

Evaluation of farmers' markets from the organisers', producers' and consumers' perspective in Hungary

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Abstract: *In the past 5-10 years there has been a growing consumer demand in the European Union for goods sold directly by producers or with the help of one intermediary. The farmers traditionally use the local markets as the most frequent type of short food supply chain. On the one hand, the scientific knowledge and literature available on farmers' markets is rather insufficient; on the other, it receives attention both from consumers and farmers as well as from policymakers at local, national and EU level. The objective of our study was to fill a knowledge gap and to help evidence-based market management and policymaking. The initiator of our research was the development of the Short Food Supply Chain Thematic Sub-program of the Hungarian Rural Development Programme (SFSC TSP of Hungarian RDP 2014-2020). We conducted research in Hungary to map the motivation, attitudes and satisfaction of organisers, producers and consumers with regards to the farmers' markets. Using the SERVQUAL model, we could compare the stakeholders' expectations and experiences, which showed significant differences in many ways. Our results mean that the farmers' markets' supply of goods and services did not entirely match consumer demand; moreover, according to their self-evaluation, the organisers and the farmers did not acknowledge these discrepancies. We hope that our research can serve as a mirror and might help organisers and local councils to develop more successful farmers' markets.*

Keywords: *short food supply chain, small farms, local products, consumer satisfaction*

Introduction

During the last decade in the European Union – including Hungary – the need for short food supply chains (SFSCs) has been increasing both from the demand and the supply side (Benedek et al., 2014; Csíkné Mácsai, 2014; Györe, 2014; Kujáni, 2014; Szabó, 2017). Reflecting the societal need, SFSCs appeared in the Common Agricultural Policy (CAP 2014-2020) as a possibility to conduct a complex programme (Thematic Subprogram, TSP) as part of the national and regional Rural Development Programmes (RDPs). But what exactly are SFSCs and how is it possible to develop them? The scientific literature and development policy documents had many definitions (e.g. Nihous, 2008; JRC, 2013; Juhász et al. 2012). Thus, a definition of SFSCs has been established in the regulation (Article 2 (m) of Regulation (EU) No 1305/2013 of the European Parliament and of the Council); this is rather general, allowing member states and regions to develop sub-programmes adjusted to their local needs. The definition of an SFSC in the Hungarian context is the following: producers and groups of producers market their agri-food products directly or via one intermediary. These direct or one-intermediary marketing forms of SFSC fall under four main types (via intermediary, via delivery, via open farms and via points of sale) and, within them, two sub-categories (traditional and modern). This classification indicates which participant of the SFSC shall organize the logistics thus helps to define the development areas (Figure 1).

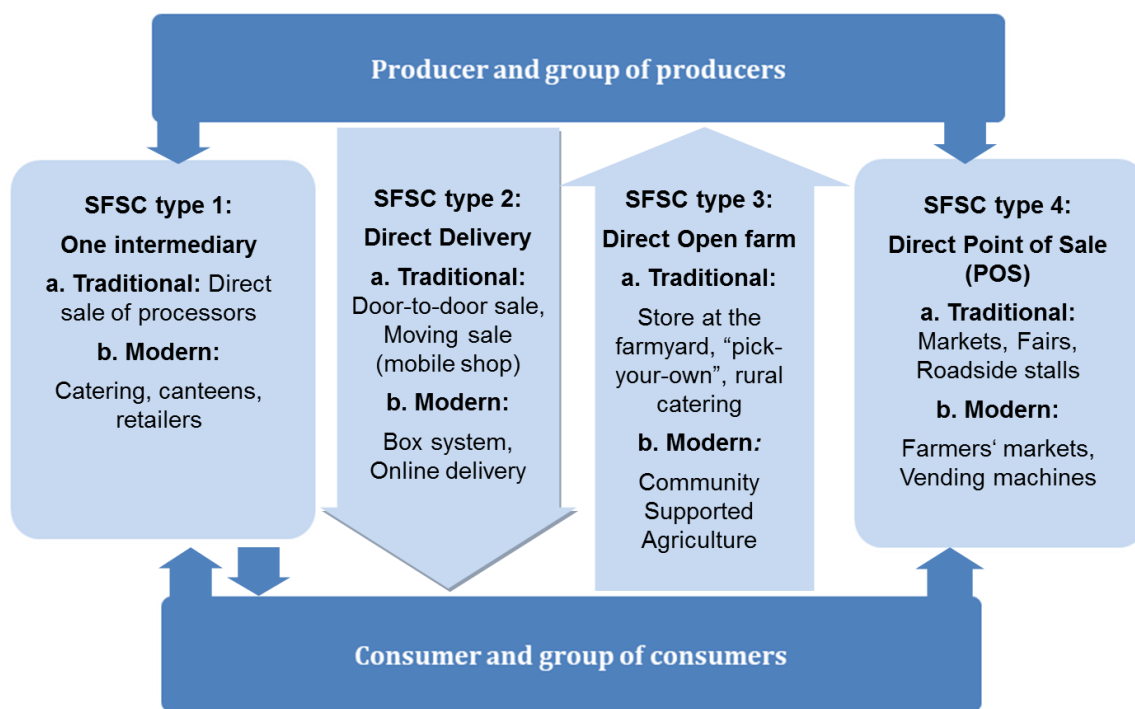


Figure 1. Marketing types of SFSC and the framework of SFSC from the aspect of the TSP
Source: RDP for Hungary, 2014

Although all the above SFSC types are interesting and challenging to study, we chose farmers' markets because of their relevance in sales volume and value, as well as their possible added value in local community development, and because of their relatively new liberalized regulation in Hungary (Decree No. 51/2012. (VI. 8.) Ministry of Rural Development on food-safety rules of local producers' markets).

The small farmers most often use markets from the different SFSC types (pl. Irz et al., 2015; Mastronardi et al., 2015, Csikné Mácsai, 2014, Thilmany and Watson, 2004). Farmers' markets are not just a place for producers and consumers' commercial interactions, and not only a source of fresh food, but also have a significant role in the development of communities and provide a place for social interaction. According to the JRC report (2013) in the EU the main characteristics of SFSCs and more specifically the farmers' markets are similar in each member state. One important point is that the SFSCs offer fresh and quality products for consumers, but traditional and craftsmanship products are also typical. The participation in SFSCs for small scale agri-food enterprises might be important from more aspects: they maintain and carry on craftsmanship traditions and they sell local traditions satisfying the reawakening consumer demands. The farmers' markets might also possess unique characteristics to maintain the interest of consumers by offering added value such as providing entertainment and community activities, organising different services, educating in relation to food and healthy lifestyle, campaigning for local smallholders or products and varieties. These unique features might enforce the positive, supportive attitude of mostly urban consumers. In consequence farmers' markets might earn the image of fair-trade food supply chains (Mihály, 2011; Aguglia et al., 2009; Stephenson et al., 2008). One of our research questions was whether these literature references about the special features of the markets are true and relevant in Hungary.

In Hungary, since 2012, the farmers' market has been supported by liberalizing the pre-conditions of opening and operating them, which has led to an increase in the number of producer markets from 118 to 237 between 2012 and 2016 (NÉBIH and NAK databases). At the same time, the data available on farmers' markets are incomplete at both Hungarian and European levels. There is no comprehensive monitoring and evaluation or research program supporting farmers' markets being sustainable in all three aspects (economic, social, environmental) and taking account of all three stakeholders (organisers, producers,

consumers). We tried to collect and highlight the most relevant results from the studies we found. The least researched stakeholder is the organiser, then there is bit more attention on farmers' perspectives and finally one can find quite a considerable amount of consumer studies.

