



<sup>1</sup>. Rita Irén KŐSZEGI

## RELATIONSHIP BETWEEN SUSTAINABLE AGRICULTURE AND RURAL DEVELOPMENT IN HUNGARY

<sup>1</sup>. College of Kecskemét, 6000 Kecskemét Erdei Ferenc square 1-3, HUNGARY

**Abstract:** Decades ago, agriculture and rural areas primarily focussed on producing industrial raw material as well as foodstuffs of appropriate quality and substantial quantity, which entailed the employment of a big chunk of rural labour in the agricultural sector. Later a trend emerged requiring the reduction of agricultural pressure on the environment, primarily by minimizing the use of chemicals. This trend then evolved into organic agricultural production and ecological farming, which both have been enjoying wide success in the develop world (see HOLLÓ et al., 2009) and have significantly risen in importance over the past few years as key factors of sustainable agriculture both in Hungary and across the globe. A shift from industrial agriculture to ecological agricultural production is evidently in progress both in the European Union and in Hungary (KISSNÉ, 2000).

**Keywords:** sustainable agriculture, rural development

### INTRODUCTION

While rural space has been drastically shrinking in the West, rural values are still well detectable in Hungary, thus bearing the potential of the revitalisation of segments of the economy which rely on rural resource systems. This revitalisation should be based on the principles of local sustainability as the current ecological situation is unsustainable both in Hungary and across the globe (MAGDA- MARSELEK, 2010).

I decided on the investigation of the relationship between rural development and sustainable agriculture as the subject of my research as the past few years have seen an emerging interest in sustainable agricultural solutions, with a special focus on natural, organic and ecological crop cultivation as well as livestock production methods. I believe that ecological farming could largely contribute to rural sustainability and development, and subsequently to the retention of the current rural population and triggering further population growth.

The above-mentioned factors are emphatic in both the Hungarian and European Union (EU) environmental and rural development policies. Organic production is the sole production system

that has been clearly defined on EU level. This system aims at creating a sustainable management system that respects natural biological processes and cycles and at the same time produces high quality foodstuffs without posing a threat to the environment as well as to the health and well-being of humans, animals and plants alike (IFOAM EU GROUP, 2010).

Thomas Mal thus was the first to touch upon the issue of agricultural sustainability, arguing that population growth, if unchecked, could lead to starvation and wars due to an insatiable demand for food; consequently, the law of diminishing returns rules in the agriculture (LISÁNYINÉ, 2011).

The interpretation of agricultural sustainability as well as the role agriculture plays in rural sustainability recurrently raises professional debates. The lack of consensus results from the different approaches to the definition of sustainable agriculture, which consequently entails that the relationship between the rural areas and agriculture is not clearly identified yet.

I agree with Laki (2006), who claims that on the one hand, a vigorous rural area is based on vigorous agriculture but on the other hand rural

development cannot be fully resolved solely via agricultural development. This also serves as proof that it is not realistic to expect agriculture to remedy the problems of rural areas.

**MATERIAL AND METHOD**

Primarily I relied on the available scientific literature, research data, statistics databases as well as academic articles published in journals for my research purposes. I collected the statistical data with the assistance of the Hungarian Central Statistical Office (KSH), National Employment Service, Biokontroll Hungária Nonprofit Ltd, Hungarian Bioculture Association and EUROSTAT, the statistics database of the European Union.

My research explores the viability of ecological farming, a frequently emphasized production method these days, as a means of economic take-off in Bács-Kiskun County, a Hungarian region with deep and significant agricultural traditions.

I conducted in-depth interview with ecological farmers from Bács-Kiskun County, the majority of whom I randomly selected from a list of ecological farmers which is publicly available on the Hungarian Bioculture Association website. During visits at ecological farms, I was provided with contacts to further ecological farmers. Controlled ecological farms, farms converting to ecological cultivation as well as farms that had abandoned ecological cultivation were equally interviewed as I aimed at investigating the reasons for the drastic decline in the number of ecological farms after 2005.

