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BARRIERS OF THE DEVELOPMENT OF DOMESTIC ORGANIC ANIMAL FARMING

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Abstract

In connection with putting emphasis on the protection of the nature, the food-safety, and the differentiation of the product, organic farming becomes sustainable alternative for some of the actors in the supply chain (stakeholders). Unfortunately the domestic organic production lost on importance after the EU accession which can be driven by numerous root causes, factors. The aim of the study is to give an insight to the problems of the Hungarian organic animal farming. According to the data of the Biokontroll Hungária Ltd. only 5% of the farmers deal with organic livestock breeding. 60 % of the organic land – which is controlled by the

Biokontroll – are meadow, pasture, extensive lawn, and fallow. On the basis of cattle, sheep and goat stock the animal unit per hectare is 0.2, however the desired value should be 1-1,5. 75 % of the total livestock is cattle. We sent questionnaires to the organic animal keepers and we can state that they produce in small measures but their farming structure is highly diversified. These animal products have higher added-value than in other sectors and the products are sold directly to the consumers.

Keywords: organic farming, animal unit, domestic market, export

JEL code: Q110

Introduction

The support of the Hungarian agriculture has always been part of regional development strategies and conceptions of the government, given all the excellent facilities of the environment. In the past few decades we experience a relative decrease in the diversity of the domestic flora and fauna and in the ancient organic production habits which is due to the expansion of intensive production. Although at the same time the conception of sustainable agriculture and biodiversity gives more sense and value to the organic production. Alternative agriculture is a totally different approach both for farmers, and consumers. The study measures the situation of the Hungarian alternative agriculture especially the situation of domestic livestock farmers.

2,3% of the total Hungarian land is exploited by organic agriculture. This rate is lower only in a few other European countries: Romania, Ireland, Bulgaria, and Malta (DG AGRICULTURE AND RURAL DEVELOPMENT, 2013). In Central and Eastern Europe, Czech Republic and Slovakia show higher percentages, where 13 and 8,5% of the agricultural land is involved in

organic production. According to the study of International Centre for Organic Agriculture of Central and Eastern Europe in Slovakia it means 144.000ha. This rate is 13.000 ha more than the total Hungarian land used for organic agriculture (EKOCONNECT, 2012). According to the results of the congress of the Hungarian Research Institute of Organic Agriculture (Ökológiai Mezőgazdasági Kutatóintézet), there are several similarities between the organic sectors of the Eastern and Central European countries. Products with low added value, having low processing rate are exported by the countries in very high volumes which worries the actors of the economy sector (e.g. Ukraine, Romania, Hungary, Czech Republic) (ÖMKI, 2013).

Roszík, the manager of BOKONTROLL HUNGÁRIA NONPROFIT Kft, also agrees with these results, he mentions – “There are few organic seeds, export is very high with 80% ratio, and products have low processing rate”. Although in Hungary, the rate of organic livestock density is also moderate (HÁJOS et al., 2011). It is also supported by the fact that “in Hungary there is 0,1 livestock per 1 ha organic land, that is relatively low, and should be at least 1-1,5, so 10-15 times more” (SOLTI, 2006).⁵⁰ In Romania the factor is the same, while in the Czech Republic it is four, in Slovakia it is five times more livestock per hectare, in Germany, Austria and Slovenia it is almost 1 livestock per hectare (RADICS et al., 2006).⁵¹

According to the data of two certifying and auditing company, in 2012, 1560 companies took part in the organic production in 2012, out of which 1458 firms were registered by the Biokontroll Hungária Nonprofit Kft. (ROSZÍK et al., 2013), and 102 were registered by the HUNGÁRIA ÖKO GARANCIA Kft. (GÖBLYÖS, 2013). As per the studies of HOFFMANN and POÓR, in 2009 only less than 10% of the farmers kept organic livestock, and this rate has only got worse until 2012, when it was only 5%, according to the annual report of Biokontroll Hungária. The number of livestock keeping farms is not mentioned in the annual reports of Hungária Öko Garancia Kft, so in the analysis I refer to the data of Biokontroll.

