

ORGANIC PRODUCTS – A NECESSITY OR AN OPPORTUNITY FOR ROMANIAN AGRICULTURE?

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Abstract

Ecological products may represent a valid alternative for Romanian agriculture. The national agricultural potential, significant for the organic production, is represented by large farming areas, which are fallowed for a large period of time, a small number of industrial polluters in Romania and Romania's tradition in agriculture. The increasing demand in organic farming products, which became manifest at a community and international level, may represent an opportunity for local farmers. The poor development of intensive farming production in Romania may represent a strategic advantage in developing the ecological agricultural sector. The present paper proposes an organic product concept assessment, an identification of Romanian agriculture's opportunities to obtain organic raw materials, an ecological product domestic and international market description.

Keywords

ecological, organic, biologic, production, consumption

Introduction

Organic foods represent niche products, destined to consumers having above-average incomes, who are careful about their diet and their health. (Dinu et al, 2014). The continuous development of world population raises complex food safety issues at a global level. The natural potential, represented by farming lands, climatic conditions, water resources and mineral components is limited by the planet's constraints. Crops need full development stages until they reach technological maturity, whereas the animal kingdom has a cycle that comprises development stages that may be compressed /optimized only up to certain limits. Under these conditions, food shortage sometimes becomes manifest, which is usually followed by social actions, wars or population migration. Food production intensive systems, relying on the use of chemical fertilizers, fungicides, insecticides, plant growth regulators and pesticides or on genetic changes, represent options that only temporarily solve global food demand but, on the other hand, they raise food ethics issues and they pose potential risks for human race genetic mutations (Hails, 2000, Pusta et al, 2009). A consumer segment, with sufficient financial resources and access to information, aware of the potential risks that conventional foods pose, asks for products obtained by means of ecological farming and processing. These products represent, in fact, the basis for a healthy nutrition. Unlike conventional farming, oriented towards economic efficiency maximizing, ecological farming focuses on balancing the social, economic and ecological aspects. Food organic farming and processing do not have as main purpose cost reduction, the focus being put on quality and environment protection. Thus, these products are more expensive, destined, at present, for a consumer elite that values the products' natural properties and a healthy nutrition. Unfortunately, if intensive farming has been practised on a certain surface of farmland, then the return to organic farming principles is a long-term and costly process.

1. Literature review

On the Romanian market there are a series of food and non-food products with names that contain the terms natural, ecological, organic or biologic. These words are frequently used in everyday language most often than not without knowing their real meaning. The organic product must comply with some quality standards, based on some well-defined and accurately-determined criteria (Winter and Davis, 2006, Kahl et al, 2012). In many cases the concept is misunderstood by the consumer, who confuses the terms natural and ecological, biologic or organic. The consumer purchases products which are labelled with the term natural without knowing the fact that "natural" or "100% natural" frequently represents a marketing strategy that does not offer the guarantee of a quality product and does not indicate an ecological product. In order to avoid the fraudulent use of the terms "ecological", "biologic", "organic" or of the abbreviations "bio", "eco" as trademarks or use practices for the products that are not obtained in accordance with the ecological production rules and regulations and that may mislead the consumer, the Government of Romania issued the Ordinance amending and supplementing the Government Emergency Ordinance No. 34/200 regarding ecological food products. The national legislation, correlated with the community one, clearly defines the objectives, principles and rules that must be applied to ecological production, making references to the conditions imposed on ecological farming and the processing referring to land conversion, plant cultivation and animal breeding (without using chemical substances or other genetic modifications), to adequate marking – labelling, selling, inspection and certification.

From the point of view of scientific significance there is no difference between the terms bio/biological, eco/ecological or organic. Their use is specific to some geographical area and the terms are not mutually exclusive. Thus, "organic" is mainly used in the Anglo-Saxon area whereas "bio" (from biological) is mainly used in the French - German area. In the USA and Canada the term "organic" is used, in the German area both "eco" and "bio" and in Italy or Hungary the term used is "bio". In Romania, according to the community recommendations, the agreed term is "ecological", and on the certification logo from the specified products there are the terms "Ecological Agriculture", with the abbreviation "ae". Toncea et al (2009) carried out an overview of the equivalent notions of the ecological product used by European countries according to the Regulation (CE) No. 834/2007.