**RESULTS**

Ecological farming in Hungary is primarily engaged in crop cultivation but the overwhelming majority of the land is used as pasture or field while the cultivation of cereals is also significant (Figure 1).

Radics argues that the ideal land size for ecological farming would be ha 600,000 under the current conditions in Hungary but he disapproves the current administrative practices that classify many fields as ecological landing area although there is no actual cultivation performed – what actually happens on these areas is “taken care by Nature itself” (RADICS, quoting HAJTUN, 2012).

In the field of animal husbandry, cattle rearing and poultry farming are the most significant sectors (Figure 2).

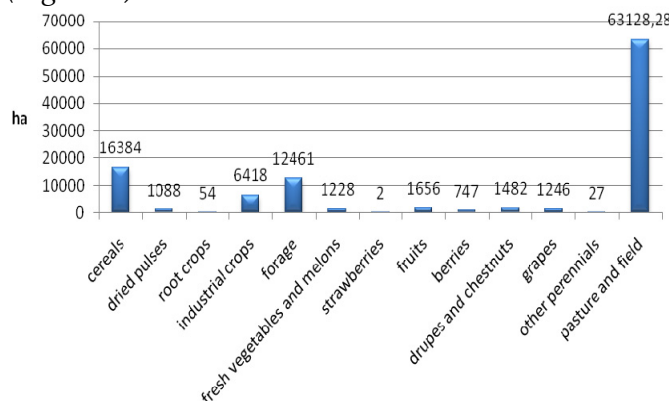


Figure 1: Controlled areas in Hungary (2010)  
Source: Biokontroll Hungária, 2011

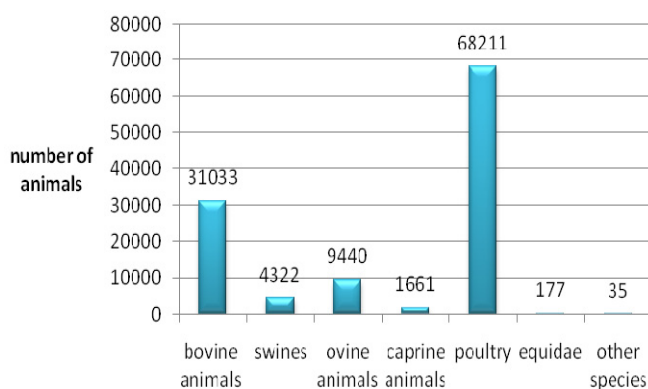


Figure 2: Controlled livestock in Hungary (2010)  
Source: Biokontroll Hungária, 2011

The farms participating in my research produce a variety of animal and plant species including cereals, corn, leguminous plants; fruits, grapes; vegetables; animals: grey cattle, racka (Hungarian sheep breed), Mangalitsa, caprine animals, poultry, Kisber Felver horses (Hungarian horse breed).

The range of plants produced varies from year to year depending on crop rotation.

Regarding the age group of the interviewees, the majority is aged 45 to 60. 40 percent of the farmers have completed higher education. In his research, Szente refers to the findings of the Agricultural Census of 2002, i.e. that the educational attainment of the controlled and uncontrolled ecological farmers is above the average. The ratio of controlled ecological farmers with tertiary attainment is 20 percent higher than the ratio of farmers on family-run farms generally; while the comparison of the ratio of tertiary attainment of uncontrolled ecological farmers and their

colleagues working on family-run farms reveals 11 percent difference (SZENTE, 2005). Figure 3 presents the educational attainment of the interviewees.

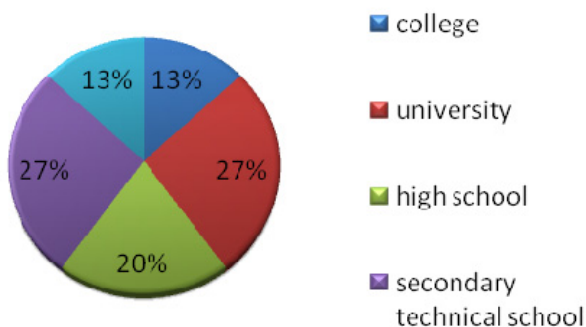


Figure 3: The educational attainment of the interviewed ecological farmers

Source: Researcher's own research and editing, 2013

Most of the interviewed farmers used to work in the agricultural sector prior to switching to ecological farming, hence they have gained solid agricultural skills and relevant experience over the years. The majority of them is primary agricultural producers and has been working on family-run farms.