The Hungarian organic animal stock has gone through significant changes in the past 10 years. The number of the animal keeping farms grew to double between 2001 and 2004 but since the EU accession it has been decreasing steadily. The decrease had a slow pace at the beginning but after 2008 we can see a drastic decline. If we review the size of the life stock units it can be stated that the farms achieved the highest life stock unit increase from 2008 to 2009. In this respect the livestock unit increases from 2001 to 2002 and from 2004 to 2005 are also remarkable. In all three cases the subsidies stood behind the increases. At first the Agricultural Environment Protecting Programme (AEPP) accepted by the decree of the government number 2253/1999 (X.7.), in the frame of which the most frequently applied targeted programme was the organic farming and meadow using programme (SZABÓ et al., 2003)⁵². Later the AEPP was integrated in the Agri-Environment Related Measures of National Rural Development Plan and more organic targeted programmes were formulated for separate sectors (KORMOSNÉ KOCH, 2008).

In 2009, the second turn of the Agricultural Economic Subvention brought several different organic objectives as well. The increase of livestock and the decrease of organic farms resulted in a process that concentrated the livestock in the farms; so from 2008 to 2010 the number of livestock per farm doubled. This procedure started in 2006, so until 2010 the amount got tripled compared to 2006. TAKÁCS and TAKÁCSNÉ, 2006 “emphasize the

⁵⁰ Cited by: FÖLDES, 2008

⁵¹ Cited by: FÖLDES, 2008

⁵² Cited by: Kormosné Koch, 2008

factor, that farmers, who started ecological production in time, may utilize the extra income realizable in this period, which the more substantial consumers are willing to pay for goods that satisfy their demands. In this case, only a less propitiation of the extra revenue is necessary to compensate the yield decrease, its larger proportion makes savings and farm development possible. The period of time can be a preparation to that one, when, by increasing the bio-product volume; the realizable extra price will expectably decrease. However, this will not make any problems until certain limit, but may start a farm concentration, which increases the value of fix capital, but is necessary to establish the conditions of sustainable farming.”

Table 1: Organic livestock keeping situation in Hungary 2001-2011

Year	All agricultural farms	Livestock keeping farms	Livestock keeping farms per all farms	Number of livestock	Number of livestock per farms	Number of livestock per 1 ha
2001	886	72	8,13	8 387	116,49	0,1
2002	1 116	83	7,44	11 855	142,83	0,1
2003	1 239	137	11,06	11 210	81,82	0,1
2004	1 404	160	11,40	12 254	76,59	0,1
2005	1 334	156	11,69	15 673	100,47	0,1
2006	1 233	148	12,00	14 931	100,89	0,1
2007	1 185	134	11,31	16 430	122,61	0,1
2008	1 151	113	9,82	16 111	142,58	0,1
2009	1 541	n.a.	n.a.	20 542	n.a.	0,2
2010	1 493	62	4,15	20 182	325,52	0,2
2011	1 345	68	5,05	n.a.	n.a.	n.a.

Source: Own calculation based on Biokontroll Hungária Nonprofit Kft. annual reports 2001-2011

The number of livestock per hectare improved from 0,1 to 0,2, but this value is still much lower compared to the figures years ago in the neighbour countries. The number of livestock keeping farms didn't increase by the subventions, meaning that they didn't enhance enough the sector. In 2011 the number of farms fell back to the level of 2001 which means that the circulation of organic agriculture could not be developed by the farms, operating long ago, apart from the period of the accession to the European Union.