Table 1. The use of the terms relating to ecological production in the EU countries

Country	Terms used	Country	Terms used
Austria (AT)	biologishe	Romania (RO)	ecologic
Lithuania (LT)	ekologiškias	France (FR)	biologique
Belgium (BE)	biologische	Slovakia (SK):	ekologické, biologické;
Luxembourg(LU)	biologesch	Germany (DE)	ökologisch, biologisch
Bulgaria (BG)	биологичен	Slovenia (SL)	ekološki
Malta (MT)	organiku	Greece(EL)	βιολογικό;
The Czech Republic (CZ)	ekologické, biologické	Spain (ES)	ecológico, biológico
Great Britain (GB)	organic	Ireland(IE)	organic
Cyprus (CY)	organic	Sweden (SV)	ekologisk
The Netherlands (NL)	biologisch	Italy (IT)	biologico

Country	Terms used	Country	Terms used
Denmark (DK)	økologisk	Hungary (HU)	ökológiai
Poland (PL)	ekologiczne	Latvia (LV)	biolģisks, ekolģisks
Estonia (EE)	mahe, ökoloogiline	Finland (FI)	luonnonmukainen
Portugal (PT)	biolģico		

(Source:Toncea et al, 2009)

According to Toncea et al (2009), there are organic food products that originate from three main types of ecological farming: ecological farming proper (organic or biologic), biodynamic farming and natural farming (forestry farming and permaculture). The principles of the three types of farming are presented in the community regulations 834/2007 and 889/2008 of the European Commission and in the own standards, like DEMETER for the biodynamic production.

The ecological farming itself (organic or biologic) proposes an alternative to the conventional agriculture – obtaining high-quality agricultural products, with high organoleptic properties and digestibility and soil fertility improvement, eliminating all environment pollution sources. The biologic farming system gives up chemical fertilizers completely, the necessary nutritive elements being ensured by means of traditional methods. Lotter (2003) proposes some differentiation criteria between the two production systems (table 2).

Table 2. Some criteria to compare conventional and organic agriculture

Conventional	Organic
Apply chemical fertilizers to promote plant growth.	Apply natural fertilizers, such as manure or compost, to feed soil and plants.
Spray synthetic insecticides to reduce pests and disease.	Spray pesticides from natural sources; use beneficial insects and birds, mating disruption or traps to reduce pests and disease.
Use synthetic herbicides to manage weeds.	Use environmentally-generated plant-killing compounds; rotate crops, till, hand weed or mulch to manage weeds.
Give animals antibiotics, growth hormones and medications to prevent disease and spur growth.	Give animals organic feed and allow them access to the outdoors. Use preventive measures — such as rotational grazing, a balanced diet and clean housing — to help minimize disease.

(Source: Lotter, 2003)

The transition from an intensive farming system to organic production is relatively difficult and it lasts 1-3 years or a rotation, depending on the intensity degree of the farming system before conversion. For the certainty of the organic production (biologic, ecological) some certifications are necessary. These certifications are made by some certification institutions authorized by the state and/or by the European Economic Commission (EEC) or by the International Federation of the Organic Agriculture Movement (IFOAM). The certification is costly and the procedure is complex and strict. Although the conversion period from intensive to organic farming involves a series of losses for the producer, the subsequent benefits can be significant, taking into account the high prices of the products (Caceka and Langnera, 1986). Reganolds (2013) proposes a series of indicators in order to comparatively analyse the conventional and organic production farming systems (table 3).

The foundations of biodynamic farming were laid by Steiner in 1924 (Paul, 2011). The biodynamic production system proposes getting high nutritive value foods by applying a concept, which relies on the energies of life. (Ponzio, Gangatharan și Neril, 2013). The accent in the biodynamic farming production is laid on integrated farming systems, the use of inter-crops and crop rotation, animal and crop integration, soil protection and regeneration by means of compost (Carpenter-Bogs, Reganolds et Kennedy, 2000).

