

## **Tržno obnašanje slovenskih ekoloških kmetij v razmerah slovenskega trga ekoživil**

### **Izvleček**

Rastoče povpraševanje po ekoloških živilih v Sloveniji je tržna priložnost za kmete. Namen prve obsežne raziskave trga ekoživil v Sloveniji je bil ugotoviti stanje in perspektive, s poudarkom na domači ponudbi, ter predlagati ukrepe za izboljšanje. Prispevek na osnovi izbranih rezultatov raziskave opisuje tržno uspešnost in tržne načrte slovenskih ekoloških kmetij. Izvedeno je bilo neposredno anketiranje reprezentativnega vzorca ekoloških kmetij (256), popisane so bile ekološke tržnice in opravljeni pogovori z 1/3 prodajalcev na njih ter opravljeni poglobljeni intervjuji s ključnimi trgovci ekoživil. Ugotovljeno je bilo, da je neposredna prodaja s 85 % deležem daleč najpomembnejša oblika trženja slovenskih ekoloških živil. Prevladuje prodaja na kmetiji, približno 110 ekoloških kmetij pa ustvari v povprečju 70 % svojih tržnih prihodkov na ekoloških tržnicah. Po drugi strani pa trgovci poročajo o pomanjkanju oziroma nedosegljivosti domačih ekoloških pridelkov, čeprav potrošniki povprašujejo po njih. Celoten promet z ekološkimi živili v Sloveniji v l. 2010 je ocenjen na približno 1 % vsega prometa z živili, od tega pa je slovenskih ekoloških živil le približno 20 %. Prispevek podaja nekatere predloge za povečanje domače tržne ekološke pridelave, še zlasti v luči dodatnega povpraševanja po ekoživilih (zelena javna naročila).

Ključne besede: neposredna prodaja, partnersko kmetijstvo, prodaja na kmetiji, tržni delež

## **Market Performance of Slovenian Organic Farms in the Context of Slovenian Organic Market**

### **Summary**

The growing demand for organic products in Slovenia is creating market opportunity for the farmers. The aim of the first comprehensive research of Slovenian organic market was to establish status quo and perspectives, focusing on domestic supply, and to suggest measures for improvement. The article is describing market performance and market plans of Slovenian organic farms, based on selected results of the research. Face-to face interviews of a representative sample of 256 Slovenian organic farms were used, an inventory of organic farmers' markets was established and 1/3 of sellers interviewed; in-depth interviews with key retailers of organic foods were performed. It was established that direct sales have by far the most important role for domestic organic products, accounting for over 85 percent of sales. On-farm sales account for the largest share, while about 110 organic farms realise on average 70 percent of their sales on the farmers' markets. On the other hand, the retailers reported a lack of availability of domestic organic products, in the contrast to a high interest of consumers. The estimated total volume of organic food sales is 1 percent of the total food sales (2010), where domestic organic products account only for about 20 percent. The article is giving some proposals for increasing domestic organic market production, especially from the viewpoint of additional demand for organic foods (green public procurement).

Key words: direct food sales, on-farm sales, market share, partnership farming

## 1. Introduction

In the last decade there have been increasing indications about a rising demand of Slovenian consumers for organic products on the one side and on insufficient response of domestic farming sector to cover this demand on the other. Some of the indications are a growing number of specialised organic food shops, increasing offer of organic products in the conventional supermarkets, scarcity of domestic organic products in the shops and their limitation to on-farm sales and organic farmers' markets, as well as high price premium for organic foods. In 2011, the organic farming area in Slovenia was 6,8 percent of total agricultural land and has been increasing very slowly in the last years, while the production structure (88,2 percent permanent grassland, 7,5 percent arable land, 3,8 percent permanent cultures and only 0,4 percent vegetables) is very unfavourable in relation to the market needs and also hasn't changed much in the last 10 years (data for 2011 from an internal report of the Ministry for Agriculture and Environment).

The first comprehensive 2-year research of Slovenian organic market (Slabe et al., 2010) provided a description of the status quo, insight in some past developments and future trends and enabled analysis of some of the key reasons for the situation.