The most comprehensive study we found on the organisers was conducted by Ragland and Tropp on behalf of the United States Department of Agriculture (USDA) in 2006. It is unfortunately more than 10 years old, but it is a nationwide survey of farmers' markets. One of the important results was that markets where consumer surveys were made before the opening were economically more viable: thus the conscious information on consumer needs and awareness raising is a key element of long-term sustainable operation. Overall, market organisers have recommended that careful planning and co-ordination between producers and consumers is essential to ensure a successful farmers' market. The needs of local consumers should be recognized and then translated for the market organisers, the local authorities, as well as the local businesses surrounding the markets. The main success factors were easy-to-access, a convenient shopping-around potential, maintaining the most direct relationship possible between producers and consumers, and being able to give consumer feedback to producers (Ragland and Tropp, 2009).

The literature also frequently refers to higher sales revenue through the elimination of intermediaries as the main motivating factor for the participation of producers in direct sales, (Morris and Buller, 2003). In the United States, King et al. (2010), stated that the producers gained more revenue in the local supply chains and had a much larger share of the retail price but had greater responsibility for supply chain management (processing, distribution, marketing). In an analysis conducted in Italy, Rocchi et al. (2010) found that producers wanting to stay competitive by selling their products at lower prices than traditional retailers did not always attain good profitability. In addition, since they were usually small businesses, they also risk having their economies of scale reduced further. As the main difficulty of small farms, they mentioned the constraints of their capacity and the lack of a distribution system linked to leading markets. The limited extent of research, education and professionalization related to the marketing activity, certification of local foods and the requirements (e.g. food-safety requirements) has also negatively impacted their effectiveness. However, farmers using alternative distribution channels had the advantage of gaining a positive reputation for their products instead of obtaining certification with a high cost. The fact that, besides profit, other factors such as ethical considerations also play a role in the motivation of farmers to take part in SFSCs was also shown by some studies (Jarosz, 2008).

There are several international scientific publications of consumer surveys on farmers' markets, typically from local markets in the United States. In addition, some countries in Western Europe have conducted research in this field, but the amount of relevant literature is much smaller in Europe than in North America. In most cases, the questionnaires were aimed at getting acquainted with buying habits and attitudes, as well as identifying the target groups of farmers' markets and separating consumer clusters with specific characteristics.

The results of international studies have mostly described similar consumer characteristics: mainly women, middle aged and with high education were the most loyal consumers in the farmers' markets (eg, Varner and Otto, 2008, Onianwa et al., 2006).

According to the North American farmers' market surveys, consumers have opted for the market mainly for fresh, high-quality agricultural products (eg, Lyon et al 2009, Wolf et al 2005). Among the motivational factors, the better taste of the products (Teng et al., 2004), local production (Baker et al., 2009), local economy support (Gumirakiza, 2013), free and organic production (Dodds et al., 2014), as well as community building appeared (Gao et al., 2012).

Among the motivations, trust has been mentioned in several sources as well: direct contact with producers acts as quality assurance for consumers (e.g. Garner, 2014; Lyon et al., 2009). Therefore, consumer visits are a kind of risk aversion in producer markets, as direct contact with growers presupposes the guarantee of high-quality, fresh and safe products, even though unsafe products are found on the markets from time to time (Archer et al.,

2003). However, Gao et al. (2012) also warned that a large part of consumers still lacked information about producers and their products on the farmers' markets.

The relevance of our research is that Hungarian or English-language scientific publications related to the quality of service markets in the producer markets have so far been completely lacking. With the results of our study, we intend to support the decision-makers and operators of farmers' markets and the producers who sell on the markets, while providing useful information to local governments, rural developers and consumers themselves.

Methodology

The primary data collection was performed with online questionnaires among the producers, the market management and the consumers between August 2016 and February 2017. The authors applied the List-based sample method within the probability sampling approaches to producer survey. Our work was assisted by the Hungarian Chamber of Agriculture (HCA) which distributed to its members the questionnaire link on the website of the Research Institute of Agricultural Economics (AKI). In response to the request, 41 valid forms came in. The same method was applied with the market management, using the contacts available on the AKI website, 232 managers were reached in total via email, and we received 47 valid forms. During the consumer surveys, the unrestricted self-selected surveys were used within the non-probability selection methods. A total of 283 participants took part in the consumer survey.

To interpret the results, several statistical analyses were applied as the methods of crosstab, principal component and cluster analysis, correlation calculation and variance analysis with the aid of the SPSS 19.0 programme. Since both the producers and the market managers participating were low in number, additionally, the representativeness of the samples was not ensured as for the Hungarian producers or the Hungarian adult population, the significance tests and the indicators representing the strength of relations between the variables are to be interpreted with caution.

The researchers used the SERVQUAL (SERvice QUALity) 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 consumer perception of farmers' 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, consumer-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, we adopted them.

This model was used for the first time in a study about marketplaces, published in 2013 (Szabó and Juhász, 2013). The current research presented the opportunity of comparing the results with the previous study. To construct the model, the researchers requested the market managers, the producers and the consumers to evaluate 24 factors, describing goods, services and the conditions of the market. The evaluation was carried out from two aspects: the requirements (expectations) of a successful market and the reality (experience) for their market. We offered a 5-point grading scale for evaluation: score 1 meaning not important or not true at all; score 5 as vital or true based on their experience.

Results

Survey of market organisers

Based on our results, the market organisers' main driver to open a local market was the emergence of the consumer demand (mean: 4.5) as well as was their loyalty towards the

local farmers (mean: 4.4). In addition, the producers' needs for selling at farmers' markets exceeded an average of 4. The market location was also perceived as of high importance (mean: 3.9). The increase in their income, the change in the legal acts facilitating the opening of the markets, and the available funding for opening or renovating markets were ranked as less significant with an evaluation average below 3 each. It means that the social aspects have played more important role than the economic aspects in the respondents' decisions.

Additional criteria mentioned as crucial factors of motivation were to influence the consumer attitude towards fresh, domestic food products; to increase employment; to promote seasonal and to revive a community space. All of these listed aspects prove the importance of the social factors in the market organisers' decision making.

An inevitable condition for the long-term sustainability of a farmers' market is the matching of the quantity and quality of the supply with the needs of the demand. For the market organisers to gain information about the demand and supply characteristics on the local markets crucial and can be solved with an *ex-ante* survey. Nevertheless, not even half of the participating managers (49%) gathered information about the characteristics of the consumers and the producers in the settlement (part of the settlement) and in the nearby area before opening their market. Most of those who assessed the market opportunities did so with questionnaires. Furthermore, taking part in professional forums, contacting professional organisations, and conducting personal interviews also helped the organisers to gain the necessary information.

To assess the product range available at the local markets, we requested the organisers to provide the total number of stands for each major product categories. Figure 2 shows how many stalls sold each product category on average. It is not surprising that the most frequently marketed goods were fresh vegetables and fruit. Vegetables were marketed on 10 stands on average per market at the time of the study. In case of fresh fruit, the average number of farmers was six. The third group of products was unprocessed and processed¹ fruit (canned fruit, jams, dried fruit, etc.) but these products were sold on only three stands per market on average. Dairy produce, eggs, unprocessed and processed vegetables (sauces, pickles, etc.) and meat stuff followed with 2.2-2.5 stalls per local market. Typically, there are one to two vendors selling honey, beverages, dry pasta and sweets in every market, while bakery products, cooking fat (cooking oil, fat, margarine), alcoholic drinks, and fishery products were only offered in every second or third market.

