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# New challenges for Romanian agriculture – Organic farming

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**Abstract:** *The paper presents the evolution of the organic farming in Romania, the general background, the legislation bearing on it, the institutions created to coordinate this activity, the rules that should be observed for a product to be labelled as organic, opportunities for Romanian farmers, the new challenges in the field, tendencies and traditions. All these are analyzed in close relation with the evolution in the world and indicate the place of Romania in this competition.*

**Keywords:** *organic farming, transition, Romania*

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## Introduction

Products that to be seem designed on the computer, largesized, with perfect shapes, charming colours, as if coming from an unreal world; big, goodlooking fruits, all having the same size; vegetables, full of colour and appetizing, with the same picture aspect, as if cut from a magazine. This is the common image of the agrifood products in the supermarket, which are being sold today in the world. But beyond these exterior aspects, pleasant to the eye, there is something else, which is disappearing, that some of us have completely forgotten. It is the essence, the contents, the texture, it is that “something” enchanting not only the eye but also the other senses. This is the taste. Are the products of today still tasty? Are the products of today still healthy? Most knowledgeable consumers’ opinion is that most often these vegetables or fruits have almost nothing in common with their natural taste. As regards the quality, it is hard for consumers to give an answer and they need the help of specialists.

In view of the fact that this subject is relevant and important for all European countries we decided to elaborate this study. It uses statistical data provided by the National Institute of Statistics of Romania, the Ministry of Agriculture and various publications in this field.

Organic farming (“ecological”, or “biological” agriculture) is a modern practice to grow crops, or to raise and fatten animals and to produce foodstuffs, which is fundamentally different from conventional farming. The role of this agriculture system is to produce a much cleaner food, more appropriate to the human body metabolism, but in full correlation with the preservation and development of the environment in respect to nature and its laws. The process and procedures for obtaining organic products are regulated by strict production rules and principles, which start with the quality that land must have and end up with the effective final food product.

Organic farming does not use synthetic fertilizers and pesticides, growth stimulants and regulators, hormones, antibiotics or intensive animal raising systems. The Genetically Modified Organisms (GMOs) and their products are forbidden in the organic farming legislation.

The organic farming system is based upon the respect of certain strict production rules and principles in conformity with the EU legislation and the national legislation into effect on the enforcement of EU legislation. The European Union laid a special focus upon obtaining vegetal or livestock products based upon organic farming procedures; it provides incentives for those willing to practice organic farming. Coming back to old procedures is not at all simple, as the rules are very strict, so that the final product should be completely natural and ecological.

### **International market**

Organic farming is practised in approximately 100 countries of the world and the area under organic management is continually growing. Also for some countries, where no statistical material was available, it may be assumed that organic agriculture methods are practised.

The land areas under organic farming in the world totalled 24 m ha in the year 2004, the largest areas being found in Australia (10.0 m ha), Argentina (2.9 m ha) and Italy (1.1 m ha), according to a SOEL study (February 2004). The world’s largest certified organic property (994,000 ha) is located in Australia (FAO 2002). In percentage, the situation is the following: Australia/Oceania 42%, South America 24.2%, and Europe 23%. Table 1 presents the land area utilized under the organic farming system in the world, according to the SOEL study in 2004.

In Australia/Oceania more than 10 m ha and 2,000 farms are under organic management – comprising the largest area in the world. Most of them are dedicated to extensive beef enterprises. The region’s growth in organic trade is heavily influenced by the increasing demand for organic food and fibre products in Europe, Asia (especially Japan) and Northern America.

In many Latin American countries the area of organic land is now more than 100,000 ha, and – starting from a low level – growth rates are extraordinary. The total organically managed area is more than 5.8 m ha. The number of organic farms is almost 150,000.

In North America almost 1.5 m ha are managed organically, representing approximately a 0.3 percent share of the total agricultural area. Currently the number of farms is about 10,500. There are signs that with the U.S. national organic standards, which were fully implemented at the end of 2002, progress has been made for the organic sector and for consumers.

The total organic area in Asia is now about 880,000 ha, corresponding to 0.07 percent of the agricultural area. The number of organic farms is more than 61,000. Interest in organic agriculture continues to grow even though unevenly throughout the region. There is a wide spectrum of sector development stages, from early pioneer status to highly developed markets (Japan).

