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# Organic Farming – Past, Present, Future

Mihai CHITEA  
*Romanian Academy, Institute of Agricultural Economics,  
Bucharest, Romania*

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The deep social, economic and political changes that followed after the World War II (unprecedented development of industry, intensive farming, environment pollution) also resulted in the awareness of the need to develop some measures to fight against the negative effects generated by these on the environment and on the consumers' health. Among these early measures, one could mention the support provided to an alternative form of farming, which should create both the premises for obtaining safe organic products and for reducing the negative impact on the environment.

At present, organic farming represents an increasingly important sector in a great number of countries with different development levels. In some developed countries, for example, organic farming accounts for an important segment of the agri-food sector (10,0% in Austria, 7,8% in Switzerland), while in other countries it experiences a yearly growth rate of over 20,0% (for example in USA, France, Japan, Singapore). At the same time, some developing countries have small local markets for the organic products, while other countries benefit from the export opportunities provided by organic farming (exports of Mexican coffee, of cotton from Uganda).

Although it is expected that only a small part of farmers will become producers of organic products, the increasing demand for organic food products and fibers provide new opportunities for the farmers and businessmen world-wide, raising new challenges for the FAO. In this respect, governments wish to highlight the organic farming potential, with a view to contribute to the sustainable development of different countries. These appeal to the help provided by the FAO for deciphering the multitude of rules that have to be observed by the local producers.

An important number of countries and private organizations have tried to define organic farming. The great differences from the past were eliminated together with the emergence of the consistency conditions of the international sellers, leading to the uniformity of definitions.

Regarding the definition of organic farming, this is "that type of agriculture which is based upon a minimum use of external materials, upon banning the use of chemical substances as fertilizers and soil ameliorators, pesticides, ingredients for feed preparation, ingredients and additives for food preparation. This type of agriculture is based upon observing certain strict production principles and rules, in conformity with the guidelines, standards and national and international terms of reference".

In conformity with the Food Commission Codex, organic farming represents "a production management system which promotes and improves the agro-ecosystem health, biodiversity, biological cycles and biological activity of soils. For the accomplishment of any function, specific to the system, agronomic, biological and mechanic methods are used, wherever possible, without applying chemical inputs".

Thus, organic farming seems a method of addressing the sustainable agriculture problem, while many of the techniques used by it, i.e. internal harvesting of crops, crop rotation, double shoveling, integrated farming (crop and livestock production) are practiced under different farming systems. The organic farming specificity resides in:

- ♦ banning chemical inputs;
- ♦ favouring crop rotation.

The basic rule is the acceptance of natural inputs. However, there are exceptions to this rule: a series of natural inputs considered to be harmful for human health or environment by

different certification programs, as well as a set of chemical inputs established as being essential and consistent with organic farming philosophy are permitted.

Having in view all these elements, some of the basic principles of organic farming can be outlined:

- it produces high-quality nutritious food;
- it respects and protects the natural ecosystems as well as their genetic diversity;
- it promotes and diversifies the biological cycles inside the agrarian systems, with respect for the microorganisms, flora and fauna of the soil;
- it maintains and improves soil fertility by using natural fertilizers (manure, green fertilizers and compost);
- it uses natural and renewable resources;
- it maintains the genetic diversity of the agrarian systems;
- it provides a sufficient income for farmers and a safe and healthy work environment;
- it takes into account the impact of the crop techniques on the environment and people.

The need for organic farming was felt world-wide ever since the '80s, as the demand for organic food products increased, generated by the awareness of the dangers involved by intensive farming. This phenomenon increased in time, at present becoming a constant coordinate of social life and agricultural policies.

Nowadays, out of over 22 million ha of agricultural land farmed under the organic farming system throughout the world, Australia has 10.5 million ha, followed by Argentina with 3,2 million ha and Italy with more than 1.2 million ha. It is expected that in the next period the share of organic products in total agro-food markets will increase from 1-3% at present to 5-10% on the large markets from Europe and USA.

Europe's concern for the environment was consolidated as the Single European Act was signed, which had in view the inclusion of the environmental problem in the Community competences scope. The reform of the Common Agricultural Policy of 1992 introduced new regulations regarding environment protection, established a series of measures concerning forestation and supporting certain production measures, compatible with environment protection. These elements were the starting point in the process of organic farming concept creation.

The first measures in this respect focused upon the establishment of the institutional and legal framework, as basis of future actions with a view to consolidate the common policy regarding organic farming. The first regulation in this field was elaborated in 1991: (EEC) Regulation no. 2092/1991 on organic farm production, by agricultural and food products. The legislation in this field has been completed and amended so far with other 21 decisions of the European Council and Commission.

In Europe, organic agriculture finds its basis in the activity performed by Hans and Maria Mueller from Switzerland, who, since 1920 dedicated themselves to the development of the concept of family farming. Their scientific approach, influenced by the biodynamic farming concept in the 1930s, resulted in the elaboration of a series of organic methods for farming the land and animal husbandry in 1950.

