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**Article**

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## AN ANALYSIS OF THE "BIO" / "ECO" PRODUCTS MARKET, REFERRING TO THE EU AND ROMANIA

Ionel BOSTAN\*

**Abstract:** *The EU and Canada represent the largest market in the world for the sale of ecological products attracting exports from many third countries and recording a total sale of 95% of the worldwide total market. The European market for ecological products – also known as “bio” / “eco” – in absolute figures – is somewhere around 20 billiards euro/year, and in the case of Romania, the market for those products varies around 200 million euro/year. According to European legislation, there are harmonized provisions and procedures for the import of ecological products which can be implemented in two ways: either by complying with the EU legislation on ecologic products, or based on the equivalence between the existent standards and control systems. In many European countries, the operators on such a market obey the rules established by Legislation for ecologic productions strictly. In Romania, a sanctioning system against those economic operators who fraudulently use product labels suggesting they are organic products has just recently been considered. Taking into consideration all these aspects, the present paper relies on the most recent bibliographic and statistical references in this field.*

**Keywords:** environment; ecological production; organic food; biological agriculture; exports; internal market; regulations on “bio”/“eco” products

**JEL Classification:** K2; Q1; Q5

### Introductory considerations

Ecological farming is intended to produce healthier food and food more appropriate to the human metabolism, this type of farming being highly correlated to the preservation and the development of the environment, referring to that system of agriculture similar to “organic farming” or “biological farming”, that used by other EU member states (MARD, 2013).

It is more and more acknowledged nowadays that this type of agriculture plays a key role in sustainable development, in increasing the economic activities with important value added and increasing the interest in rural areas.

Referring to the ecological production, we point out that it represents in fact a global system of administering agricultural exploitations and food production having as objective sustainable farming, obtaining high quality products and using processes that are not harmful to the environment, human health, plants, animals or animal well-being (ECA, 2012).

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The characteristics and the benefits of “bio” products could be presented as follows (BIOSENS, 2012):

- Absence of chemical substances (pesticides, synthetic substances etc.) which, after being used for a long period of time, are harmful to humans and to the environment;
- Nutritional quality: “bio” products contain up to 40 % more antioxidants, more essential minerals and higher amount of nutrients than regular food products;
- Ecological products are characterized by a high content of amino acids, vitamins and oil elements;
- Contribute to saving the environment – biological agriculture is a production process that respects biodiversity and the natural balance;
- Biological cosmetic products are highly nourishing; they consist of important active ingredients for the body with long term effects;
- Not being contaminated with pesticides or mycotoxins, organically certified products can prevent early ageing, chronic diseases and can increase work capacity.

Ecological products (“bio”/“eco”) – considered “premium” products – are obtained by respecting a precise set of rules, like the rotation of cultures, use of genetically modified organisms is forbidden and very strict limits to the use of synthetic chemical pesticides and chemical fertilizers, animal antibiotics, food additives etc. in the processing of agricultural products (Table 1).

**Table 1** - “Bio” / “Eco” product in relation with both natural and chemical product

<b>“Bio”/“eco” product</b>	<b>Natural product</b>	<b>Chemical product</b>
<ul style="list-style-type: none"> <li>• cultivated in non-polluted areas</li> <li>• the species and the varieties used are characterized by high resistance to environmental conditions</li> <li>• naturally fertilized soil</li> <li>• feed is prepared with raw materials allowed by the standards of ecological farming</li> <li>• products are not genetically modified</li> <li>• No synthetic chemical additives are used</li> </ul>	<ul style="list-style-type: none"> <li>• Are obtained in agriculture without the use of chemical substances</li> </ul>	<ul style="list-style-type: none"> <li>• Are also obtained in agriculture but assume the use of chemical substances</li> </ul>

Source: SSAJ, 2012

“Bio” products have shorter validity terms than regular products as they don’t include synthesis food additives – conservatives, colorants, taste and thickening agents (BIOSENS, 2012).

In the conditions presented here, these products are generally more expensive than conventional products.

### **1. Agriculture and ecological production in the European area**

The issues repave represented the main subject of various specialty papers – directly (Kilcher *et al.*, 2011; Lampkin, 1999; Mitchell *et al.*, 1997; Fitiu, 2007; Costin, 2008) or indirectly (Stefan *et al.*, 2013; Toncea *et al.*, 2013), that were received with interest by those interested in this important field.