**Table 1: Land Area Under Organic Management (SOEL-Survey, February 2004)**

	Organic Hectares	Organic Hectares	Organic Hectares
Australia	10,000,000	Indonesia	40,000
Argentina	2,960,000	Romania	40,000
Italy	1,168,212	India	37,050
USA	950,000	Kazakhstan	36,882
Brazil	841,769	Colombia	33,000
Uruguay	760,000	Norway	32,546
UK	724,523	Estonia	30,552
Germany	696,978	Ireland	29,850
Spain	665,055	Greece	28,944
France	509,000	Belgium	20,241
Canada	478,700	Zambia	20,000
Bolivia	364,100	Ghana	19,460
China	301,295	Tunisia	18,255
Austria	297,000	Egypt	17,000
Chile	285,268	Latvia	16,934
Ukraine	239,542	Sri Lanka	15,215
Czech Rep.	235,136	Yugoslavia	15,200
Mexico	215,843	Slovenia	15,000
Sweden	187,000	Dominican Rep.	14,963
Denmark	178,360	Guatemala	14,746
Bangladesh	177,700	Costa Rica	13,967
Finland	156,692	Morocco	12,500
Peru	130,246	Nicaragua	10,750
Uganda	122,000	Cuba	10,445
Switzerland	107,000	Lithuania	8,780
Hungary	103,672	Cameroon	7,000
Paraguay	91,414	Vietnam	6,475
Portugal	85,912	Iceland	6,000
Ecuador	60,000	Russia	5,276
Turkey	57,001	Panama	5,111
Tanzania	55,867	Japan	5,083
Polen	53,515	Israel	5,030
Slovakia	49,999	El Salvador	4,900
New Zealand	46,000	Papua New Guinea	4,265
South Africa	45,000		
Netherlands	42,610		
		Thailand	3,993
		Azerbaijan	2,540
		Senegal	2,500
		Pakistan	2,009
		Luxembourg	2,004
		Philippines	2,000
		Belize	1,810
		Honduras	1,769
		Jamaica	1,332
		Bosnia Herzegovina	1,113
		Liechtenstein	984
		Rep. of Korea	902
		Bulgaria	500
		Kenya	494
		Malawi	325
		Lebanon	250
		Suriname	250
		Fiji	200
		Benin	197
		Mauritius	175
		Cyprus	166
		Laos	150
		Madagascar	130
		Croatia	120
		Guyana	109
		Syria	74
		Nepal	45
		Zimbabwe	40
		<b>SUM</b>	<b>24,070,010</b>

Source: Willer and Yussefi 2004

In the European Union (EU), including Romania and Bulgaria, the EFTA countries (Iceland, Liechtenstein, Norway and Switzerland), Turkey, Bosnia-Herzegovina, Croatia and Serbia, Montenegro and Macedonia, there are almost 6 mil ha under organic farming, accounting for 2% of total agricultural land. In the year 2005, in the 25 EU Member States, an increase of over 2% of the areas under organic farming was noticed, compared to 2004. In the same period, the number of organic operators increased by over 6%. More than 170,000 farms are run organically (2004). The main driving factor for the development is a growing market as well as policy support for organic farming. As regards the areas under organic farming in total agricultural land, the situation in Europe is the following: Liechtenstein with 26.40%, Austria with 11.60%, Switzerland with 10.00% and Italy with 8.00% are on top. Areas under 1% are cultivated in Greece, Latvia, Ireland, Poland or Yugoslavia. Table 2 indicates the hierarchy of the countries in the world according to the share under the organic farming system in total agricultural land area.

In Romania, the area under the organic farming system also increased. Its share in total EU organic area is still low. But, in recent years, the areas under organic farming increased by over 8 times, from 17,438 ha in 2000, to over 143,000 ha in 2006. An increase of the area under organic farming was also estimated, up to 1.7% of the country's agricultural area for 2007 (about 250,000 ha).

**Table 2: Land Area Under Organic Management in Percent of Total Agricultural Area (SOEL-Survey, February 2004)**

% of Agricultural Area		% of Agricultural Area		% of Agricultural Area	
Liechtenstein	26.40	Latvia	0.81	Morocco	0.14
Austria	11.60	Ecuador	0.74	Turkey	0.14
Switzerland	10.00	Ireland	0.70	Tanzania	0.14
Italy	8.00	Iceland	0.70	Zypern	0.12
Finland	7.00	Sri Lanka	0.65	Senegal	0.10
Denmark	6.65	Ukraine	0.58	Japan	0.10
Sweden	6.09	Peru	0.42	Cameroon	0.09
Czech Rep.	5.09	Papua New Guinea	0.41	Indonesia	0.09
UK	4.22	Dominican Rep.	0.40	Vietnam	0.08
Germany	4.10	Paraguay	0.38	Pakistan	0.08
Uruguay	4.00	Tunisia	0.36	Lebanon	0.07
Norway	3.13	Poland	0.36	Honduras	0.06
Costa Rica	3.11	New Zealand	0.33	Zambia	0.06
Estonia	3.00	Guatemala	0.33	China	0.06
Spain	2.28	El Salvador	0.31	Rep. of Korea	0.05
Portugal	2.20	Yugoslavia	0.30	South Africa	0.05
Slovakia	2.20	Suriname	0.28	Fiji	0.04
Australia	2.20	Romania	0.27	India	0.03
Netherlands	2.19	Jamaica	0.26	Thailand	0.02
Luxembourg	2.00	Lithuania	0.25	Philippines	0.02
Slovenia	1.91	Panama	0.24	Laos	0.01
France	1.70	Brazil	0.24	Malawi	0.01
Hungary	1.70	Colombia	0.24	Guyana	0.006
Argentina	1.70	USA	0.23	Croatia	0.004
Chile	1.50	Mexico	0.20	Benin	0.003
Belgium	1.45	Azerbaijan	0.20	Russia	0.003
Uganda	1.39	Egypt	0.19	Kenya	0.002
Belize	1.30	Ghana	0.16	Bulgarien	0.001
Canada	1.30	Cuba	0.16	Nepal	0.001
Bolivia	1.04	Mauritius	0.15	Syria	0.001
Israel	0.90	Nicaragua	0.14		
Greece	0.86				

