

## THE STAGE OF ROMANIAN AGRICULTURE IN THE CONTEXT OF ROMANIAN'S NEW STATUS AS THE MEMBER OF THE EUROPEAN UNION

**Manuela Rozalia GABOR**

Universitatea "Petru Maior", Tg. Mureș

e-mail: rozalia\_gabor@yahoo.com

*Romania, with its new status as a Member State of the European Union will be able to access, its specific financing forms, beginning with 1 January 2007. Agriculture is one of the economic branches whose financing requirement is stringent as this sector though it has interest (and with tradition across Europe) for Romanian economy, it has not received political and economic actions in order to really sustain its development. The agricultural sector may provide Romania a real competitive advantage across Europe, Romania being alongside countries as France, Germany, one of the countries with a high agricultural potential.*

*At present, Romanian agriculture has certain characteristics related to: real absorption capability of structural funds of this sector, work force in agriculture is aged, arable in operation is structured in a very high number of small farms, infrastructure and outfit with farm equipment is minimum directly resulting a low productivity of this sector, livestock's, production of main produce per capita as well as most vegetal production have a downward trend in 1990 - 2005, lack of Romanian produce competitiveness internationally, lack of a coherent national agricultural policy etc.*

*The paper suggests a short analysis concerning the development of the main indicators related to agricultural sector in Romania in 1990 - 2006 and identified the general trends, which characterize this sector at the moment of Romania adhesion to the European Union.*

**Keywords:** Romania, agriculture, indicators, analysis, trends, European Union.

The structural problems of Romanian agriculture are difficult to solve. Apart most states that became members in 2004, in Romania, structural gaps in agriculture are higher, complicated adjustments being necessary. Excessive fragmentation of agricultural property is one of the main drawbacks. EU has no direct competencies for this issue but it may act indirectly by certain rural development actions or by setting the support criteria related to farmers' income.

### MATERIAL AND METHOD

To analyze the economic indicators that characterize agriculture, statistical data related to 1990 - 2005 and published in Statistical Directories of Romania in 2005 and 2006, in the "Structural survey in agriculture - 2005" carried out by the National Institute

of Statistics in Romania as well as in reports of the European Institute of Romania concerning the Common Agricultural Policy has been used.

Through data analysis, analysis, characterization and identification of the general trends that characterize agriculture in Romania in 1990 - 2005 were followed, the general development and trend of *the main produce per capita, livestock and animal production* respectively. Of statistical methods concerning trend determination (simple or analytical) of a chronological series, analytical methods have been chosen, using the adjustment linear mathematical function, thanks to the advantage of getting a more accurate estimation compared to the simple methods of trend determination, function given by the following formula:

$$y_t = a + bt$$

In order to estimate parameters *a* and *b* of the linear regression function (thanks to its quality) *the least-squares method* has been used, where exogenous variable is given by the time “t” variable. To solve the equation system obtained through the least-squares method, it was started from the requirements  $\sum t = 0$  and  $\min \sum (Y_t - \hat{Y}_t)^2$ .

The system of equations used to calculate the linear function parameters is given by:

$$\begin{cases} na = \sum Y_t \\ b \sum t^2 = \sum Y_t \cdot t \end{cases}$$

General trends were represented graphically for each surveyed economic indicator. Also for an objective characterization of Romanian agriculture, aspects related to the structure of 55-64 year old population employed in agriculture were analyzed and represented graphically compared to other sectors in Romanian economy, agricultural exploitations in 2005 as well as structure of employed population divided on main activities of the national economy.

## RESULTS AND DISCUSSIONS

An important structural issue of agriculture is the high number of subsistence and semisubsistence farms, Romanian authorities should carry out a restructuring scheme of the semisubsistence farms based on efficiency principles. Weight of farms with an area up to 5 hectares (in line with the statistics supplied by the *Structural Survey in Agriculture in 2005* by the National Institute of Statistics and Economic Studies in Romania) being 66.25 % of total number of farms in Romania (figure no.1) and those with a size of over 30 hectares represent only 0.28 % of total, many Romanian farmers carry out a subsistence agriculture, exploiting narrow stripes without reaching a significant production. Moreover, many results of these farms' agricultural activity are dedicated to self-consumption.

Another problem of Romanian agriculture is the high number of old farmers (figure 2) as well as the high weight of farmers in total active population (figure 3).

