

RESEARCH FOR ORGANIC FARMING PRACTICING ON EUROPEAN LEVEL

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Abstract: *Ecological (organic) agriculture is a burgeoning sector, whose origin dates from the early conceptual twentieth century, with research conducted by researchers in the UK (Albert Howard) and Germany (Rudolf Steiner). Since the '80s, the development of organic farming has become a global concern and European. Major organizations such as USAID, IFOAM etc. expanded their activities into this area are involved in the development of legislative initiatives, development strategies and action plans.*

This study covers information recorded in the period 2005-2010, the legislative framework governing the market in the EU organic farming, community support measures, organic market structure and dynamics in organic acreage structure of organic producers, the average size of organic farms sales volume of organic products (turnover) for Europe and the European Union, consumption per capita of organic products etc.

Key words: *system, organic, agriculture, european*

INTRODUCTION

In the European Union, agriculture and rural areas are considered pillars of future economic development. Proposing and maintaining a high competitiveness of agricultural products in the global market, with a focus on quality, the new orientation of the Common Agricultural Policy aims to increase the contribution of agriculture and rural areas to improve the overall condition of the environment and living standards of the population and the diversification of occupations, goods, products and services, making a substantial contribution to implementing the requirements of sustainable development in Europe.

The European Union has created a legal framework for regulating products and organic market since 1991 by Regulation (EEC) no. 2092/91. Since 2007, the European Union introduced a new legislative framework, by Regulation (EC) no. 834/2007. In the context of new stipulations it can be revealed by law as “Organic production is an overall system of farm management and particularly food production that combines best environmental practices, a high level of biodiversity, conservation of natural resources, the application of higher standards animal welfare and production method the preference of certain consumers for products produced using natural substances and processes”.

MATERIALS AND METHODS

The industrial agriculture tends to be replaced by organic (or sustainable). Agriculture was from its inception “green”, but in recent years searching for application in agriculture and systematic vision of modern technologies. Organic farming promotes farming by those means which provides a balance between agro ecosystems and ambiance and is based on the use of those means and methods offered by the company, the scientific and technical achievements that ensure high yields, consistency and quality in terms of protection environment.

The components of a farming system are chosen and works closely with the expenses and the effects it generates, aiming to ensure a positive impact on the effectiveness of each production system practiced. This system, based on substantial investments founds in production costs per hectare (large sums allocated to the use of chemicals for fertilization and pest and disease control etc.). Is opposed, to some extent, and in practice, system to use organic farming.

The main objectives that must meet sustainable agriculture are:

- food security;
- conservation of environment and natural resources on which agriculture depends;
- efficient use of renewable resources and untilld land;
- support the viability of farming and quality of life in rural areas, but also in the whole entire society.

RESEARCH RESULTS

Area under organic farming in Europe was in 2010 about 10.0 million hectares, ie about 2.06% of the total agricultural land and number of operators who apply the principles of organic farming was about 277,000 operators. The main organic crops in Europe were permanent pasture (45%) and arable land (40.6%). In the period 2005-2010, according to data published by the Research Institute of Agriculture (FIBL) organically cultivated area increased by 47.9%. The same trend of increasing (by about 50%) was recorded in the permanent pasture and arable land.