Source: Willer and Yussefi 2004

Specialized studies reveal that organic farming is under development not only in Australia, South America and Europe, but also in Africa, especially in the south of the continent (South-Africa). An important factor driving the development of organic farming in Africa is the demand for organic products in developed countries. In Africa with few exceptions (e.g. Egypt and South Africa) certified organic production is mostly geared to products destined for export beyond Africa's shores. The statistics indicate that with few exceptions certified organic farming is relatively under developed, even in comparison with other lowincome continents. More than 320,000 ha and 71,000 farms are now managed organically, representing about 0.04 percent of the agricultural land.

Table 3 presents the hierarchy of the number of organic farms registered by local authorities by countries.

**Table 3: Organic Farms Worldwide** (SOEL-Survey, February 2004)

Organic Farms		Organic Farms		Organic Farms	
Mexico	53,577	Paraguay	2,827	Azerbaijan	285
Italy	49,489	Ecuador	2,500	South Africa	250
Indonesia	45,000	Norwegen	2,303	Bangladesh	100
Uganda	33,900	Polen	1,977	Bosnia Herzegovina	92
Tanzania	26,986	Argentina	1,779	Slowakei	84
Peru	23,057	Niederlande	1,560	Zambia	72
Brazil	19,003	Australia	1,380	Ukraine	69
Austria	18,576	Rep. of Korea	1,237	Bulgaria	50
Turkey	18,385	Romania	1,200	Luxembourg	48
Spain	17,751	Thailand	1,154	Cyprus	45
Germany	15,628	Slovenia	1,150	Liechtenstein	41
Dominican Rep.	12,000	Hungary	1,116	Ethiopia	35
France	11,177	Portugal	1,059	Guyana	28
USA	6,949	Vietnam	1,022	Nepal	26
Bolivia	6,500	El Salvador	1,000	Iceland	20
Switzerland	6,466	Ireland	923	Croatia	18
Greece	6,047	New Zealand	800	Lebanon	17
Cuba	5,222	Belgium	700	Malawi	13
India	5,147	Czech Rep.	654	Jamaica	12
Finland	5,071	Estonia	583	Zimbabwe	10
Mozambique	5,000	Morocco	555	Fiji	10
Colombia	4,500	Philippines	500	Mauritius	3
UK	4,057	Uruguay	500	Kazakhstan	1
Costa Rica	3,987	Egypt	460	Syria	1
Denmark	3,714	Israel	420		
Sweden	3,530	Tunisia	409	<b>SUM</b>	<b>462,475</b>
Canada	3,510	Pakistan	405		
Sri Lanka	3,301	Lithuania	393		
Senegal	3,000	Benin	359		
Honduras	3,000	Latvia	350		
China	2,910	Madagascar	300		
Guatemala	2,830	Chile	300		

Source: Willer and Yussefi, 2004

On the basis of the presented estimates, world sales from 23 European countries, the USA, Canada, Japan and Oceania totalled about 23-25 bn \$ in 2003 and 29-31 bn \$ in 2005. The growth rate is estimated to increase in the next decade, with the growing awareness of the organic farming concept among the traditional producers; consumers' awareness of the importance of healthy food is also growing.

Although production of organic crops is increasing across the globe and sales are concentrated in the industrialized parts of the world (North America and Western Europe comprise the bulk of global revenues).

Consumer demand is confined to the industrialized world largely because of the price premium of organic products. Many developing countries have a large share of their population below the poverty line, and this makes it difficult for an organic products market to develop.

On analyzing consumer behaviour towards organic products in international countries, a picture of a global organic consumer is emerging. A typical consumer of organic products has the following attributes:

- Location – lives in urban areas, usually in a big city;
- Buyer Behaviour – discerning towards food and drink purchases, considering factors like quality, provenance and production methods;
- Demographics – typically well-educated and belongs to middle-high social classes;
- Purchasing Power – lives in a medium to high-income household with relatively high purchasing power.

The industrialized nations have a sizeable and welleducated middleclass, and this is the reason why most organic food and drink sales are concentrated in these countries. As more countries develop economically and as their populations become increasingly educated and more affluent, demand for organic products is rising. This causes sales of organic products to become less concentrated in the world. Rapid economic growth in countries like China, Brazil, and South Africa is causing the upper social classes to expand, and this is creating a market for organic food and drink.

In other regions, there is an increase in organic farmland because farmers are attracted to the benefits of exporting organic products. Although most production in Asian and African countries will be for export markets, this development is also creating regional in which organic farmers market their organic crops to consumers in their region.

Sales of organic food and drink are slowing in certain countries, especially in Western Europe; however, the market is becoming increasingly global. Consumer demand for organic products is expanding worldwide and as this continues, it will capture even larger international attention. Valued at USD 23 bn in 2002 and healthy growth continuing, the global organic market can be considered anything but a niche.

