# Consumers and consumption of organic food in Central and Eastern European new member states of the European Union

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# **Abstract**

Despite the significant growth of organic farms and organically managed land in Central and Eastern European new member states of the European Union (CEE NMS) the consumption of organic food in these countries remains at the very low level. The main barriers to organic food consumption growth are low availability of organic food in the sale channels where contemporary CEE NMS consumers prefer to buy food, high prices for organic products, related, inter alia, to high distribution costs and high gross margins that reflect the undeveloped nature of organic markets in CEE NMS. Further development of the organic sector in CEE NMS will contribute to the growth of organic food consumption by overcoming the supply-related barriers. Nevertheless, to increase the consumption of organic food, many efforts needed to communicate the benefits of organic food and farming to target potential consumers.

# Introduction

More than 73 million consumers live in the new European Union member states of Central and Eastern Europe, comprising nearly 15% of the total population of the EU-25 (Europe in figures 2005). Despite the differences in food consumption size and structure CEE NMS have one common characteristic - the low incomes in comparison with Western European countries. National per capita income in CEE NMS ranges between 40 - 70% of the average income in the EU 15 countries before 2004. The share of expenses for food in household budgets is just over 20% in Slovenia and the Czech Republic to more than 30% in Latvia and Lithuania (Europe in figures 2005). All this affects the ability to satisfy the food needs of CEE NMS residents as well as their interest in acquiring more expensive food products that also includes organic foods. Despite the unfavourable income situation and limitations in realising consumption, the number of organic food consumers in the CEE NMS continues to increase, while knowledge on the share of organic consumers, their socio-demographic profile, behaviours and attitudes is fragmented in comparison to the EU 15 countries. The main aim of this paper is to present the attributes associated with organic food in the opinion of CEE consumers, their motives to buy organic foods and barriers to consumption of organic products.

# Materials and methods

The research was divided into two stages consisting of literature review on consumer behaviour and an organic market expert survey with the use of a semi structured questionnaire. An attempt was made to estimate organic food consumption using the

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supply balance sheet (SBS) approach (Hamm and Gronefeld 2004). According to SBS methodology, organic food consumption could be calculated in a way where domestic organic consumption = organic sales + organic imports - organic exports. However, the lack of reliable data on primary production, and particularly, international trade, made it impossible to calculate human consumption of organic food in all CEE NMS using SBS. Hamm and Gronefeld (2004) obtained most sales and import data needed to estimate consumption from wholesalers and importers. In the case of CEE NMS, obtaining import and export data turned out to be very difficult due to the fact that exports were conducted incidentally and frequently without consideration of organic origin. Wholesale trade in organic foods is still in its infancy in CEE NMS and there was no information to support the identification of organic products sales. As a result, the data on organic consumption was based on estimates by national market experts. They gathered the necessary data via interviews with stakeholders representing various areas of the organic supply chain.

#### Results

Analysis of the available literature on consumer behaviour across the CEE NMS suggests that the three most important factors driving purchases of organic food are health, environment and taste. Research conducted among Hungarian consumers by Kovács (2003) revealed that the primary motives to buy organic food were health protection (67%), environmental protection (30%) and the desire for healthy nutrition (24%). In research carried out between 2001 and 2004 on a representative sample of Polish consumers, health concerns were mentioned as the primary motive for purchasing organic foods. Sensory values of organic foods, such as taste and smell, were subsequently mentioned in the hierarchy of motives. One of the issues emerging in the 2004 survey involved concern about GMO in food. The absence of GMO in organic food was considered an important attribute of organic food and a factor impacting the decision to buy organic food by 28% of respondents. In a survey of 295 Czech consumers, the most frequently mentioned reason to buy organic food was health (76.2%), quality (53.8%) and low contamination of organic food (49%) (Tvrdon, Perinova, Misak, 2001). Research conducted in Lithuania shows that there are three main factors that impact the decision to buy organic food by Lithuanian consumers: safety, quality and taste (Rutkovienė, Abraitytė, Zakowska - Biemans, 2005). The analysis of CEE NMS consumer behaviour shows that among the factors having an impact on the decision to chose organic food, social and cultural aspects are relatively marginal. Consumers are motivated mainly by universal values ("safety", "health"). Organic farming and organic food have positive connotations when food safety issues come into play, a concern of contemporary consumers. Other concerns such as animal welfare were less pronounced by CEE NMS consumers. Among Polish consumers, just 5% of the 2004 survey respondents perceived organic food as "respecting animal welfare".