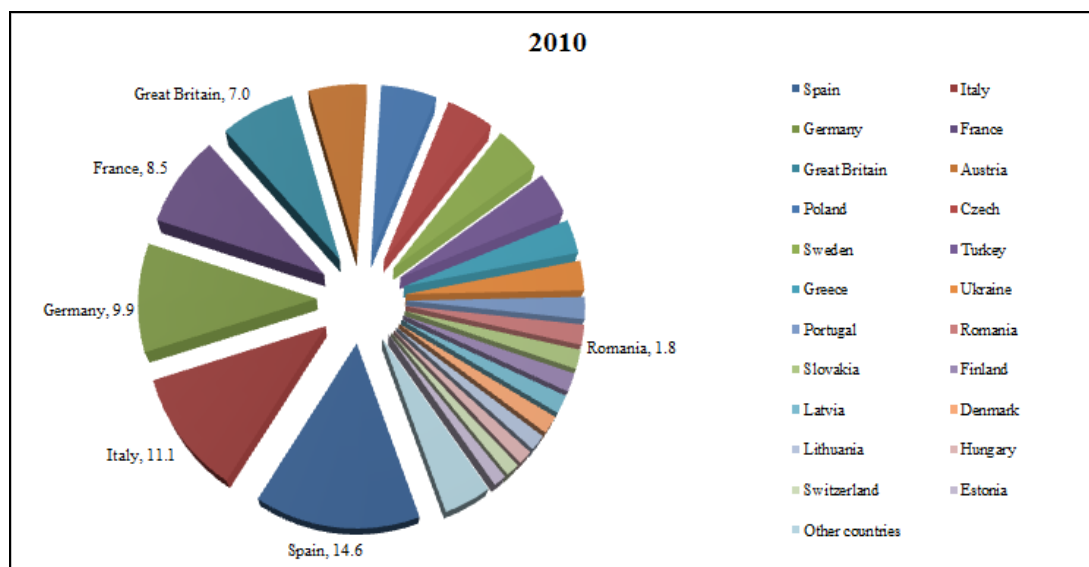


Fig 1. Surface structure of organic cultivation in European countries (2010)

At European level, in 2010, the area cultivated organically represent 2.06 % of agricultural land, the number of operators has reached about 277,000 operators. The main growing countries in organic surface were Spain (1456,7 thousand ha), Italy (1113,7 thousand ha), Germany (990,7 thousand ha), France (845,4 thousand ha) and the UK (699,6 thousand ha). In ranking the countries, Romania is ranked 14 with 182,7 thousand ha (1.8%) (fig.1). Analysis of the countries in Europe, reveals important dynamics of cultivated areas of Russia, Bulgaria, Croatia and Turkey (fig.2).

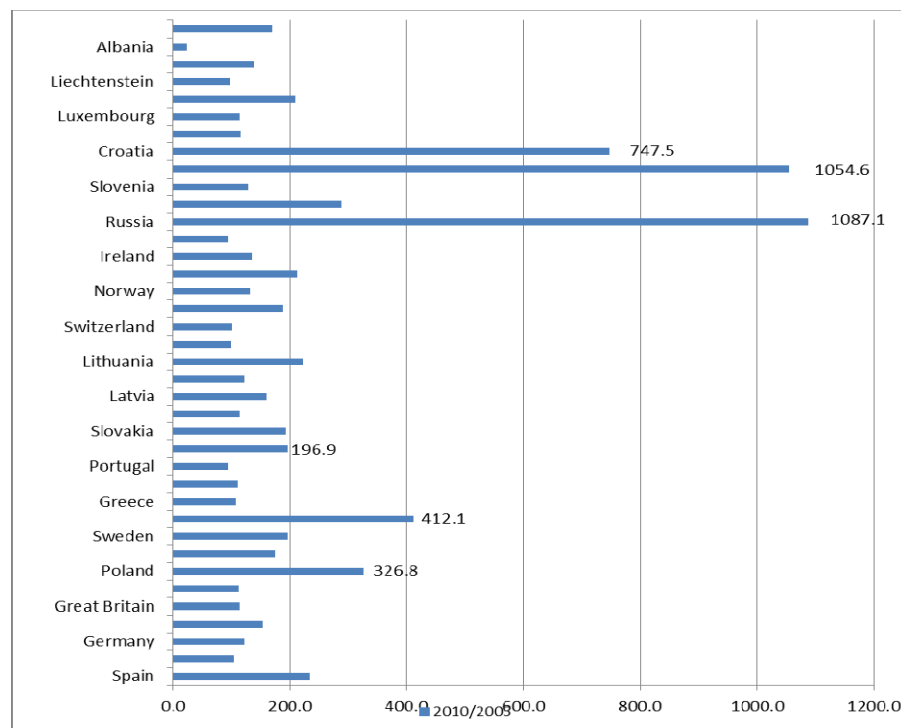


Fig 2. Dynamics organically cultivated areas (during 2005-2010)

In terms of the number of producers in organic farming system, it reached Europe at about 277,4 thousand, with 47.7% more than in 2005 (187,8 thousand). In 2010, the highest number of producers was recorded in Turkey (43,1 thousand), Italy (41,8 thousand) and Spain (27,9 thousand), these countries together holding approximately 40.7% of the total (fig.3). On the other hand, Austria, Germany, Greece. France and Poland have about 21- 22 thousand producers, from 38.4% of the total.