## Organic farming in Romania

### Legal and institutional framework

As organic farming contributes to sustainable development, through an increase of biodiversity, soil fertility and environmental protection, the organic farmers are supported through the agroenvironmental programs of the European Commission (EC). Thus, starting with 2007, organic farmers benefit from a compensatory premium per hectare (and by crops), in order to make up for the income losses incurred during the conversion period and for the certified production, through the National Rural Development National Plan (PNDR) – Axis 2 – the agroenvironmental submeasure, from the European Agricultural Fund for Rural Development (EAFRD), nonrefundable support in conformity with the Commission Regulation (EC) no. 1698/2005.

At the same time, EU provides support for the promotion of organic products, through cofinancing programs, with a 50% funding from the EC, 20% from professional organization, and 30% from the state budget, in conformity with the procedure of the Commission Regulation (EC) no. 1071/2005.

The legal basis of the organic farming system was established in the 1990s by the Commission Regulation (EC) no. 2092/1991 regarding organic farm production and the indications for their presentation as agricultural and agrifood products.

At the national level, together with the signing up of the Association Agreement and the initiation of the EU accession negotiations – Romania's legislation had to get in line with the EU legislation. Following this process, at present, Romania's legislation complies with EU requirements and orientations.

The main normative acts, produced in recent years, are: Government's Emergency Ordinance (OUG) no. 34/2000 on the organic agrifood products, approved by Law no. 38/2000; Government's Decision no. 917/2001, for the approval of the Methodological Norms for the application of provisions from OUG no. 34/2000 regarding the organic agrifood products; The Joint Order no. 417/2002 and no. 110/2002 of the Minister of Agriculture and of the President of the National Authority for Consumers' Protection; Order no. 70/2002 of the Minister of Agriculture on the establishment of the Commission for Organic Farming Development in Romania; Order no. 527/2003 of the Minister of the Agriculture for the approval of the Rules on the inspection and certification system and the accrediting conditions for the inspection and certification bodies in organic farming; Order no. 721/2003, of the Minister of the Agriculture for the approval of Rules on the import and export of organic agrifood products; Order no. 153/2006 regarding the approval of the componency of the Commission for the accrediting of inspection and certification bodies in the organic farming sector,



which inspects and controls the operators on Romania's territory; Order no. 317/2006 regarding the modification and completion of the Annex to the Order of the Ministry of Agriculture and of the President of the National Authority for Consumers' Protection no. 417/110/2002, for the approval of the Specific labelling rules for the organic agrifood products; OUG no. 62/2006 for the modification and completion of OUG no. 34/2000 on the organic agrifood products; Law no. 513/2006 on the approval of OUG no. 62/2006 for the modification and completion of OUG no. 34/2000 regarding the organic agrifood products; Order no. 219/2007 on the approval of Rules regarding the organic farmers' official registration. They provide information, rules and norms necessary in this field like: the authority responsible for organic farming; the general rules and principles of organic production; the duration of the conversion period; the inspection and certification system; the list of accepted products to be used by the organic farming practice; the list of ingredients and processing methods that can be used in the preparation of organic foodstuffs; sanctions etc.

In Romania, the government, the civil society and the business environment are becoming increasingly aware of the need to promote organic farming.

The governmental policy is elaborated and coordinated by Ministry of Agriculture, Forestry and Rural Development (MAPDR), under which the Office of the National Authority for Organic Products (ANPE) is operating, which is the authority in charge of the organic farming sector. ANPE is collaborating with different agencies, education and research institutions, foundations, among which we can list the following:

- The National Agency For Agriculture Consultancy – ANCA;
- The Academy of Agricultural and Forestry Sciences – ASAS;
- Higher education institutions, agricultural research institutes and stations;
- The National Organic Farming Federation, whose activity is based on the “sustainable development principle”, a development type which should not disable the next generations' access to a clean environment.

The Ministry of Agriculture established an action plan for the development of the domestic market of organic products, which includes:

- The intensification of actions promoting the organic farming concept;
- The improvement of information on organic farming practice, and the qualification of the participants in this sector;
- The increase of areas under the experimental modules “organic micro-farms”;
- The delimitation of organic farming areas;
- Support to farmers during the conversion period;
- The creation of an information system accessible to farmers.

At the beginning of the year 2007, the following organizations were registered at MAPDR, with attributes or concerns in organic farming, rural development, environment protection and sustainable development: The As-

sociation for ecological agriculture “agrieco”, with the headquarters in Cluj Napoca, the professional Organization „Agroecologia” – Cluj Napoca, the Association of the biofarmers in Romania „BIOTERRA” – Cluj’ county, the Romanian Association for Sustainable Agriculture – Călărași County, the Association „Terra Verde” – Bucharest, the Association of the Biopoultry breeders in Romania – BIOAVIROM – Ilfov County, the Association for the organic farming development in Romania, “Ecofocus” – Bucharest, Ecorural – Bucharest, the Association for the Environmental Protection and ecological agriculture „TER” – Bucharest, the Foundation „Mama Terra” – Bucharest, „The National Association of the Agricultural Consultants” – Bucharest, the Academic Foundation for Rural Progress „TERRA NOSTRA” – Iași, „The Ecologist Society in Maramureș” – Baia Mare, „The Foundation for Rural Development in Romania” – Bucharest, „The Ecological Group for Cooperation Bucovina” – Suceava, the Foundation „Business School Mehedinți” – Drobeta Turnu Severin, the Society „Avram Iancu” – Cluj Napoca, the Foundation „The Operation Romanian Villages” – Bacău county, „The Ecological Club Transylvania” – Cluj Napoca, „The Romanian Rural Foundation” – Timișoara, „Bioclub Cluj” – Cluj Napoca, „the Group of Gardeners Biodynamics” – Târgu Mureș, „the Romanian Association for Applied Biofarming” – Arad county, „the Centre for Ecological Consulting Galați” – Galați, „the Association for Environmental and Nature Protection” – Târgu Mureș, the Foundation „Divers Eco” – Maramureș county, the Foundation „Noema Consulting” – Cluj Napoca, the Association „Albina” (the „Bee”) – Bucharest, the Association for Environment Protection and Preservation of Resources – Bucharest.

