ORGANIC AND LOCAL FOOD MARKET – ALTERNATIVES OR COOPERATION POSSIBILITY?¹

ABSTRACT

The market for local and organic food is still a niche market in Hungary. Both offer consumers an alternative to the anonymous, globalized food supply chain. Yet local food and organic food seem to be overlapping and to some degree competing food concepts. The main focus is to explore the perception of Hungarian consumers towards local and organic food, using results from one research. We chose quantitative research as a method and carried out random interviews on a nationwide representative sample of 1000 respondents. Food of organic origin is considered somewhat important for 4 out of 10 respondents (38.9%), while the majority (59.8%) is neutral towards this aspect of products. At the same time, in the case of local products, origin is partially or wholly important for as much as 72.9% of the interviewees. We found it very important that 92.5% of respondents prefer to buy local foods versus imported foods (if sold at the same price), whereas the number drops to 81.3% in the case of organic foods. Our research reveals that the production and sales of local and organic foods is of very high (strategic) importance in our country as reflected in consumer needs. To that end producers, processors, traders and NGOs – in collaboration – need to create a quality product base, and a sales strategy that needs to be well communicated and reflect special characteristics.

KEY WORDS: niche market, globalization, consumer preferences, food marketing, strategy.

1. INTRODUCTION

Emerging interest in environmentally friendly, fresh and healthy food products can be detected nowadays. Local and eco food products seem to meet these consumer needs as a “natural” solution, both offer consumers an alternative to a globalized anonymous food supply chain (HAAS et al., 2013). Furthermore, an increase in interest in community building (both virtually and in real), and besides the central economic development interventions, raison d’etre of local economic development arise (MEZEI, 2006). Latter factors create the opportunity for independence, as well as for the establishment and maintenance of identity and economy which is based on local resources. In most countries a form of “food nationalism” is expressed, which leads consumers to give preference to products of national or regional origin (OPTEM, 2005).

In principal, similar concept was the basis for the organic farming in developed economies. In the last about twenty-twenty and five years organic production has undergone a transformation and a significant development in the whole world. Organic products, which were regarded first as “fashion products”, have become a consumer trend. In the Western European and North American countries – serving as a model for Hungary – easily segmentable organic-food consuming groups have formed and organic products have become more regular for human consumption.

The market of organic products is quite small in Hungary. However, based on its development potential it has strategic importance (SZAKÁLY, 2004). According to GFK HUNGÁRIA (2005) lifestyle survey, about 65% of Hungarians consider organic foods the ideal nutriment of future. Researches of GERWIN (1998) and PANYOR (2007) shows that 60% of consumers have bought any kind of organic food in Hungary.

Unfortunately, there is no reliable data in Hungary regarding organic food traffic; participation of sales channels are only estimated. Based on these estimates, the traffic of organic food in Hungary is about 30-35 million Euros. This amounts to less then 1% of national food market traffic. The Hungarian organic food consumption level is even lower.
lower, only 0.5-1% of total consumption (CZELLER, 2009; GAUVRIT & SCHAER, 2013), however that of Danish and Austrian exceeds 5%, in fact, in the UK, it could reach 20-30% in case of dairy products (GERARD et al., 2013). Another issue is that Hungary, organic production is export-oriented: the majority (90-95%) of the products (e.g. wheat, corn, sunflower seeds, pumpkin seeds, rye, soybeans, livestock) goes abroad unprocessed. Hungarian organic food scarcely appears in retail; consumers can only buy imported, sometimes lower quality products. The market has problems in both supply and demand: they distribute products that are not needed, and certain desired products are absent.