¹ REGULATION (EC) No 852/2004 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 29 April 2004 Chapter I, Article 2:

(b) "primary products" means products of primary production including products of the soil, of livestock farming, of hunting and fishing;

(n) "unprocessed products" means foodstuffs that have not undergone processing, and includes products that have been divided, parted, severed, sliced, boned, minced, skinned, ground, cut, cleaned, trimmed, husked, milled, chilled, frozen, deep-frozen or thawed;

(o) "processed products" means foodstuffs resulting from the processing of unprocessed products. These products may contain ingredients that are necessary for their manufacture or to give them specific characteristics.

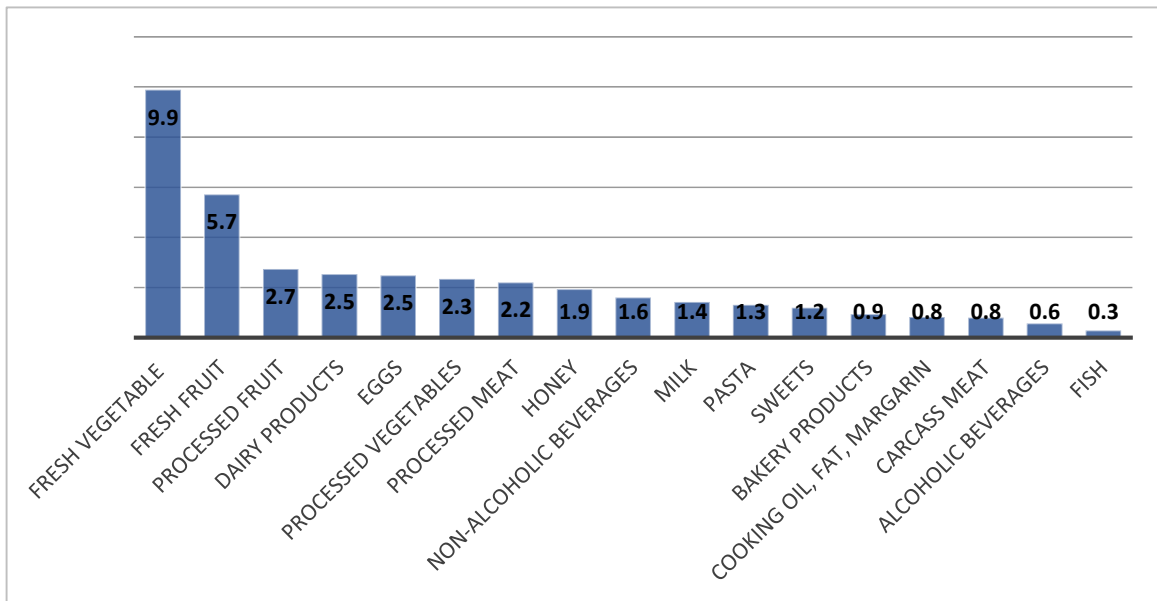


Figure 2: The average of stands per small farmers' market offering each category of goods (N=35)
 Source: Authors' own compilation

During the analysis of the service quality of the markets assessed by the organisers, we studied the overall average values of the listed attributes and the four dimensions of the SERVQUAL. All in all, the highest expectation was based on the attributes of the goods, with a score of 4.6 out of 5. Next on the list was convenience with 4.5 evaluation average, followed by the dimension regarding the conditions of the market with a score of 4.1. The provision of various services proved to be the least important attribute (mean: 3.3).

The experienced quality of the services constantly fell behind the expectations along all the dimensions: the largest gap (-0.4) was in the field of convenience, thus it requires the most urgent improvement according to our market organiser respondents. In the other dimensions, the gap was smaller (-0.2). As a result, the value of market organiser satisfaction is -0.23 according to the survey outcome. This result points out that the market organisers believe that there their markets have development potential. Figure 3 displays the results of the market management SERVQUAL model.

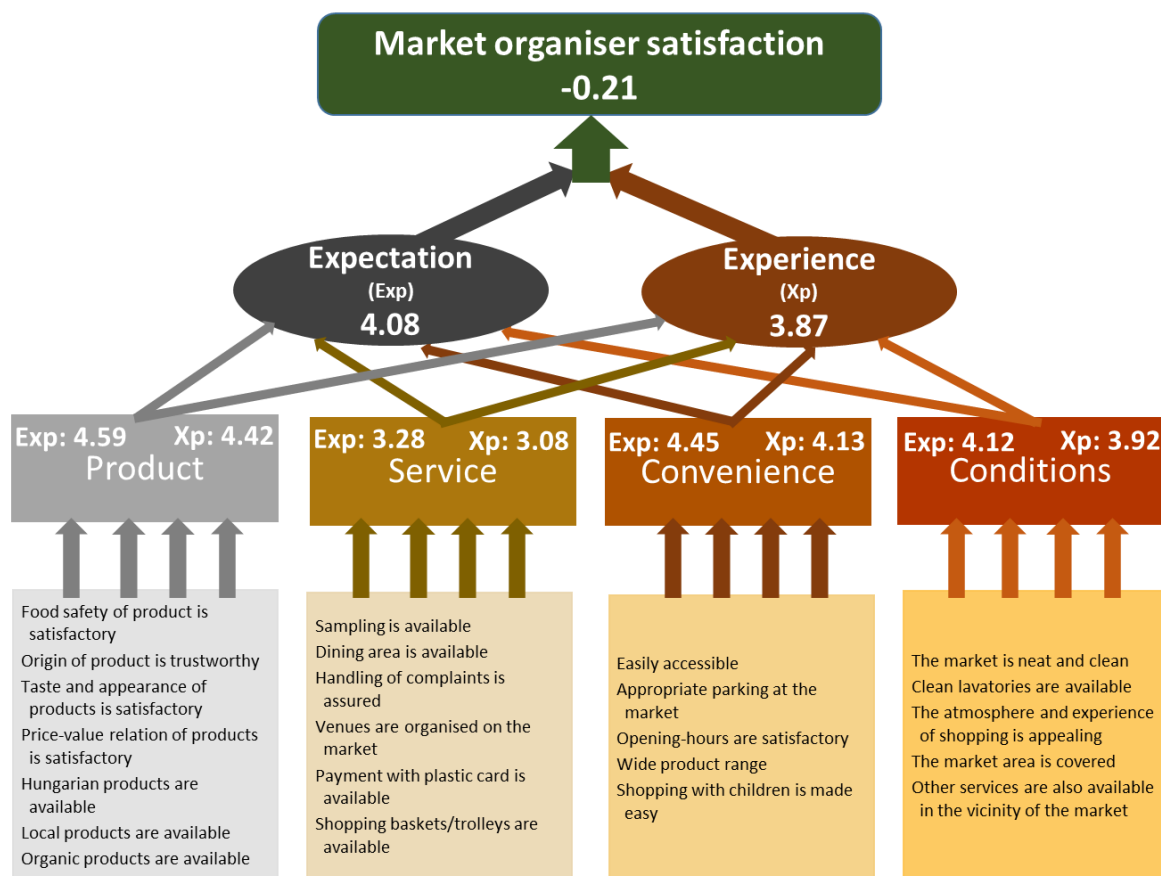


Figure 3. The results of the SERVQUAL model from the market organisers' perspective (N=37)
Source: Authors' own compilation

Concluding from the above survey and the AKI study², it is clear that the local government take an increasingly significant role in the opening of the markets. The local government's involvement has been eased by the simplified regulations, and is supported by the local development plans.