Table 3. Sustainability indicators for measuring farming system performance

Economic	Environmental	Social
Farm profitability	Energy efficiency	Yields
Operating costs	Soil and water quality	Nutritional quality of food
Income variability	Soil erosion	Farmland protection from urbanization
Financial risks	Wildlife protection	Farmworker salaries and benefits
Food costs	Pesticide impact	Well-being of farm communities

(Source: Reganolds, 2013)

Conventional, organic and biodynamic farming differ in how they treat soil, plants and animals – the latter recognising the important interactions between the three and working towards creating a healthy, self-sustaining harmony. The absence of any synthetic fertilizers, pesticides, insecticides or other chemical treatments is the basic criterion for biodynamic, and of course, ecological agriculture. Compared to organic agriculture, the biodynamic production system uses a manure-based compost, decomposed plants or the addition of natural minerals, favoring a cyclic circuit of nutrients, fermentation, photosynthesis or other biological processes. (Reeve et al, 2005). Natural farming represents a farm-ecological system based on the laws of nature and on minimum human interference, promoted by Fukuoka (1978). The models for forestry farming and permaculture are natural ecosystems, in which man can integrate (Toncea et al, 2009). For the pre-conversion period, LEISA systems are recommended (Low External Inputs Sustainable Agriculture), based on local resources of soil, climate and workforce. The use of chemical fertilisers and pesticides, of conventional equipment, of food ingredients and fodder, etc. is allowed only to cover the resource deficit and only if they do not affect the environment. LEISA is recommended before conversion in order to balance farming systems as social, economic and natural potential. Conventional or traditional technologies are reducer or slowly replaced by ecological ones as the system accepts them and does not reject them.

3. Materials and methods

The data presented were selected from journals, scientific articles, statistical data collections, legislation and media information regarding organic foods. All the collected data from the statistical databases FAO, CEE, IFOAM or the National Institute of Statistics were adequately processed. Series of statistical data have been used regarding annual productions, farming areas, the number and type of operators, organic product transaction value. The use and processing of statistical data offered the possibility of an adequate interpretation of the tendencies manifest in the domain of farming production classified on geographical areas, countries, product categories and economic operators.

4. Surface evolution and ecological farming production

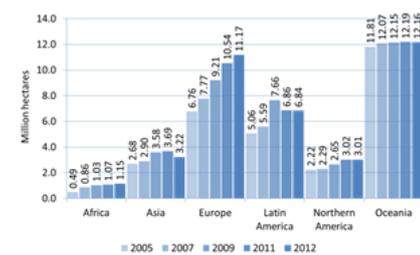
4.1 Organic farming evolution at a global level

Organic farming production registered an impressive global growth lately. The economic crisis didn't significantly influence the development of ecological farming (Giannakas, 2005). The increasing interest of consumers for biologic products led to producer adaptation and the use of ecological farming on bigger and bigger farming areas. Practically, ecological farming is practised on all continents except Antarctica. According to the data taken from the Research Institute of Organic Agriculture (FiBL, 2014), in 2012 there were approximately 37.5 million ha on which biologic farming was used at a global level, distributed unevenly on the 6 continents. (figure 1). Although there hasn't recently registered a substantial growth in the surfaces allotted to ecological production, Oceania occupies the first place in the world, with 12 million hectares dedicated to bio farming and a share of over 30% out of the global surfaces. Oceania, and especially Australia, has large farming areas, destined mainly for animal breeding, on which intensive farming is not practised.

As an annual average growth pace, Europe is by far on the first place, registering a doubling of the surfaces destined for the ecological sector in the last few years. Asia registered a slight decrease of the organically cultivated surfaces in 2012 as compared to 2011.