Even less information is available on the local food market in Hungary. Organic farming and organic food are terms, which are clearly defined and legally regulated, which is not the case for “local food”. Local food has neither a clear environmental, neither production process nor health related definition, which can be a barrier for marketing (SZABÓ & JUHÁSZ, 2013; HINGLEY et al., 2010). In the 2008 Farm Bill the US Congress states that to be considered as “... locally or regionally produced agricultural food” the total distance has to be less than 400 miles from its origin or it has to be within the State in which it is produced (MARTINEZ et al., 2010). There is no common product assessment system or database, therefore, the estimation on the size of the market is even less accurate (and presumably lower!) than that of eco products.

Based on these trends and effects, our aim was to compare the consumer expectations between local products having niche characteristics and eco products, in order to highlight those marketing tools that would increase their proportion and turnover in retail trade.

2. MATERIALS AND METHODS

2.1. Sampling

In order to achieve the set objective, a nationwide representative questionnaire-based survey was given to 1000 participants in Hungary. Representativeness for regions and types of settlement was ensured by the applied quoted sampling method. The sample pattern met the quotas previously defined by the Hungarian Central Statistical Office (HCSO). On the assigned settlements a random walking method was used to ensure total randomness in selection (MALHOTRA, 2008). In the second step, the interviewed person within one household/family was selected by using the so-called birthday-key. The main point of the method is to select that consumer from the family members who has the appropriate age (18 or older) and whose date of birth (birthday) falls closest to the day of the interview (more simply: whoever had their birthday last). With this method randomness was ensured in the second step as well. Refusal was characteristic; the questions were answered in only 68% of the households. Since random walking does not ensure the sample is a reflection of the entirety of the population (the number of the female and elderly respondents was higher than the national average), the sample of the people was corrected by multi-dimensional weighing factors (gender and age) (GRAFEN & HAILS, 2002). After these methods were applied, the sample was representative of the structure of the Hungarian population in all the four aspects (region, type of settlement, gender and age).

2.2. Analysis of the data

The assessment of the data was based on various mathematical-statistical methods (frequency, mean, standard deviation, chi-squared test, one-way analysis of variance) fitting to the topic of the research. The missing values were replaced by a sample mean in each case.

3. RESULTS AND DISCUSSION

3.1. Importance of the origin of local and organic foods

The first question touched upon the origin of the products: is it important for the consumer to know whether the desired product is organic, local or Hungarian?

Organic origin is considered somewhat important for 4 out of 10 respondent (38.9%), while the majority (59.8%) is neutral towards this aspect of products. At the same time, in the case of local products, origin is partially or wholly important for as much as 72.9% of the interviewees. It is worth noting that 62.9% of those who prefer ecologically farmed food products also consider local origin important. Yet, 48.1% of those who favour locally produced goods do not consider organic origin important at all (p=0.000).

Similar results were observed by others too: according to the findings of COSTANIGRO et al. (2011) attitudes associated with “local food products” are stronger than that of “ecological food products”. The results of HAAS et al. (2013) also point to the conclusion that despite their divergent distribution channels, branding, pricing and labelling, organic and local food products are rivals on the American market. Otherwise, some Austrian results are quite promising: according to a survey conducted in Lower Austria, it is exactly this kind of duality that can turn an enterprise into a successful business (MILESTAD et al., 2010).

In Table 1 we organize consumer attitude towards importance of local produced foods according to level of education.
Table 1. Importance of local produced foods depending on education level of respondents

<table>
<thead>
<tr>
<th>Answer categories</th>
<th>Elementary school</th>
<th>Vocational training</th>
<th>Highschool graduation</th>
<th>Higher degree</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Head</td>
<td>%</td>
<td>Head</td>
<td>%</td>
</tr>
<tr>
<td>Partially</td>
<td>50</td>
<td>34.2</td>
<td>130</td>
<td>41.5</td>
</tr>
<tr>
<td>Yes</td>
<td>59</td>
<td>40.4</td>
<td>81</td>
<td>25.9</td>
</tr>
<tr>
<td>No</td>
<td>36</td>
<td>24.7</td>
<td>100</td>
<td>31.9</td>
</tr>
<tr>
<td>Don’t know</td>
<td>1</td>
<td>0.7</td>
<td>2</td>
<td>0.6</td>
</tr>
</tbody>
</table>

Locally produced foodstuffs were valued most by tertiary education graduates. 79.2% of them indicated that the local origin of foodstuffs plays a major or minor role in their decision making. Approximately one third of skilled labourers replied that production location is an unimportant aspect of foodstuffs (*p*=0.016).