Survey of small farmers

Despite the low rate of participation, the creation of the producer SERVQUAL model provided the opportunity to compare the present study with the 2011 study by AKI. Also it served to obtain the producers' opinion besides that of the consumers and the market organisers.

We studied the farmers' motivation for participating in markets. The responding producers evaluated the factors listed with the aid of a 5-point grading scale; with score one meaning no influence on their participation in the farmers' market, and score 5 marking the most influential factor in their decision-making process (Table 1).

Table 1. Score averages of and diversions from the 2011 AKI evaluation of the motivating factors as to producer participation in farmers' markets (1 = not influential at all – 5 = very influential, N=15)

Criteria	Mean	Standard deviation	Deviation from the 2011 survey values
Need for direct consumer contact	4.14	0.949	0.37
Actual consumer demand	3.93	1.335	0.08
Marketing of exclusive quality produce	3.71	1.204	-0.06

² Szabó, D. and Juhász, A. (2013) *A piacok jellemzői fogyasztói és termelői szemmel*. [The characteristics of markets from the consumers' and the producers' point of view]. Budapest: AKI.

Income increase	3.69	1.078	-0.62
Small amount of marketable produce	3.40	1.298	0.50
Reducing vulnerability against the middlemen	2.79	1.626	-1.12
Utilisation of capacity	2.73	0.961	-0.11
Idealism	2.43	1.742	-0.19
Losing ground in other types of supply channels	1.62	1.193	-1.72
Utilisation of funding	1.46	0.776	-0.22
Less tight food safety requirements	1.36	0.929	-0.33

Source: Authors' own compilation based on AKI producer survey (2011) and own research

The average of the evaluation was compared with the previous survey results. The most influential drive for the producers to start trading at the market was the direct connection with the consumer, with an average of 4.1. This aspect was less motivating five years ago, coming fourth with a score of 3.8. According to the questionnaire of 2016, the second most important motivating factor was the adaptation to the consumer needs; the emergence of the actual consumer demand was evaluated with 3.9, exceeding the results of the previous survey with 0.08. Next came the opportunity of trading produce of exclusive quality, which lost a little from its importance (-0.06) compared to 2011. In 2016 the income increase factor slipped down to from the first to the fourth place.

The last aspect in the recent survey was the opportunity of trading small quantities of commodities. This criterion, like the preceding ones, was also of greater influence on the farmers in the recent survey than in 2011. The drop-in vulnerability against the middlemen held less significance for the producers to trade in the farmers' markets, while five years earlier, it was the second most important factor. The greatest difference showed in the evaluation of losing ground in other types of supply channels: while in 2011 it was evaluated with a score of 3.3, in 2016 the same value was scored with 1.6. The order of the criteria evaluated as the least significant corresponded to the outcome of the preceding survey, but having a lower average in the recent survey. The less tight food-safety requirements and the utilisation of funding were considered the least motivating factors for trading in the farmers' markets. The criteria not involved in the list were completed with two values of influence: those of the cost curb and the support of community life.

The producers in the farmers' markets sell mostly processed goods to the consumers. The market organisers listed 41 types or groups of products, out of which 17 were raw and unprocessed product: mainly fresh vegetables and fruit, but farmers trading honey, eggs and cow milk also took part in the survey. The number of processed foodstuff was 24 in total, including syrups, jams, pickles, cooking oil, smoked meat products and relishes.

The consumers in the farmers' markets consider trust to be a factor of importance, proven by the fact that the majority of the consumers are regulars. Based on the farmers' responds on average 52% of their consumers are regulars, but even the lowest value of the regular consumers reached 15% while the maximum is outstandingly high, with 80%. The results of the average, minimum and maximum of the regulars corresponded to those of the 2011 survey. The correlation calculation proved that the more consumers visit a producer, the greater is the rate of regulars.

To analyse the service quality evaluation provided by the farmers in the local markets, the SERVQUAL model was re-applied. Like the market organisers' opinions, the greatest expectation concerned the commodities, valued with 4.5 on the 5-point grading scale. It was followed by the dimension of convenience with an average score of 4.4. Next was the aspect including the conditions of the markets with 4.0. The least important aspect of all was the provision of various services with a score of 3.0.

The quality of the services consistently fell behind the expected value in three dimensions: to the greatest extent (-0.3) in terms of the products, which is the dimension requiring the most improvement according to farmers responding to the questionnaire. The criteria concerning

the convenience received 0.2 less score than the farmers' expectations from the market while the evaluation of the aspects referring to the conditions differed slightly between expectations and experience: the producers' impression fell behind the expected merely with 0.1. The farmers expressed their optimism regarding the services provided by the markets. In this case, they believed that the markets outdid the expectations, since, according to them, these conditions are of medium importance concerning the markets (mean: 3.0), whereas the fulfilment was valued with a score of 3.4. All things considered, the value of the producer satisfaction came to -0.03 according to the study, denoting that the farmers' markets require certain improvement in some dimensions to ensure long-term sustainability, but in general they function well (Figure 4).