The in-depth interviews reveal that the majority of the interviewed farmers have started up in ecological farming out of commitment to the protection of the environment, non-chemical agricultural practices as well as healthy lifestyle. One of the interviewed farmers, who has quit ecological farming, claims that he decided to start up in this business due to the money-making and career-building potential that he believed ecological farming might have. I think this case exemplifies well that farmers who solely start up in ecological farming in the hope of financial gains will not get far in this business because in many cases they simply cannot cope with efficient weed management, ruined harvest or farming related administrative tasks – or they lack the willingness to cope with the latter as they regard it as a waste of time. I am of the opinion that ecological farming is a way of life, a world view and Attila Kocsis, the former Deputy Director of Hortobágyi Nonprofit Ltd also shares this view: "This is not simply a job but this is a mission in life that you do not only practise on the farm but it has got to be in your heart, in your soul" (ILONKA, 2010: p. 7).

Two of the interviewed farmers are converting part of their land, which are actually both vineyards, from conventional to ecological production. I think they are doing so in an attempt to find new market opportunities. The farmers have already faced several difficulties during the shift, therefore they are not sure yet whether they do not return to conventional agricultural production, especially because they can market wine grapes only as conventional products in the region where they live. State bodies are paying an increasing amount of attention to ecological farming, for example its support plays a significant role in the Hungarian National Agri-Environmental Program, dated 1999. Aid is granted for ecological arable and pasture lands and plantations in the framework of Agri-Environmental Program (AKG) as well as area aid is also eligible for ecological farmers.

Szente (2005) points out in his research that the integration of agricultural lands of poorer soil into ecological production is given special attention in the Hungarian National Agri-Environmental Program. In Germany, farmers working on scattered lands of poorer soil and lower yield have had a higher tendency to convert to ecological farming. Of all the farmers I interviewed, only one claims that his possessing a poorer quality sand soil land played a role in his decision to convert to ecological farming.

The interviewees state that qualification as ecological producers does not bring high pecuniary gain, they rather use it to demonstrate instead that they stand up for high quality standards both in ecological farming and food production.

Most of the farmers agree that there is a raising demand for organic products on the side of Hungarian population, consumers are interested in these products and hopefully the number of consumers of organic products will further increase in the future. I think that this is partly owing to the health issues that the population struggles with and partly to the gravity that healthy lifestyle is present with in our everyday life; the youth increasingly pays attention to healthy diet while the older generation intends to protect and improve their health condition by consuming organic products.

In comparison to conventional products, the ratio of organic products available on the market is relatively small in Hungary, the overall supply is smaller than in the surrounding countries, for instance in Austria, where ten percent of the total territory used for agricultural production is subject to ecological farming. The consumers' potential reluctance to go for organic products is partly owing to financial considerations and partly to the mistrust towards organic products.

Direct sales plays a crucial role in the management of the majority of the farms in this research and this trend has led to the emergence of the so-called "Pantry Tour Network" which now has its own logo (Figure 4) and website (visit [www.kamratura.hu](http://www.kamratura.hu)). Pantry Tour is no webstore, no purchase can be done on the website, products can instead be purchased right on the spot from the farmers.



Figure 4: The official Pantry Tour logo

Source: Bács-Kiskun County Chamber of Agriculture

Ecological farmers in the surroundings of Kecskemét founded the so-called Szatyor Association. The Association operates a webstore, hence their products are purchasable online; orders can be placed on their website ([szatyor.org](http://szatyor.org)), then these individual orders are gathered and forwarded collectively to the farmers on weekly bases. These farmers then deliver the ordered goods to the pick-up points on the days of taking over and in turn the members of the association who are in charge of picking up the delivered goods hand over the new orders designated to the individual farmers. The farmers are accountable for the quality and freshness of the goods they produce.

