

Organic agriculture as component of sustainable development. Romania's case

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Abstract. We offered a general overview on organic farming in Europe, on the present state of Romanian organic agriculture: exports, imports, operators, types of activities, land use. Nowadays, agricultural policy no longer resembles the one initially designed. Because organic agriculture combines tradition, innovation and science to benefit environment, because it offers a good quality of the products and contributes to increase the interest in rural space for all involved, it represents a key issue for a sustainable development. Abandonment of farming and inappropriate agricultural practices that appeared as consequence of lack of specialized knowledge or limited financial resources, have adversely affected the biodiversity and have led or increased soil erosion. These are only a few reasons to give a major interest of this sector.

Key words: organic agriculture, policy, environment.

Rezumat. Am oferit o privire de ansamblu asupra agriculturii ecologice din Europa, asupra stării actuale a agriculturii organice românești: exporturile, importurile, operatorii, tipurile de activități, gradul de utilizare a terenurilor pentru activități agricole durabile. În zilele noastre, politica agricolă nu mai seamănă cu cea proiectată inițial. Deoarece agricultura organică combină tradiția, inovația și știința în beneficiul mediului, întrucât oferă o calitate bună produselor și contribuie la creșterea interesului pentru mediul rural, aceasta reprezintă una dintre cheile dezvoltării durabile. Abandonarea activităților agricole și practicile necorespunzătoare care au apărut ca urmare a lipsei de cunoștințe specializate sau a resurselor financiare limitate, au afectat negativ biodiversitatea determinând, mai ales, creșterea gradului de eroziune a solului. Sunt doar câteva dintre motivele care impun să acordăm un interes major acestui sector.

Cuvinte cheie: agricultură organică, politică, mediu.

Introduction. During the last decade we have experienced if not a green revolution – from the ecological perspective – at least a green evolution in the agricultural policy (Leguen de Lacroix 2004). 91% of the EU citizens believe that one of the essential activities of the Common Agricultural Policy is to guarantee food safety. 89% consider environmental protection to be another basic function. The new agricultural policy has taken the responsibility of these consumers' new expectations, setting up a solid basis for our rural patrimony preservation, in order to produce the required agricultural merchandise, but at the same time ensuring the position on the world market (Petrescu-Mag 2007). Gradually, the policy of agricultural structures has expanded in rural development, being regarded not only as a complement of the market policy but also as the second pillar of the Common Agricultural Policy (Ledent & Burny 2002)

Because organic agriculture combines tradition, innovation and science to benefit the environment, because it offers a good quality and contributes to increase the interest in rural space for all involved, it represents a key issue for a sustainable development. Thus, organic farming has a strong emphasis on natural quality of the products, while quantitative aspects and productivity are on a peripheral level. Typical organic farming practices include (for examples): Wide crop rotation as a prerequisite for an efficient use of on-site resources; Very strict limits on chemical synthetic pesticide and synthetic fertiliser use, livestock antibiotics, food additives and processing aids and other inputs;

Absolute prohibition of the use of genetically modified organisms; Choosing plant and animal species that are resistant to disease and adapted to local conditions; Raising livestock in free-range, open-air systems and providing them with organic feed.

Organic Farming in Europe. Agri-environment measures are a key element for the integration of environmental concerns into the Common Agricultural Policy (CAP). Agri-environment measures are co-financed by Member States. EU expenditure on agri-environment measures amounts for 2007 - 2013 to nearly 20 billion EUR or 22 % of the expenditure for rural development. According to art. 39 of Council Regulation (EC) no. 1698/2005 on support for rural development by the European Agricultural Fund for Rural Development (EAFRD) (http://ec.europa.eu/agriculture/envir/measures/index_en.htm). Agri-environment payments shall be granted to farmers who make on a voluntary basis agri-environmental commitments. Where duly justified to achieve environmental objectives, agri-environment payments may be granted to other land managers. Since 2005, all farmers receiving direct payments are subject to compulsory cross-compliance (under Council Regulation 1782/2003 and Commission Regulation 796/2004). Cross compliance is a mechanism that links full support under the first (and to some extent under the second) pillar of the CAP to the compliance of farmers with rules relating to basic standards for environment, food safety, animal and plant health and animal welfare, as well as standards aimed at the maintenance of land in good agricultural and environmental condition (Health Check of the CAP, Guide 2008 http://ec.europa.eu/agriculture/healthcheck/guide_en.pdf).