Growth of the organic agricultural land by continent 2005-2012

Source: FiBL-FOAM survey 2014



Source: Organic World Net

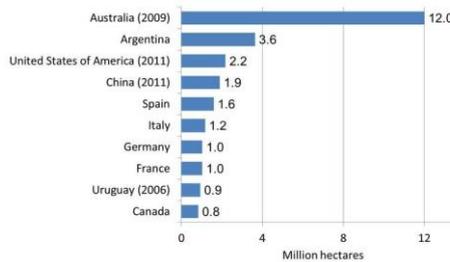
Fig.1 Surfaces cultivated ecologically by continents

In 2012, there were 1.9 million farmers at a global level. According to the data processed from FiBL (table 4), the greatest numbers of producers were in Asia, continent which surpasses Europe, Latin America and North America taken together as far as the number of farmers are concerned. North America is the continent on which one may notice a decrease in the number of farmers in 2012. A weight of organic producers on continents, as compared to the global number of producers, is presented in figure 3.

In the rankings of countries on the globe, as far as surfaces allotted to organic farming are concerned, Australia is on the first place, with over 12 million ha, followed by Argentina and the USA. Europe is represented by Spain, Italy, Germany and France, with bio farming surfaces between 1.6 and 1.0 million hectares.

The ten countries with the largest areas of organic agricultural land 2012

Source: FiBL-FOAM survey 2014



Source: Organic World Net

Fig.2 Surfaces cultivated ecologically by countries

Table 4. The evolution of the total number of producers registered at a global level

Continent	2009	2010	2011	2012	2012/ 2011
Africa	517156	539402	532101	572862	+40761
Asia	729596	461774	620455	684873	+64418
Europe	257678	277424	292307	321626	+29319
Latin America	284365	270568	315889	316584	+695
Northern America	16855	29860	16598	16470	-128
Oceania	8454	8483	14138	14605	+467
Total	1814104	1587511	1791488	1927020	+135532

(Source of data <http://www.organic-world.net>)

The size of the farms destined for biologic farming varies between 830 ha in Oceania and 2 ha in Africa. Europe is on an intermediate position, with an average surface of 41.5 ha/production unit.

Table 5 presents a weight of the economic agents that operate in the organic product domain on categories (merchants – exporters/importers, farmers, processors and other categories of economic operators). North America and Oceania do not present some data regarding economic operator situation in the organic domain, but it is likely that their number be greater than the one forecasted in table 5 (FiBL, 2014).

Table 5. Economic operators in the organic domain on continents and categories – 2012

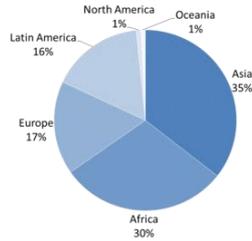
	Africa	Asia	Europe	Latin America	Northern America	Oceania
Total of economic operators, out of which	537914	690145	367387	318188	17707	16080
exporters	468	800	298	500	-	-
importers	22	222	1920	6	-	12
other categories	-	1259	3512	33	-	413
processors	562	2991	40031	1065	1237	1050
producers	572862	684873	321626	316584	16470	14605
The average size of the farms (ha)	2,00	4,70	34,70	21,60	41,53	832,60

(Source: processed data from <http://www.organic-world.net>)

A hierarchy of countries regarding the total number of farmers who use biologic farming, illustrated in figure 4, situates India on the first place, followed by Uganda and Mexico. The last places in top 10 are occupied by European countries (Italy, Spain and Poland). Argentina, which was on the first place as far as the total surface allotted to ecological production is concerned, is not included in this hierarchy.

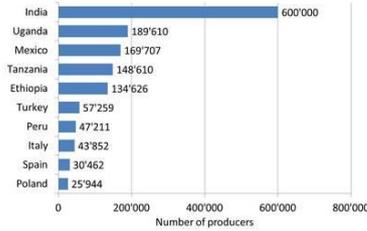
In the category of operators registered as having the main activity in the domain of organic products, Asia is dominant, followed by Africa and Europe (figure 3). Although in Oceania there are the biggest organic-farming surfaces, the number of registered producers represents only 1% of all the global producers.