The stock-farmers I interviewed mainly raise indigenous Hungarian breeds which are highly resistant and have a high tolerance of extensive conditions.

The existence of controlled ecological farming in Hungary can be traced back to 1993-4. All the farms covered in my research, just like 95 percent

of all the Hungarian ecological farms, are controlled by Biokontroll Hungária Nonprofit Ltd. The interviewed farmers consciously select highly resistant local breeds that are fully suitable for the conditions of the given agricultural area. The adequate adaptability of the selected breeds to the specific conditions of the agricultural area is a minimum requirement on ecological farms because this is a prerequisite for the creation and preservation of the balance between the plant breed and the ecological as well as growing conditions, which harmony in yields successful production and high quality products (MÁRAI, 2010).

The in-depth interviews I conducted reveal that some of the farmers and their products are both domestically and internationally acknowledged. The Rendeks were rewarded with the Henry Ford European Conservation Awards for their achievements in the fields of eco-friendly farming and the preservation of folk culture; they received the awards at the Hungarian Academy of Sciences. They also joined the Slow Food<sup>1</sup> movement and they successfully present the Hungarian Mangalitsa sausage at the international food fair in Torino from year to year, where they represent Kiskunsági Traditionalist Association.

iPOPY (innovative Public Organic food Procurement for Youth) was launched as a research project in the European CORE Organic program in 2007 with the objective to provide the youth with organic food at school and other public serving outlets, thus increasing young people's consumption of organic food in Europe. Fourteen researches from Denmark, Finland, Italy, Norway and Germany participate in the project. The introduction of organic food into public food serving outlets is implemented step by step, in conjunction with political measures (NAGY, 2010).

<sup>1</sup> Slow Food is an international movement founded by Italian Journalist Carlo Petrini to resist the fast food phenomenon and particularly the opening of a fast food restaurant near Piazza de Spagna. The objectives of the movement are to promote and protect regional products from the wrongs of globalization and homogenization; hence their logo is the snail. Small producers have been awarded since 2000 for protecting biodiversity. Numerous products enjoy national and product protection in Europe but the sole Hungarian product to enjoy this protection is the Rendeks' Mangalitsa sausage.

The interviewees agree that ecological farming could contribute to the decrease of unemployment, related processing industry and trade could take on labour as well. Farmers face a severe shortage of agricultural labour with a willingness to work hard. Despite the high rate of unemployment, many unemployed are disinclined to take on hard agricultural jobs and it is more challenging to find reliable and properly skilled labour.

The majority of the interviewees do not plan to quit ecological farming but in the future they prefer focussing on processing to expanding the land they cultivate.

However, the future development of these farms heavily depends on aid from the government. A recently launched comprehensive agricultural program which covers agricultural and rural development and operates as the implementation framework of the Hungarian National Rural Strategy favours high quality agriculture, land and environmental management. The ruling government has set it as its objective to foster the production of high quality, healthy, safe and GMO-free foodstuffs in Hungary and the simultaneous protection of the natural resources, soil, drinking water, wildlife, landscape along with the humans, their communities and culture. The creation of job opportunities and the expansion of employment in rural areas are prioritized.

During his lecture at "The Current Situation of Domestic Ecological Farming in Hungary - Trends and Take-Off" event at Szent István University held on 2 February 2012, Lehota (2012) voiced his opinion that the domestic organic foodstuffs sector can succeed only if its competitiveness improves. A prerequisite to this end is the development and implementation of a strategy drawn up on the bases of proper and reliable research work.