In addition, the composition of the livestock is also unfavourable. As per the data of Biokontroll Hungária, 76% of the livestock is cattle. Taking into account the stock of buffalos and sheep, goats that are 5% and 7% of the total stock, then ruminants takes 86% of the total livestock. “Taking into consideration, that most of these animals live in national parks, we can see that this stock is not for nutritional purposes.” The reason for high portion of organic cattle stock is that the more than the half of the Hungarian controlled organic lands (57%) is meadow, pasture or extensive lawn, where production of goods is very poor, although these circumstances are favourable for livestock (JÁRÁSI, 2009). From organic livestock sectors, poultry takes 4%, pig takes 7% of the total size of organic animal stock.

In addition to the changes in the size of production, it is also worth to mention the consumption attitudes of organic goods. Gyarmati says that currently there is no solvent demand on organic dairy or butchery that would need a higher average of livestock available. Contrary to this, organic livestock breeding is still necessary for organic manure supply, because there is a limit on the usage of conventional artificial manure (GYARMATI, 2007). The studies of SZENTE, SZAKÁLY and SZÉLES assess that the wealth of livestock plays already a key role, but fails compared to health protection, product reliability of the product or its natural taste. The reason for this might be that the availability and the consumption of organic butchery products are really low in Hungary (SZENTE et al., 2011).

So the most significant barrier of the development of organic livestock breeding is the low domestic demand, so during our research we assessed the general opinion of farmers about the market beside the investigation on production data. The development of organic agriculture has been summarized by JÁRÁSI, based on the studies of KÜRTHY, 2001 and OSZOLI, 2002.

Table 2: Barriers of development in organic agriculture

Production side	Consumption side
<ul style="list-style-type: none"> • Low domestic demand • Risk in export on long term • High rate of smaller farms • Lack of subventions • Information and training of farmers 	<ul style="list-style-type: none"> • Interpretation of the meaning of organic food • High prices • Supply issues • Low processing level of products

Source: JÁRÁSI, 2009

Material and methods

In the study I examined the changes of the past ten years, and their drivers as well through secondary data sources. During the analysis I used the data in the annual reports of *Biokontroll Hungária Kft.*, and *Hungária Öko Garancia Kft.*

After the literature review, I present the results of a primary questionnaire that was asked from the farmers *Hungária Öko Garancia Kft.* The questionnaire was sent out by the help of *Hungária Öko Garancia Kft.* in March 2013. The certifying company had 102 farmers registered in 2012, to which they sent the questionnaires by email. They received 39 answers that are 38% of the total sum of farms under their control. As the two companies has distributed 1600 certification altogether, the results are only exploratory for the total country, but represents the members of *Hungária Öko Garancia Kft.*

The questionnaire contained 38 questions, in which we asked about the barriers of development in the organic livestock breeding. The research had two parts, questions about production and about the sales. We listed open and closed questions as well. During the analysis of the answers we identified the edge values, the averages, and also percentages. The opinions of the farmers about the domestic and foreign organic markets were sorted according to the values of Likert scale. We identified 19 statements that had to be evaluated on a scale of 1 to 5 by the responders both for domestic and export markets. 1 meant strongly disagree, 5 meant strongly agree category. We determined two groups of the responders, farms with organic livestock, and farms not taking part in organic production.

Results

Most of the responders were from the central and the southern part of Hungary. According to the list issued by Hungarian Federation of Associations for Organic Farming (Biokultúra Szövetség) in the southern region 21% of the total of 1126 farmers produce, in the county of Pest it is 15%. So around on third of the farmers lives and work in these two regions. In the remaining regions the number of responders was around 3-6, so the opinions of the two mentioned regions are dominant in a percentage of 51%, which is in line with the dispersion of the farmers in the country.

The production profile of the responders is diversified terms of the composition of product types. 50% of the producers deal with grain, 44,7% with vegetables, 38,5% with fruits, and 47% with livestock breeding. Farmers dealing with livestock breeding represents high portion in the sample (18 out of 38), so I will underline the answers of these members in the sample.

