

THE ECOLOGICAL AGRICULTURE – A MODEL OF DURABLE AGRICULTURE

AGRICULTURA ECOLOGICĂ – UN MODEL DE AGRICULTURĂ DURABILĂ

ADAMOV TABITA CORNELIA*, IANCU T.*, NAGY ANDREA*, TOADER COSMINA-SIMONA*

* Faculty of Farm Management, Timișoara, România

In the context of the community agriculture politics orientation toward a natural agriculture, where the concept of ecological agriculture has a very well defined place, it is necessary to intensify the efforts to promote the ecological agriculture practices and to inform the farmers about the importance and the role of the ecological technologies and, last but not least, the economical advantages and also the advantages to improve the environment. The ecological agriculture (similar term for organic or biological agriculture) is a “modern” method to grow plants, to breed animals and to produce food, which is totally different from the conventional agriculture. The ecological agriculture contributes to the increase of the economical activities with a high added value and has a major contribution to increase the interest for the rural space. Romania has appropriate conditions to develop the ecological agriculture and, now when Romania joined the EU, this is an advantage. Another advantage could be that the ecological products can be valuated at higher prices, an average of 20 – 40% higher than the conventional products; the production costs are higher only for the animal production. The large surfaces which were not fertilized with chemical fertilizers in the last few years because of the lack of financial means, the productive soils and the possibility for delimitation of some ecological areas are only some of the Romania’s advantages for obtaining ecological products.

Key words: ecological agriculture, durable agriculture, rural space

Introduction

The ecological agriculture is a sector where Romania has great opportunities for development and represents a variable alternative for the future.

In Romania ecological agriculture is a dynamic sector, knowing in the last few years an ascendant evolution both for the vegetal and animal sector.

Even if the specialists estimated that about 25% of the Romania’s areas could be used to obtain ecological products, mainly pastures, very few European countries are practicing ecological agriculture on more than 5% of the areas.

Materials and Methods

The biological agriculture know, in the last years, a very important progress at international level, so that in 2006 the areas used for biological agriculture reached a level of 31 millions ha, with a remarkable development in Australia, 12.2 thousands of ha. At the opposite side there is North America and Africa.

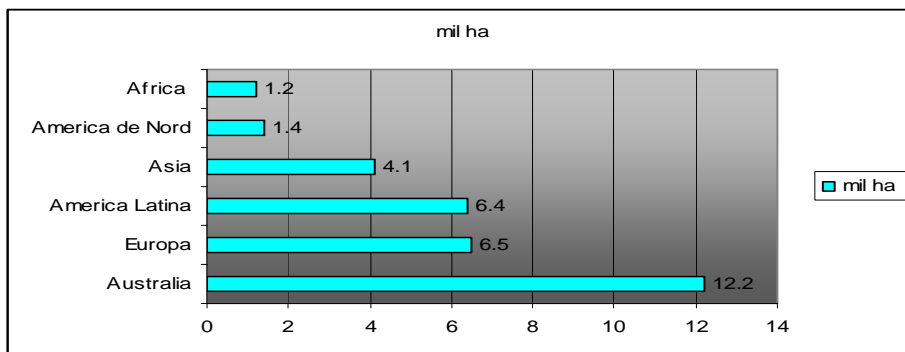


Figure 1: The areas for biological agriculture, at international level, 2006

In EU – 25 the organic agriculture represents 6.5 millions ha, meaning 2.9% of the used agricultural area, divided in 181.900 exploitations. There are some differences between the EU countries. So, Austria is the country with the largest areas used for ecological agriculture (13.6%) followed by Finland (7.3%), Sweden (6.8%) and Italy (6.2%). On the last places there are Ireland (0.7%), Portugal (0.5%) and Malta (0.1%).