In our research, we also asked our respondents to rate how much they care for choosing organic products when buying food (Figure 1).

Figure 1: Willingness of respondents to actually buy organic food products, % (n=1000)

3.7% of the interviewees paid attention to put organic food products into their cart, and 10% insisted that organic origin is important for them. Consequently, somewhat more than one fourth of the respondents is only planning or would only like to buy the desired products, but due to certain obstacles they withdraw from doing so. Those, who replied with “yes” to organic products are predominantly women (36.0%), tertiary education graduates (39.9%), white-collar workers (41.9%), or have above average income (45.7% and 30.8%). The majority replied with “no” to this question too. The results shown on the above two figures indicate that in addition to the actual buyers, many other respondents consider organic origin an important factor.

To understand the underlying causes, we asked those who replied with “no” to specify the obstacles preventing them from buying organic products. The causes thus obtained are summarized in Figure 2.

The main cause of refusal is the relatively high price; two-third of the surveyed individuals cited this as an obstacle (63.3%). By summing the results associated with the different factors signalling scepticism, we obtain 79.5%, i.e., the most serious obstacle is the doubt of surveyed individuals about the authenticity and the alleged benefits of organic products. The third argument according to which it is hard to identify the products—problematic for one fourth of the consumers (27.5%)—might be most easily treated with communication tools. This also draws attention to the problem that distinguishing verified organic food products from normal goods is hard—even these days. Although there are local and EU regulations, consumers can hardly distance the designated “bio-“ prefix of foods from that of biotechnological products. What is more, the Hungarian slang term for synthetic cannabinoids “biofű” might also give rise to dangerous associations among the lay consumers. As regards the background variables, the lack of scepticism towards and trust in the health benefits of organic product are correlated with one’s level of education: lowly-educated respondents (up to primary school) and tertiary education graduates are the less sceptic (*p*=0.000) and the most trustful (*p*=0.026).

Figure 2: Causes for refusing organic products, % (n=701)

* More than one option was possible.
The next question dealt with those factors that have the largest impact on one’s organic food purchase (Table 2). The respondents had to rate the impact of each individual factor on their purchase using a 1-to-5 interval scale (1—it has the smallest impact on me, ..., 5—it has the greatest impact on me).

**Table 2.** The impact of the listed factors on purchasing decisions

<table>
<thead>
<tr>
<th>Name</th>
<th>n</th>
<th>Mean</th>
<th>Std. dev.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Price of the product</td>
<td>402</td>
<td>4.04</td>
<td>1.411</td>
</tr>
<tr>
<td>Constant quality of the product</td>
<td>399</td>
<td>4.01</td>
<td>1.429</td>
</tr>
<tr>
<td>Health protective effect of the product</td>
<td>402</td>
<td>3.97</td>
<td>1.384</td>
</tr>
<tr>
<td>Tastes associated with the product</td>
<td>404</td>
<td>3.78</td>
<td>1.435</td>
</tr>
<tr>
<td>Origin of the product (local, import)</td>
<td>391</td>
<td>3.77</td>
<td>1.393</td>
</tr>
<tr>
<td>The whole family loves it</td>
<td>396</td>
<td>3.71</td>
<td>1.447</td>
</tr>
<tr>
<td>Label ensuring quality</td>
<td>392</td>
<td>3.66</td>
<td>1.472</td>
</tr>
<tr>
<td>Appearance of the product, its aesthetic</td>
<td>400</td>
<td>3.64</td>
<td>1.397</td>
</tr>
<tr>
<td>Label ensuring ecological origin</td>
<td>402</td>
<td>3.54</td>
<td>1.466</td>
</tr>
<tr>
<td>Habit</td>
<td>401</td>
<td>3.27</td>
<td>1.383</td>
</tr>
<tr>
<td>Brand of the product</td>
<td>397</td>
<td>3.10</td>
<td>1.409</td>
</tr>
<tr>
<td>Handy, practical packaging</td>
<td>397</td>
<td>3.06</td>
<td>1.377</td>
</tr>
<tr>
<td>Name of the production firm</td>
<td>397</td>
<td>3.03</td>
<td>1.440</td>
</tr>
<tr>
<td>I can get it anywhere</td>
<td>391</td>
<td>2.82</td>
<td>1.404</td>
</tr>
<tr>
<td>Promotedness of the product</td>
<td>396</td>
<td>2.44</td>
<td>1.378</td>
</tr>
</tbody>
</table>