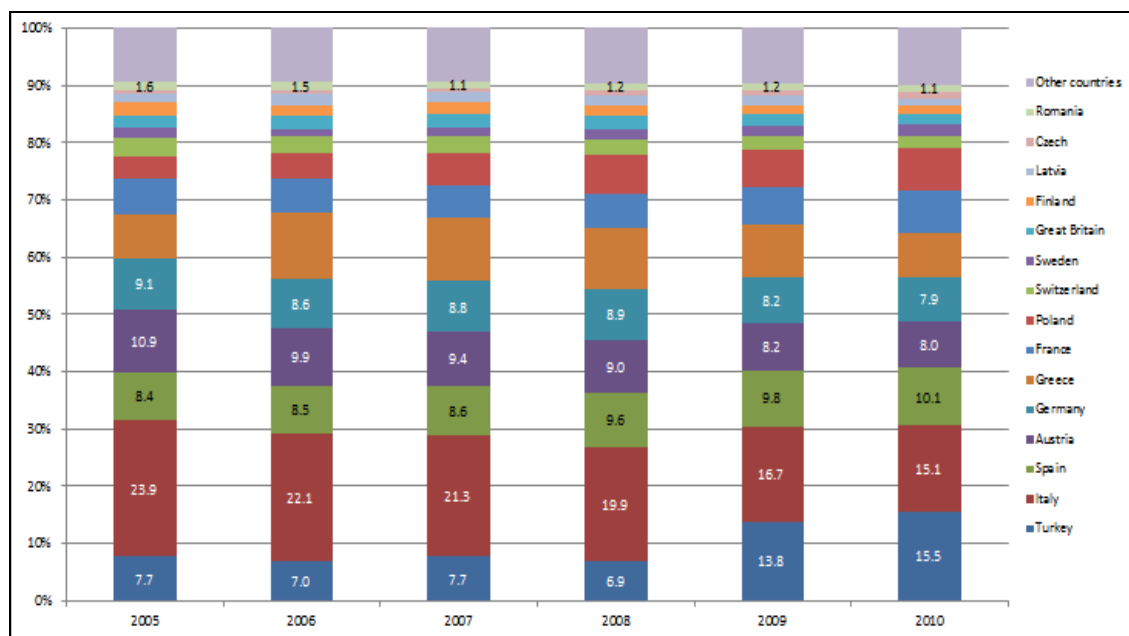


Fig.3. Structure of organic producers in European countries (2010)

The average area of organic farms in Europe was about 36 ha. The large farms were registered in Ukraine (1903.0 ha/expl), Russia (880.3 ha/expl) and Slovakia (480.6 ha/expl). Also, Moldova, Iceland, Great Britain and the Czech Republic present eco operational structures of about 100-200 ha. Romania, with 61.2 ha/expel exceeds the EU average by about 70%.

Table 1**The average size of organic farms in European countries (during 2005-2010)**

Country	2005	2010	2010/2005 +/-	Country	2005	2010	2010/2005 +/-
Ukraine	3360.8	1903	-1457.8	France	48.3	41	-7.2
Russia	404.9	880.3	475.4	Luxembourg	45	38.8	-6.3
Slovakia	460.2	480.6	20.4	Bulgaria	21.9	36.2	14.3
Moldavia	91.5	193.4	101.9	Ireland	36.9	35	-1.8
Iceland	199.6	152.8	-46.8	Liechtenstein	29.7	32.9	3.2
Great Britain	143.8	141.4	-2.4	Netherlands	33.2	31.6	-1.6
Czech	307.6	127.4	-180.1	Italy	23.8	26.6	2.8
Sweden	75.5	84.2	8.8	Poland	22.2	25.4	3.1
Estonia	59	83.3	24.3	Austria	23.5	24.6	1
Portugal	143	82.6	-60.4	Bosnia and Herzegovina	16	21.5	5.5
Hungary	82.8	78.9	-3.9	Croatia	11.6	20.8	9.1
Macedonia	5	64.9	59.9	Norway	17.2	20.4	3.2
Romania	31.8	61.2	29.4	Switzerland	18.2	20	1.7
Denmark	44.2	60.9	16.7	Greece	19.8	14.6	-5.2
Lithuania	35.6	54.2	18.5	Slovenia	13.7	13.8	0.2
Spain	39.7	52.3	12.6	Turkey	6.5	8.9	2.4
Latvia	36.3	46.3	10	Cyprus	5.6	4.9	-0.7
Germany	47.4	45.2	-2.3	Albania	12.6	2.6	-10
Belgium	31.9	44.2	12.3	Malta	2.3	2.2	-0.2
Finland	33.9	42.1	8.2	Total	36	36.1	0.1