With regards to the product scale, the following goods have been included in the sample: home-made syrups, marmalade, vegetable preparations, cheese, apple juice, apple concentrate, elder syrup, paddy white rice, herbs (fresh, dried, grown/collected), lemongrass, peppermint, fennel, milfoil, forest mushrooms dried, oyster, pickles, egg, peeled goods (millet, buckwheat, sunflower), oil pumpkin, pumpkin seed oil cold-pressed, plum jam, dried fruit, lucerne hay (sold conventionally), seed production (mustard, pees, vetch), propolis, pollen, seedlings of herbs, vegetables, ornamentals in containers, products of mill industry, bread, pastries, canned food, stonecrop, herbs, almond, walnuts, walnut oil. This small sample of goods represents of the diversity of products that is also specific for the whole range of the organic agriculture.

The smallest farm that is involved in organic agriculture is 4 ha, the biggest is 828 ha, so the dispersion is high. With regards to the horticultural farms, these values are 0,5 and 18 ha. The smallest amount of livestock is 5, the biggest is 940 pieces. The figures show that the sample contained relatively large and small farms as well.

Out of the total product range cereals are sold as raw material in 89%, vegetables in 70%, fruits in 33%, meat in 28%. 72% of meat products are sold with an added value, and for fruits this value is 67%. So fruits and meat products are leading in the sector, but cereals are sold as raw material in very high percentage. This is unfavourable taking into account that 85% of the farmers sell this product on the basis of the public producers list of

Out of the sample of the farmers, 63% of them exports cereals, and 60% of them exports fruits, and these rates are the highest export rates. 41% of vegetables and 33% of meat products are sold abroad. These amounts are significant compared to the values defined by in backup sources.

In the next paragraphs I show the result of the responses of livestock keeping farms. The size of the farms is between 5 and 940 animals. Scoping out a farm with 940 animals, the average of livestock on the farms is 85, that is relatively low. Three farms out of them deal only with livestock breeding and processing. These farms with animals sell their products directly to the consumers (77%). Compared to non-organic products, these commodities are sold with 30% mark-up on the price, however most of the vendors don't only sell meat, but also a wide range of other products, like herbs and marmalade. The smallest price difference is 5%, the biggest is 142%. Companies with the largest variety of products show the biggest price difference.

The figures below (Figure 1, 2) show the results of the analysis. The opinions of the livestock keeping farmers about foreign markets are the followings in the sequence of how specific they are. There most important to mention the positive attitude on the export of organic products. At the same time farmers prefer domestic products to import goods, and they show brand loyalty and strong local market organising. In Hungary farmers face the lack of cooperation, and also regulations that are very hard to comply with which is not the case in other countries. Possibilities to sell organic products are also limited because of the lack of solvent demand, and the distrust in the farmers. Farmers present on export markets can sell their products with 83% higher price on foreign markets, on average they can achieve 23% higher price. These farmers have strong relations with their partners, and they cooperate with them on the long run. This is positive, as it is essential for organic production.