Our first observation is that as much as 40% of the respondent can be treated as somewhat competent in purchasing ecological food products. The 10% surplus compared to those who pay close attention to their purchases points to a significant latent demand; the purchasing decisions of this layer are subconsciously influenced by the ecological origin of products. Further, it is apparent that none of the listed factors achieved overwhelmingly high or low score, which means that the adjustment of individual factors will not have significant market impact. “Price”—also featured as a purchase obstacles—is the most influential factor on shopping decision, but the advantageous “constant quality” and “health benefit” factors are just following it. Based on the survey, the factors which have the smallest impact on shopping decisions are the degree of promotion, the accessibility of products and the name of the production firm.

The cause of this phenomenon might be that compared to regular products, consumers perceive organic ones as special, which do not land in their carts due to advertisements; while as regards the point of purchase, they demand that it must signal trust. This might be related to the branding of the production firms, since there are not any widespread organic brands in Hungary, and none of the firms aim at emphasizing their own name. The labelling of ecological products is only at the middle of the listing, which explicitly refers to the lack of information, and as a result it valorizes those aspects which aid identification (without taking the anomalies identified as the causes of refusal into account).

**3.2. Sales channels of organic and local foods**

The accounts of HAAS et al. (2013) posit that locally produced foodstuffs are primarily distributed via short food supply chains (SFSCs), i.e., farm shops, farmers’ markets and local convenience stores. On the contrary, the largest proportion of organic food products in North America is available in super- and hypermarkets as well as discount stores. In Hungary, markets are the most important sources of locally produced foodstuffs (SZABÓ & JUHÁSZ, 2013), but such products are also available in certain grocery stores in urban areas and through vending machines. Since unipolar profile building is not common, in our study we surveyed the related opinions. Figure 3 summarizes the attitudes of participants towards the importance of having local stores specialized for organic foodstuffs.

**Figure 3:** The willingness to buy local foods at a store specializing in only local products, % (N=1000)
70.1% of respondents find important or partially important to buy local foods at a store specializing in only local products. This rate is comparable to the response for importance, only a slight difference could be observed. According to the result of these two questions there is a significant demand for a store where only local products purchased.

According to previous researches besides the relatively high price of organic products, availability is also a significant obstacle in distribution: every other customer face difficulties when it comes to finding distributors of locally produced foodstuffs (HODGSON, 2012), or when they have to distinguish local and non-local products or have to find the unusual sales locations (HAAS et al., 2013). Our results indicate that the communication of information is markedly important, as 94.4% of those who favour locally produced goods are planning to buy these products in the near vicinity of their homes.

Our next question was about the point of purchase. The interviewees were asked to mark for each listed channel whether they mostly, occasionally or never buy ecological foods products there (Figure 4).

