

# THE PERSPECTIVES OF ORGANIC AGRICULTURE IN ROMANIA

## PERSPECTIVELE AGRICULTURII ORGANICE ÎN ROMÂNIA.

MUNTEANU N.<sup>1</sup>, STOLERU V.<sup>1</sup>, STAN T.<sup>1</sup>,  
STOLERU CARMEN-MARIA<sup>1</sup>, ALDESCU TEODORA<sup>2</sup>

<sup>1</sup>University of Agricultural Sciences and Veterinary Medicine Iasi,

<sup>2</sup>MAPDR

**Abstract.** *The roots of organic vegetable growing cannot be separated from those of organic agriculture in general. Organic agriculture (ecological, biological) had appeared as a reaction to the industrial agriculture, "intense uncontrolled" which had the following effects: the reduction of soil productivity caused by erosion; organic matters and nutrients loss; the pollution of surface water with sediments and chemical products that materialized later in a reduction of biological activity from soil, an increased resistance for chemical products used to control pests, pathogens and weeds; the useful flora and fauna destruction and the reduction of its biodiversity by using pesticides etc.*

**Rezumat.** *Rădăcinile legumiculturii organice nu pot fi separate de cele ale agriculturii organice în general. Agricultura organică (ecologică, biologică), a apărut ca o reacție la agricultura de tip industrial, "intensiv necontrolată", fapt care a determinat: reducerea productivității solului prin eroziune, pierderea substanței organice și a elementelor nutritive; poluarea apei de suprafață cu produse chimice și sedimente fapt ce s-a concretizat ulterior în reducerea activității biologice a solului; creșterea rezistenței la produsele chimice de combatere a dăunătorilor, agenților patogeni și buruienilor; distrugerea florei și faunei utile și reducerea biodiversității acestora prin utilizarea pesticidelor etc.*

The term of "ecological agriculture" do not mean strictly "ecological", but a generous form of agriculture that combines the principles and techniques of biodynamic, organic, biological agriculture (Munteanu, 1999). So, an obligatory dimension of biological agriculture in the presented context is its ecological characteristic that consolidates or establishes the agricultural ecosystem reconstruction and maintenance quality. In fact, the measures for ecological protection ensure the system sustainability – a major goal of ecological agriculture (Toncea, 2002).

## THE ORGANIC AGRICULTURE EVOLUTION

Undoubtedly, the organic/ecological/biological agriculture is now one of the most dynamic agricultural systems, especially in Europe (Stoian, 1999).

At the end of 2005, the areas used for ecological agriculture in the world were about 52 millions hectares, while in Europe were 6,5 million hectares (with 20% higher than in 2004). A situation of ecological agriculture is presented in *Table 1*.

The market for organic products in Europe had developed based on ecological food consumption consistency and field cultivation with the view of obtaining ecological products.

In Europe, in 2005 the organic marketing explosion amounted to 8 billion pounds. The main reasons for this development were the interest for health and environment protection and social and economical benefits.

