ORGANIC PRODUCTS - A CHANCE TO MAKE
THE AGRICULTURE OF ROMANIA
IN THE EUROPEAN UNION AND A SOLUTION
TO ECONOMIC CRISIS

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Camelia Vechiu*

Abstract:
Sustainable development is development that combines the present requirements without compromising the ability of future generations to meet their own needs. Sustainability is therefore characterized by three main aspects often in conflict: the economic aspect (effectiveness), the social (equity) and environmental (pollution, degradation).

In the agricultural sector link between efficiency, equity and environment is very necessary. Economic performance in agriculture depends primarily on availability and quality of natural resources. Environmental damage may adversely affect agricultural productivity and income, which in turn may be pressure on economic and social structure in rural communities.

Thus, in the current economic crisis, the experts recommended as solutions three main directions of interest: tourism, investments in renewable energy and organic farming.

Keywords: organic agriculture, comparative advantages, economic performances

JEL Classification: Q10, Q18, Q57

Introduction
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In the agricultural sector link between efficiency, equity and environment is very necessary. Economic performance in agriculture depends primarily on availability and quality of natural resources. Environmental damage may adversely affect agricultural

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productivity and income, which in turn may be pressure on economic and social structure in rural communities.

At EU level, the market for organic products reached in 2005 an estimated 23 billion euro. This includes virtually all primary and processed agricultural products (bread, wine, meat, milk, oil, fish etc.). Organic products are, in general, with 25-30 percent more expensive than conventional products, but, depending on the game market may reach 400 percent of the price of conventional product.

As regards the countries of Eastern Europe, they will need a period of 10-15 years after their accession to the European Union in order to develop and structure its domestic market. For some EU countries, this period was insufficient, an evidence is Spain, which 17 years after accession, began an internal market structure. During this period, Spain has exported almost all organic products on the northern European markets.

In the current economic crisis, the experts recommended as solutions three main directions of interest: tourism, investments in renewable energy and organic farming.

In the future, Romania will have to focus more agriculture to organic production, to deficiency product in the European Union, from the considerations that we expose below.

Sustainable development is development that combines the present without compromising the ability of future generations to meet their own needs. Sustainability is therefore characterized by three main aspects often in conflict: the economic aspect (effectiveness), the social (equity) and environmental (pollution, degradation). In the agricultural sector link between efficiency, equity and environment is very necessary. Economic performance in agriculture depends primarily on availability and quality of natural resources. Environmental damage may adversely affect agricultural productivity and income, which in turn may be pressure on economic and social structure in rural communities.

During the most important period of growth that a world has seen in spite of technological innovations unprecedented, mess has expanded dramatically. In addition to the expansion of unemployment and deteriorating social situation of the population, we witness the destabilization of life (the waters are poisoned, soils are degraded, the air is dangerous for breathing). The response to these imbalances is economic development - an alternative, healthy, sustainable in order to obtain economic and financial results without prejudicing the environment, while contributing to solving social problems, such as reducing unemployment.

Food businesses must be profitable as businesses trivalent “environmental management systems, to gain performance by economy, environmental values (to avoid waste and pollution) and social ones. They must work to harmonize the potential of human resources, with state of the environment (output's business will be best if at equality between net marginal benefit and marginal external cost - the
value of marginal damages plus penalties in case of pollution) and the particularities of human resources based on a degree of fairness, cooperation, complementarity.

Theoretically, business today must be based on a long-term, logic triad, which we know as the (logical) trivalent, whose fate is to eliminate the application of the exclusive economic logic.

**Figure 1**

Gradually, companies today must transform into profitable trivalent agricultural enterprises, starting from the following:

1. use of clean technologies, leading to reduce waste;
2. processing of “green” raw materials;
3. procurement and marketing of “green” products;
4. use “right place” man.

All these aspects determine the increased efforts of enterprises to have: Expenditure of large research and development expenses related to the significant acquisition of patents, licenses, trade marks, brand; Investment amount above which the “exhausted” enterprises can not cover self and entail recourse to external financing. In our country, it still remains onerous (average annual interest rate on bank loans in lei is 26-30%); Operating expenses will increase dramatically as the costs for raw materials, organic, organic auxiliary materials, continuing with the values recorded for depreciation costs and, not least the costs of staff; Expenditure to promote “green” products and their role for food security will increase on the background of increasing prices for such products; Agricultural enterprises, and agriculture throughout Romania should be in line of a transformation process in which exploitation of resources, investment direction, techniques guidance and institutional changes take place in harmoniously, in a process of sustainable development - trivalent as one considered by the World Commission of Environment and Development. Ecology is and will be at least 20 years from now the number one concern worldwide.
A timely business during the current economic situation is the application of modern technologies in processing natural food products. Today, Romania has no processors, but has much raw material, which it sends to the West. For example, the cost for organic agricultural industry in our country would be like the raspberry (strawberry), the processing to obtain products that could worth 100 euros kilogram, rather than sell fresh raspberry in Germany with only 3 euro kilogram, what happens now.