Cross-compliance includes two elements:

- Statutory Management Requirements: These requirements refer to 18 legislative standards in the field of environment, food safety, animal and plant health and animal welfare.
- Good Agricultural and Environmental Conditions (GAEC): The obligation of keeping land in Good Agricultural and Environmental Conditions refers to a range of standards related to soil protection, maintenance of soil organic matter and structure, avoiding the deterioration of habitats, and water management.

Failure by farmers to respect these conditions can result in deductions from, or complete cancellation of, direct payments. Examples of commitments covered by national/regional agri-environmental schemes are: management of low-intensity pasture systems; integrated farm management and organic agriculture; preservation of landscape and historical features such as hedgerows, ditches and woods; conservation of high-value habitats and their associated biodiversity.

In the EU, these rules on organic agriculture are laid down in:

- Council Regulation (EC) No 834/2007 of 28 June 2007 on organic production and labelling of or organic products and repealing Regulation (EEC) No 2092/91 which has been amended since then by:
- Council Regulation (EC) No 967/2008 of 29 September 2008 amending Regulation (EC) No 834/2007 on organic production and labeling of organic products. In the amendment the Commission postpones the obligatory use of the EU organic logo on all pre-packaged organic food and the indication of the origin of the agricultural ingredients which has to accompany the logo until 1 July 2010.

More detailed rules on organic production, processing, distribution, labeling and controls have been adopted in the following EC regulation: Commission Regulation (EC) no. 889/2008 of 5 September 2008 laying down detailed rules for the implementation of Council Regulation (EC) No 834/2007 on organic production and labeling of organic products with regard to organic production, labeling and control. This regulation has been amended since then with new rules on organic yeast production by: Commission Regulation (EC) No 1254/2008 of 15 December 2008 amending Regulation (EC) 889/2008 laying down detailed rules for implementation of Council Regulation (EC) No 834/2007 on organic production and labeling of organic products with regard to organic production and labeling of organic products with regard to organic production, labeling and control. On this way, the European Commission's Directorate-General for Agriculture and Rural Development developed a competition (in 2009) for a new logo that will be

introduced as the official logo for organic products throughout the European Union in July 2010. The new EU organic logo will be mandatory for all pre-packaged organic products that originate in the 27 Member States and meet the labeling standards. Additionally, all non pre-packaged organic products that originate from the EU or that are imported from third countries can use the EU logo on a voluntary basis (Fig. 1).



Figure 1. The design which won the organic logo competition.

General rules on the production of processed food (art.19 Council Regulation (EC) No 834/2007 of 28 June 2007 on organic production and labeling of organic products and repealing Regulation (EEC) No 2092/91, Official Journal of the European Union, L 189/1, 20.7.2007) (examples):

1. The preparation of processed organic food shall be kept separate in time or space from non-organic food.

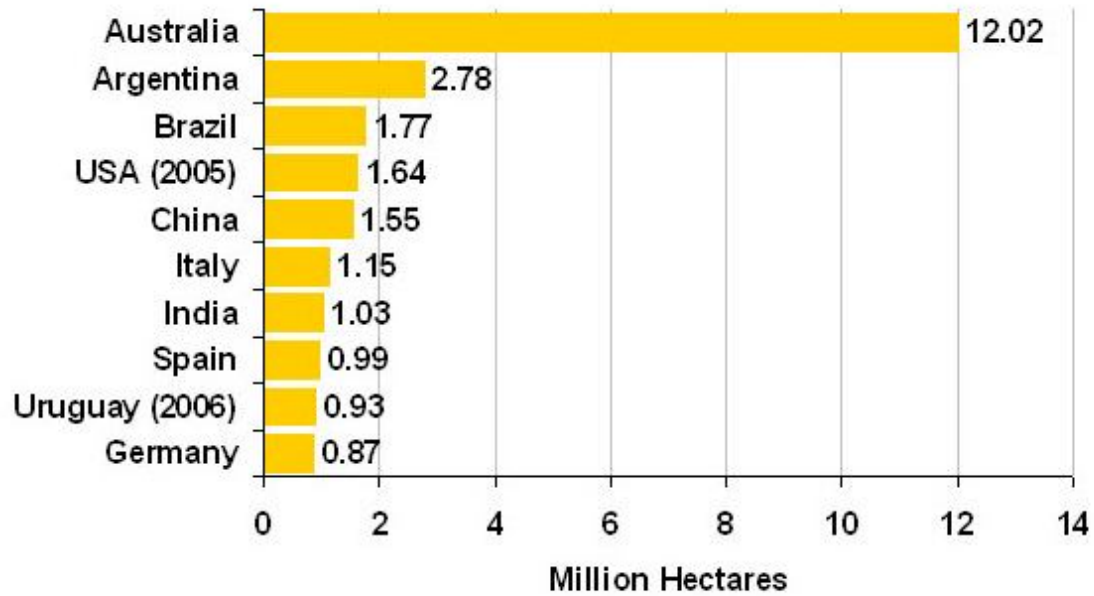
2. The product shall be produced mainly from ingredients of agricultural origin; in order to determine whether a product is produced mainly from ingredients of agricultural origin added water and cooking salt shall not be taken into account;

3. Non-organic agricultural ingredients may be used only if they have been authorised for use in organic production or have been provisionally authorised by a Member State.