*Table 1*

**The situation of ecological agriculture in Europe (FIBL, 2006)**

| Country            | Year | Area<br>(hectares)  | % of total<br>area | Number of<br>organic farms |
|--------------------|------|---------------------|--------------------|----------------------------|
| Albania            | 2004 | 803.95              | 0.07               | 57                         |
| Austria            | 2004 | 344,916.00          | 13.53              | 19,826                     |
| Belgium            | 2004 | 23,728.00           | 1.70               | 712                        |
| Bosnia/Herzegovina | 2004 | 310.00              | 0.01               | 122                        |
| Bulgaria           | 2004 | 12,284.00           | 0.23               | 351                        |
| Croatia            | 2005 | 7,355.00            | 0.23               | 265                        |
| Cyprus             | 2005 | 1,017.96            | 0.71               | 225                        |
| Czech Republic     | 2004 | 260,120.00          | 6.09               | 836                        |
| Denmark            | 2004 | 154,921.00          | 5.76               | 3,166                      |
| Estonia            | 2004 | 46,016.00           | 5.17               | 810                        |
| Finland            | 2004 | 162,024.00          | 7.31               | 4,887                      |
| France             | 2004 | 534,037.00          | 1.80               | 11,059                     |
| Germany            | 2004 | 767,891.00          | 4.52               | 16,603                     |
| Great Britain      | 2005 | 690,270.00          | 4.39               | 4,010                      |
| Greece             | 2004 | 249,488.0           | 2.72               | 8,269                      |
| Hungary            | 2004 | 128,690.02          | 2.19               | 1,583                      |
| Iceland            | 2004 | 4,910.00            | 0.22               | 25                         |
| Ireland            | 2004 | 30,670.00           | 0.70               | 897                        |
| Italy              | 2004 | 954,361.00          | 6.22               | 36,639                     |
| Latvia             | 2005 | 43,901.99           | 1.77               | 1,043                      |
| Liechtenstein      | 2004 | 984.00              | 26.40              | 42                         |
| Lithuania          | 2005 | 64,545.00           | 1.86               | 1,811                      |
| Luxembourg         | 2004 | 3,158.03            | 2.49               | 66                         |
| Macedonia          | 2005 | 192.46              | 0.02               | 50                         |
| Malta              | 2004 | 13.00               | 0.13               | 20                         |
| Moldova            | 2005 | 11,075.00           | 0.44               | 121                        |
| Norway             | 2004 | 41,035.00           | 3.95               | 2,484                      |
| Poland             | 2004 | 82,730.00           | 0.49               | 3,760                      |
| Portugal           | 2004 | 206,524.00          | 5.42               | 1,302                      |
| Romania            | 2004 | 75,000.00           | 0.51               | 1,200                      |
| Serbia/Montenegro  | 2004 | 20,541.52           | 0.37               | 3,000                      |
| Slovakia           | 2005 | 93,943.00           | 4.19               | 218                        |
| Slovenia           | 2004 | 23,032.00           | 4.55               | 1,568                      |
| Spain              | 2004 | 733,182.37          | 2.87               | 16,013                     |
| Sweden             | 2005 | 206,579.00          | 6.80               | 3,138                      |
| Switzerland        | 2004 | 121,387.00          | 11.33              | 6,373                      |
| The Netherlands    | 2004 | 48,152.00           | 2.49               | 1,469                      |
| Turkey             | 2004 | 108,597.00          | 0.26               | 12,806                     |
| Ukraine            | 2005 | 241,980.00          | 0.58               | 72                         |
| <b>TOTAL</b>       |      | <b>6,500,365.30</b> | <b>2.21</b>        | <b>166,898</b>             |
| <b>U.E.</b>        |      | <b>5,853,910.37</b> | <b>3.42</b>        | <b>139,930</b>             |

In Romania, the introduction of Government Urgent Injunction 34/17.04.2000 and the establishment of National Authority for Ecological Products (NAEP) represented concrete steps that had made ecological agriculture more dynamic.

Now, Romania has an adequate law system for obtaining (in optimal conditions) Bio products:

- Urgent Injunction of Government 34/17.04.2000 modified and completed with Urgent Injunction of Government 62/06.09.2006 regarding ecological agroalimentary products;
- The Government Decision 917/2001 regarding application norms of U.I. 34/2000;
- The Minister Disposition 417/110/2002 modified by Disposition 317/190 from 28 June 2006 regarding ecological agroalimentary labelling and the use of mark "ae";
- The Minister Disposition 153/2003 regarding import/export rules for ecological agroalimentary products;
- The Minister Disposition 527/2003 regarding the inspection and certification of ecological agroalimentary products;
- The Minister Disposition 20/2006 regarding the support for ecological vegetal production.

