only identify five clusters compared to the eight distinctive segments arising from the Italian research. On the positive side this could indicate more easily created and executed traditional marketing activities in Hungary, but on the negative side it could also implicate less precise targeting with modern marketing tools. The most important similarity is that Rosa (2010) also found quality and freshness – both produce related – to be the most important success factors of farmers' direct sales. The core importance of produce quality may seem to be an obvious statement but from our experience of farmers' market development programmes in Hungary we can say that it is not. Thus, the future subsidy programmes affecting SSC (the SSC thematic sub-programme and Leader measures in the Hungarian Rural Development Plan) should continue to be focused on it.

On the other hand, research conducted about consumer satisfaction by Cassia *et al.* (2012) in Italy – on farmers' markets – and Lülfs-Baden *et al.* (2008) – on farmers' shops – conclude that most important expectations are intangible and connected to customer service and the locality as such. These results also reflect economic and social differences between the countries as the surveys showed the importance of being 'alternative' compared to 'mainstream' consumers, a factor that was much less reflected in our results. Still it provides an important insight into the expectations of the urban (upper) middle class local-alternative food movement which was so small in Hungary at the time of our survey (2012) that we could not capture it with our results. However, it is clearly an upcoming trend that will motivate us to extend our survey in the future. The work of Lülfs-Baden *et al.* (2008), Rosa (2010) and Cassia *et al.* (2012) give us a valuable insight into what are the most important development factors if the Hungarian markets want to ride and keep the loyalty of urban locavores. The urban local food movement may well be too small today to maintain the Hungarian markets but it could help where markets are already located at tourist attractions such as for example near Lake Balaton or at the city centre 'ruin pubs' of Budapest.