The theoretical bases of these methods were provided by the German physician and microbiology specialist Hans-Peter Rusch, who tried to explain the indissoluble link between soil microbiology and fertility in his book "Soil Fertility" (1968). Starting from these elements, the European states have gradually developed their own programs to fight against the negative phenomena induced by the accelerated industrialization that followed after the World War II, and to increase the importance attached to organic farming in this context.

Thus, in Germany, for example, Rudolf Steiner took the first steps for developing the organic farming concept, since 1920, by making public some studies having as subject the benefits resulting from the establishment of certain agricultural units of farm type. In his opinion, the farm was a living organism, influenced both by material and non-material, spiritual elements.

In late '60s, the negative impacts of the intensive farming and pollution upon the environment were obvious, being a starting point in considering organic farming as an essential element for sustainable development.

Thus, the first stage in the development of this project during 1968 and 1988 is characterized by the appearance of the first producers' organizations and foundations that

supported organic farming, namely “Bioland” (1971), “Farmers’ Association in Organic Fruits, Vegetables and Grains” as well as the Association for Ecology and Agriculture (1975), that coordinated the expertise and information exchange in organic farming mainly through its publications. This stage had a very great importance through the message it transmitted, i.e. organic farming can be successfully practiced.

The second stage, 1988-2000, continued the approach initiated in the '70s, providing further consistency through strengthening the legislative framework, the emergence of some new elements (the basic standards for the organic products and the seals necessary for their marketing) and the development of non-governmental organizations for organic farming.

Nowadays, there are eight producers’ organizations in Germany that account for almost 60% of total organic farms.

The efforts made to support organic farming led to a turnover rate of over 2 billion Euros (for organic products) in 2001, while organic farming accounted for 3,7% of the total agricultural area of the country.

In France, unlike other European countries, organic farming developed only in the early 1980s, mainly in relation to the quality of agricultural products, number of organic farms and the amount of information received by the population. Some of the elements that led to strengthening the organic farming concept were the following:

- the publication of organic farming standards by the producers’ association “Nature-Progress” in the year 1972;
- the issuing of the legislative framework on organic farming in 1981;
- the launching of the state logo for the organic products in 1985 (AB-Logo); this high level of recognition by the state led to the wide acceptance of organic farming both in France and in the neighbour countries, for which France was the main supplier of organic products at that moment;
- the emergence of the producers’ organizations and of other non-governmental organizations (NGOs), i.e. the NFOF (National Federation for Organic Farming), consisting of the regional producers’ organizations, that represents the organic sector in administration; Bio Convergence and Setrab (the European Trade Union of the Organic Products Processors), that represent the processors;
- the increase of domestic consumers' demand for organic products (about 20% per year), that determined the elaboration of a governmental plan for organic farming support; this provides for granting some subsidies of 12,3 million Euro for organic production stimulation and improvement, distribution and sales, implying the conversion of 1 million ha of agricultural land and a number of 25.000 organic farms by the year 2005.

The support to organic farming support had generally the expected effect, so that at the beginning of the year 2001, in France there were 9.260 organic farms, that operated more than 370.000 ha (representing 1,4% of total of farms, respectively 1,3% of the agricultural area of the country), a turnover rate of about 2,6 billion Euros being estimated for this sector in the year 2003.

As a result of the increased concern manifested for this sector by the European organizations and the increased awareness of the importance of organic agri-food products for human health, organic farming has experienced an unprecedented evolution lately.

The European leaders as regards the share of agricultural land farmed under the organic system are the countries from Scandinavia and those from the Alps. Thus, in 2001, the largest area under organic farming was found in Austria, with 11,3% of total utilized agricultural area, while the share of farms applying the organic farming principles was 9,3%. Austria was followed by Switzerland, Finland and Sweden with 9,7%, 6,6% and 6,3% of the agricultural area, 10,2%, 6,4 % and 4,0% respectively of total farms (table 1). Italy, Germany, Austria and Spain have 51,1% of their agricultural area under organic farming, while organic farms account for 59,7% of total organic farms.

As for the average area of organic farms in Europe, this reached 29,28 ha in the year 2001, with significant differences from country to country: in Portugal 70,27 ha, in Finland 29,68 ha, in Italy 21,79 ha, in Switzerland 16,69 ha. In conformity with the FAO specialists, in the next years, the agricultural area farmed under the organic system in Europe will increase by 5 times, while the demand for organic products will continuously grow.

Table 1. The area included in the organic farming system/organic farms in the year 2001.

Country	Organic farms	(%) of total farms	(ha) of land under organic farming	(%) of agricultural area
Austria	18.292	9,3	285.500	1,3
Belgium	694	1,0	22.410	1,6
Czech Rep.	654	2,4	218.114	5,1
Denmark	3.525	5,6	174.600	6,5
Finland	4.983	6,4	147.943	6,6
France	10.364	1,5	419.750	1,4
Germany	14.703	3,3	632.165	3,7
Greece	6.680	0,8	31.118	0,6
Hungary	1.040	-	105.000	1,8
Italy	56.440	2,4	1.230.000	7,9
Netherlands	1.528	1,4	3.800	1,9
Norway	2.099	3,1	26.673	2,6
Portugal	917	0,2	70.857	1,8
Spain	15.607	1,3	485.079	1,6
Sweden	3.589	4,0	193.611	6,3
UK	3.981	1,7	679.631	3,9
Slovenia	883	-	5.280	0,7
Poland	1.787	0,07	44.866	0,3

Source: „The World of Organic Agriculture Statistics and Future Prospects” – BioFach 2003.