The turnover of organic farming worldwide was 46 billion dollars in 2007, up 10 percent from 2006, and reached Europe reached 15.4 billion Euros, up 15 percent more than in 2006. All over the world, organic agriculture is developing rapidly, being one of the most dynamic sectors (see Figs 2-3). According to the latest survey on organic farming worldwide, almost 30.4 million hectares are managed organically by more than 700'000 farms (2006). As it is shown below, Australia is the country with most organic land (Willer et al 2008; see Fig. 2).

Reasons to Encourage Sustainable Agriculture Practices in Romania.

Abandonment of farming and inappropriate agricultural practices that appeared as consequence of lack of specialized knowledge or limited financial resources, have adversely affected the biodiversity and have led or increased soil erosion. Romania holds large surfaces that can be considered disadvantaged areas (DA) (according to EC Regulation 1257/1999) due to unfavorable environmental characteristics which considerably limits the conditions of land use and leading to a lower agricultural production (NPRD 2009). Romania is interested in preserving a number of local species of domestic animals, specific to regions, which are in danger of extinction. In domestic mammals catalog are included 79 races (of which 26 are still active, 19 in potential danger and 34 extincted). It should be noted however that many local races (Turcan, Jigaie, Capra Carpatină etc) have a breeding system in local communities (reproductive isolation in a certain area, without stud book or an official control of production, the selection being made after the owner's preference). Because among the disadvantaged areas, identified agricultural areas with extensive management/disadvantaged agricultural land and those designated as Natura 2000 is a high degree of overlap, is expected that a combination of payments for disadvantaged areas with agri-environmental and Nature 2000 payments will significantly contribute to support the viability of farms in these areas, to conserve farming systems with high natural value and different types of habitats and species associated with them.



Argentina, US and Uruguay: Only fully converted areas

Figure 2. The ten countries with most organic agricultural land in 2007. Source: FIBL&IFOAM 2009, <http://www.organic-world.net/maps-2009.html#c225>

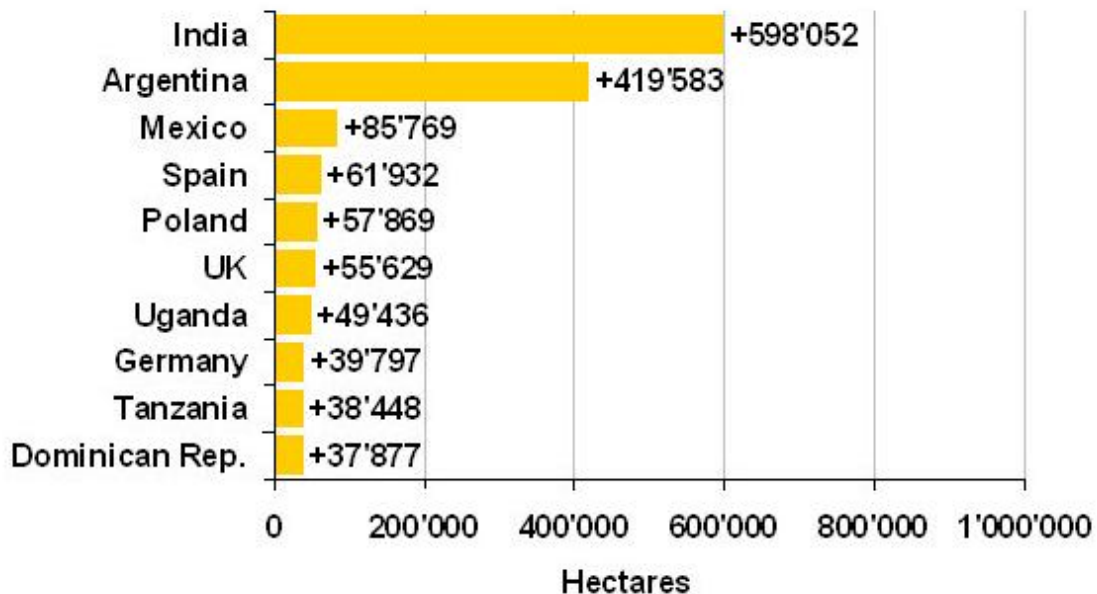


Figure 3. The ten countries with the highest increase of organic land 2006-2007. Source: FIBL&IFOAM Survey 2010. <http://www.organic-world.net/graphs-2009.html#c2235>