## **Evolutions and trends**

The data supplied by MAPDR reveal the increasingly importance of the organic sector for the domestic producers. The positive evolutions of areas, livestock herds and production subject to organic farming practices prove the existing potential, initiative, development prospects and increasing demand of consumers (see tables 4 and 5).

Both land areas and the number of animals increased in the investigated period (with minor exceptions). The trend is increasing and the perception of these crops as an alternative activity and income source is positive. Comparing the objectives established by the government’s strategy with the field results, we could say that the objectives were achieved; the bases were created for the development of this activity and for the exploitation of the market niches, both in the domestic and world markets.

**Table 4.** Evolution of areas and livestock herds under the organic farming system

Specification	MU	Achieved						2006
		2000	2001	2002	2003	2004	2005	
1. Total area, out of which:	ha	17,438	28,800	43,850	57,200	73,800	110,400	143,000
Cereals	ha	4,000	8,000	12,000	16,000	20,500	22,100	16,310
Pastures and fodder crops	ha	9,300	14,000	20,000	24,000	31,300	42,300	51,200
Oilseeds and protein crops	ha	4,000	6,300	10,000	15,600	20,100	22,614	23,872
Vegetables	ha	38	100	700	200	300	440	720
Fruits (sour cherries, cherries, apples)	ha	-	-	50	100	200	432	292
Spontaneous flora collection	ha	50	100	300	400	500	17,630	38,700
Other crops	ha	50	300	800	900	900	4,884	12,100
2. No. of animals, out of which:								
Dairy cows	heads	2,100	5,300	6,500	7,200	7,200	8,100	9,900
Sheep and goats	heads	1,700	3,700	3,000	3,200	3,200	40,500	86,180
Laying hens	heads	-	-	-	2,000	2,700	7,000	4,300

Source: MAPDR Database (reported data by inspection and certification bodies)

As in the case of land areas and livestock, productions continuously increased in the investigated period. Although the production levels are much higher than those obtained 5-6 years ago, the domestic supply cannot totally meet the demand yet, which makes it possible for the imported organic products to penetrate the Romanian market.

At the end of the year 2006, 3092 organic operators were registered at MAPDR, classified by three large categories of products, i.e. crop, livestock and beehive products. They were organized either as independent producers, physical entities, or as family associations or commercial companies as legal entities under the form of limited liability companies or joint stock companies. Not all the counties are included in this evidence. Most organic farmers are from the counties Suceava, Mureş, Sibiu, Tulcea and Constanţa.

According to this statistical evidence, organic farming can be considered a dynamic sector in Romania, with an increasing trend in recent years, both in crop and livestock production. As a result, the organization devoted to marketing of organic products ([www.agriculturaecologica.ro](http://www.agriculturaecologica.ro)) is becoming increasingly important. The sale of the organic products can take place directly from the farm, or through the traders registered at MAPDR. Organic products can be found both in the large store network and in the small specialized shops. At the beginning of the year 2007, only two shop networks were registered at MAPDR: the shop "BIOCOOP" (Sibiu) and the shop Naturalia ([www.naturalia.ro](http://www.naturalia.ro)), with units both in Bucharest and in the county Ilfov (Voluntari).

Table 5. The evolution of organic farm production

Specification	MU	Achieved							2006
		2000	2001	2002	2003	2004	2005	2006	
1. Total crop production, out of which:									
Cereals, out of which:	tons	13,502	24,400	32,300	30,400	87,200	131,898	166,574	
-Export	tons	7,200	12,500	16,000	14,400	41,000	55,000	48,441	
Oilseeds and protein crops, out of which:	tons	5,500	7,200	11,000	12,480	37,000	45,600	73,082	
-Export	tons	-	-	-	-	9,800	12,100	22,100	
Vegetables	tons	600	4,000	4,000	2000	3,000	7,200	8,708	
Fruits (sour cherries, cherries)	tons	-	-	200	300	500	1,000	340	
Spontaneous flora collection:	tons	200	400	300	320	4,500	16,748,	24,962	
-Export	tons	-	-	-	-	3800	14,200	-	
Other crops	tons	2	300	800	900	1200	6350	11,041	
2. Animal production, out of which:									
Cow milk	hl	58,367	63,885	92,747	92,485	92,868	100,000	112,000	
Ewe and goat milk	hl	701	1,740	1,360	1,470	1,800	13,500	15,500	
Eggs	thou. pieces	-	-	-	500	650	1,820	1,075	
3. Processed products									
Ewe hard cheese, out of which:	tons	18	46	36	45	48	480	520	
-Export	tons	-	-	-	38	48	180	70	
Schweitzer, out of which:	tons	23	23	100	110	116	268	576	
-Export	tons	-	-	-	-	61	160	22	
Cacciocavalo, out of which:	tons	-	121	250	220	253	330	642	
-Export	tons	-	-	-	-	52	210	80	
Canned fruit and vegetables	tons	-	-	-	-	35	50	42	
Bee honey, out of which:	tons	10	20	80	110	320	610	1,243	
-Export	tons	6	12	52	93	210	509	720	