In the future, the agricultural policy in the EU will be much more concerned with organic farming; the EU agricultural reform will be correlated with the reconversion to organic farming, which is environment friendly, asking for natural recycling mechanisms and avoiding the use of chemical inputs as much as possible. The European Commission also planned a Conference to be held in Brussels on January 22, 2004; 100 organizations will be present there, Ministries of Agriculture from the Member States and Candidate Countries, as well as specialty publications having as subject the identification of best solutions for supporting the organic farming sector.

In the perspective of our country's accession to the European Union, the Romanian government has focused a lot upon organic farming lately, both as regards the legal framework harmonization and the information of the general public related to advantage of producing and consuming organic products (table 2).

Table 2. The evolution of certified areas and of livestock included in the organic farming system in Romania.

Specification	Unit	Real figures		Estimates	
		2001	2002	2003	2004
<b>1.Total area, of which:</b>	ha	28.800	43.850	57.200	75.500
Cereals	ha	8.000	12.000	16.000	20.000
Fodder crops and pastures	ha	14.000	20.000	24.000	30.000
Oilseeds and protein crops	ha	6.000	10.000	14.000	20.000
Vegetables	ha	400	1.000	2.000	4.000
Wild berries	ha	100	300	400	500
Other crops	ha	300	500	700	800
<b>2. Livestock total, out of which:</b>	heads	13.000	20.000	27.000	38.000
Dairy cows	heads	3.000	5.000	7.000	8.000
Milk ewes	heads	10.000	15.000	20.000	30.000

Source: Ministry of Agriculture, Food and Forestry.

Any action for the organic farming development should start from the main available opportunities:

- traditional agriculture, based mainly upon using "clean" technologies;
- highly-productive fertile soils;
- chemical inputs and technology that are far below those used in the EU countries;
- possibility of delimitation of the ecologic non-polluting areas, where the organic farming practices can be applied;
- sufficient available labour force;
- the demand for organic products (both on the domestic and foreign markets) continuously increases;
- the prices of organic products are highly advantageous, contributing to a substantial increase of farmers' incomes.

Besides these opportunities, the organic farming development should be also based upon a solid legal framework, the present situation of which is the following: Government's Emergency Ordinance no. 34/2000 on the organic agri-food products approved by Law no. 38/2001 – main law for organic farming; Government's Decision no. 677/2001 on the establishment of the Institute for Food Bioresources as main organism for accrediting the inspection and certification organisms and performance of quality tests and research work in organic farming; Law no.166/2002 on farm operation, by which family farms are stimulated for the organic farming practice; Government's Decision no.917/2001 on the Methodological Norms for the application of G.O. no.34/2000; The Order of the Minister of Agriculture, Food and Forestry no.70/2002 on the establishment of the "Commission for Organic Farming Development in Romania".

For the application of the provisions in G.O.no. 34/2000, the National Agency for Organic Products was established, whose responsibility is to control the observance of the specific legal provisions, as well as the application of the organic methods in production, with a series of attributions: elaboration of the National Program on Organic Farming, accrediting the physical and legal entities for effecting the inspection and quality tests for the organic production; it ensures the link to the international organizations specialized in organic farming; it organizes education and training programs for operators. The legislation into force also provides for the labeling of organic products. In this respect, a National Commission will be set up Granting Organic Labels (Logos), consisting of representatives of the Ministries of Environment and Industry, university staff, research institutes and NGOs. Romania's short-term goal is represented by its inclusion on the List of third countries in the year 2004, issued by the European Commission, by complying with the conditions imposed by the EU legislation, so that Romania could export organic agri-food products under Romanian Logo.

For reaching this main goal, the implementation of some measures and actions of legal, institutional and technical nature is necessary in the next period, namely:

- in the legislative field: the continuation of transposing the EU legislation regarding the rules and principles of organic production and the products that are authorized in the organic farming practice; support for the producers in the conversion period; elaboration of the rules of the inspection system and the organization of its implementation;
- in the institutional field: strengthening the capacity of the National Authority for Organic Products by creating a territorial structure for monitoring and supervising the sector; establishment of Romanian inspection and certification bodies in conformity with the European Norm 45011;
- in the technical field: intensification of actions for promoting the organic farming concept; enlargement and diversification of areas under experimental modules of the type "organic micro-farm" type, delimitation of areas under organic farming.

Among the expected effects of the measures presented above, the following are worth mentioning: development of the organic production and of a domestic market for organic products; creation of an available supply of organic products for export, by types of products; recognition of the equivalence of the Rules for production and inspection by the European Commission, by approving Romania's demand to be included on the list of third countries.

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