Single Area Payment Scheme (SAPS) is implemented in the EU for subsidies in agriculture. Romania implemented SAPS since 2007 (the former acceding countries had the flexibility to choose to implement the Single Payment Scheme- SPS or to opt for the simplified Single Area Payment Scheme-SAPS (Davidova 2008)). SAPS grant is subject to compliance GAEC. Complementary National Payments placed all of 2007 and added to the payments area. The difference is that Complementary National Payments are paid by the Romanian state, out of the budget of the Ministry of Agriculture. Complementary National Payments are given on cultivated area, respectively for livestock, according to the EU model.

Agri-environment measures of the National Plan for Rural Development (NPRD 2007-2013) are of particular importance in this regard, especially in support of high nature value grasslands, the grasslands important for birds and for the maintenance of traditional management of grasslands. Axis 2 of NPRD called "Improving the environment and the countryside" aims to improve the environment in rural areas, to improve biodiversity through sustainable management of farmland and forest. This axis contains measures such as: Support for disadvantaged mountainous area (607.8 million Euros), Natura 2000 Payments for land, starting with 2010 (100 million Euros), Agri-environment payments (894.4 million Euros). Axis 3 contains measure environment (22.3 million Euros). The president of Bio-Romania Association pointed out that our country is the only EU Member State that has not received European subsidies for organic agriculture: "We are the only EU country which has not included financial support by the National Rural Development Program for organic farming sector" (EcoMagazin 2010). Because to an adjustment in the Common Agricultural Policy (CAP) in 2009, Romania has proposed that organic farming shall be financially supported. In this CAP adjustment, it has created a financial reserve enabling Member States to support certain programs in a particular context - we technical call it article 68. The financial framework for Romania, available only for 2010 only, amounted to 5 million euros (EcoMagazin 2010). Romanian producers of organic farming will be financial supported for certification and conversion costs, meaning the shift from traditional agriculture to the ecological one. As we said before, the sum will be allocated only for this year.

Romanian Organic Farming in Figures. Romania exports significant amounts of organic wheat, which is returning as the processed products at prices 2-3 times higher than the conventional ones. According to Ministry of Agriculture, Forestry and Rural Development, exports amounted in 2008 were around 100 million, twice than in 2006 (see Fig. 4). Thus, exports grew in 2008 by about 20% compared to 2007, up 130,000 tons of organic products with a value of 100 million Euros, compared with 80 million Euros in 2007. Destinations which have achieved the most important exports were the Netherlands, Germany, Denmark, Italy and Britain. Imports of organic products were worth 8-10 million Euro, almost double than in 2007, the most significant being jams, marmelades, coffee and sweets.

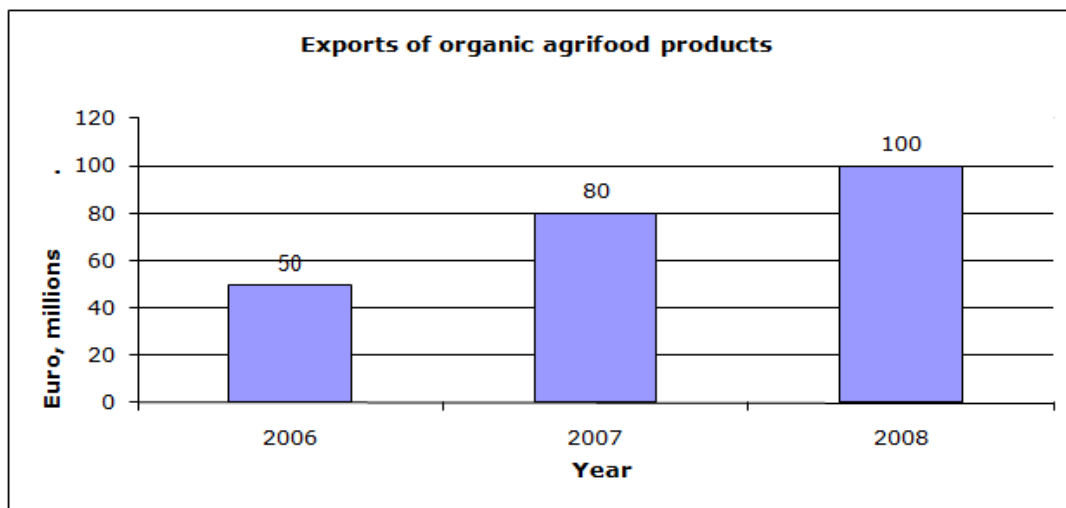


Figure 4. Exports of organic agrifood products.