Some results of the project related to the spatial differences and demographic features of Slovenian organic production as well as selected market-production features of organic farms have been elaborated in another paper presenting the potential of organic production for sustainable local food supply in Slovenia. We have shown that the large majority (92 percent) of surveyed organic farms was involved in some kind of market activity, but also that the large majority of products from Slovenian organic farms was sold directly. The most important market product was meat which was sold by 70 percent of farms, followed by cereals (45 percent of farms) and vegetables (40 percent). We concluded that the demographic potential of the surveyed farms was good. However we identified also different obstacles for increasing market production of organic farms and for marketing itself (Slabe et al., 2011).

Slovenian situation is not unique; Polish researchers reported on a similar situation regarding the importance of direct sales for Polish organic farmers, and also regarding low level of market-related cooperation between the farmers (Łuczka-Bakula et al., 2009). One of the common features of farming in both countries is a large share of small farms.

In Germany where the organic food market is much more developed, the share of organic producers' direct sales in the total organic expenditure decreased from 20 percent in 2000 to 10 percent in 2007, although the absolute value of direct sales changed little (Buder F. et al., 2010). This may indicate that in the specific market situation there can be certain limitations to the amounts which can be sold directly, either on the side of producers, consumers or both.

Both European Action plan for organic food and farming (2004) and Action plan for the development of organic farming in Slovenia until 2015 (Majcen et al., 2005) are naming two key reasons for public interest in the development of organic farming: a range of documented public benefits (environment protection, rural development, food quality etc.) and a steady increasing demand of consumers for organic food. From the viewpoint of public benefit it would be therefore advisable to have a certain balance between organic food production and consumption in the country.

European countries have a very diverse ratio between organic food production and consumption; there are countries which export most of the organic products, such as Bulgaria (90 percent), while Germany which has the biggest share of European organic food and drink market (31 percent) is both a large producer and importer – also in the case of some products that could be produced in the country. In general, all the top ten European countries according to the size of their organic food and drink markets are both large producers (in the size of agricultural area) and large importers of organic products. (The World of Organic... 2012).

The current situation on the Slovenian organic food market can be seen in two ways: as unfavourable domination of imports over the too slow and insufficient domestic production, or as a good market opportunity for the existing and future domestic organic farms and producers. The aim of this paper is to give an indication about the possible future market performance of Slovenian organic farms, as seen from the selected results of the organic farm survey within the context of the Slovenian organic market situation in 2010 as shown by the same research project (Slabe et al., 2010), amended with some recent developments.

## 2. Methodology and data

We researched both market performance of Slovenian organic farms as well as Slovenian organic food (and drink) market as a whole.

The market performance of organic farms was researched by a survey of organic farms. The sample of 256 farms was formed from a data base of 1.788 organic farms; those were all the farms which (i) had been in 2008 fully certified for at least 1 year and thus theoretically had had an access to the organic market; (ii) had a minimum size of 0,5 ha agricultural land. Data base consisted of the full information on the plant and animal production structure of the individual farms. The farms were divided into four most important production types and six size groups (range of hectares). The random sampling of the farms for survey adequately reflected the no. of the farms in each of the 24 (4 x 6) production type/farm size categories. Direct interviews with individual farmers were performed on field in January to March 2010. The questionnaire consisted of 16 detailed questions related to the different aspects of production for the (organic) market. Analysis of quantitative data provided by both mentioned questionnaires (of organic farmers and market actors) used the Statistical Package for Social Sciences (SPSS 17.0).

Due to the complexity of the organic market, we used and combined several methods to obtain more reliable data on the market features, especially on the volume and the share of the different market channels:

a) In-depth interviews with 15 key market actors responsible for 80-90 percent of organic food turnover were interviewed in 2010; a part of the collected data was used in this paper. The data on supply, wholesale and retail sale of individual market actors was used to exclude duplication of market volumes.

b) Gathering of publicly available information on key market actors (such as annual business reports) for years 2009-2010 and cross-referencing this information with the data collected in the interviews, to ensure a high level of reliability of the estimates.

c) A survey of all organic farmers' markets (13 markets in 2009-2010), interviews with market coordinators and with a sample of sellers. The sample comprised 30 per cent of sellers (33 out of total 110).

Some of the results of the survey of organic farms were also used to improve the reliability of the organic market features.

In addition to this, we also carried out a price survey of selected 65 organic foods and comparable conventional foods in different sales channels and outlets, in several terms (June, October 2009: 13 locations, June 2010: 7 locations).