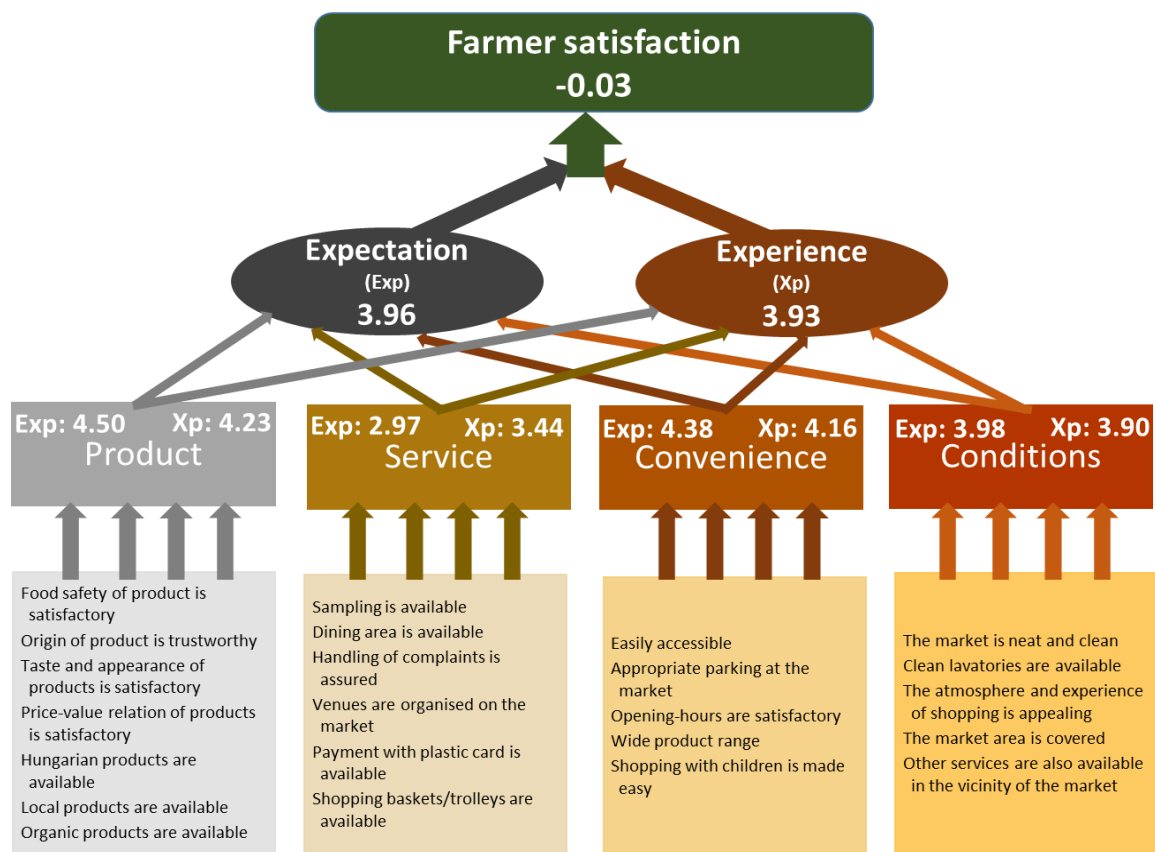


Figure 4. Evaluation averages of the dimensions in the SERVQUAL model from small farmers' perspective
Source: Authors' own compilation

In the 2011 survey, the farmers' expectations from the markets were not investigated, but the experience was collected concerning the same markets where the participating growers traded their goods. The listed aspects and dimensions were the same as those in the 2016 survey, which were evaluated with the aid of a 5-point grading scale; as a result, the data were comparable. Based on the producers' evaluation regarding the produce sold in the markets, the consideration of this dimension improved by 2016; the farmers evaluated these factors with +0.43 higher than in 2011. In the field of the services provided, the deviance was even more remarkable: the factors were graded nearly an entire point higher in 2016 than in 2011. The aspects of convenience and the criteria for the conditions of the markets were lower compared to the figures of 2011: the former by -0.03, the latter by -0.14. Nonetheless, all in all, a positive change was detectable on the producers' side in the comparison of the two studies (+0.26).

Survey of consumers

The consumer survey was not representative regarding the adult population of Hungary. Residents of the region of mid-Hungary, those with tertiary education, the middle-aged and women were over-represented as for their proportion out of the total number of participants. Nevertheless, we consider the outcome of the data analysis relevant to the farmers' markets

because the consumer groups with demographic characteristics mentioned comprise primarily the potential consumer base of the local markets.

In the local markets, 56 percent of the respondents purchase foodstuffs at least occasionally, 2 percent of them purchase several times a week, and 12 percent of them visit the farmers' markets weekly. Additionally, 19 percent of the surveyed choose this type of shopping several times a month and 23 percent choose it occasionally during a year. On the other hand, 22 percent of respondents do not shop in the local farmers' markets, or visit traditional markets or market halls. The same percentage claim that they never purchase foodstuffs through these types of supply channels.

Analysing the assessment of consumers' attitude towards the goods, the respondents consider dependability of the foodstuffs: aspects graded highest was the shelf-life (mean: 4.4), the importance of provenance (mean: 4.1) and the significance of the standard ingredients of the international brands (mean: 4.0). Out of the statements concerning the Hungarian and the producers' goods, the only significant aspect was to benefit the domestic products, with a 3.9 mean. The direct purchase from the producers, the organic products and the food safety of the goods in the local markets, and the higher quality of the Hungarian products versus the imported ones came in the second half of the ranking.

The data regarding the rate of participants that responded with the answer choice 'I don't know' also proved to be of great significance since it suggests that the respondents had insufficient information to judge the claim. This rate was over 10 percent in the case of the statements below:

- The products are more expensive in the farmers markets than in the bigger shops (19%)
- The organic products are safer than the non-conventional ones (18%)
- The safety control of the small producers is more difficult than that of the big producers (14%)
- I can purchase safer foodstuffs in the markets than in the big supplier shops (10%)

Each of the statements listed above indicates the extensive lack of consumer information about the small farmers' goods.

Most (13 persons) of the 49 participants avoiding the markets named the inflexible opening hours as one of the deterring reasons. Next came the limited range of products and the time-consuming nature of the shopping process with 18 votes each.

The products purchased were traditionally mostly fresh vegetables and fruit, which 94 percent of the consumers bought at least occasionally. At the same time, honey is purchased in the form of direct supply: 22.5 percent responded that they always purchase the various types of honey in the local market, and 76 percent do so occasionally. Based on the responses of 75 percent, eggs are also the staple product of the markets proven by the fact that the rate of regular buyers (17%) was close to the rate of those who almost always purchase fresh vegetables (18.5) and fruit (18%) from this source.

Based on the results of the SERVQUAL model, like the previously presented service quality investigations, the greatest expectation is tied to the produce itself (mean of the dimension value: 4.3). Next came the aspects of convenience with a 4.1 value average, the dimension including the conditions of the market took third place with a value of 3.6. The least important attribute, in this case as well, proved to be the assurance of various services (mean: 2.5).

The consumer experience concerning the quality of the services fell behind the expected measure in three dimensions. The greatest deviation occurred between the expectations and the experiences in market organiser, producer and consumer survey likewise. In total, the assessment of the experiences was -0.5 lower than that given to the dimension of the expected aspects. In the case of the convenience factors, the difference was -0.4, while in the dimension covering the local market conditions, it came to -0.2. Like the producers involved in the research, the consumers considered the quality of services available appropriate; the value of the rate of satisfaction was +0.1. All things considered, in conclusion, the consumer satisfaction average was -0.23, which means that the local

markets, despite the positive evaluation of the services, did not fulfil the level of the consumer expectation (Figure 5).