## References

- Alkon, A. (2008): From value to values: sustainable consumption at farmers markets. *Agriculture and Human Values* **25** (4), 487-498. <http://dx.doi.org/10.1007/s10460-008-9136-y>
- Benedek, Zs. and Balázs, B. (2014): A rövid ellátási láncok szocioökonómiai hatásai. [The socioeconomic effects of short supply chains]. *Külgazdaság* **2014** (5-6), 22 pp.
- Benedek, Zs., Fertő, I., Baráth, L. and Tóth, J. (2014): Differences of small-scale farmers and the related short agri-food value chains: An empirical evidence from Hungary. Discussion Paper MT-DP 2014/9. Budapest, MTA Közgazdaság- és Regionális Tudományi Kutatóközpont.
- Brown, C. and Miller, S. (2008): The impacts of local markets: a review of research on farmers markets and community supported agriculture (CSA). *American Journal of Agricultural Economics* **90** (5), 1298-1302. <http://dx.doi.org/10.1111/j.1467-8276.2008.01220.x>
- Cassia, F., Ugolin, M., Bonfanti, A. and Cappellari, C. (2012): The perceptions of Italian farmers' market shoppers and strategic directions for customer-company-territory interaction (CCTI). *Procedia – Social and Behavioral Sciences* **58**, 1008-1017. <http://dx.doi.org/10.1016/j.sbspro.2012.09.1081>
- Couper, M.P. (2011): The Future of Modes of Data Collection. *Public Opinion Quarterly* **75** (5), 889-908. <http://dx.doi.org/10.1093/poq/nfr046>
- Csikné Mácsai, É. (2014): Közvetlen értékesítés a mezőgazdasági termékek piacán [Direct selling on the market of agricultural products]. Unpublished PhD thesis. Gödöllő, Hungary: Szent István Egyetem.
- Dezsény, Z. (2013): Emergence of Community Supported Agriculture in Hungary: A Case Study of Sustainable Rural Enterprises. Unpublished M.S. thesis. Davis CA: University of California.
- EC (2013): Regulation (EU) No 1305/2013 of the European Parliament and of the Council of 17 December 2013 on support for rural development by the European Agricultural Fund for Rural Development (EAFRD) and repealing Council Regulation (EC) No 1698/2005. O.J.L. no. 347/487.
- Györe, D. (2014): A közvetlen értékesítés szerepe az egri borvidéken [The role of direct selling in the Eger Wine Region]. Unpublished PhD thesis. Gödöllő, Hungary: Szent István Egyetem.
- Henneberry, S.R. and Agustini, H.N. (2004): An Analysis of Oklahoma Direct Marketing Outlets: Case Study of Produce Farmers' Markets. Paper presented at the Southern Agricultural Economics Association Annual Meeting, Tulsa, Oklahoma, 18 February 2004.
- Juhász, A. and Szabó, D. (2014): A piacok jellemzői fogyasztói és termelői szemmel [The characteristics of markets from the consumers' and the producers' point of view]. *Agrárgazdasági Könyvek*. AKI: Budapest.
- Kujáni, K.O. (2014): Fenntarthatósági és rövid ellátási lánc modellek alkalmazásának hazai vizsgálata – Adaptációs lehetőségek a homokháti tanyavilág esetében [Analysis of application of sustainability and short supply chain models in Hungary – Adaptation opportunities for the sparsely populated territory of Homokhát]. Unpublished PhD thesis. Gödöllő, Hungary: Szent István Egyetem.
- Lülf-Baden, F., Spiller, A., Zühlsdorf, A. and Mellin, M. (2008): Customer satisfaction in farmer-to-consumer direct marketing. *International Food and Agribusiness Management Review* **11** (2), 49-72.
- Marsden, T., Banks, J. and Bristow, G. (2000): Food Supply Chain Approaches: Exploring Their Role in Rural Development. *Sociologia Ruralis* **40** (4), 424-438. <http://dx.doi.org/10.1111/1467-9523.00158>
- McGarry Wolf, M., Spittler, A. and Ahern, J. (2005): A Profile of Farmers' Market Consumers and the Perceived Advantages of Produce Sold at Farmers' Markets. *Journal of Food Distribution Research* **36** (1), 192-201.
- Nemes, G. (2005): Integrated rural development: the concept and its operation. Discussion Paper MT-DP 2005/6. Budapest: MTA Közgazdaságtudományi Intézet.
- NRC Piackutató (2011): Internet-riport 2011/Q3, 2011 december 29 [www document]. <http://nrc.hu/hirek/2012/01/13/Internet-penetracio>, p.16 (accessed xx xxxx 20xx).
- Parasuraman, A., Zeithaml, V.A. and Berry, L.L. (1988): SERVQUAL: A Multiple-Item Scale for Measuring Consumer Perceptions of Service Quality. *Journal of Retailing* **64** (1), 12-40.
- Renting, H., Marsden, T. and Banks, J. (2003): Understanding alternative food networks: exploring the role of short food supply chains in rural development. *Environment and Planning A* **35**, 393-411. <http://dx.doi.org/10.1068/a3510>
- Rosa, F. (2010): Short Chain in FVG Region: An evaluation of the Customer Satisfaction at the "Farmer's Shopping Points", in M. Fritz, U. Rickert and G. Schiefer (eds), *Proceedings of the 4th International European Forum on System Dynamics and Innovation in Food Networks*, Innsbruck-Igls, Austria, 8-12 February 2010, 62-81.
- Seyfang, G. (2008): Avoiding Asda? Exploring consumer motivations in local organic food networks. *Local Environment* **13** (3), 187-201. <http://dx.doi.org/10.1080/13549830701669112>
- Stephenson, G., Lev, L. and Brewer, L. (2008): When Things Don't Work: Some Insight Why Farmers' Markets Close. Special Report 1073. Corvallis OR: Oregon State University Extension Service.
- Van der Ploeg, J.D., Renting, H., Brunori, G., Knickel, K., Mannion, J., Marsden, T., Roest, K., Sevilla-Guzman, E. and Ventura, F. (2000): Rural Development: From Practices and Policies towards Theory. *Sociologia Ruralis* **40** (4), 391-408. <http://dx.doi.org/10.1111/1467-9523.00156>
- Varner, T. and Otto, D. (2008): Factors Affecting Sales at Farmers' Markets: An Iowa Study. *Applied Economic Perspectives and Policy* **30** (1), 176-189. <http://dx.doi.org/10.1111/j.1467-9353.2007.00398.x>