Source: MAPDR

An important role in market promotion and obtaining new market shares and segments of consumers is represented by the marketing activity. The presentation of products, the beneficial effects upon the human body, the gains obtained by buying clean and healthy products, even though they are more expensive than the conventional products, as well as consumers growing aware of their importance, are the main concerns that the producers and sellers of organic products should have in their development policy. The participation in exhibitions, fairs and other national and international manifestations is a modality to present the organic products and to establish new contacts for marketing these products. It is only a promotion modality among several possibilities, with a special impact upon consumers.

The fact that the organic products have a market in Romania is proved by imports, which are doubling almost every year. In 2007, the market of organic products was estimated at 2.5 mil EUR (1 mil EUR more than in 2006).

The Expert Group study reveals that only 30% of the organic production is sold on the domestic market (the rest was exported). The main organic products sold through the organized commercial network are eggs and dairy products.

The sale on the domestic market is through the wholesale networks Metro, Selgros mainly by retail shops. The main stores that introduced organic products in their assortment of goods are: Carrefour, Cora, Gima, La Fourmi, Mega Image, Nic, Primavera, OK.

Except for the processors that have their own presentation shops, no other shops respect the storage/handling/presentation rules for organic products. The organic products are found in the same place with the conventional products, they are handled and stored together. In the abovementioned study, it is also shown that on the domestic market there is confusion between "natural product" and "organic product" (most often maintained by the producers of the former), which makes it more difficult to promote an organic product under the conditions of the price difference. The World Bank and the Ministry of Agriculture, Forestry and Rural Development through the ASSP Program conducted the study within the project ExtEco - „Extension for Eco-Profit”.

The Romanian organic products are mainly exported to Western Europe (Germany, for example) and attempts are being made to penetrate the US market. The wild berries, either organic or non-organic, have a much higher export price, and the price is even higher if these are organically certified (the volume of the exports of fruits in 2004, in Germany and Italy was 800 tons).

Unfortunately, not all the producers are satisfied with the evolution of this market and with the government's involvement in the activity to support organic farming. In the opinion of some farmers who had initiatives in this field, organic agriculture became a non-efficient business in Romania, not because the outlet is not large enough, but rather because the government has not shown

interest in this activity so far; on the other hand, this activity was given as an example of opportunity to conquer the foreign markets. The lack of financial support from the state, in addition to the extreme weather phenomena in the last years, is the main factor which determines the producers to think giving up their business. In many reports made by the producers or in the communications at the scientific events organized by them, it is mentioned that farmers are confronted with the problem of higher production costs as well as with the problem of products distribution.

The problem of the ratio of the production cost to the price of the product is not the only problem for organic farmers. The consumer is interested more in the price than in the quality of the product, and this constrains the development of the sector.

As always happens in such conflicts, on the other side, of the state institutions, the announcements are optimistic, satisfactory, and even praiseworthy. All governmental statements and the official documents show the favourable evolution of this sector and government's active implication in its development. For example, the documents elaborated by Romania's Government in the last years regarding the strategy in this field in the future, comprise concrete references on the next steps and have clearly identified objectives. Thus, in the National Export Strategy for the period 2005-2009 states: the quantitative objective is to increase the areas under organic farming to 150,000 ha by 2007 and to create a domestic market of organic products; Romania has great opportunities for promoting and developing organic farming due to its large agricultural land area, i.e. 14.9 m ha and its non-polluted soils; the increase of organic farmers' participation to the economic events in the country and abroad (BioFach 2006). By the examination of the valoric chain and of the consumers' requirements on the world market, the following critical success factors could be identified: price, assortments, package, branding, and availability.

The reaching of the export targets is linked to other objectives as well (on the short, medium and long-term), which can contribute to the improvement of the competitiveness of the Romanian organic sector in the next period:

- The increase in the number of operators in this sector, receiving financial support from the Romanian Government Programs;
- Increase of the role of the non-governmental organizations (NGOs) in this sector through programs for the development of trade with organic products;
- Increase in the number of exporters who are actively involved in programs for organic agricultural trade development in the less-favoured areas;
- Support provided to organic commercial farms, so as to be more active on the market;
- The association of the small organic farmers so as to co-operate in the marketing of organic products;
- The increase in the number of municipal and regional organizations directly involved in the implementation of the National Export Strategy in its initial stage;

- The increase in the number of local processing units and foreign direct investment projects;
- The increase of investments in related activities in rural areas;
- The increase in the number of employees in the exporting units which are implementing the organic farming regulations;
- The increase of investments in the activities related to exportable organic products from the less developed rural areas;
- The increase of the organic farm output;
- The increase in the number of new companies involved in export activities with primary and processed organic agricultural products;
- The increase in the number of optimal operation modules by the association of crop and livestock farms;
- The development of processing capacities for the organic farming sector;
- Capacity improvement in terms of products and value added;
- The development of services oriented towards the export of organic products;
- The diversification of the exportable cultivated species (for example: vegetables, fruits) and of the range of processed products (e.g.: bakery and pastry products);
- Increase in the number of new approved investment projects.