Also, a direction for opening new businesses in agriculture, would be, services more specifically, agricultural research services.

**Planted areas**

Organic farming worldwide increasingly gaining ground. Total areas occupied by the total organic crops in 2007, according to SOEL-FiBL was over 30 million hectares, the most extensive being grown in Australia (11.8 million hectares), Argentina (3.1 million hectares), China (2.3 million hectares), Italy (1.2 million hectares), etc.. Developing countries from Africa, Asia or Latin America paid close attention to areas cultivated with organic growth, but are also the target of debates as to whether using waste water for irrigation of organic crops.

In Europe there is land over five million hectares for organic crops, which corresponds to 2% of total agricultural land. These lands are located in EU countries, including Romania and Bulgaria, EFTA countries (Iceland, Liechtenstein, Norway, Switzerland) and in Turkey, Bosnia-Herzegovina and Croatia.

In terms of area under organic cultivation in the European Union in the first place is Austria with 11.30% of the area, followed by Switzerland - 9.70% Italy - 7.94%, Denmark - 6.51 %, Sweden - 6.30%, Czech Republic - 5.06% France - 1.40%. Areas less than 1% are grown in Ireland, Slovenia, Greece, Poland, Slovenia.

Large areas in Eastern European countries, which lack financial means have not received high chemical inputs in recent years have the opportunity today to transform the “Cinderella” to “ER” in the context of the European ecological deficit. Thus, the agriculture of these countries could enter one of the few colors that, technically and economically there are no genuine European competitors.

**Sales**

Globally, the volume of sales of organic products reached 46 billion dollars in 2008 and it is estimated that, with an annual growth rate of 10% by 2010 will reach 60 billion dollars. Market in North America has increased the pace of the alert, the United States in 2006 becoming the biggest market for organic products in the world. The European market has a volume of sales of 15 billion euros, of which one third are performed in Germany, occupying the first country in Europe. Germany is followed by Britain, Italy and France. In Europe, per capita consumption exceeds 100 euros only in Switzerland (102 euros per person). Representative in other countries, this indicator reached 64 euros in Austria, 56 Euros in Germany, 47 euros in the United Kingdom, 42 euro in Sweden, 32 euros in Italy, 28 euros in the Netherlands and 27 euros in France.
**Products and production**

The market for organic products in the European Union includes virtually all primary and processed agricultural products: bread, wine, meat, milk, oil, fish etc.

Eastern - Europe will have to focus organic production, produced by deficiency in the European Union namely: vegetable protein and red fruit. The reason is that western countries have begun to significantly reduce production in sectors which requires much labor such as those mentioned above, which becomes an advantage for others.

In some European countries, as mention of Greece, Portugal, France, Italy have been significant increases in organic production represented especially in fruits and vegetables. Organic farming has developed, also in Hungary, Poland or Romania, but the achievements are far from the desired and expected, if judged after the demand rate, which outrun the supply. Germany, for example, is by far the main consumer of organic products and although it is the third producer, and share, at EU level does not meet the demand for organic products to their consumers. In addition, Germany has known problems of planned supply of grain and barley for beer factories, and eggs, dairy and pork, this state of affairs is emphasized in the years of crisis caused by “mad cow disease”. France, who was leader of the 80 organic production makes now larger effort to convert, being obliged to resort to imports to meet consumer demands.

**In Romania**

Among the organic products are made notable notes oil and protein plants, grains, technical plants, herbs, berries, sunflower oil and soy products, processed milk (telemea sheep, cheese, Feta-type cheese) and honey. Furthermore, Romania is a source of feed for organic livestock.

Areas planted in environmental system have increased in several years of almost tenfold, from 17.438 ha in 2000 to 190.129 ha in 2007, representing less than 1% of the agricultural area of the country. It is expected to increase in area cultivated ecologically to 400,000 ha in 2010.