**Figure 4:** Frequency of choosing different outlet types for purchasing organic foods, % (n=1000)

Since organic foods have a sort of “trust product” character, it is not surprising that the largest portion of respondents usually buy these directly from the producers. For the consumers/customers it is hard to verify each criteria of organic food products—e.g. that they are free of plant-protecting agents, pesticides or hormones—thus trust for the producers is valorized. After the producers, the various specialist shops follow, which were also shown to be popular in earlier studies (HAMM et al., 2002; SCHAAK, 2013, ZAGATA, 2012). The different super and hypermarkets and smaller outlets were almost equally popular, which refers to the increasing accessibility of organic products. In the recent years, organic foods began to appear on the shelves of different discount stores in Hungary, 14.9% of the respondents maintained that they buy products from these outlets with some frequency. Purchasing from web stores is the least favored option; the operators of such outlets should expect orders for specialties and for earlier tested products.

The next question in line aimed to investigate the location where ones’ purchasing decisions are made (Figure 5).

**Figure 5:** Place of making purchasing decisions about organic food products, % (n=1000)
Those who buy organic food products, predominantly decide about their purchase in the outlets, which highlights the importance of in-store advertising in the case of these products. Packaging, placement, shelf facing and the various POP/POS tools might have a profound impact on sales. The opinion of HEMPFLING (2004) seems to reinforce our observation: “I don’t like it when organic products are hidden in one of the corners. If this happens, I feel that I’m sorted out, and I withdraw from buying anything.” In case of direct sale, the appearance of the product (freshness and attractive packaging), the possibility to test it (taste it) and the recommendation of the producer might be useful.

3.3. Judgement of pricing for locally produced and organic foods

According to researchers, consumers are willing to pay premium prices for local and organically grown foods (GREBITUS, LUSK & NAYGA, 2013; YUE & TONG, 2009). In the case of “organic” or “eco” labelling that means on average a 20% to 30% mark up, while the pricing for local products varies according to place and product category (SZENTE, 2009; HAAS et al., 2013). Women are particularly willing to pay higher prices (GRACIA, DE MAGISTRIS & NAYGA, 2012). The main reasons that consumers pay higher prices include: freshness and supporting the local economy, in the case of local products, and in that of organic foods, rather, the lack of chemical additives and general health benefits (SZENTE, 2009; GREBITUS, LUSK & NAYGA, 2013).

During our research we asked consumers about suitable pricing for both types of product. Figure 6 shows that in the case of two equally priced similar products consumers would be inclined to buy the locally produced product versus an import of unknown origin.

Figure 6: Willingness to buy locally produced foods compared to the same characteristics of other source foods, if the price is the same, % (N=1000)

64.3% of respondents are absolutely sure that in the case of equally priced similar products they would prefer to purchase the locally sourced one compared to ones of other origin. Of the remaining respondents, close to thirty percent of those surveyed tend to waiver depending on product type, and just 6.7 percent answered “No” or were undecided, how could be even cosmopolitan consumer or expect price differences according to origin.

The case of organic foods paints a similar picture: 54.6% of respondents would choose organic products over standard ones if the prices were the same. A quarter of respondents would only choose organic goods for certain products (26.0%). 20% wouldn’t buy organic even if the prices were the same as other foods.

We determined that local products are more attractive at parity pricing compared to organic goods, which could stem from the strength of scepticism surrounding organic products, as demonstrated by Figure 2.

Figure 7 shows consumer opinion regarding organic vs. similarly priced conventional foods.

Figure 7: Willingness to buy organic foods compared to foods with same characteristics and price

The case of organic foods paints a similar picture: 54.6% of respondents would choose organic products over standard ones if the prices were the same. A quarter of respondents would only choose organic goods for certain products (26.0%). 20% wouldn’t buy organic even if the prices were the same as other foods.

Figure 8 shows that in the case of two products of similar characteristics consumers would sometimes choose the local product, even if it was more expensive than an imported one.