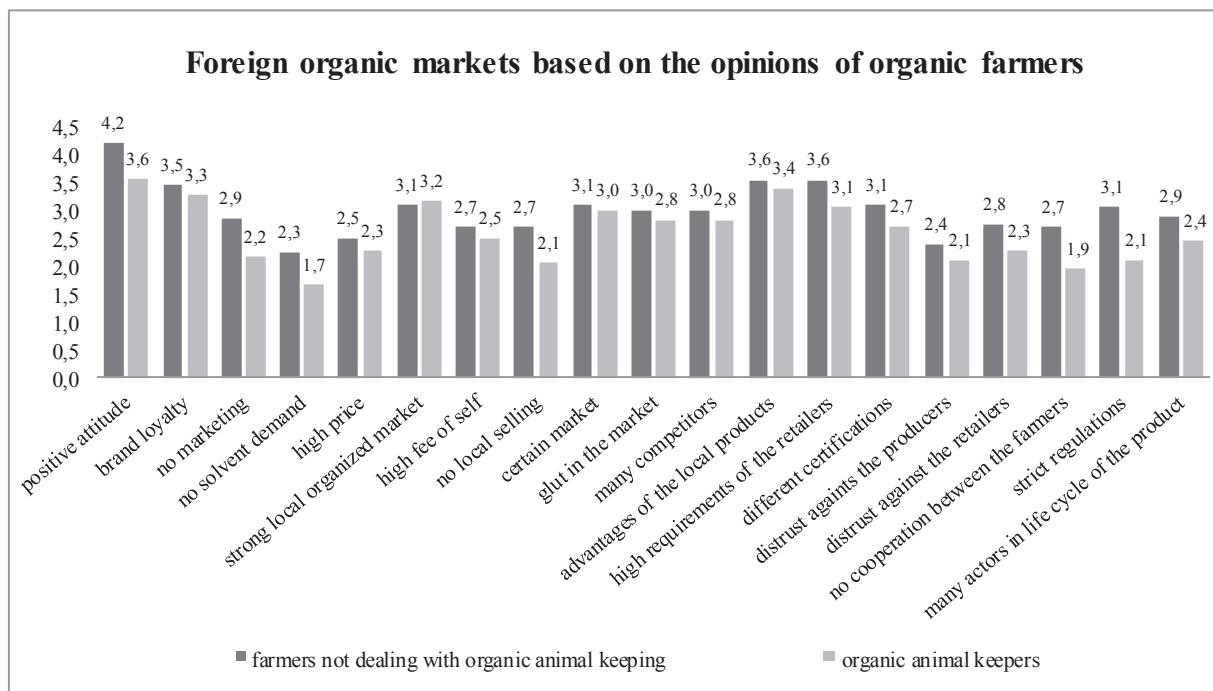


Figure 1: Export markets of the organic products

Source: Own calculation based on questionnaire survey, 2013

The opinions of farmers without livestock related products (20 members in the sample) are quite different from the attitude of farmers selling animal related goods. These farmers have a bigger market share in foreign markets, and don't feel better export possibilities, then farmers with animal products. At the same time they have a wider customer base, and don't experience a different way of cooperation between domestic and foreign farmers. They think that the lack of domestic sales is also a problem in other countries, where the marketing is also not so strong, how the farmers think. Strict regulations are considered to be on the same level, meanwhile as per farmers with livestock it is easier to comply with regulations on export markets.

The opinions about domestic markets of these two groups of farmers are similar. The lacks of cooperation of the farmers, plus the shortage of solvent demand are considered the biggest weaknesses of organic production. Inappropriate marketing strategies are also weakening the sector, customers are not aware of the presence of these products on the market. Prices on the domestic markets are relatively high, also more expensive on foreign markets compared to

non-organic products. Farmers still face too strict regulations on the production and sale of organic products. Distrust with producers and traders are mentioned frequently as problematic, while in other countries, this is in a better shape. So we see still not having enough demand on domestic sale of these products, so farmers need to sell goods to big chain of stores, where shelf prices are to be paid.

To summarize, huge differences appear between domestic and foreign markets, which drives higher export of the concerned products, but this is only possible for the ones selling in bigger volumes.