Regarding sales of organic products, it is noted that in 2005-2010 there was an increase of about 62%, reaching in 2010 about 18 to 19 billion euros (fig. 4). This growth is influenced by the attention of people to consume healthy food in most developed countries the consumption of organic products is over 5%.

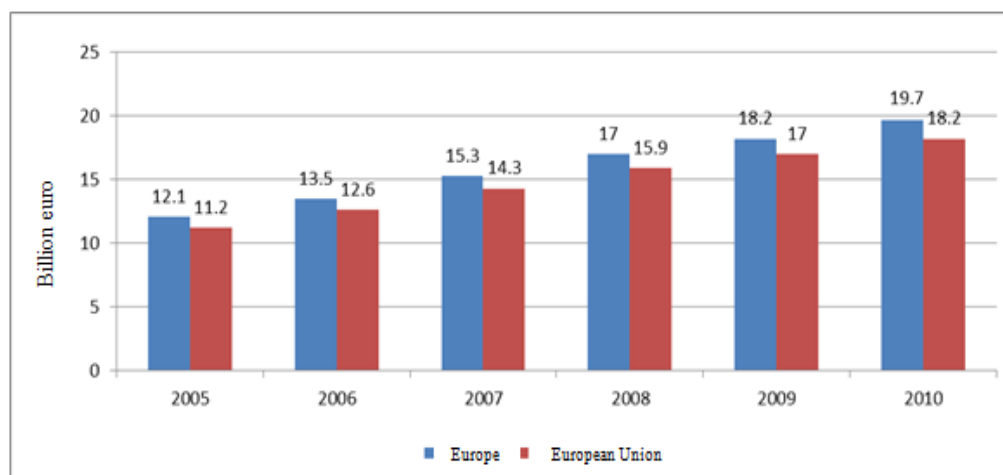


Fig.4. Volume sales of organic products (turnover) in Europe and European Union (during 2005-2010)

Most sales in 2010 were recorded in Germany (6.0 billion euros), France (3.5 billion euros) and the UK (2.0 billion euros). With a sales volume in function than in 2005 by 72%, Germany adjustments to hold in 2010 about 30.5% of total sales of organic products and beverages in Europe. In France, between 2005 and 2009, sales of organic food have almost doubled from 1.7 billion euros in 2005 to 3.5 billion euros in 2010, the last year accounting for 17.8% of total sales Europe. In Great Britain, changes in 2005-2010 are not so obvious, but sales are at a level of about 30% compared to those in Germany. Regarding the consumption of organic products in the following chart we can see that, in 2010, the highest per capita consumption were registered in Switzerland (153 euro) and Denmark (142 euro) (figure 5).