## Financial aspects

In the pre-accession period, Romania benefited from programs and funds with special destination for development of the organic farming. Among these, the most attractive and ample were those under the SAPARD Program (Measure 3.3 „Agricultural production methods designed to protect the environment and maintain the countryside”). Under this measure, the following 3 pilot sub-measures were provided to farmers.

### A. Soil conservation and protection against erosion:

- Transformation of arable land into grassland; the cultivation of arable land with mixtures of perennial grasses (the grass mix was recommended for each location taking into consideration the volume and distribution of rainfall and the soil conditions). Grazing was forbidden in the first year – the actions going beyond the Good Farming Practice. In the following years, rational grazing was practised to ensure the annual regeneration of the grassland. No synthetic (chemical) fertilizers and pesticides were used – actions in conformity with the Good Agricultural Practice (GAP).
- Establishment of grass strips (applicable in terraces with perennial crops when the slope is bigger than 8%); the placing of grass strips oriented in the general direction of contour lines. No grazing was practiced on these strips and no pesticides and chemical fertilizers were used – actions in conformity with the Good Farming Practice. The minimum width of the grass strip is 5 m. The maximum distance between the grass strips is 80 m – actions beyond the GAP.
- Establishment of hidden green crop on arable land, after harvesting. The hidden green crops to be used as green fertilizers or fodder had to be immediately established (not later than 30 days) after harvesting the main crop.

After harvest of these crops, the land is ploughed not later than 2 weeks before planting the next crop. Annual crop mix is used (grains, vegetables, rapeseed, and mustard).

#### B. Biodiversity preservation through traditional farming practices:

- Maintaining some temporary humid zones by traditional cultivation of rice. Crop rotations were introduced by at least 30% rice – actions in addition to the GAP, and without the use of mineral N fertilizers and pesticides – action in conforming to the GAP;
- The preservation of alpine pastures and hayfields by ensuring their rational operation with 0.3-0.5 livestock units/ha – action in conformity with the GAP;
- The elimination of the erosion effects by over-planting with domestic species, the maintenance of areas by mowing, at least once a year, not before June 15, the prevention of soil acidity, through the neutralization of at least 20% of the non-utilized pasture areas by 1-year rotation – actions in addition to the GAP and giving up chemical fertilization, pesticides or insecticides – actions in addition to the GAP.

#### C. Organic farming:

- The conversion to organic farming methods;
- Maintaining the current organic production methods.

With regard to the funding conditions, the applicant had to respect the following general eligibility conditions:

- The support was granted to the potential beneficiaries participating to an agro-environmental scheme on a voluntary basis and who concluded contracts for the application of obligations regarding the agro-environmental measures for a 5 year – period.
- The potential beneficiaries had to present an agro-environmental plan of the entire farm.
- The potential beneficiaries had to prove the farm bookkeeping and the preparation of the farm managerial accountancy (in detail, in the implementation procedure).
- The potential beneficiary had to prove the compliance of the good agricultural practice standards on the whole area.
- The potential beneficiaries made proof of land ownership or of land lease-concession or had to present any other document certifying the land use right according to the legislation into effect for at least 5 years from the date of the application for compensatory premium under the SAPARD Measure 3.3, in order to carry out the environmental actions.
- The final beneficiaries had to attach the cadastral plans of the entire area into ownership, which were asked for at the local town halls and had to be approved at the County Cadastral and Land Registration Office.
- The beneficiaries of this measure had to apply the GAP on the entire area they had into ownership, not only on the parcels for which they applied for financial support.



- The legal and/or technical entity in charge of the project had to make proof of professional expertise in the field attested by a copy of the study diploma or a document to prove an expertise of a least 3 years in the field (a copy of the record of employment) and a written commitment that this or one of the employees will attend a vocational training course under the Measure 4.1, and for the beneficiaries of sub-measure C, an additional training course (improvement of the professional skills), before the first payment of the compensatory premium.
- The funding contract comprised the mutual commitment of the Romanian state and of the support beneficiary.
- The beneficiaries had to agree under written form that they would provide knowledge on the agricultural production methods meant to protect the environment and to maintain the countryside at the demand of other agricultural producers.

All farmers who received support, on the basis of Measure 3.3, had to comply with the GAP standards during their agro-environmental project. These standards had to be complied with on the entire agricultural area administered by the project beneficiary.