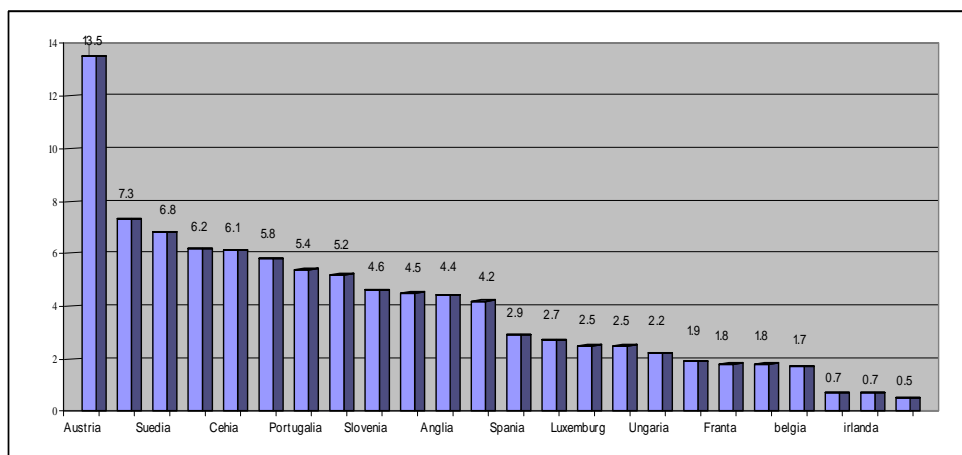


Figure 2: The percentage of the areas occupied with biological agriculture in EU - 25

In Romania the ecological area represents less than 1% of the total agricultural surface, but this value is increasing.

In Romania, the areas cultivated following the ecological method increased in the last five years from 17438 ha in 2000 to 1140400ha in 2005 and for 2006 the increase was estimated to 170000 ha. Also, it is estimated that the ecologically cultivated area will increase from 1.16% in 2006 to 1.7% in 2007, meaning 250000 ha and to 2.72% in 2010, meaning 400000 ha.

In Romania, the organic food consumption is lower than 1% and it is estimated that it will increase in the next five years only to 2%. This value can be explained by the price of these products (calculated to compensate the production losses against the conventional agriculture). Also, we must take into consideration that we have a developing organic agriculture and the “bio” stores are almost inexistent.

In 2005, from the ecologically cultivated areas we obtained 131898 tons of products, representing an increase of 51.3% compared to the production registered in 2004. For the animal sector, we registered an increase of the ecologically certified animal effectives, specially sheep and goats; the increase was 13 times higher compared to the effective registered in 2004.

Concerning the processed products, it was registered an increase for the milk and dairy products, but also the ecological honey production was doubled, meaning 610 tons in 2005 compared to 320 tons in 2004.

In the present time, Romania is present on the European markets with ecologically certified food products. Even if the organic agriculture is at the beginning in Romania, our country is among the first 20 exporters at international level. We export walnuts, forest fruits, mushrooms and cereals. In 2006, we exported 95% of the vegetal organic products and 20% of the animal origin products. The exportation of ecological products increased from 600 tons in 2000 to 7200 tons in 2006.

Results and Discussions

The ecological agriculture problems in Romania

1. Low level of the productivity

For the ecological agriculture, the productions for the area unit are lower compared to the conventional agricultural systems. The decrease of productivity is registered mainly in the conversion period from the conventional agriculture to the ecological agriculture, because it is necessary to have a period of time to re-establish the ecological balance of the agricultural ecosystem and afterwards the production levels will be stabilized.

2. The valuation price of the ecological agricultural products is greater than the price of the conventional products

The specific production techniques used in the ecological agriculture systems and the lower production level than in the conventional agriculture are some of the factors that make the production price of these products to be higher.

So, if in the developed countries these are accessible to almost every population category, in the developing countries, where the quantitative aspect of the nutrition is still important, only the consumers with financial possibilities above the average can afford this kind of products.

3. The necessity to support the ecological agriculture

Even in the developed countries where it has an important percentage, the ecological agriculture needed and still needs economical support (bonuses, tax exemption, etc.). Now-a-days, when these types of support for the ecological agriculture are eliminated for different reasons, we can notice that some farmers are getting back to the conventional agriculture system.

The necessity to support the ecological agriculture is more important in those countries where this type of agriculture is at the beginning.

4. The ecological products are often suspected to contain mycotoxins

As a result of a poor technology during the production process, but also during preservation and storage of agricultural products, concerning the diseases prevention, the consumers are in the situation to choose between the possibility of the micotoxins presence in the ecological products or the pesticide residues presence in the conventional products.

5. Lack of organoleptic characteristics (aspect, taste) for some agricultural products

There is the possibility that some ecological products, as a result of neutralization of chemical products used for preventing pests and diseases, of the growth regulators and of other chemical products, have a poor commercial aspect (for example: smaller fruits, with spots, etc), but this negative aspect is compensated by the nutritional and biological value of these products.