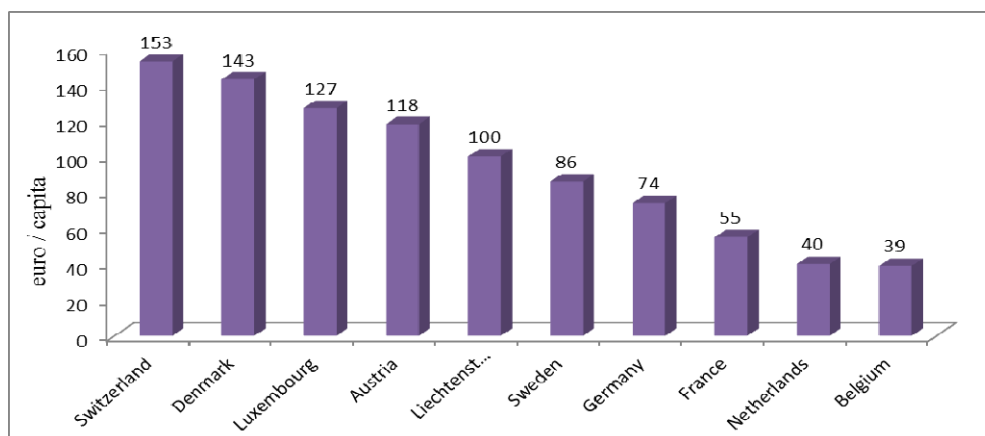


Fig.5. The consumption per capita of organic products in 2010 in EU countries

In 2010, the highest number of producers was recorded in Turkey (43,100), Italy (41,800) and Spain (27,900), these countries together holding approximately 40.7 % of the total. The average area of organic farms in Europe was about 36 ha. The large farms were registered in Ukraine (1903.0 ha/expl), Russia (880.3 ha/expl) and Slovakia (480.6 ha/expl). Romania, with 61.2 ha/expl exceeds the EU average by about 70%.

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CONCLUSIONS

The EU organic sector is developing rapidly, so that joint efforts should focus on three main objectives: to maintain consumer confidence, maintaining the confidence of producers and to encourage farmers to organic farming. It is necessary to stay close to organic farming principles and objectives in order to meet the needs of the population in terms of the environment and quality. In this regard, it is recommended:

- consolidation and harmonization in the European Union and for imported products, eliminating many of the current exceptions in production and controls;
- strengthen controls by applying them according to risk;
- facilitate the membership of small farmers to organic farming by introducing possibility that they are part of a group certification scheme;
- better address the international dimension of trade green by adding new provisions

relating to exports;

- simplification of legislation to reduce administrative costs incurred by farmers and improving transparency.

In conclusion, it is vital that the transition to sustainable agriculture to consider the need to maintain a competitive agricultural sector and economically efficient, responsive to fluctuating preferences of consumers and to facilitate the development of trade in agricultural products, preserving the meanwhile, the natural environment and resource base in the future

REFERENCES

1. **HODGES R D.**, 1981, Biological Husbandry. A scientific approach to organic farming, Butterworths, London-Boston, p.1-14;
2. **COFAS ELENA, VLAD CRISTINA MIHAELA, BEREVOIANU ROZI**, 2013, Organic farming in the context of the bioeconomy, The 4th International Symposion „Agrarian Economy and Rural Development – realities and perspectives for Romania”, ICEADR Bucharest;
3. **IONESCU ALEXANDRU**, 1982, Agricultura ecologică, Editura Ceres, București;
4. **PUIA I.**, 1977, Probleme ale agriculturii ecologice, Editura Ceres, București, p.23-27;
5. **PUIA I., SORAN V., CARLIER L., ROTAR I., VLAHOVA M.**, 2001, Agroecologie și ecodezvoltare, Editura ACADEMICPRESC, Cluj-Napoca, p.396;
6. **ROMAN GH. VALENTIN, ION VIOREL, EPURE LENUȚA, TOADE MARIA, TRUȚĂ ALINA M., DUȘĂ MIRELA E., BĂȘA ADRIAN GH.**, 2008, Principii și practici de bază în agricultura ecologică, Editura Alpha MDN, Buzău, p.11-13;
7. **RUSALI MIRELA**, 2008, Modele de agricultură ecologică în context European, Economie Agrară și Dezvoltare Rurală, Editura TERRA NOSTRA, Iași, p. 113–121;
8. **WILLER HELGA**, 2012, Organic agricultural land and share of total agricultural land in Europe and the European Union 2005-2010;
9. **ZAHIU LETIȚIA, DACHIN ANCA**, 2001 – Politici agroalimentare comparate, Editura Economică, București, p. 31;
10. ***Regulamentul (CE) nr. 834/2007 al Consiliului din 28 iunie 2007;
11. ***http://ec.europa.eu/agriculture/organic/eu-policy/research-projects_en.