The good agricultural practice is a new concept applied in Romania and it is essential that the proposed verifiable standards should be:

- a) Relevant for the current environmental problems;
- b) Clear and practical for farmers, to adopt in the present agronomic and socio-economic context;
- c) Easy to be controlled.

The implementation of the pilot agro-environmental programs under Measure 3.3 provided a significant opportunity for testing the good practice standards that are fit for Romania and that could be clearly and easily defined and controlled at the farm level. Four fields for the GAP were identified that derived from the specific agro-environmental legislation, with regard to the farmers' activities in Romania:

- Soil protection;
- Biodiversity preservation;
- Crop Protection;
- Water Protection.

Under this measure farmers could participate to one or to all the sub-measures, on a simultaneous basis, and under the same sub-measure to all actions except for sub-measure A: soil conservation and protection against erosion, where the table of combination of actions is provided and the actions that can be carried out at the same time.

### **Post-accession support programs for organic farming**

In the second half of the year 2006, the European Commission published a list of 31 projects concerning information and promotion of EU agricultural products on

the Single Market, selected to receive EU financial support. The total project budget for 1-3 years is 55.3 m EUR; 50% of which will be contributed by the EU.

The 25 Member States submitted 79 program proposals. The selected projects come from 19 states and have in view the promotion of the EU products that are not treated with chemical substances, of the agricultural products with specific quality standards (PDO, PGI, TSG), of dairy products, meat, wine, fruits, vegetables, herbs, bee honey and potatoes.

The envisaged measures included public relations and promotion and publicity actions designed to highlight the advantages of EU products in terms of quality, hygiene, safety, nutrition values, packaging, non-polluting production techniques, etc. The information campaigns on the European quality standards are also eligible. The European Union covers 50% of these projects budget, the rest representing the contribution of professional organizations, which initiate projects, or Member States' contribution, through their domestic budgets. Each year, until November 30, the interested professional organizations can submit the project proposals in the Member State they are part of. This makes a preliminary selection and sends the Commission the list of accepted programs. Subsequently, the Commission evaluates the programs and decides which of these will effectively benefit from the EU support.

Financial support can be also obtained for the assignment of the organic label. In the EU, the organic label is granted to 368 firms, for 2.500 items. In Romania, the rate for processing the application for organic label is 300 € for products and 100 € for services.

Those wishing to label their products or services as organic can get support from the Ministry of Economy and Finance. Thus, within the program for products competitiveness increase, financial support can be obtained on a 3-year period, for the SMEs the public financial support reaching 65%. An annual rate is charged, of 0.15% of the annual sales of the product that obtained the organic label. According to the representative of the National Agency for Environment Protection, so far in Romania the organic label was granted only for textiles and bed mattresses, although the organic labelling system includes various products and services, ranging from refrigerators, washing machines or dishwashers, to products of animal and vegetal origin.

It is expected that through EAFRD other projects will receive financial support, much larger projects, for organic farming development through the three priority axes established.

## Conclusions

Although organic farmland continues to rise across the globe, most sales of organic food and drink are restricted to the industrialized world: USA, West Europe, Japan and Australia.

Two factors are adjudged to be responsible for consumer demand to be concentrated in the most affluent countries of the world. The price premium of organic products restricts demand to countries where consumers have high purchasing power. This explains why most sales are in countries where there is a sizeable middleclass in the population. The second factor is education and more specifically awareness of organic products. As consumers become more educated and informed of food issues, they are more inclined to buy organic products whether it is because of factors like food safety, concern for the environment, or health reasons.

As production of organic crops increases across the globe, regional markets are also expected to develop in which organic farmers will produce organic products for consumers in their region. This is expected to stimulate sales of organic products in many developing countries, especially in countries like Brazil, China, India, and South Africa where economic development is increasing at a rapid rate and a more educated and affluent middleclass of consumers is developing.

In Romania, there are a few main ways, which can contribute, to the improvement of the competitiveness of the Romanian organic sector in the next period:

- An increase in the number of operators in this sector, receiving financial support from the Romanian Government Programs;
- The association of the small organic farmers so as to co-operate in the marketing of organic products;
- An increase in the number of municipal and regional organizations directly involved in the implementation of the National Export Strategy in its initial stage;
- An increase in the number of foreign direct investment projects and investments in related activities in the rural area;
- An increase and diversification of the organic farm output;
- Capacity improvement in terms of products and value added;
- The development of services.

## References

- MAPDR Database, reported data by inspection and certification bodies. Voicilas D.M., 2007, *Organic farming*, In: Ionel I. (Ed.): *Non-conventional farming economics*. Romanian Academy, Institute of Agricultural Economics, Terra Nostra Publishing House, ISBN 973-8432-75-8, 65-125, Iasi, Romania.
- Voicilas D.M., 2007, *Alternatives of rural development-organic farming*, In: *Multifunctional agriculture and rural development – Rural values preservation*, Institute of Agricultural Economics, Beograd, ISBN 978-86-82121-48-0, Beograd/Beocin, Serbia.
- Willer H., Yussefi M. (Eds.), 2004, *The World of Organic Agriculture – Statistics and Emerging Trends*, 6<sup>th</sup> revised edition, ISBN 3-934055-33-8, International Federation of Organic Agriculture Movements, Bonn, Germany.