**Table no. 1**

**Land and Livestock Development of organic agriculture in Romania**

<table>
<thead>
<tr>
<th>SPECIFICATION</th>
<th>UM</th>
<th>2000</th>
<th>2001</th>
<th>2002</th>
<th>2003</th>
<th>2004</th>
<th>2005</th>
<th>2006</th>
<th>2007</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total surface</td>
<td>ha</td>
<td>17.438</td>
<td>28.800</td>
<td>43.850</td>
<td>57.200</td>
<td>73.800</td>
<td>110.400</td>
<td>143194</td>
<td>190129</td>
</tr>
<tr>
<td>Grains</td>
<td>ha</td>
<td>4.000</td>
<td>8.000</td>
<td>12.000</td>
<td>16.000</td>
<td>20.500</td>
<td>22.100</td>
<td>16310</td>
<td>32222</td>
</tr>
<tr>
<td>Grasslands and fodder plants</td>
<td>ha</td>
<td>9.300</td>
<td>14.000</td>
<td>20.000</td>
<td>24.000</td>
<td>31.300</td>
<td>42.300</td>
<td>51200</td>
<td>57600</td>
</tr>
<tr>
<td>Oil and protein plants</td>
<td>ha</td>
<td>4.000</td>
<td>6.300</td>
<td>10.000</td>
<td>15.600</td>
<td>20.100</td>
<td>22.614</td>
<td>23872</td>
<td>26491</td>
</tr>
<tr>
<td>Vegetables</td>
<td>ha</td>
<td>38</td>
<td>100</td>
<td>700</td>
<td>200</td>
<td>300</td>
<td>440</td>
<td>720</td>
<td>310</td>
</tr>
<tr>
<td>Fruits (morello cherries, cherries and apples)</td>
<td>ha</td>
<td>-</td>
<td>-</td>
<td>50</td>
<td>100</td>
<td>200</td>
<td>432</td>
<td>292</td>
<td>650</td>
</tr>
</tbody>
</table>
Organic products - a chance to make the agriculture of Romania in the European Union and a solution to economic crisis

Gathering spontaneous flora

| ha | 50 | 100 | 300 | 400 | 500 | 17.630 | 38700 | 58728 |

Other crops

| ha | 50 | 300 | 800 | 900 | 900 | 4.884 | 12100 | 14128 |

2. Animals

Milk Cows

| heads | 2.100 | 5.300 | 6.500 | 7.200 | 7.200 | 8.100 | 9.900 | 6265 |

Sheeps and caprinae

| heads | 1700 | 3700 | 3.000 | 3.200 | 40.500 | 86180 | 78076 |

Hens

| heads | 2.000 | 2.700 | 7.000 | 4300 | 4720 |

Source: www.madr.ro, Communications inspection bodies and certification

Tabel no. 2

Production development of organic agriculture in Romania

<table>
<thead>
<tr>
<th></th>
<th></th>
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<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Grains:</td>
<td>to</td>
<td>7.200</td>
<td>12.500</td>
<td>16.000</td>
<td>14.400</td>
<td>41.000</td>
<td>55.000</td>
<td>48441</td>
<td>65127</td>
</tr>
<tr>
<td>Oil and protein plants</td>
<td>to</td>
<td>5.500</td>
<td>7.200</td>
<td>11.000</td>
<td>12.480</td>
<td>37.000</td>
<td>45.600</td>
<td>73082</td>
<td>52982</td>
</tr>
<tr>
<td>Vegetables</td>
<td>to</td>
<td>600</td>
<td>4.000</td>
<td>4.000</td>
<td>2000</td>
<td>3.000</td>
<td>7.200</td>
<td>8707</td>
<td>3410</td>
</tr>
<tr>
<td>Fruits (morello cherries, cherries)</td>
<td>to</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>200</td>
<td>300</td>
<td>500</td>
<td>1.000</td>
<td>340</td>
</tr>
<tr>
<td>Gathering spontaneous flora</td>
<td>to</td>
<td>200</td>
<td>400</td>
<td>300</td>
<td>320</td>
<td>4.500</td>
<td>16.748</td>
<td>24962</td>
<td>35236</td>
</tr>
<tr>
<td>Other crops</td>
<td>to</td>
<td>2</td>
<td>300</td>
<td>800</td>
<td>900</td>
<td>12.000</td>
<td>6350</td>
<td>11041</td>
<td>11302</td>
</tr>
<tr>
<td>2. Animal production</td>
<td>x</td>
<td>x</td>
<td>x</td>
<td>x</td>
<td>x</td>
<td>x</td>
<td>x</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cow Milk</td>
<td>hl</td>
<td>58.367</td>
<td>63.885</td>
<td>92.747</td>
<td>92.485</td>
<td>92.868</td>
<td>100.000</td>
<td>122000</td>
<td>85031</td>
</tr>
<tr>
<td>Sheep and goat milk</td>
<td>hl</td>
<td>701</td>
<td>1.740</td>
<td>1.360</td>
<td>1.470</td>
<td>1.800</td>
<td>13.500</td>
<td>15500</td>
<td>13273</td>
</tr>
<tr>
<td>Eggs</td>
<td>thousands</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>500</td>
<td>650</td>
<td>1.820</td>
<td>1075</td>
<td>1321</td>
</tr>
<tr>
<td>3. Produse procesate</td>
<td>x</td>
<td>x</td>
<td>x</td>
<td>x</td>
<td>x</td>
<td>x</td>
<td>x</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sheep cheese</td>
<td>to</td>
<td>18</td>
<td>46</td>
<td>36</td>
<td>45</td>
<td>48</td>
<td>480</td>
<td>520</td>
<td>510</td>
</tr>
<tr>
<td>Schweitzer</td>
<td>to</td>
<td>23</td>
<td>23</td>
<td>100</td>
<td>110</td>
<td>116</td>
<td>268</td>
<td>576</td>
<td>580</td>
</tr>
<tr>
<td>Cheese</td>
<td>to</td>
<td>-</td>
<td>121</td>
<td>250</td>
<td>220</td>
<td>253</td>
<td>330</td>
<td>642</td>
<td>640</td>
</tr>
<tr>
<td>Canned vegetables and fruits</td>
<td>to</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>35</td>
<td>50</td>
<td>42</td>
<td>40</td>
<td></td>
</tr>
<tr>
<td>Honey</td>
<td>to</td>
<td>10</td>
<td>20</td>
<td>80</td>
<td>110</td>
<td>320</td>
<td>610</td>
<td>1242</td>
<td>1950</td>
</tr>
</tbody>
</table>