From a legislative point of view, given the importance of the subject (Simiz et al, 2013), the catering sector is subjected to EU regulations on hygiene and food product labelling (EC, 2007; COM, 2008a; COM, 2008b), which state that the labels referring to the production process cannot be used so to mislead the buyers (EP, 2000). As a matter of fact, the objectives, principles and norms applicable to ecological productions are included in the EU and national legislations in this field. These rules, apart from defining the production method in the plant, animal and aquaculture production sectors, regulate the multiple aspects related to the system of ecological farming: the processing, labelling, commerce, import, inspection and certification (MARD, 2013).

According to a report of the European Commission for the European Parliament and the Council on the application of EC Regulation no. 834/2007 (COM, 2012), seven member states have introduced national norms, while other ten member states use private standards. These rules focus on certifying ingredients, types of foods, menus or operations carried out in the catering sector in general.

Considering the total surface of land used in ecological farming, almost 8.6 million hectares are used for this in the EU (4.7% - EU 27/2009); the number of companies involved being of almost 200 000 (1.4% - EU 27/2009).

Figure 1 presents the situation of the EU member states with the largest surfaces used in organic farming.

**Figure 1 - The 10 EU Member States with the most organic agricultural land (in conversion and fully converted) in 2009 (1 000 ha)**



Source: ECA, 2012; Willer, 2009

The largest organic surfaces are cultivated in Spain, Italy and Germany which own 40% of the cultivated land in organic farming in EU, estimated at almost 9 million hectares. If Austria, Sweden or Estonia cultivate between 13 and 20 % of their land organically, Romania, Bulgaria and Ireland have the lowest percentage among the member states (below 2%) (Capital, 2012). The European market for organic products is estimated at 20 billiards Euro/year (Willer, 2009), which represents a market share of 1.5% of the food market in general (FiBL, 2008).

The average amount of organic food consumed in the eastern part of Europe is 3-5 %. In Germany the consumption level is 5% and in England and Austria, 3%. The average in Western Europe is 3 – 5%, in Hungary it has reached 2% while in Romania it is just above 1%.

What should be known is that almost 15% of the organic products consumed in Europe are imported from third countries (ECA, 2012), they are mainly products rarely or not at all cultivated in the EU (coffee, bananas, cotton etc.).

## **2. Analysis of the evolution and the trends of organic farming in Romania**

Among the strategic management actions for assimilating and putting into practice the principles of sustainable development in Romania we find the one related to ensuring food security and safety by capitalizing the competitive advantages of the country in developing agricultural production, including organic products (MECC, 2013). At the same time, this action considers the correlation of those measures related to quantitative and qualitative increase of agricultural

production for ensuring food for people and animals with the request of increasing the production of biofuels, without leaving aside the requirements on maintaining and increasing soil fertility, biodiversity and environmental protection.

An important measure included in the National Rural Development Program (NRDP) which refers to recreating and protecting biodiversity on agricultural lands (MARD, 2014), focuses on providing the necessary protection to natural resources by encouraging organic farming of almost 80 000 ha of agricultural land.

On a whole, organic farming is a dynamic sector in Romania and in the last few years it has recorded an increasing trend (Table 2).

**Table 2 - The evolution of organic farming in Romania, 2006 – 2012**

<b>Indicator</b>	<b>2006</b>	<b>2007</b>	<b>2008</b>	<b>2009</b>	<b>2010</b>	<b>2011</b>	<b>2012</b>
• number of operators registered in organic farming	3 409	3834	4191	3228	3155	9703	15544
• surface cultivated in organic farming - arable land (ha)	45605	65112	86454	110014.4	148033.5	147581.55	174644
• permanently surface cultivated – pastures and hayfields (ha)	51200	57600	46006.5	39232.8	31579.11	78197.51	105836
• orchards and vineyards (ha)	294	954	1518	1869.4	3093.04	4166,62	7781
• collection from spontaneous flora (ha)	38700	58728	81279	88883.4	77294.35	338051	1082138

Source: MARD, 2013

This is due to the fact that Romania, through MARD (Ministry of Agriculture and Rural Development) provides specific financial support for the conversion period (EC, 2009; GR, 2010) making additional annual payments for exploitation.