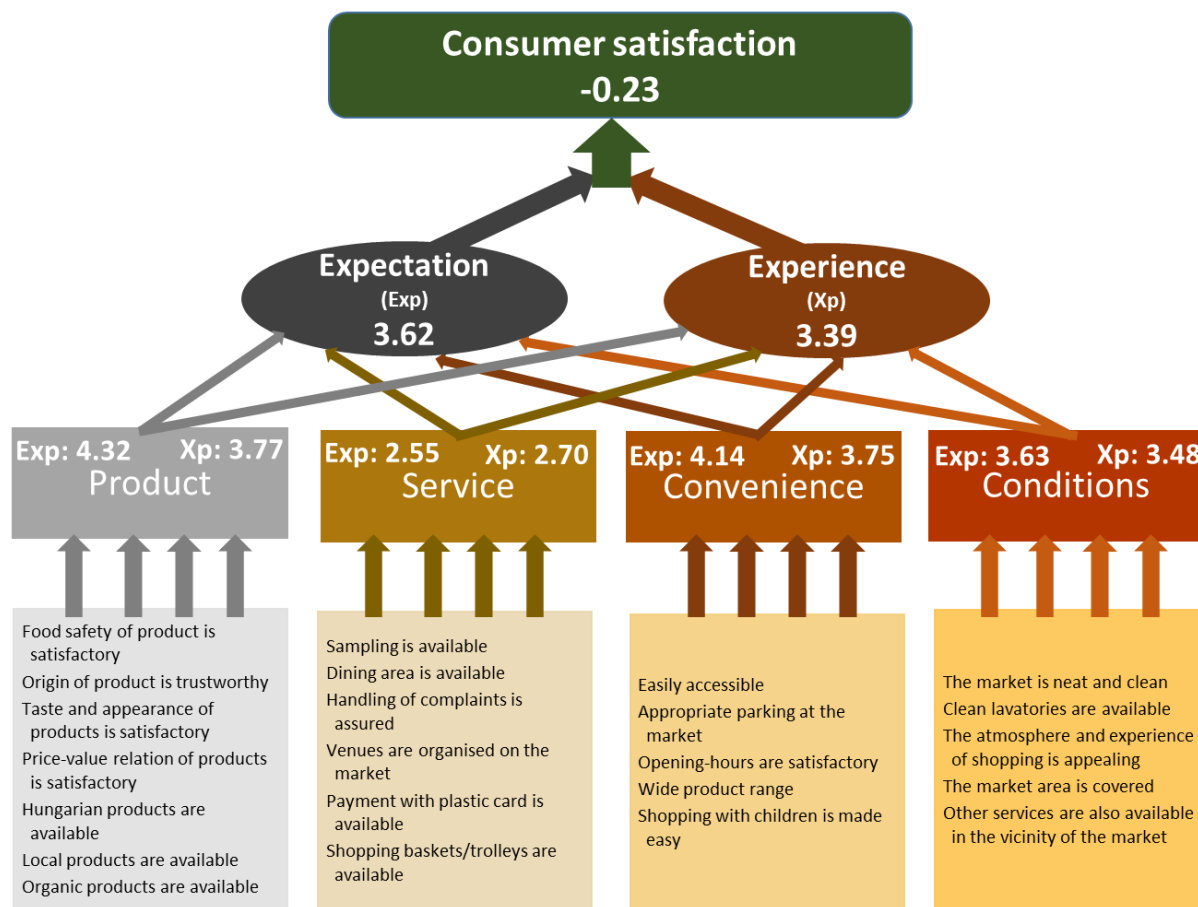


Figure 5. Evaluation averages of the dimensions in the SERVQUAL model from consumer perspective
Source: Authors' own compilation

In the 2011 consumer study, the researchers investigated the service quality of the markets applying the same dimensions and methods; therefore, the data were comparable. The deviance between the expectations and experiences barely changed during the past five years; in both surveys, the deviance was -0.5 between the average of the two evaluations. Like the producer evaluation, the satisfaction in the services provided by the markets turned into a positive direction (+0.41), despite the fact that the participants' expectations were higher in the 2016 survey than the values provided by the respondents of the 2011 survey. The expectations also grew regarding the criteria of convenience, but in this case, the rate of satisfaction expressed in figures dropped: while in 2011 consumer satisfaction regarding the convenience dimension was -0.11, in 2016 this rate reached -0.39. The evaluation of the conditions of the markets did not change significantly on the side of either expectations or experience. Additionally, the change in level of consumer satisfaction was close to zero (-0.01). In total, however minimal the difference is, it went in a positive direction between the two points in the terms studied (+0.03).

Comparison of the market organiser, producer and consumer surveys

The SERVQUAL model in the market organiser, producer and consumer surveys provided the opportunity to compare the participants' expectations and experience of the local markets, as well as the evaluation of the service quality.

To begin, the service quality evaluations of each factors were compared among the participants. Firstly, the researchers contrasted the market organisers' values with the consumers'; then the difference was examined between the results provided by the producers and the consumers. Lastly, the researchers drew parallels between the

organisers' satisfaction with the markets and the producers' evaluation. The low, negative figures meant the following:

1. The consumer dissatisfaction is higher than that of the market organisers.
2. The consumer dissatisfaction is higher than that of the producers.
3. The producer dissatisfaction is higher than that of the market organisers.

While the high, positive figures denoted:

1. The consumer satisfaction is higher than that of the market organisers.
2. The consumer satisfaction is higher than that of the producers.
3. The producer satisfaction is higher than that of the market organisers.

Contrasting the market organisers' and the consumers' evaluation of the farmers' markets, it can be stated that each criterion concerning the products was considered under-secured by the consumers. The greatest deviance between the two evaluations regarded the trustworthiness of the product origin. Even though both estimations fell into the negative range, the difference between them was still -0.74. Similarly, there was a significant diversion as for the food safety of the goods (-0.67), as well as the appearance and taste (-0.47) of the commodities available in the markets. In this dimension, only the safety of the organic products was perceived in a less negative manner by the consumers than the market organisers. In the majority, there was hardly any difference in the field of services between the two groups. All three groups agreed that the variety of products is to be widened but this was considered as a more important issue by the organisers than the consumers. For the consumers, the opening hours are less suitable compared to the organisers' evaluation, and they also had a difference of opinion regarding accessibility (-0.22).

Upon comparing the evaluation of the producers and the consumers, a nearly identical tendency is observable, but the extent of the difference varied in several cases. The least agreed factor was the price-value relationship of the foodstuffs traded in the markets (difference: -1.07), while the availability of the domestic goods was perceived as assured rather by the consumers, although their satisfaction rate was also in the negative range (difference: +0.51). The greatest deviation of all in the satisfaction concerned the assurance of the payment with bank card. Even though the consumers considered it as a less important factor of the markets, the producers highly underestimated its significance (difference: -2.09). The aspect which holds the greatest deviation concerning the convenience is the opening hours in this case as well (difference: - 0.78). Moreover, it was the consumers again who were less satisfied with accessibility and parking conditions (differences: -0.33 and -0.31). The same applies to the neatness of the markets and the availability of lavatories, considered less satisfactory by the consumers, as well as the availability of other services near the market. The consumers evaluated the shopping experience positively, as opposed to the farmers who estimated 0.47 lower the level of satisfaction of the criterion in question.

Finally, the researchers investigated whether the organisers and the producers evaluate the local markets differently from one another. The greatest negative deviation concerned the domestic products, of which the availability is ensured on the local markets according to the organisers, while the producers questioned its certainty assessing the criterion -0,9 lower than the organisers. In addition, regarding the food safety of goods available in the markets, the reliable origin of the products and the appearance and taste of the foodstuff, as well as the availability of the local commodities concerned, the producers were less satisfied than the organisers. In contrast, they found the price-value relationship of the products and the array of organic goods more satisfactory than the organisers.

After the analysis of the farmers' market criteria, the researchers also compared the SERVQUAL examination of the dimensions based upon the evaluation of the participants. The dimension of the products was of the greatest importance and the field which is to be improved according to all the market organisers, producers and consumers. At the same time, the supply did not keep up with the demand, since the consumer satisfaction was -0.4 lower than that of the organisers and -0.3 behind the producer satisfaction. As for the services provided at the farmers' markets, none of the participants had high expectations – with, however, a remarkable difference between the organisers, producers and consumers.

The market organisers estimated that these criteria are to be enhanced in the markets, whereas neither the producers nor the consumers saw a need for this. On the other hand, all participants regarded the factors of convenience to be essential for successful functioning of the markets and agreed that these conditions need to be improved, although there was a slight difference in the extent of this factor's importance among the participants. The consumer expectation concerning the criteria of the market conditions were more moderate than on the organiser and producer side. Nevertheless, neither the consumers nor the organisers were fully satisfied with the aspects in question. The producer satisfaction was close to zero; that is, they attributed less significance to the factors defining the conditions in the local markets than the other two groups involved. In total, farmers' markets were the closest to the producers' expectations while both the consumers and the organisers claimed to nearly the same extent that there are fields to be improved in this supply channel, which allows the farmers' markets to be made more appealing (Figure 6).