Source: www.madr.ro, Communications inspection bodies and certification

Production yields of organic farming are considered lower by 20% compared to those in conventional agriculture. The situation varies from one culture to another and from one year to another. It is important the presence of subsidies, funds and programs for agriculture and rural development and other supportive factors. By accessing an agroambiental program on medium term, a Romanian farmer could receive direct payments from the European Union of approximately 700 euros per hectare per year.
As in the European Union, demand for organic products is increasing. Consumption of organic products on the Romanian market was valued at 2% of the total consumption of food from the market in 2008. Work to promote these products should be supported, but without affecting the prices to increase, so that these products are more expensive by 20% than the conventional ones and the consumer does not appreciate this as one justified price.

Producers are interested in accessing European funds for developing the processing, given that currently much of the production sector is represented by organic material. Moreover, in 2009 came into effect a new regulation that allows parallel processing of conventional and organic products, which will lead to development of the sector.

With increasing land under organic cultivation has occurred a request for export products. Thus, in 2007 were exported about 100,000 tons, i.e. over 38% of organic products of plant origin, 10% of processed milk products, 65% of the production of honey, etc. Their value was about 80 million euro. In 2008 it exported 130,000 t, representing 48% of organic products of plant origin, 6% of processed milk products, 68% of honey, etc., with a value of 100 million euro. Imports of organic products are insignificant, they total less than 7 million euro. They summarize the brown sugar from sugar cane, coffee, chocolate, beverages made from soy or fruit juices.

Number of operators in the sector of organic farming in 2008 was 4190 compared to 3835 in 2007. Increases in this index is around 10% annually. Issues of organic farming is an area of concern to researchers in the field, which demonstrates that it can be profitable. For example, we further present a summary of research that demonstrates that in organic vegetable cultivation it is possible a profitable farming if several criteria are met related to crop rotation technology, planting scheme, organic fertilization, soil treatments made at time of seedling stage and during the growing season, vegetation control factors (temperature, humidity), application through drip watering. The calculation of efficiency indicators in early cucumbers crops, tomatoes and cauliflowers made since 2005 are as follows:

<table>
<thead>
<tr>
<th>Culture</th>
<th>Turnover</th>
<th>Costs</th>
<th>Profit</th>
<th>Commercial rate of return</th>
<th>Rate of return of resources consumed</th>
</tr>
</thead>
<tbody>
<tr>
<td>Early Cucumbers</td>
<td>1,350</td>
<td>957,5</td>
<td>392,5</td>
<td>29,07</td>
<td>40,99</td>
</tr>
<tr>
<td>Autumn cauliflower</td>
<td>750</td>
<td>539,5</td>
<td>210,5</td>
<td>28,06</td>
<td>39,01</td>
</tr>
<tr>
<td>Tommates</td>
<td>1,400</td>
<td>655,5</td>
<td>744,5</td>
<td>53,17</td>
<td>113,57</td>
</tr>
</tbody>
</table>

Source: www.fermierul.ro Adrian Nitu George Ionita, Nastasa Belea, Eruța Iorga Nedita Gabriela, Claudia Mosoiu, John Martinof, cultivating organic vegetables - a profitable business
As a conclusion we can say that organic production, which is still at an early stage of development, can be a profitable opportunity for Romanian agriculture, while a solution to exit from the crisis of the Romanian farms as it represents comparative and competitive advantages in the following:

- Soils are fertile and productive;
- Chemisation and technologisation have not yet reached the levels of highly industrialized countries;
- Traditional agriculture is based on the use of clean technologies;
- Can become a field of employment in rural areas and increase the interest to live in this environment;
- National and global demand for organic products is increasing;
- Biodiversity;
- Methods of farming provides living conditions and natural development;
- Good Prices.

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