The research on CEE NMS consumers show that besides the positive connotations on organic food, various opinions of a negative nature showed up, resulting not so much from the essence of organic food, rather its availability in the preferred sales channels, as well as the conviction it is overpriced and of poor appearance. Limited availability and high prices could be considered a barrier related to the undeveloped nature of organic markets in CEE NMS. As national market experts point out, the latter is an important factor that limit interest in buying organic food in CEE NMS. Another issue that may affect CEE NMS consumers' interest in the purchase of organic food is the lack of confidence in the reliability of information on organic products (Zakowska-

Biemans 2005). Surveys conducted on a representative sample of Polish consumers from 2001 to 2004 show that there is a high share of consumers who were not able to recognize organic food (Zakowska-Biemans 2005). Similar problems were reported by national market experts from other CEE NMS.

Despite the lack of research on preferences among CEE NMS consumers, one can assume that the existing assortment of organic food does not meet consumer expectations and the lack of efforts to promote organic farming and organic foods results, among other things, in low consumption of organic food. Even though most CEE NMS have nation-wide logos for organic food, which is a prerequisite for the organic food market to develop, these logos are not recognized by consumers due to lack of well targeted promotion. These factors, in addition to the unsatisfactory assortment, limited availability and high prices, are deemed as the primary barriers to develop the demand for organic food in CEE NMS.

The results of the market expert survey show that the share of organic consumption in total food consumption in all the CEE NMS is very low and does not exceed 1%. This includes plant and animal products. However, in the case of plant products, the share of organic consumption is higher because of better availability of such products. The highest volume of organic plant products (cereals, potatoes, vegetables, fruit) consumption was recorded in Hungary and Poland. The consumption animal products (milk, beef, pork, poultry, eggs) varies considerably among CEE NMS. The highest consumption of organic milk was observed in Poland and Latvia, but there was no data from the Czech Republic where the level of organic milk consumption could be higher than in mentioned countries since large scale processing is under development. In terms of meat consumption, the data is very inconsistent since a large proportion of pork and eggs is sold via direct sales.

When analyzing consumption data in CEE NMS, it should be also emphasised that semi-subsistence is important. Semi-subsistence is particularly important in the case of Latvia, Lithuania, Poland and Slovenia. As a result, small farms that have low market orientation designate a marginal percentage of products for sale, while most production is designated for personal needs, relatives, friends or tourists.

## Discussion

There are still many barriers to overcome, related to both supply as well as demand for organic produce, in order to increase the consumption of organic products in CEE NMS. The national market experts stressed that despite growing production, a small proportion of total organic food production in CEE NMS ends up in organic domestic markets. The export (international trade) orientation still plays a very important role in CEE NMS and particularly in Czech Republic, Hungary and Poland. The low supply of organic products hampers the development of organic processing and sale channels. As a result, the assortment of domestic organic products and the availability of organic food are very poor. Another issue that appears to be a crucial factor towards further development of organic food demand in CEE NMS is the price level. The price premia for organic food in CEE NMS are high due to low supply, high distribution costs and relatively high gross margins. Zanoli et al (2004) think that the barrier is not the absolute price level but rather the perceived "opportunity cost" for consumers, which includes other transaction costs due to limited availability, inappropriate price-performance ratio, lack of pricing transparency, and other psychological factors such

as the persistence in memory of prices for organic products. Lowering the prices of organic food in CEE NMS will not enlarge the market if there is no coherent long term strategy to communicate various attributes associated with organic food and organic farming.

## Conclusions

The conditio sine qua non to stimulate consumption of organic food in CEE NMS is to develop appropriate policy measures that would impact both supply and demand for organic food. There is no research that characterises organic consumers in CEE NMS and there is a need to learn more about CEE NMS organic consumers' emotions, cognition and behaviour to develop effective marketing strategies. Efforts are needed to differentiate the existing offer of organic foods by strengthening the scope and methods of organic food processing. Development of processing is crucial to stimulate the demand for organic food in CEE NMS. Nevertheless, without investment in innovative processing, it will be difficult to adjust the offer of organic food to the needs of contemporary consumers. It is necessary to communicate various aspects that affect the prices of organic products, particularly those related to organic standards, to show the benefits of organic food consumption. Moreover, to attract consumers, food attributes such as convenience can not be neglected. Further development of the organic sector in CEE NMS will support overcoming the supply-related barriers to organic food consumption growth but communication with consumers remains one of the key issues to ensure further development of organic consumption in CEE NMS.

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