## 3. Some aspects of market performance of Slovenian organic farms

### 3.1. The key features of Slovenian organic food market

The combined results of key market actors' interviews and turnover data of companies involved in organic market showed a 10-15 percent growth rate of the organic market in Slovenia in the last five years, with the highest increase of demand in the segment of fresh vegetables and fruits. Such growth rate has also been confirmed in a consumer research in Ljubljana, Slovenia in the investigation on the time dimension of purchasing organic products (Lampič et al., 2011). The combined data from the trade sector and investigated organic

farms, incl. organic farmers' markets, showed an estimated worth of the organic food market of 34,5 mio EUR, or 17 EUR per capita expenditure for organic foods (data for 2009). In relation to the total expenditure for foods and drinks the share of organic products was slightly more than 1 percent in 2009 (Slabe et al., 2010, Kuhar et al., 2012). Based on our survey in the end of 2011, we estimate that in 2010, the total value of Slovenian organic food market was 38 mio EUR and per capita expenditure 18,6 EUR.

An important feature of the organic market is price premium for organic products. In Slovenia, we found it to be very high; the average price premium in 2009 was 87 percent. However, there was a strong variation between product groups and types of sales channels (Slabe et al., 2010). In 2010, the average premium for fresh vegetables was 51 percent at organic farmers' markets and up to 200 percent in conventional supermarkets; for bread and milling products 15 percent at organic farmers' markets and 100 percent in conventional supermarkets; for fruits 36 percent at organic farmers' markets and 120 percent in conventional supermarkets; for dairy products organic farmers' markets had a price premium of 34 percent and conventional supermarkets 21 percent.

### 3.2. Market position and performance of Slovenian organic farms

In the interviews with key market actors we put a special focus on domestic supply. Due to the complexity of the organic food market – the imports, supply links between different market actors (while the export was marginal), it was not possible to calculate the exact volume of sales, but by comparing and combining the data from the interviews and surveys (organic farms, organic farmers' markets/sellers) and taking into account business reports of key market actors, it was possible to work out a fair estimate which can be very useful for further research, but also for the practice, for example to adapt organic farming policy measures.

Our estimate showed that domestic production supplied only some 20 percent of the total organic food sold in Slovenia in 2010 and that a large majority of sales of domestic organic products was realised by direct sales of the farmers, either on farm (two thirds of total direct sales) or on organic farmers' markets (one third). The structure of direct/indirect sales channels incl. share of domestic products is shown in Figure 1.

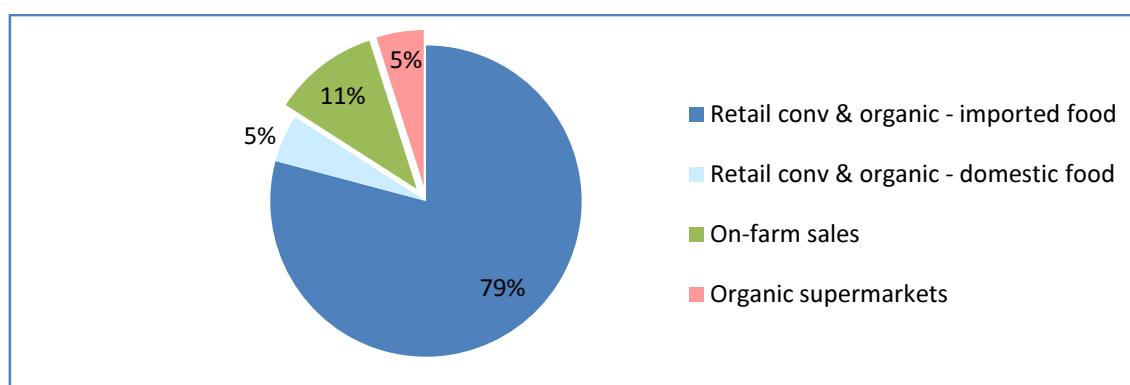


Figure 1: Structure of direct/indirect sales channels of organic food in Slovenia, 2010 (incl. domestic products)  
Data source: Slabe et al. 2010

The interviews with key market actors involved in retail showed that all but one of them were offering at least some domestic organic products from farms or processors; however, their share in the total turnover was very small, ranging from few percent to maximum 5-10 percent. However, the retailers also stated that consumers would want to buy more domestic organic products. Among the main reasons for the small share of domestic products in the retail the interviewees mentioned insufficient availability of domestic products both in respect

to quantities and diversity, and sometimes inappropriate quality and too high prices. They mentioned also that the majority of producers didn't fulfil the basic supply requirements such as appropriate declarations, invoices, packaging etc. All retailers agreed that a big obstacle was the fact that Slovenian organic farmers operate as individual market actors. The retailers however need larger quantities and more reliable supply. They pointed out that they would give priority to domestic products if the quantities and quality would allow.