Table 2

**The evolution of certified areas in ecological agriculture from Romania**

| Specifications                | MU | Accomplished |        |        |        |         | Estimated |
|-------------------------------|----|--------------|--------|--------|--------|---------|-----------|
|                               |    | 2001         | 2002   | 2003   | 2004   | 2005    | 2006      |
| Total area from which:        | Ha | 28,800       | 43,850 | 57,200 | 73,800 | 110,400 | 170,000   |
| Cereals                       | Ha | 8,000        | 12,000 | 16,000 | 20,500 | 22,100  | 34,000    |
| Fodder crops and meadows      | Ha | 14,000       | 20,000 | 24,000 | 31,300 | 42,300  | 50,100    |
| Oleaginous and proteic plants | Ha | 6,300        | 10,000 | 15,600 | 20,100 | 22,614  | 51,000    |
| Vegetables                    | Ha | 100          | 700    | 200    | 300    | 440     | 560       |
| Fruits                        | Ha | 0            | 50     | 100    | 200    | 432     | 540       |
| Forest fruits                 | Ha | 100          | 300    | 400    | 500    | 17,630  | 26,000    |
| Other crops                   | Ha | 300          | 800    | 900    | 900    | 4,884   | 7,800     |

Source: MAPDR

Table 3

**The evolution of ecological certified vegetal yield**

| Specifications                | MU | Accomplished |        |        |        |         |
|-------------------------------|----|--------------|--------|--------|--------|---------|
|                               |    | 2001         | 2002   | 2003   | 2004   | 2005    |
| Total area from which:        | to | 24,400       | 32,300 | 30,400 | 55,590 | 131,898 |
| Cereals                       | to | 12,500       | 15,000 | 14,400 | 30,500 | 55,000  |
| Oleaginous and proteic plants | to | 7,200        | 11,000 | 12,480 | 37,000 | 45,600  |
| Vegetables                    | to | 4,000        | 7,000  | 2,000  | 3,000  | 7,200   |
| Fruits                        | to | 0            | 200    | 300    | 800    | 1,000   |
| Forest fruits                 | to | 400          | 300    | 320    | 4,500  | 16,748  |
| Other crops                   | to | 300          | 800    | 900    | 1,200  | 6,350   |

Source: MAPDR

Referring to the destination of ecological products obtained in Romania, it may say that in 2006 almost 38% of vegetal yield was exported while 62% was distributed on intern market.

Recent studies of Romanian Academy, quoted by BBW, estimates that in Romania every year will be sold ecological agroalimentary products to the sum of almost 2 millions euro (almost 1 % of total agroalimentary market).

The actions for promoting the ecological agriculture concept in Romania will be accomplished through consultancy and extension, training and education, research/funds reception from sectorial projects (OM 662/2006).

The opportunities for ecological agriculture development in Romania are determined by:

- productive and fertile soils;
- chemicalization and technology had not reached the level from the industrialized countries;
- the traditional romanian agriculture is based on "clean" technologies;
- there is the possibility for determining ecological areas, unpolluted where it could be applied the practices for ecological agriculture;
- the ecological agriculture may become an important source for rural workforce;
- comparative and competitive advantage with conventional production.

## CONCLUSIONS

The national development plan for ecological agriculture from 2007 to 2010 has two major objectives which are determined by quality and quantity.

The qualitative objective is based on ecological agriculture placement in the centre of romanian agriculture as a motor of durable agriculture justified through:

- economical viability in creating a market with an important potential for development;
- the guarantee of production process and in according with environment practices;
- the sale of products at prices with 20 to 60 percent higher than conventional products;
- professional trainings for young people with low investments capacities.

Quantitative objective is influenced by areas increase in ecological agriculture, as following:

- 2007 → 250.000 ha (1.70% of agricultural areas);
- 2010 → 400.000 ha (2.72% of agricultural areas).

## REFERENCES

1. Munteanu N., Rominger O. 2001 - *Organic farming an increasing opportunity for Romanian farmers*. Lucr. științifice UȘAMV Iași, seria Horticultură, vol. 44;
2. Stoian Lucian 1999 – *Agricultura biologică – tendințe europene*. Hortinform 12-98;
3. Toncea I. 1994 – *Ghid practic pentru agricultură ecologică*. Editura Academic Press, Cluj-Napoca;
4. \*\*\* - *The world of Organic Agriculture Statistics and Emerging Trends*. IFOAM and Fibl, ISBN 3-934 055-61.3;
5. [www.mapam.ro](http://www.mapam.ro) 2007 - *Ministerul Agriculturii și Dezvoltării Rurale*.