Organic producers by region 2012
Source: FiBL-IFOAM Survey 2014



Source: Organic World Net
Fig.3 The distribution of the total number of organic producers by continents 2012

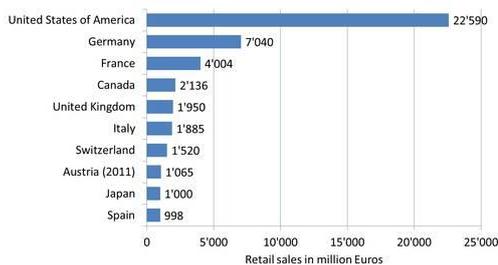
The ten countries with the largest numbers of organic producers 2012
Source: FiBL-IFOAM Survey 2014



Source: Organic World Net
Fig.4 Top 10 countries of organic producers 2012

Linked to the increase in the number of surfaces and of economic operators, the organic food product trade registered an important growth worldwide. With sales of over 22 million euros in 2012, the United States of America represent the biggest market for organic products, followed by Germany (7040 million euros) and France, with almost 4 billion euros (figure 5). According to the FiBL & IFOAM report (2014), the countries that registered the greatest annual average organic product consumption per capita were Switzerland (189 euros per capita), followed by Denmark (159 euros per capita) and Luxemburg (143 euros per capita).

The ten countries with the largest markets for organic food 2012
Source: FiBL-AMI-OrganicDataNetwork survey 2014



Global market: Distribution of total retail sales value by country
Source: FiBL-AMI-IFOAM Survey 2014

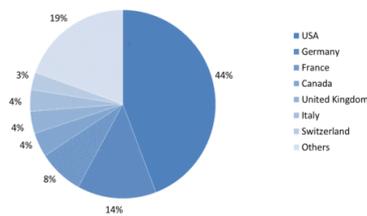


Fig. 5. The organic product market on countries in absolute values (a) and their share in international trade (b) (source FiBL/IFOAM, 2014)

4.2 Ecological farming in Europe

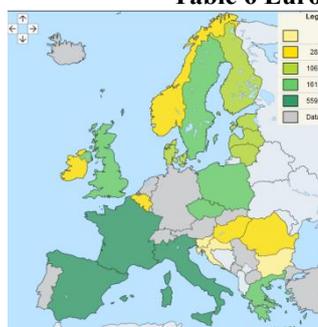
Although some states were affected by the economic crisis, Europe registered one of the most dynamic growth in point of surfaces dedicated to organic farming, of operator number, production and consumption. According to the data provided by Eurostat, in 2002 there were 5.7 million organically cultivated ha, whereas in 2011, there were 9.6 million. There are more than 186000 farms across Europe that practise organic farming. The EU Member States that joined the EU before 2000 hold most of the organic land (78%) and have most of the organic farms (83%). In these member states, among other factors, the national and European legislation helped in stimulating the development of this sector. The European countries that have joined the EU since 2004 also have had a fast growing organic sector. The above mentioned countries recorded a 13% yearly growth rate from 2002 to 2011 (European Commission, 2013).

Compared to 2011, The European organic product market increased by approximately 6%, reaching a value of 22.8 million euro (out of which 20.9 euro go to the European Union). Germany, the biggest market for ecological products, presented a growth close to the European average (6%). At a European level, the lands covered with crops amounted to 11.2 ha, out of which approximately 10 million ha were registered in the EU. Although the surfaces seem impressive in absolute values, if compared to the total European farmland, they represent only 2.3%, and 5.6, respectively, if compared to the total farmland from the EU.

According to the data presented by Eurostat, the biggest surfaces allotted to organic crops in 2012 are Spain, Italy and France. Although is the fifth country in point of arable farmland, Romania occupies a modest place in the European hierarchy of biologic producers (Table 6 and fig. 5).

In year 2013 a survey among European consumers was carried out in order to assess the community measures needed in the organic product domain.