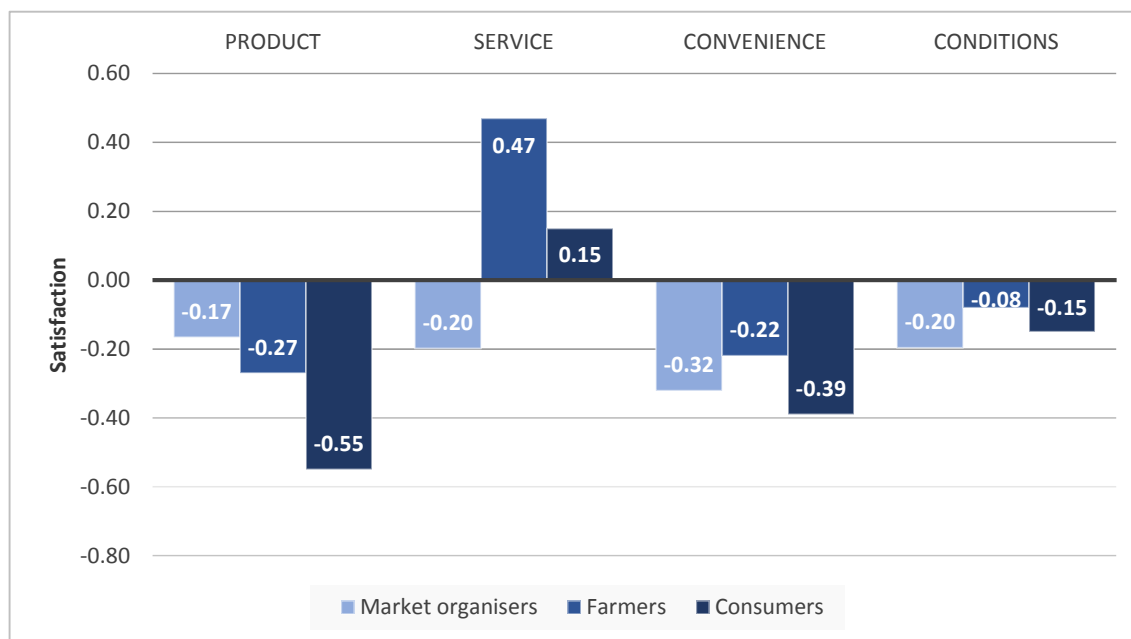


Figure 6. Values of satisfaction from market organisers, farmers and consumers perspective
Source: Authors' own compilation

Conclusions and recommendations

The market organisers identified the fields to be developed in connection with their markets. The narrow variety of products was considered as the most significant barrier and on dimension level the lack of conveniences was viewed as the greatest default. Based on the market organiser's survey, the main motivation factors of the farmers' market opening were the social and moral aspects rather than economic factors.

The main motivation for trading in the local markets on the producers' side shifted from increased income towards meeting consumer demand, compared to the survey data from five years earlier. The markets more and more often include processed and high added value products in their portfolio. According to the outcome of the SERVQUAL model, and similarly to the market organisers, the producers also identified the fields to improve in their markets.

The researchers can state according to the outcome of the consumer survey that the respondents participating in the research primarily take the safety and quality factors into consideration when shopping for foodstuffs, which they do not perceive as totally assured in small farmers' produce; while having meagre information about them. Simultaneously, it is of great importance that they purchase domestic foodstuffs. Thus this cluster of questions also proves that the share of the small farmers' goods from the total foodstuff purchase could be increased. Based on the service quality assessment, the greatest difference occurred between the expectations and experiences concerning the products, but they did not reach

the consumer expectations. According to the consumer cluster analysis, there was no connection between the perception formed about the products and the shopping and the evaluation of the local markets. It is paramount to emphasise that exactly the potential consumer base of the farmers' markets was the least satisfied with this form of the direct supply channel.

The comparison of the SERVQUAL models elaborated based on the organisers', producers' and consumers' expectations and experiences revealed that the participants' levels of expectation and satisfaction were not in accordance. The greatest deviation is detected along the dimension of the products, where the supply did not meet the demand, since the consumers' level of satisfaction was well below both the organisers' and the producers'. Communication and exchange of information are insufficient despite the direct channel and, as a result, the participants on the supply side do not entirely choose the most suitable strategy to enhance their market turnover. It is noteworthy that there was less overlap between the needs of the organisers and the producers than the ideal for the successful and sustainable operation of the market. The analysis discussed above pointed out that consumer trust concerning the small producers' goods traded in the farmers' markets did not change in the past and it can be evaluated as low.

The market organising competence is vital for the successful operation of the markets, as well as the study of the supply and demand potential. In most cases, the organisers do not possess the above information and as such, they decrease the chance of the long-term sustainability of their markets. It might be helpful to create the opportunity of the knowledge provision required for market organisation and management in the form of training/counselling, as well as the creation of a forum where the organisers might obtain up-to-date information.

On the small farmers' side, the main motivation for trading in the local market shifted from gaining profit towards meeting consumer demand. On the other hand, the consumer satisfaction evaluation regarding the markets and their products was more negative than the producers assumed, which means that the farmers still do not have the real picture concerning the consumer needs. This issue also emerged as important in the 2011 study, which pinpoints that the opportunity for information exchange provided via the direct consumer-producer contact is not yet sufficient. To improve that, it is essential to supply constant and detailed information about the produce traded in the markets for the consumers, whose simplest method is to utilise the direct contact developed during the purchase process via verbal communication.

The consumer survey results showed that the consumer base of the local markets can be increased. Nevertheless, the potential consumer group is distrustful regarding the small farmers' goods, stemming from the fact that the consumers do not possess sufficient information about the origin and ingredients of the produce; thus they consider them hazardous in terms of food safety, as well. To improve consumer trust, besides the reinforcement of producer-consumer contact mentioned above, enhancing communication to the consumers with detailed information about the producers, their products and the services available in the market is also required on the side of the market organisers.

One other important outcome indicated that there was no satisfactory communication between any of the participants, since there was no agreement between the organisers and the consumers, between the producers and the consumers, and between the organisers and the producers concerning the expectations and the experiences about the markets. This lack of communication is hindering both the adjustment of the supply to the demand and the approach of the target groups. To improve that, the cooperation between the market organisers and the producers, and that of among the farmers should be enhanced.

Consequently, the consumer demand for farmers' markets and their products could be increased if the necessary and trustworthy information about farmers and products were constantly provided for the consumers. The market organizer – who could support these

processes with appropriate management skills – has a key role in this case. These skills could be developed through training, consultancy and adaptation of best practices as well.