### 3.3. Market-related plans of Slovenian organic farms

The questionnaire developed for the survey of organic farms contained also some questions about the planned market-related activities of the farms.

The farmers were asked whether they are **planning any changes in the sales channels**; the question related only to the relevant sales channels already used by the farm that the respondents had identified in one of the previous questions. They could however also indicate if they want to introduce a new sales channel. The respondents had three response options: no changes in sales through the relevant channel; decrease of sales; increase or introduction of sales.

The results are shown in Figure 2. The majority of respondents (from 76 to 82 percent) didn't plan any changes. However a great majority of the farms that did plan changes were planning either expanding the sales or introducing new sales channels. The share of these respondents was, depending on the individual sales channel, between one fifth and one third.

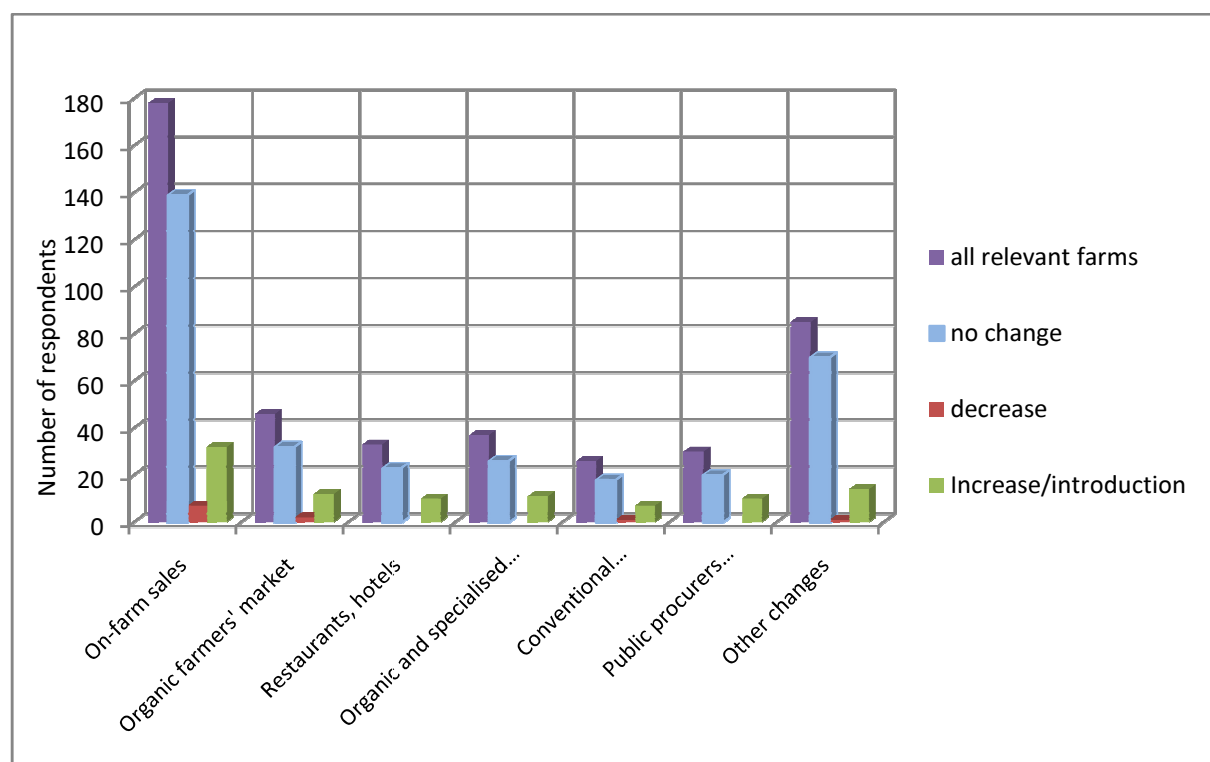


Figure 2: Planned changes in the relevant sales channels of surveyed organic farms, 2010  
Data source: Survey January – March 2010