6. The presence of false ecological products on the market

Some traders are attracted by the high price and profit of the ecological products and they are selling conventional products as being ecological products.

7. The control and certification process must be improved

In order to trade ecological products on the market, they have to be controlled and verified by authorized laboratories. The agricultural producers must have easy access to these laboratories, both as time and space and financially. For example, the ecological products obtained in Romania are sent for verification to some laboratories from other countries, because such laboratories do not exist yet in our country.

8. The lack of research and extension systems for ecological agriculture

Even if there are some progresses concerning the research and the extension for the ecological agriculture, they are irrelevant compared to other similar activities from the conventional agriculture.

The support for the development of the ecological agriculture

Taking into consideration these opportunities that Romania has, but also the new tendencies of the community agricultural politics oriented to a “clean”

agriculture, the Ministry of Agriculture, Food and Forest, adopted the basic legislative and institutional framework, partially harmonized with the European Union regulations for this domain, necessary for the development of the controlled ecological agriculture in our country:

- ✓ Emergency Government decision no. 34/2000 concerning the ecological food products, valid from the 17th April 2000, approved by the Law no. 38 from the 7th March 2001.

- ✓ The Government decision no. 917 from the 13th September 2001, concerning the approval of the Methodological rules for the appliance of the provisions from the Emergency Government Decision no. 34/2000 concerning the ecological food products.

- ✓ The Order of the Ministry of Agriculture, Food and Forest no. 70/2002 concerning the organization of the “Commission for the development of ecological agriculture in Romania”.

- ✓ Order no. 317/190 from the 11th May 2006 to change and to complete the annex of the Order of Ministry of Agriculture, Food and Forest and of the president of the National Authority for the Consumer’s protection no. 417/110/2002 for the approval of the specific regulations concerning the labeling of the ecological food products.

- ✓ The Emergency decision no. 62 of the 6th September 2006, to change and to complete the Emergency Government Decision no. 34/2000 concerning the ecological food products.

- ✓ Law no. 513 from 29th December 2006 concerning the approval of the Emergency Government decision no. 62/2006 to change and complete the Emergency Government decision no. 34/2000 concerning the ecological food products

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- ✓ Order no. 688 from 09.08.2007 to approve the regulations concerning the organization of the inspection and certification system and to supervise the activity of the control organisms

These legislative documents establish the authority which is responsible for the ecological agriculture, the general rules and principles for ecological production, labeling, inspection and certification system, penalties for those who do not comply with these regulations.

Also, they establish the rules and principles for the ecological production, the list of the products approved to be used in ecological agriculture and the ingredients and methods of processing which can be used for the production of ecological food.

Conclusions

The ecological agriculture represents an agricultural model based on combining the advantages of the traditional agriculture with those of the biodynamic and organic agriculture prioritizing the agricultural production and the labor productivity, the attenuation of the impacts between the agriculture and environment and the decrease of the pressure on the non-regenerating resources used in the agricultural production process. The transition to an ecological agriculture needs, beside the adoption of larger vision on the entire food chain as part of the ecosphere, a series of technical, environmental, economical, institutional, socio-cultural changes.

Even if the ecological agriculture was recognized at European level since 1991 by the Regulation of the European Community Council no. 2092/1991 and for Romania is an alternative to the future of the Romanian agriculture and represents an alternative to penetrate on the western market with products obtained by using this type of agriculture, the Romanian farmers do not have enough information about this domain.

We consider that the young people from the Romanian villages, potential farmers, have to practice this type of agriculture because the products obtained by ecological means are high quality products and the plants growing and animal breeding in a pollution free environment and with pollution free fodder are the arguments which should be valued in order to insure the successful adaptation of Romania to the agricultural structures, even more when the Romanian Government issued the Emergency decision 108/2001 and the Law 166/2002 approved by the Parliament in 2002 defining the commercial agricultural exploitations and establishing their minimum dimensions and the small family exploitations which do not fit the established limits will have the Government support in order to develop ecological agricultural systems.

The agricultural strategies and politics and their implementation will increase the ecological agriculture contribution to the lasting agriculture development and, considering the traditions and the natural conditions of our country, Romania can become a leader in this type of agriculture.

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