Table 6 Europe's top 15 organic farmlands 2008-2012(ha)



	2008	2009	2010	2011	2012
Spain	691,2	605,4	1,084,6	1,221,8	1,366,9
Italy	812,1	735,3	821,9	837,1	923,8
France	502,2	525,6	571,8	701,1	855,6
United Kingdom	582,2	607,9	651,9	605,6	560,0
Poland	178,7	222,0	309,2	375,1	457,7
Sweden	246,6	303,3	329,3	385,2	424,3
Czech Republic	232,9	267,5	296,4	354,6	402,7
Greece	266,7	293,6	292,6	201,3	351,8
Finland	134,8	143,0	142,0	161,2	161,2
Denmark	139,0	139,5	145,6	151,4	159,1
Latvia	141,5	141,0	140,9	130,1	144,6
Estonia	71,8	76,2	82,4	101,9	119,9
Lithuania	89,8	106,0	103,2	99,4	114,5
Hungary	108,6	110,9	97,6	101,8	106,3
Romania	71,6	83,9	83,0	96,6	103,1
Slovakia	113,1	111,5	112,3	123,3	123,3

Fig. 6. Organically cultivated areas in Europe, 2012 (Source of data: Eurostat database)



Fig.7. European organic logo (Source

<http://ec.europa.eu>)

(Source of data: Eurostat Database, 2014)

An online survey, which was carried out in the first half of 2013, raised a lot of interest and obtained 45,000 responses. The results of the survey, published in September 2013, highlight the fact that 71% of the consumers trust organic products and that 83% of the consumers buy organic products because they are not GMOs and because they do not contain pesticide residues. The survey also indicated that the vast majority of the respondents (78%) were willing to pay more for organic products. The results of the survey also show an urgent need for unitary rules at the EU level: 74% of all the respondents require a reinforcement of the European organic product standards and 86% wish for uniform regulations across the EU in point of organic products. More than half of the

interviewees also strongly believed that the European control system for organic products should be improved (European Commission, Results of public consultation, 2013).

4.3 Ecological farming in Romania

For Romania, ecological farming represents a niche of the farming sector, which can create the necessary conditions for a durable economic development, the rural community welfare increase and natural ecosystem preservation. The objectives, the principles and the rules applicable to ecological production are stipulated in the national and community legislation. The national rules, correlated with community stipulations in the ecological product domain, regulate some aspects regarding biologic production (in the vegetal, animal and aquaculture sectors) and lay down some strict regulations regarding processing, labelling, trade, import, inspection and certification. Thus, the inspection and certification of ecological products is carried out only by inspection and certification bodies approved by the Ministry of Agriculture and Rural Development. In 2013, there were 14 legal private inspection and certification bodies. As a result of the inspections carried out by the inspection and certification bodies, the operators who complied with the production rules will receive the ecological product certificate and will be allowed to label their products with the mention "ecological". On the label of an ecological product it is compulsory to put the following mentions: reference to the ecological production, logo, name and code of the inspection and certification body that carried out the inspection and issued the ecological product certificate. The national logo "ae", specific to ecological products, together with the community logo, are used in order to complete the labelling with the view of identifying the products obtained in accordance with the ecological production methods. The consumers who buy products with the national and the community logo can trust the fact that at least 95% of the ingredients of which the product is made have been obtained according to the ecological production method and that the product is in compliance with the rules of ecological production.

Table7. Surfaces dedicated to ecological farming in Romania (1000 ha)

Categories of surfaces	2008	2009	2010	2011	2012
Organic farming areas, total	139.6	167.9	183	230	288.3
Certified organic farming areas	71.6	83.9	83	96.6	103.1
Farming areas in course of conversion to organic	68	84	100	133.3	185.2

(Source of data: Faostat Database, 2014)

With a medium pace of growth of 23%, the ecological farming sector in Romania presents a spectacular development in the last few years, especially after joining the EU. In 2007, the total surface cultivated by means of ecological farming was of 131,448 ha, out of which 46,865 farming areas in course of conversion to organic and 84,585 ecologically certified surface. According to European statistics presented in table 7, the organically cultivated surfaces in Romania doubled between 2008 and 2012, major increases also being registered in the vegetal or animal production. (figure 8).

Simultaneous with the increase of the farming lands destined for the ecological sector, there has also been an increase in the number of economic agents in the domain. As compared to the moment when Romania joined the EU, the number of operators increased with almost four times in 2012, the increase being accelerated especially in the last few years. Thus, if

in 2010 there were 3155 operators; in 2012 the statistics highlighted 15544 economic agents involved in ecological product production, processing and marketing.