Increasing organic market in Romania is still constant, given that in 2008 there were 86 processors of organic products, almost double than in 2007, when it was recorded a total of 48. Of the total reported, 60 processors activated in plant production, 9 in animal production and 17 in beekeeping (see Fig. 5). The number of registered organic operators (meaning producers, processors, traders and mixed categories) grew by 9.31% in 2008 to 4191 (3947 of them are producers) compared to 3834 organic operators that were

recorded accrued in the previous year (Ministry of Agriculture, Forestry and Rural development Order no. 35/2009 establishes the rules on registration of operators in organic agriculture). We presented in Table 1 the data on the registered operators in organic agriculture for 2008, in Cluj county.

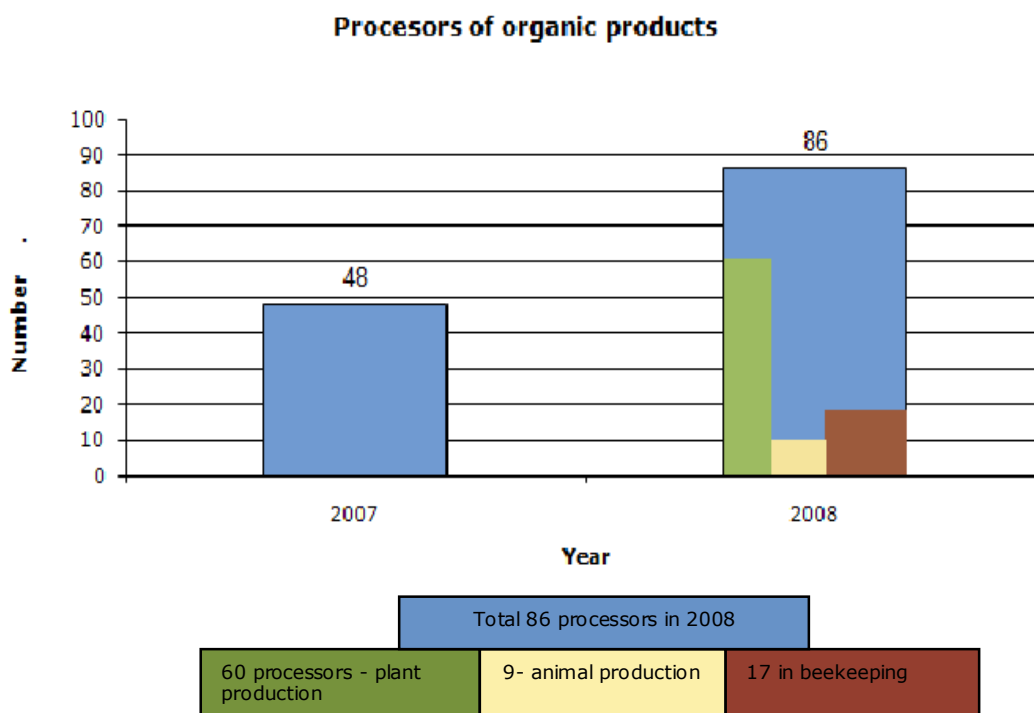


Figure 5. Processors of organic products.

Table 1

Registered operators (in Romanian Ministry of Agriculture and Rural Development Database) in organic agriculture for 2008, Cluj County

<i>Type of operators</i>	<i>Number</i>	<i>Type of activities</i>
Producers	12	Vegetal crops: cereal crops, tuberculifere and roots plants crops
Producers	4	Animal sector (including grassland and meadow grazing fated to grazing/or as fodder) All 4 have: grassland and meadow grazing fated to grazing/or as fodder, Dedicated to livestock production (out of 4): sheep (only 2), poultry (1), bovines (1)
Producers	5	Beekeeping
Processors	2	Processed products – only vegetal processed products
Traders	2	Only marketed products of vegetable origin

Source: Romanian Ministry of Agriculture, Forestry and Rural Development
http://www.maap.ro/pages/agricultura_ecologica/producatori-culturi-vegetale-cluj.html

In terms of areas cultivated with organic products was expected in late 2009, they occupied about 240,000 ha of the total current, with 8.6 percent more than in 2008, when 221,000 hectares were reported (1.60 percent of total). According to Romanian Ministry of Agriculture, Forestry and Rural Development, early in 2008, 49,000 hectares were cultivated with organically grain and 60,000 hectares were covered with pasturelands and meadows grazing. Also, on 30,000 hectares were cultivated oleaginous and leguminous plants, and on 62,000 hectares were covered by spontaneous flora. However, vegetables and fruit (cherries, apples) grown on an area of 1,000 hectares and 18,000 hectares were covered with other cultures (see Fig. 6).