The highest number of respondents (32) was planning increase or introduction of on-farm sales, 14 respondents planned to increase/introduce the "other" channel (which was later identified mostly as a cooperative or a slaughterhouse serving as sales channels for meat or live animals), while 12 respondents planned to increase/introduce sales on the organic

farmers' markets. The rest planned to increase/introduce sales to specialised (organic) shops (11 respondents); restaurants and hotels (10 respondents) and public procurers – schools, kindergartens etc. (also 10 respondents). The smallest increase/introduction is expected in the sales to the supermarkets (seven).

However, seven respondents plan to decrease on-farm sales and two sales on farmers' market; only minor (one respondent) or none of the other channels are expected to decrease.

The relevance of the sales channels as presented here is giving only the number of farms in our sample that used certain channel and doesn't give any information on the actual amounts sold through it. Nevertheless, the relative importance of the channels and the planned changes provide a good indication on the sales-related development trends on organic farms.

We checked for eventual influences on the described plans of surveyed organic farms. We found a statistically significant positive influence of the use of the Biodar logo (logo of the Union of Slovenian Organic Farmers' Associations – USOFA) on the increase/introduction of on-farm sales.

It is necessary to note that in order to be able to use the Biodar logo, the producer has to sign a contract, i.e. it is not an automatic right obtained by a membership in one of the member associations of USOFA, and it is also connected with a fee. The use of the logo it is therefore also an indication that the producer is more market-oriented.

We asked the farmers about **other market-related plans**. They could choose one of the three suggested options or add their own option (Table 1).

Table 1: Other market related-plans of organic producers

	yes (no. of farms)	yes (%)
To start market cooperation with other organic producers	67	26,2
To increase production by increasing farmland	33	12,9
To sign contract for the use of Biodar logo	27	10,5
Other plans	21	8,2

Data source: Survey January – March 2010

The highest share of respondents planned to start cooperation with other organic producers; these were only the relevant respondents i.e. those without any such cooperation so far. The same remark holds for those who intended to sign a contract for the use of Biodar logo. As described above, plans related to introduction of Biodar logo also indicate a higher orientation towards market production.

We also found that the users of Biodar significantly more frequently plan to start marketing-related cooperation with other producers.

#### 4. Conclusions

The results clearly confirm our assumption that the domestic organic production covers only a small part of the domestic market demand, even if this is only approximately 1,2 percent of the total food market (2011). It is also very clear that the major turnover with organic foods is created in the conventional supermarkets, where domestic organic products are very scarcely represented. However, a large share of currently imported fresh organic fruits and vegetables (the segment which shows the highest growth rate in the last years) could also be produced in the country.

Our survey shows that 26 percent of the farmers do plan to increase production for the market, however the majority is still planning to sell directly. The fact that the majority of

organic farmers prefer to use direct sales channels indicates that for the current farm structure and market situation, this is the most appropriate way.

Direct sales may benefit both producer and consumer; our results show a high price premium for organic products so a better price together with the freshness of products may be a good incentive for consumers to buy directly. Direct sales may often also be better for the environment (less transport, less packaging etc.) as well as for the local economy; therefore they shouldn't be discouraged. But this is still a small share of the food market, while conventional supermarkets and organic shops remain a challenge.

Nevertheless, the recent development in this area may indicate that direct sales are still able to grow. In 2011, we have observed emerging of new forms of direct sales such as "partnership farming" (*partnersko kmetijstvo*) and "subscription farming" (*naročniško kmetijstvo*). These forms are characterised by a stronger relation between the (organic) producer and his/her customers, usually based on a yearly contract. Again, our survey showed that the prices here are generally lower (30 percent) than in the shops or on the markets. We identified seven farms who were involved in this type of sales in 2011 and several farms that intend to introduce it in 2012. (The survey was done in February-March 2012).

Improved market cooperation between organic farmers is one factor that can contribute towards supplying also the supermarkets; another is an increase of the medium-size and larger organic vegetable, fruit and cereals producers. However, such producers also need certain market guarantees. The first developments in this direction have already been observed in 2011, where some processors have started to make production contracts with organic farms.