Table 8. Operator and area dynamics in ecological farming in Romania

Indicator	2006	2007	2008	2009	2010	2011	2012
Number of operators registered in ecological farming	3409	3834	4191	3228	3155	9703	15544
The area cultivated by means of ecological farming, crops on arable land (thousands of ha)	45,6	65,1	86,5	110,0	148,0	147,6	174,60
The area cultivated in agricultural farming, permanent crops, pastures and hay lands (thousands of ha)	51,2	57,6	46,0	39,2	31,6	78,2	105,80
The area cultivated in ecological farming, permanent crops – orchards and vine (thousands of ha)	294	954	1518	1869,4	3093,04	4166,62	7,78
Collection from wild flora (thousands of ha)	38,7	58,7	81,3	88,9	77,3	33,8	1,082,2

(Source of data: MARD, 2013)

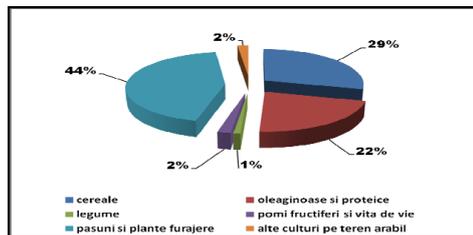
For 2012, pastures and fodder areas held the biggest share of all the surfaces with 44% (approx. 165,00 ha), followed by grains, with 29% (approx. 130,00 ha), oilseeds and pulses 22% (105,000 ha). The areas cultivated with fruit trees, vine and vegetables hold the smallest share (2%) and 1% respectively, out of the total areas destined for ecological farming (figure 7).

Table 9. The areas destined for fruit tree and vegetable cultures in an ecological system

	2007	2008	2009	2010	2011	2012
Cultivated areas (ha) out of which:	1165	1777	2214	3777	5080	9400
- vegetables	310	259	344	734	914	1200
- fruit trees	742	917	1202	2199	3324	6700
- vine	113	601	668	894	842	1500

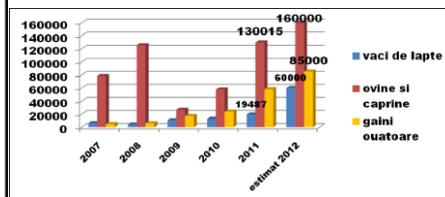
(Source of data: MARD, 2013)

The livestock sector also recorded in 2012 an important increase in the number of animals raised by means of the ecological production system. In figure 8, it is presented the Romanian livestock ecological production dynamics, important increases in number being recorded at sheep and goats (+160,000 heads), hens (+85,000 heads) and cows for milk (+60,000 heads). The beekeeping sector also had an evolution, with 102,881 bee families raised ecologically recorded in 2012.



Source: MARD, 2013

Fig.8 Shares in the ecological crops



Source: MARD, 2013

Fig.9 Livestock sector ecological production dynamics

The demand for ecologically certified products is increasing on the domestic market. Ecological products are marketed directly from the farm, by means of specialised stores or of supermarket chains. The main bio foods purchased by the Romanian consumers were fresh fruit and vegetables, products processed from fruit and vegetables, plant teas, bread, pasta, flour, products processed from cow and goat milk (butter, sheep cottage-cheese), eggs, oil, wine obtained from ecologically certified grapes, products processed from soy, honey, etc. Because of the low purchasing power on the domestic market, the greatest part of domestic ecological production is destined for export. Thus, approximately 70 – 90% of the ecological products in Romania are delivered to foreign partners, mainly the EU. The increase in the number of ecological products on the domestic market (approximately 75 million euros in 2011) can be explained by the hypermarket action in the food domain retailing.

Conclusions

Organic production may represent a lasting solution for the Romanian farming sector. Underdevelopment, excessive fragmentation, low productivity, the lack of financing led to a low competitiveness level in the local sector in the competition against intensive farming systems, small producers being forced to move to ecological production. The increase in the demand for ecological products on foreign markets, the competitiveness of the local ecological products and the natural farming potential offer the opportunity of a healthy development of the ecological production in Romania. The financial support offered to the local farming system in order to practise ecological farming can ensure ecological product business continuity on a medium and long-term basis.

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