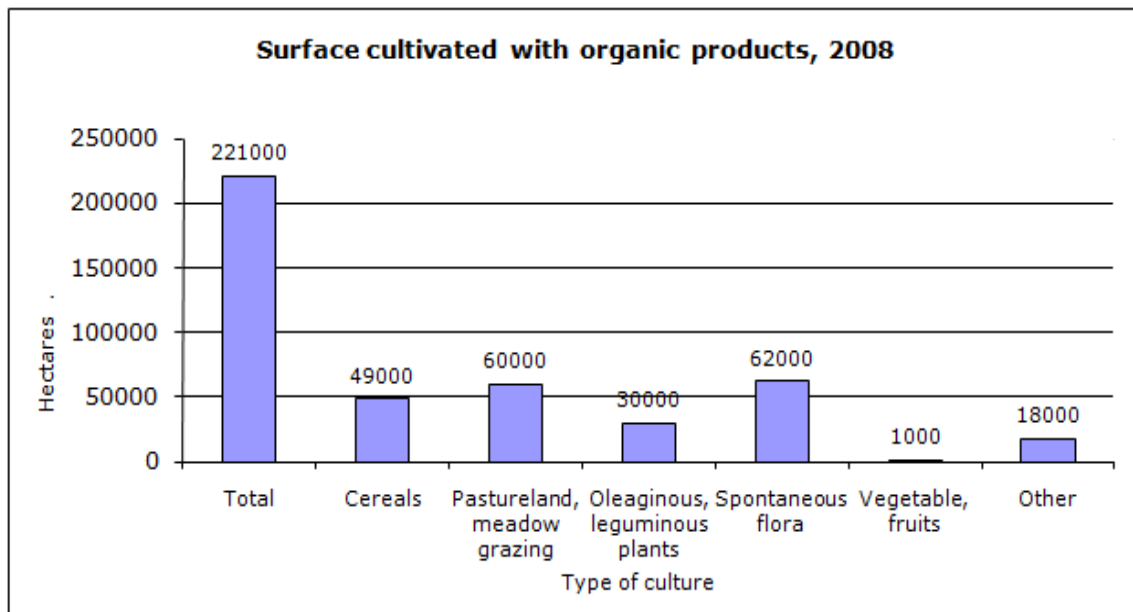


Figure 6. Surface cultivated with organic products in Romania (2008).

Nevertheless, according to the source of information the figures do not always coincide. An example comes below, regarding the surface of organic agricultural land. As we shown before, in the end of 2009, according to our MAFRD were registered 240,000 ha of the total current, with 8.6 percent more than in 2008, when 221,000 hectares were reported. According to German Central Market and Price Reporting Bureau (ZMP now AMI) and Research Institute of Organic Agriculture (FiBL), Romania has allocated in 2009 only 131,401 hectares, meaning almost half of the surface declared by MAFRD. Between countries with the highest shares of organic agricultural land in 2008, we named Falkland Island with more than 35% of the land occupied by organic agriculture, Liechtenstein almost 30%, Austria more than 15%, Sweden more than 10% (according to FiBL & IFOAM (The International Federation of Organic Agriculture Movements 2008), Figure 7).

Testing and Certification of Organic Products as a Tool Against Fraude. The need for clear and harmonized rules has not only been taken up by private bodies, state authorities, but also by United Nations Organizations. The FAO/WHO Codex Alimentarius Commission approved the Guidelines for the Production, Processing, Labeling and Marketing of Organically Produced Foods in June 1999, and animal production guidelines in July 2001. Because, the most important import markets for organic products are the European Union, the United States of America and Japan, their regulations have a significant impact on global trade and the development of standards in other regions. Today, more than 468 organizations worldwide offer organic certification services. Most certification bodies are in Europe (more than 37 %), followed by Asia (more than 31%) and North America (18%) (Willer et al 2008).