Figure 8: Willingness to buy locally produced foods compared to the same characteristics of other origin foods, if price of local product is higher, % (N=1000)

15% of respondents would be willing to spend more for a local product even if it was more expensive than an imported one, but that figure jumps to 55.6% in the case of certain products. This last figure is of special interest, as it indicates that there are certain product categories that consumers prefer to buy locally and, therefore, they are willing to spend more. It is of utmost importance that these products be available on the market consistently. Consumer insecurity is increased when local products are actually more expensive than imported ones. Comparatively, the category nearly doubles in size when we include the respondents that would pay more in specific cases. These connections demonstrate the importance of pricing on consumers’ shopping practices.
In Table 3 we organize consumer attitude towards higher priced food according to level of education.

**Table 3.** Willingness to purchase locally produced, more expensive local foods compared to other origin depending on educational level of respondents (N=1000)

<table>
<thead>
<tr>
<th>Answer categories</th>
<th>Elementary school</th>
<th>Vocational training</th>
<th>Highschool graduation</th>
<th>Higher degree</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Head</td>
<td>%</td>
<td>Head</td>
<td>%</td>
</tr>
<tr>
<td>Yes</td>
<td>21</td>
<td>14.4</td>
<td>38</td>
<td>12.1</td>
</tr>
<tr>
<td>Depending on product type</td>
<td>71</td>
<td>48.6</td>
<td>166</td>
<td>53.0</td>
</tr>
<tr>
<td>No</td>
<td>48</td>
<td>32.9</td>
<td>103</td>
<td>32.9</td>
</tr>
<tr>
<td>Do not know</td>
<td>6</td>
<td>4.1</td>
<td>6</td>
<td>1.9</td>
</tr>
</tbody>
</table>

The results show that nearly a fifth of those with higher degrees would be willing to pay more for local goods. Of those with Elementary education about one-third would not buy more expensive local goods in the place of cheaper imported ones.

*Figure 9* shows consumer willingness to spend more on organic products compared to standard products.

*Figure 9:* Willingness to purchase organic food if price is higher than conventional food, % (N=1000)

![Figure 9](image)

Compared to the previous results there is perhaps a slight influence detected in cases where products display a certificate of origin, still the certificate must somewhat decrease consumer insecurity. However, based on the results, the inclusion of a certificate does not have much demonstrable effect.

We also tested whether the inclusion of an authenticity guarantee would increase consumer opinion of organic foods compared to those of other origins (*Figure 11*).

*Figure 11:* Willingness to purchase organic foods compared to those of other origin, if authenticity mark is use, % (N=1000)

![Figure 11](image)

There is not enough perceived increase in the value of organic products once they are labelled with a certificate of authenticity to warrant its use. All this indicates that certificates of origin or authenticity do not particularly influence consumers to pay more for a product.
4. CONCLUSIONS AND RECOMMENDATIONS

Our research reveals that the production and sales of local and organic foods is of very high (strategic) importance in our country as reflected in consumer needs. Currently, both market show niche market characteristics, however the proportion of responsive consumers is significant. To increase market potential producers, processors, traders and NGOs – in collaboration – need to create a quality product base, as well as alternative sales channels, and prices should approach consumer expectations. To do so, effective marketing communication tools are essential.

It is clear that locally produced and organic foodstuffs are competitors on the market and their target audience share common sociodemographic features (mostly female audience, mostly tertiary education graduates, white collar workers, above average income). While planning the marketing-mix for locally produced foodstuffs, increased attention should be assigned for the comprehensive and simplified distribution. To familiarize consumers with the relative high price, they should be informed about the transportation costs and the reliability of products. The obstacles posed by high prices and general scepticism towards organic foodstuffs should be demolished by raising awareness in consumers. To win the sympathy of consumers and possible future buyers, the communication of products should emphasize the higher quality embodied in the higher price, and people should be familiarized with the production circumstances. It also worth considering to cojoin local specialties with the organic phrase, which might help consumers accepting the extra price, what is more, it might be the easiest way to win the trust of sceptics.

REFERENCES