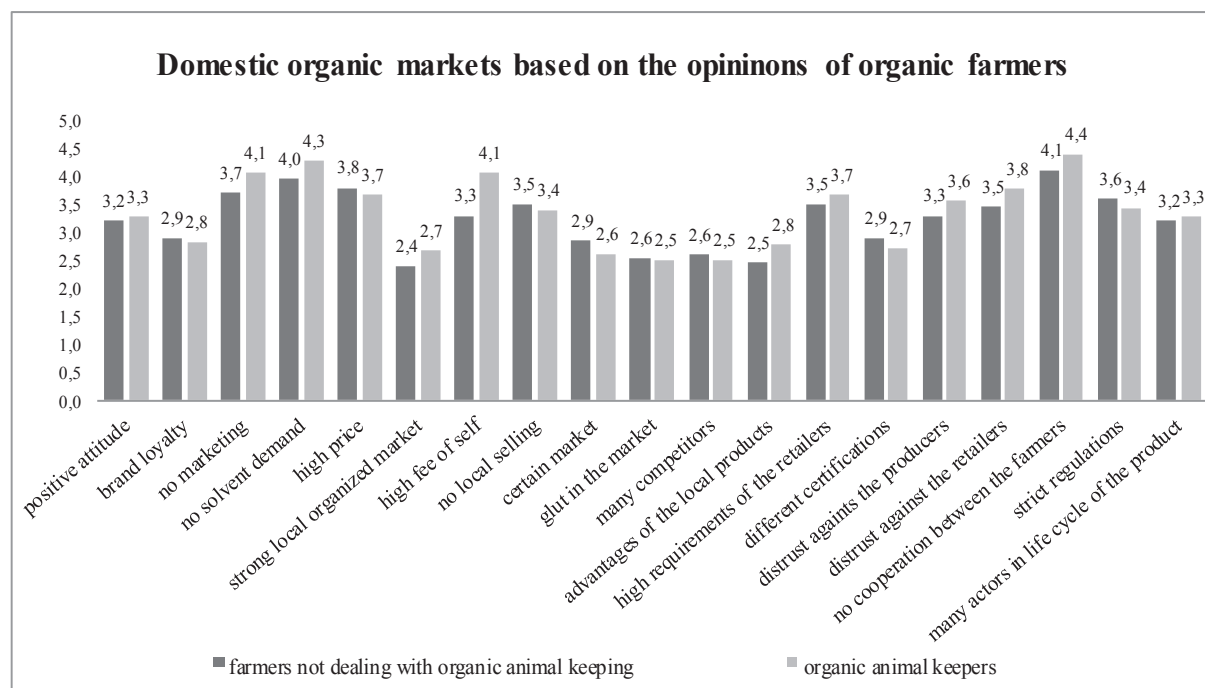


Figure 2: Domestic market of the organic products
Source: Own calculation based on questionnaire survey, 2013

Conclusions

Several studies examine the current situation of domestic organic economy, but no systematic register is kept that could facilitate to better know the members of the sector.

According to the data reported by Biokontroll only 5% of organic farms are participating in organic livestock breeding. Despite of the introduction of new subventions to the sector, there were no increase in the number of farms with livestock in the examined period, and together with the increase in the number of animals in the sector a concentration started on the farm sin 2006.

The domestic organic producers sell a wide range of products, having differences between the size of their plants. In the variety of the goods we can see a lot of specialities and also highly processed products.

With regards to the sales of organic products solvent demand, appropriate marketing and the cooperation of producers are considered significant in the questionnaire assessment. Farmers mention that the domestic sales is disorganised, and that in these circumstances only expensive products can be sold with profit. Positive attitude is not spread yet towards organic

products among the customers, and well-known brands are missing. Trust towards producers and traders are high, that makes more difficult to sell these goods on domestic markets.

We discovered during the analysis, that Hungarian organic livestock keepers find foreign market possibilities much better, but no way they can step out to foreign markets. In the current situation of market competition without appropriate marketing strategy it is not possible to stay profitable neither on domestic nor on foreign markets. The purpose would be to increase the volume of subventions, on the other hand cost effective strategies should be introduced in the sector. These subventions would not only mean a solution for the weak infrastructure, but also enhance the booming of the retail sector compared to multinational companies.

Based on the questionnaire, we can see that organic products are produced with more added value compared to other sectors, and are sold directly to the consumers. Customers are brand loyal, and have long term cooperation with the producers, but these relations are often problematic. The increase in the volume of organic livestock would be solution to keep the labour back in the countryside, to stop the flow of manpower to cities and to have a more effective environmental protection as well.

Acknowledgements

Research was supported by the Hungarian Research Institute of Organic Agriculture (ÖMKi). Special thanks to Hungária Öko Garancia Kft. and to Biokontroll Hungária Nonprofit Kft. as well.

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