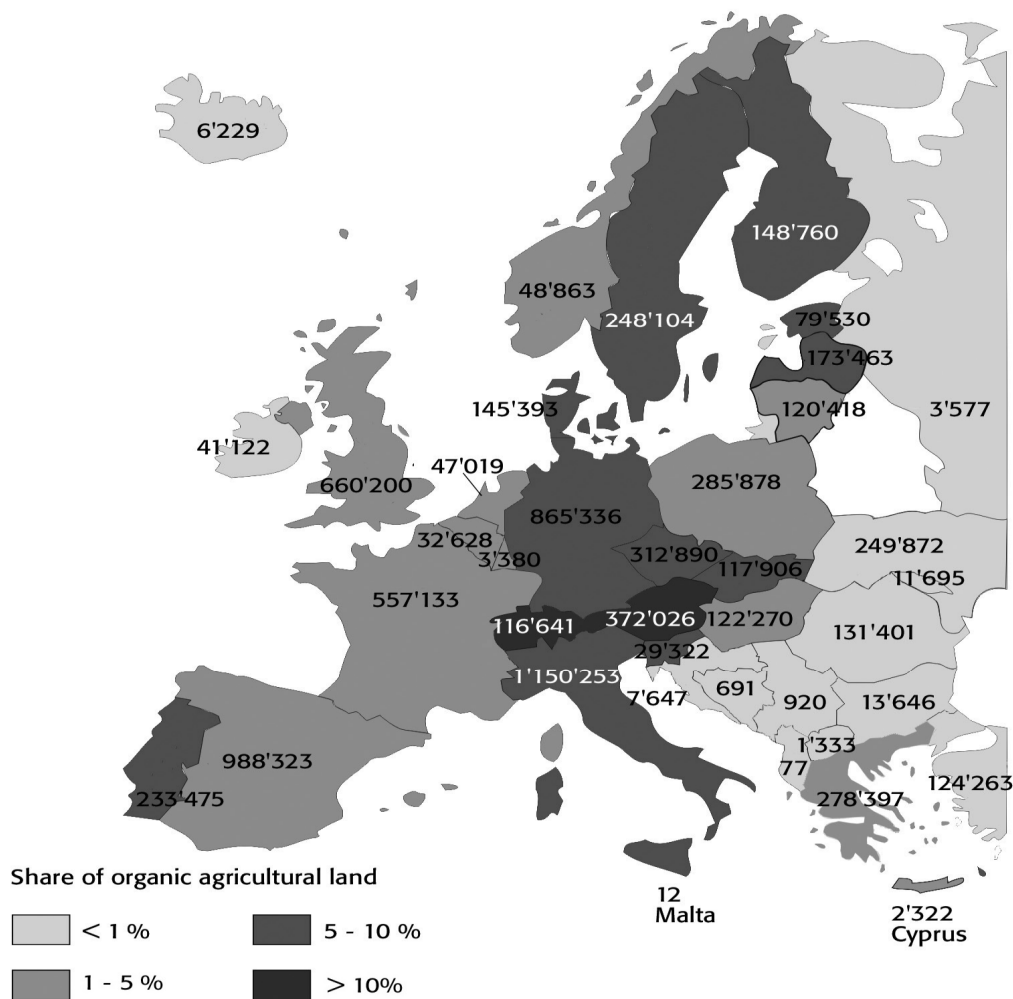


Figure 7. Share of organic agricultural land. Source: FiBL in cooperation with ZMP 2009 (<http://www.organic-world.net/maps-2010.html#c2169>)

In Romania, testing and certification of organic products is currently provided by private certification and inspection bodies. These are approved by the Ministry of Agriculture, Forestry and Rural Development, on the basis of independence, impartiality and competence (Ministry Order no. 688/2007). Approval by Romanian Ministry of the control bodies is preceded necessarily by their accreditation in accordance with the standard EN ISO 45011:1998, issued by a body designated for this purpose. So, before you can obtain agricultural products that can be marketed with the mention "product obtain from organic farming", the agricultural holding must first undergo a conversion period. Conversion means the transition from non organic to organic farming within a given period of time, during which the provisions concerning the organic production have been applied. Conversion period is determined in accordance with EU rules, as follows (few examples): 1 year for beekeeping, if bee family was bought from conventional apiaries, 1 year for meat cattle; 6 months for small ruminants and pigs; 10 weeks for poultry for meat production, purchased at the age of three days; 6 weeks for poultry for meat production. All organic products must contain logo, name and code inspection and certification body which carried out the inspection and issued the organic product. Before certification, farms must undergo a conversion period during which organic principles are implemented to reduce non-approved input residues in the fields. Due to minimal use of fertilizers and pesticides on Romanian farmland over the past fifteen years, reduced transition periods are frequently offered to potential producers. While farmers in EU countries can face transition periods of five or six years, a typical conversion period in Romania is as low as one or two years. As a result, the potential for rapid growth in the

sector is significant (GAIN 2008). If a producer has been properly certified, his/her products may carry the national organic label approved by the Ministry of Agriculture. The Romanian logo for agricultural ecologic products can be used with the EU logo for better views of consumer products from organic production (see Fig. 8).