The users of Biodar logo seem to be more advanced in their market-related thinking: they are planning to cooperate with other organic producers more in the future and also to increase their production. However the retailers don't see any effects of Biodar as a market-oriented producers' organisation.

We have surveyed only existing organic farms, but in order to obtain an indication about the overall domestic market production in the future, it would be necessary to survey also conventional farms and check their interest in conversion to organic. Only a much quicker conversion and more appropriate production structure (significantly more plant products – vegetables, fruits and cereals; currently 88.2 percent of organic area is permanent grassland) could bring a better balance in the organic consumption/production situation in Slovenia, and thus also more public benefits.

An additional challenge and opportunity for domestic organic production is the regulation on green public procurement which is demanding a minimum 5 percent (2012) resp. 10 percent (since 2013) share of organic products in the total publicly purchased food. This means substantial additional demand for organic food on the Slovenian market. The main challenge is similar: how to cooperate and organise the production.

There are several challenges both for the producers as well as for policy makers. For the policy makers, the main challenge remains how to stimulate conversion to organic farming – especially organic market production; until now, Slovenia was not very successful in this. Apart from appropriate area support and measures stimulating investment on organic farms, market cooperation between producers and an improved knowledge transfer system, it is also very important to improve the general relation towards organic farming so that both the farmers and experts can see it in unbiased way: as a market opportunity which is challenging, but unavoidable if Slovenian farming wants to keep pace with the demands of consumers and sustainability demands of the society.

## 5. References

Buder F., U. Hamm, M. Bickel, B. Bien and P. Michels (2010) Dynamik des Kaufverhaltens im Bio-Sortiment. BÖL-Bericht-ID 16983

Kuhar, A., A. Slabe and L. Juvančič (2012) Determinants of purchasing behaviour for organic and integrated fruits and vegetables: the case of the post socialist economy. Pp 19-38 in M. Reed ed., Organic Food and Agriculture - New Trends and Developments in the Social Sciences. ISBN: 978-953-307-764-2 (Intech) Available from <http://www.intechopen.com/books/organic-food-and-agriculture-new-trends-and-developments-in-the-social-sciences>

Łuczka-Bakuła W., J. Smoluk-Sikorska (2009) Sales on organic farms in Poland.  
Lampič, B., I. Mrak, I. Potočnik Slavič, P. Bednár and P. Žufan (2010) Characteristics of organic food consumers in urban regions of Ljubljana and Ostrava. Dela 34 pp. 23-38  
Wissenschaftstagung Ökologischer Landbau, Band 1, Verlag Dr. Köster, Berlin, pp. 478-481

Majcen, M.H., S. Jurcan and K. Vrečko eds (2007) Action plan for development of organic farming in Slovenia by 2015 (Ljubljana : Ministry of Agriculture, Forestry and Food)

Slabe, A., A. Bratuša and A.L. Tratar Supan (2005) Ocena ponudbe ekoživil v Sloveniji - preiskovalna analiza stanja (An estimation of the offer of organic food in Slovenia). Pp. 203-215 in Kavčič, S. ed, Slovenija v EU - izzivi za kmetijstvo, živilstvo in podeželje. (Ljubljana : DAES)

Slabe, A., A. Kuhar, L. Juvančič, A. L. Tratar Supan, B. Lampič et al. (2010) Analiza stanja in potencialov za rast ponudbe ekoloških proizvodov v luči doseganja ciljev Akcijskega načrta za razvoj ekološkega kmetijstva v Sloveniji do 2015: zaključno poročilo (Analysis of situation and potentials for growth of supply of organic products in the context of the objectives set by the Action plan for the development of organic farming in Slovenia until 2015) (Ljubljana: Inštitut za trajnostni razvoj, BF Odd. za zootehniko) p. 78

Slabe A., B. Lampič, L. Juvančič (2011) Potenciali ekološke pridelave za trajnostno oskrbo s hrano v Sloveniji. (Organic production potentials for sustainable local food supply in Slovenia). Dela 36 pp. 93–109

The World of Organic Agriculture. Statistics and Emerging Trends 2012. Willer H. and Kilcher L. (Eds) (2012). FiBL, Frick and IFOAM, Bonn.