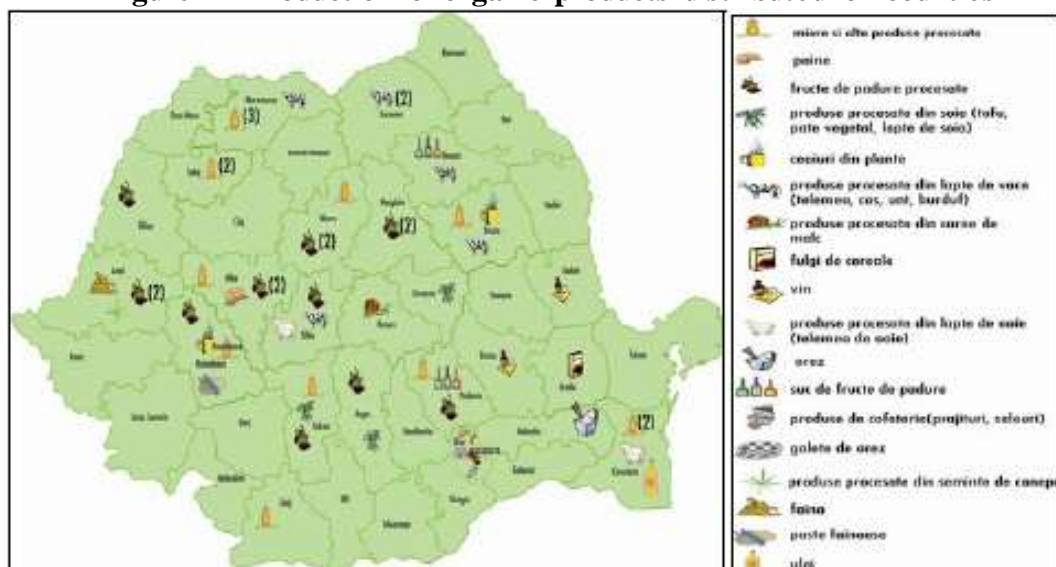
The conversion period varies for the plant, animal and apiculture production (GR, 2000; AE - Zi de zi, 2007) as follows: 2 years for annual cultures, 3 years for perennial cultures and plantations, 2 years for lawns and feed cultures, 12 months for beef cattle, 6 months for small ruminants and pigs, 6 months for animals, 10 weeks for poultry bought at the age of 3 days, 6 weeks for egg laying birds, 1 year for bees if the family was bought from conventional bee gardens.

The organic farming package has been included in the National Sustainable Development Programme (MARD, 2014); at the same time, the organic beekeeping sector is supported along with conventional apiculture, through the National Apiarian Programme (GR, 2013).

Another measure that focuses on promoting products is represented by the financial support provided by the European Commission consisting in financing 50 % of the value of the promotion programs proposed by professional and inter-professional organisations within the sector which participate with at least 20% of the real cost of the actions, 30% of the value being covered from the state budget.

The significant potential in obtaining organic products (food) refers to all the development regions of Romania (Figure 2).

**Figure 2 - Production of organic products distributed on counties**



Source: MECBE, 2011

For promoting Romanian organic products, both on the European and the international markets, the state supports 50% of the costs the economic agents have with participating at fairs and international exhibitions (MECBE, 2010).

If we consider the latest studies (Cauea, 2013), Romania is placed in the first 15 exporters of organic raw materials, with more than 300 000 hectares of organically certified agricultural land. Moreover, in 2011 it was placed in the first place worldwide according to the increasing the number of farmers certified in the organic system.

The market for “bio” products (Table 3) varies somewhere around 150 million euro/year and has increased continuously, being on a continuous increase, the best sold products being fruits and vegetables, followed by bee honey, dairy products, eggs etc.

**Table 3 - Products specific to the Romanian “bio” market**

“Bio” food products	“Bio” non-food products
<ul style="list-style-type: none"> <li>• <i>vegetables, fruits</i></li> <li>• <i>honey and bee products</i></li> <li>• <i>teas</i></li> <li>• <i>dairy products and cheese varieties</i></li> <li>• <i>wine, juice</i></li> <li>• <i>bread, flour and bakery products</i></li> <li>• <i>oils</i></li> </ul>	<ul style="list-style-type: none"> <li>• <i>cosmetics</i> (make-up and beauty products, intimate care products)</li> <li>• <i>organic textiles</i> (organic clothes, linens)</li> <li>• <i>household appliances</i> (mills for grinding cereals, germination pots, fresh juice for germinated cereals, soya milk appliances, appliances for drying fruits and vegetables etc.)</li> <li>• <i>children care</i> (organic creams and lotions, organic dippers, napkins for intimate hygiene)</li> </ul>

<ul style="list-style-type: none"> <li>• <i>soya products</i></li> <li>• <i>baby food</i></li> <li>• <i>nutritional supplements etc.</i></li> </ul>	<ul style="list-style-type: none"> <li>• <i>household</i> (detergent, laundry balm and whitener: have less chemical substances; cleaning solutions)</li> <li>• <i>relaxation products</i> (bathroom products, massage and aromatherapy products)</li> <li>• <i>organic rubber</i> etc.</li> </ul>
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Source: BIOSENS, 2012

The tendency for the next period is that the “bio” products commercialized in Romania will be sold in proportion of 60% in organic shops, 30% in supermarkets and 10% in other types of shops.