Romanian logo



EU logo



Figure 8. Romanian logo and EU logo for agricultural ecologic products.

Table 2

Number of operators submitted to regular visits and operators received additional visits (Romanian case)

Country	System A (system of approved private inspection body)	No. of operator registered					Total I+II
		*Producers	**Processors	***Importers	Others	****Total	
Romania		3193	48	22	10	3272	
		No. of operators submitted to regular inspections visits (I)					
		Producers	Processors	Importers	Others		
		3193	48	22	10		3355
		No. of operators received additional visits (II)					
		Producers	Processors	Importers	Others		
		75	4	0	3		
		No. of announced visits					
		Producers	Processors	Importers	Others	Total	Total
		3193	48	22	10	3273	3369
		No. of unannounced visits					
		Producers	Processors	Importers	Others	Total	
		83	9	0	4	96	
		No of irregularities or infringements found: 96					
		No. of sanctions or penalties: 74					

*All producers includes: Producers only, Mixed producers/processors, Mixed producers/importers, Mixed producers/processors/importers

** All processors includes: Processors only, Mixed producers/processors, Mixed processors/importers, Mixed producers/processors/importers

***All importers includes: Importers only, Mixed producers/importers, Mixed processors/importers, Mixed producers/processors/importers

****Mixed operators might be counted several times

Source: adapted after European Commission Report, 2007.

The application of the Community logo label organic products is optional now, but it will become mandatory on July 1, 2010 in accordance with Regulation (EC) Council no. 967/2008.

To prevent and eliminate fraud by substitution of organic products with conventional (cheaper), to ensure consumer protection, specific regulations have emerged in many countries. Policymakers have developed and implemented international standards designed to the compliance of strict rules regarding production, processing, transporting and marketing of these products. This process is supervised by each EU Member State, which is responsible for establishing an inspection system with competent authorities to ensure adherence to the obligations established in the organic regulation. It is very important that every farmer, processor and importer in the organic farming supply chain is inspected at least once a year to ensure their compliance with the regulation. Inspection bodies or inspection authorities must make a full physical inspection at least once a year of all operators; moreover the inspection bodies or inspection authorities have to carry out random inspection visits, announced or not, based on a general evaluation of the risk of noncompliance the EU regulations in the field (for details see Table 2).

From the European Commission Report (2007), we may draw the conclusion that the key element of the control system, i.e. annual inspection visit of each operator has been fulfilled. This is shown by comparing the number of operators submitted to regular and additional visits with the total number of operators. We may say also that among the Member States, as regards the share of unannounced visits on all inspection visits and as regards the number of samples taken for analysis, there is a significant variation.

Conclusions. Nowadays agricultural policy no longer resembles the one initially designed. CAP transformed into a more efficient mechanism, which achieves several objectives at a lower cost. CAP introduced a comprehensive rural development policy, which supports the diversity, reorganization and evolution of the areas and sectors of rural economy in the entire European Union (Petrescu-Mag 2007).

About organic agriculture in Romania, one of the most dynamic sectors of agriculture, we can conclude the following:

- Access to the entire EU market, with its rapidly increasing demand for organic products, combined with Romania's low-cost and fairly skilled workforce and easily converted agricultural land makes Romania a great location for organic production. Romania's domestic market is likely to continue to be a small niche market (Gain 2008);

- Retail products are becoming more widely available, and local consumption has increased;

- Due to the Romanian government's slow release of agricultural subsidies for organic production, growth is likely to slow over the next 2-3 years. According to the Ministry of Agriculture, 1.8-2.2 million hectares can easily be converted to organic production if the effort is made;

- The value of organic production has grown in proportion with the land under cultivation;

- Between 60 and 70% of organic products exports continue to be bulk commodities. Demand for organic honey, cereals, milk and nut cores continues to grow. However, Romanian firms have also begun to find markets for their packaged retail products;

- With less than 0.01% of the products consumed in Romania being organic, compared with 3-4% within Europe, growth is inevitable. However, most Romanians are unwilling to pay the additional 30-40% premium for organic products (GAIN 2008). The demographics of the organic product consumers is 25-39 years old, urban, and educated (and 70% female). The net income level of organic product consumers starts at 3000 RON (1215 USD) (GAIN 2008).

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