## CONCLUSIONS

The in-depth interviews have brought me to the conclusion that only those farmers can succeed in ecological farming who have adopted the organic life style and world view in their lives, who truly believe that organic products are healthier, tastier than the conventional ones, who believe that they really contribute to the protection of the environment and natural assets and who want an

alternative to the conventional chemicals-based agriculture. The pressure to maximize profit should be curtailed while drawing up the ecological policy; the farmers should accept (in theory) that the establishment of quality environment (including animal welfare, pleasant landscape and safe foodstuffs) is to prevail over profit and to meet this end, they bow to lower profitability. Profit is just a means here to the end of enhancing life quality. However, I agree with Farkas' opinion (2010) that farmers who put ecological production first and cut back on productivity and profitability would like to consolidate their finances which they see shaking in the absence of direct financial aids.

I think the biggest issue for ecological farming lies in the shortage of appropriate processing facilities and slaughterhouses. Slaughterhouses and processing facilities could take on significant labour, hence they could potentially decrease unemployment. The advancement of ecological farming could foster the expansion of organic product portfolios, which would bring Hungarian ecological farmers more consumers, hence the number of farmers who can solely conventionally market the majority of their products would decrease. The growth of ecological livestock rearing farms could help resolve the soil fertilization issue of plant production.

## REFERENCES

- [1.] Magda R. - Marselek S. (2010): *Vidék gazdaságtan I. A vidékfejlesztés gazdasági folyamatai*. Szaktudás Kiadó Ház, Budapest. 297. o.
- [2.] Holló M. - Bálint J. - Gál-Berey T. - Juhász M. (2009): *Környezeti és társadalmi felelősségvállalás az agráriumban*. *Gazdálkodás*. LIII. évf. 1. szám 46-56 o.
- [3.] IFOAM EU GROUP (2010): *A mezőgazdaságnak és az élelmiszertermelésnek meg kell felelnie a jövő kihívásainak. Hogyan profitálhat az EU az ökológiai gazdálkodási rendszerekből összetett szakpolitikai céljainak elérésében?* Brüsszel. 53.o.
- [4.] Kissné Bársony E. (2000): *Az öko-gazdálkodás szabályozási rendszerének EU- konform továbbfejlesztése az AGENDA 2000 tükrében*. *Agrárgazdasági tanulmányok*. Budapest, AKII, 2. szám.

- [5.] Laki G. (2006): A mezőgazdaság fenntarthatóságának és mérési lehetőségeinek vizsgálata. In. Biokultúra XIX. évf. 4. sz.
- [6.] Lisányi E-né Beke J. (2011): A fenntartható mezőgazdaság kritériumrendszere és eredményei Dániában és Magyarországon. Gödöllő, Doktori (PhD) értekezés, 150. o.
- [7.] Hajtun Gy. (2012): Az ökogazdálkodás lehetőségei. Magyar Mezőgazdaság, LXVII. évf. 7. sz. 24-25. o.
- [8.] Sente V. (2005): Az ökoélelmiszerek termelésének, kereskedelmének gazdasági és piaci összefüggései. Kaposvár, Kaposvári Egyetem Gazdaságtudományi Kar, PhD. értekezés, 154. o.
- [9.] Ilonka M. (2010): Pro Biokultúra 2010. Biokultúra. XXI. évf. 6. sz. 7. o.
- [10.] Márai G. (2010): Tájfajták az ökológiai gazdálkodásban. Biokultúra XXI. Évf. 3. szám 31.o.
- [11.] Nagy J. (2010): Öko ételek a gyermekétkeztetésben – tapasztalatok Nyugat-Európából. Biokultúra. XXI. évf. 3. szám 30.o.
- [12.] Farkas J. Zs. (2010): Agrár- és vidékfeldrajzi kutatások Bács-Kiskun megyei példákkal. Szeged, SZTE Doktori (PhD) Disszertáció, 180. o.
- [13.] Lehota J. (2012): Biotermékek marketingje, kutatási eredmények és kitörési pontok. In: Az ökológiai gazdálkodás hazai helyzete- Trendek és kitörési pontok c. konferencia. Gödöllő, Szent István Egyetem 21-27. o.



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5, Revolutiei, 331128, Hunedoara, ROMANIA  
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