The value of the exported “bio” products is of almost 250 million euro/year (more than 90% represent raw materials, the highest amount exported in the recent past being registered as cereals, berries and wine) and the main export markets are the states from Western Europe such as Germany, Austria, France and Denmark but also USA to where cereals and corn are delivered (Business – 24, 2013).

In the future, the values presented might grow especially if measures like the ones below are put into practice (PCPPAD, 2013):

- Drawing up a national action plan for organic farming, simultaneous with the adoption of an institutional framework capable of inspiring consumer confidence in “bio” products;
- Analysing and improving MARD competences in inspecting and certifying the Romanian “bio” products;
- Organizing and systematically controlling the entire chain of “bio” products and eliminating the possibility of falsifying the “bio” certificates in Romania;
- Obtaining the maximum financial support offered by the EU for the Romanian “bio” farmers, having an appropriate economic basise;
- Drawing up a coherent subvention system for “bio” products and “bio” processing in particular for obtaining value added products;
- Applying lower VAT values to the basic organic products.

At the same time, it is also necessary to stimulate the “bio” processing sector by providing support through PNDR from 75% to 90% of the value of the investments coordinated by the Payment Agency for Rural Development and Fisheries.



### **3. Adjusting the institutional framework necessary for establishing contraventions and applying sanctions as regard to the status of “bio” / “eco” products**

The measures and the sanctions necessary for respecting the provisions of CE Regulation no. 834/2007 concerning both organic production and the labelling process of organic products have been established relatively recently in Romania. They were adopted through a Government Decision in 2013 (GR, 2013).

In fact, the previously mentioned legal document creates the legal framework necessary for establishing contraventions and applying sanctions in the field of organic farming; based on it, the staff responsible for technical inspections in the field of organic farming from the management bodies in agriculture has the possibility to apply contraventions in more situations.

Thus, for the fraudulent use of the terms “ecologic”, “biologic” and “organic” or their abbreviations “eco” or “bio”, as commercial marks or usage practices during the production, processing, packaging, transportation, storing and product distribution, including on the product’s label, advertising materials and commercial documents, which can mislead the consumer and which are not obtained according to the rules of organic production, the applicable fines range from 20,000 to 30,000 lei. The measure to withdraw the operator from the commercialization of the products in question can be added.

The violation of the rules regarding producing, processing, packaging, transportation, storing, distribution and import of organic products from third countries can lead to sanctions between 10 000 and 20 000 lei. The fine is higher (25 000 lei – 35 000 lei), in case the operator’s documents are missing, including those related to the production evidence, transactions and the stocks of all ecologic products through which the product can be tracked during all the phases.

In case certain commercials do not allow the access of the inspector designated by MARD within the unit, or if they refuse to present the documents and the control registers, the law maker established the application of a fine ranging between 20 000 and 30 000 lei.

In spite of all the interest for legalizing coercive measures, the phenomenon cannot be completely controlled if we consider the small number of people in charge with making such controls within a county (up to 5 people). Nonetheless, in our opinion, once things have started to be on the right course, the situation can be improved.

## Conclusions

For the time being the request for “bio” / “eco” products is higher every time, as the consumers are more and more interested in them. In Romania (2007 – 2012) the land surface cultivated organically and the number of operators involved have increased several times, as has the number of animals bred using ecological methods, especially sheep and goats, dairy cows, laying hens and bee families.

Nonetheless when referring to capitalizing on organic products, they are mostly commercialized as unprocessed (raw material). Or, the interest is to distribute processed products with high added value at large scales.

Hence, the priorities in the field in question focus on selling organic products with high value added, identifying new export markets and the development of an effective processing and distribution system.

In our opinion, for the development of the sector we refer to, fiscal measures should also be used. Here, we consider VAT reduction for the “bio” sector, which would be equivalent to the development of the organic processing sector in Romania and, quite probably, will lead to a new explosion of the industry after the one in 2012 when EU subventions were introduced.

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