References

- Aguglia, L.; De Santis, F. and Salvoni, C. (2009) Direct Selling: A Marketing strategy to shorten distances between production and consumption. Paper Presented at the 113th EAAE Seminar „A resilient European food industry and food chain in a challenging world”, Chania, Crete, Greece, September 3-6, 2009, p.13
- Archer, G. P.; Sanchez, J.; Vignali, G. and Chaillot, A. (2003) Latent consumers' attitude to farmers' markets in North West England. *British Food Journal* 105(8): 487:497.
- Baker, D.; Hamshaw, K. and Kolodinsky, J. (2009) Who shops at the market? Using consumer surveys to grow farmers' markets: findings from a regional market in Northwestern Vermont. *Journal of Extension*, December 2009 47(6), Article Number 6FEA2, <https://www.joe.org/joe/2009december/a2.php>
- Benedek, ZS.; Baráth L.; Fertő I. and Tóth J. (2013) *Hogyan kapcsolódhatnak a mezőgazdasági termelők a modern élelmiszerláncokhoz? A rövid ellátási láncok működésének hazai sajátosságai és lehetőségei: egy empirikus vizsgálat tapasztalatai*. Vidékkutatás 2012-2013, MTA KRTK, Budapest, 2013
- Csíkné Mácsai, É. (2014) *Közvetlen értékesítés a mezőgazdasági termékek piacán*. Doktori (Ph. D.) értekezés, Szent István Egyetem, Gazdaság- és Társadalomtudományi Kar, Gazdálkodás és Szervezéstudományok Doktori Iskola, Gödöllő, 191.o.
- Dodds, R.; Holmes, M. and Arunsopha, V. J. (2014) Consumer choice and farmers' markets. *Journal of Agric Environ Ethics* (2014) 27:397–416
- Gao, Z.; Swisher, M. and Zhao, X. (2012) A new look at farmers' markets: consumer knowledge and loyalty. *HORTSCIENCE* 47(8):1102–1107. 2012.
- Garner, B. (2014) *“Believe me!”: An ethnography of persuasive interaction at the farmers' market*. Ph.D. Dissertation, University of Kansas Communication Studies, p. 153
- Gumirakiza, J. D. (2013) *Assessment of consumer motivations to attend farmers' markets, their preferences, and their willingness to pay for differentiated fresh produce: Three essays*. (2013). All Graduate Theses and Dissertations. Utah State University, Paper 1758, p. 151.
- Györe D. (2014) *A közvetlen értékesítés szerepe az Egri borvidéken*. Ph.D értekezés, Szent István Egyetem, Gazdálkodás- és Szervezéstudományok Doktori Iskola, Gödöllő, 151.o.
- Irz, X.; Leroy, P.; Réquillart, V. and Solerb, L.G. (2015) *Farmers' markets and farm shops in Germany: is the motivation to buy there the same?* EAAE-AAEA Joint Seminar ‘Consumer Behavior in a Changing World: Food, Culture, Society’, March 25 to 27, 2015 Naples, Italy
- Jarosz, L., (2008) The city in the country: Growing alternative food networks in Metropolitan areas. *Journal of Rural Studies* 24, 231-244.
- JRC - Joint Research Center (2013) Short food supply chains and local food systems in the EU. A State of Play of their Socio-Economic Characteristics. *JRC Scientific and Policy Reports*, Publications Office of the European Union, Luxemburg, 2013, p. 128, <http://ftp.jrc.es/EURdoc/JRC80420.pdf>
- Juhász A.; Mácsai É.; Kujáni K. O.; Hamza E. and Györe D. (2012) *A közvetlen értékesítés szerepe és lehetőségei a hazai élelmiszerek piacra jutásában*, Agrárgazdasági Tanulmányok, AKI, Budapest, 2012.
- King, R.P.; Hand, M.S.; Digiacoimo, G.; Clancy, K.; Gomez, M.I.; Hardesty, S.D.; Lev, L. and McLaughlin, E.W. (2010) *Comparing the structure, size, and performance of local and mainstream food supply chains*. ERR 99. Washington, DC: USDA Economic Research Service
- Kujáni, K. O. (2014) *Fenntarthatósági és rövid ellátási lánc modellek alkalmazásának hazai vizsgálata – Adaptációs lehetőségek a homokháti tanyavilág esetében*. Doktori (Ph. D.) értekezés, Szent István Egyetem, Gazdaság- és Társadalomtudományi kar, Gazdálkodás és Szervezéstudományok Doktori Iskola, Gödöllő

- Lülf-Baden, F.; Spiller, A.; Zühlsdorf, A. and Mellin, M. (2008) Consumer satisfaction in farmer-to-consumer direct marketing, *International Food and Agribusiness Management Review*, Vol. 11(2), 2008, 49-72
- Lyon, P.; Collie, V.; Kvarnbrink, E.B. and Colquhoun, A. (2009) Shopping at the farmers' market: consumers and their perspectives. *Journal of Foodservice* 20 (1): 21-30.
- Mastronardi, L.; Marino, D.; Cavallo, A. and Giannelli, A. (2015) Exploring the role of farmers in short food supply chains: The case of Italy. *International Food and Agribusiness Management Review* 18 (2): 109-130.
- Mihály, K. (2011) *Kiveszték a piacot, Maraton életre-halálra*, p.5, <http://www.diningguide.hu/hirek/etterem-informacio-5797>
- Morris, C. and Buller, H. (2003) The local food sector: a preliminary assessment of its form and impact in Gloucestershire. *British Food Journal* 105, 559-566.
- Nihous, F. (2008) *La diversification et la valorisation des activités agricoles au travers des services participant au développement rural*. <http://agriculture.gouv.fr/la-diversification-et-la>, 2008.
- Onianwa, O.; Mojica, M. and Wheelock, G. (2006): Consumer characteristics and views regarding farmers markets: an examination of on-site survey data of Alabama consumers. *Journal of Food Distribution Research*, vol. 37 (1), 119-125.
- 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.
- Ragland, E. and Tropp, D. (2009) *National Farmers Market Manager Survey 2006*. USDA, Agricultural Marketing Service, May 2009. p. 112.
- Rocchi, B.; Cavicchi, A. and Baldeschi, M. (2010) *Consumers' attitude towards farmers' markets in Tuscany*. Paper prepared for the 116TH EAAE Seminar "Spatial Dynamics in Agri-food Systems: Implications for Sustainability and Consumer Welfare". Parma (Italy) October 27th - 30th, 2010, p.13
- Rosa, F. (2010) Short Chain in FVG Region: An evaluation of the consumer satisfaction at the „farmer's shopping points. *System Dynamics and Innovation in Food Networks*, University of Bonn, Germany, February 08-12. 2010, 62-81.
- Rural Development Programme for Hungary, 2014
- Stephenson, G.; Lev, L. and Brewer, L. (2008) *When things don't work: some insight why farmers' markets close*. Special Report Number 1073, Oregon State University Extension Service, Corvallis, OR. p. 21.
- Szabó D. and Juhász A. (2013) *A piacok jellemzői fogyasztói és termelői szemmel*. Agrárgazdasági Könyvek, AKI, Budapest, 2013
- Szabó D. (2017) *A termelői piacok piacszervezői, termelői és fogyasztói szempontú vizsgálata*. PhD értekezés, Szent István Egyetem, Gazdaság- és Társadalomtudományi Kar, Enyedi György Regionális Tudományok Doktori Iskola, Gödöllő, 2017. p 157.
- Teng, D.; Wilcock, A. and Aung, M. (2004) Cheese quality at farmers markets: observation of vendor practices and survey of consumer perceptions. *Food Control* 15: 579–587.
- Thilmany, D. and Watson, P. (2004) The Increasing Role of Direct Marketing and Farmers Markets for Western US Producers. *Western Economic Forum*, April 2004, p.19-25
- Varner, T. and Otto, D. (2008): Factors affecting sales at farmers' markets: an Iowa study. *Re-view of Agricultural Economics* 30 (1) 176–189. o.
- Wolf, M.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*, vol. 36 (1), 192-201.