Of the population with age ranged between 55 and 64 years, the highest weight of population i.e. 59.79 % respectively work in agriculture, 12.07 % work in industrial sector and only 28.14 % in service sector.

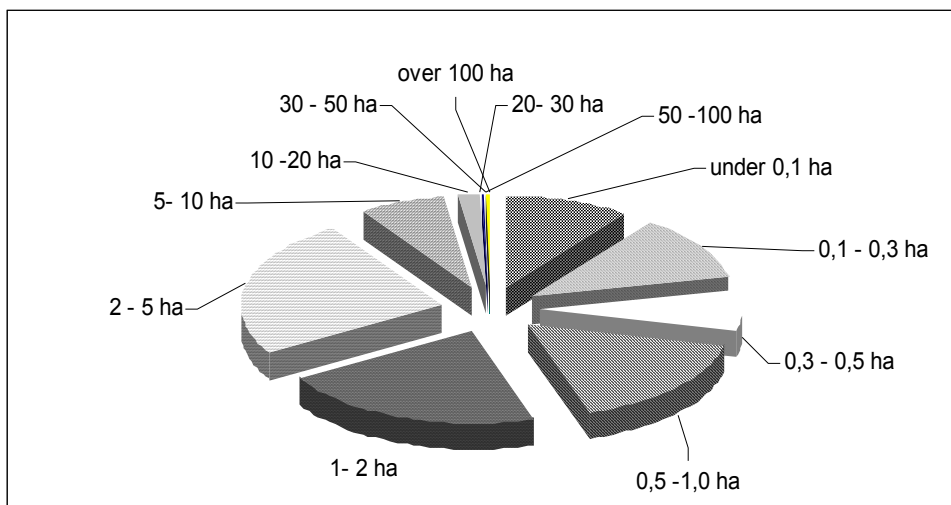


Figure 1. Agricultural exploitations divided on size classes of agricultural area in 2005

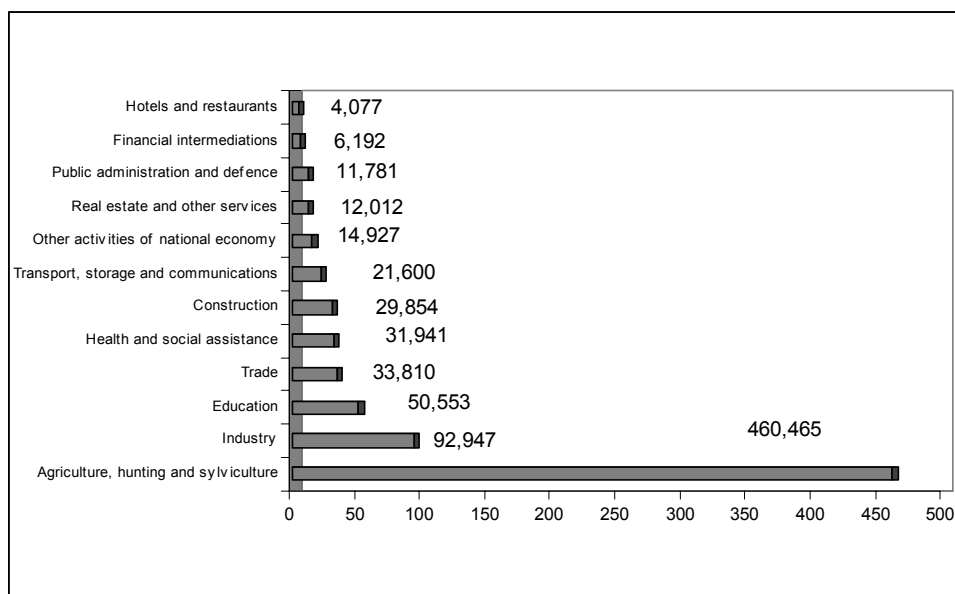


Figure 2. Employment structures for the 55 - 64 years age groups, by activity for national economy

As regards the structure of population active in the main activities of the national economy in 2005 in Romania, it was illustrated in figure no. 3, the development of active population in agriculture having a downward trend in 2000 - 2005, from 41.4 % to 31.9 % showing a drop of only 10 % in five years, however, this sector has a high share in the entire national economy. This issue is directly

reflected in the decrease of production weight in GDP, the direct effect of this correlation being the drop of production efficiency.

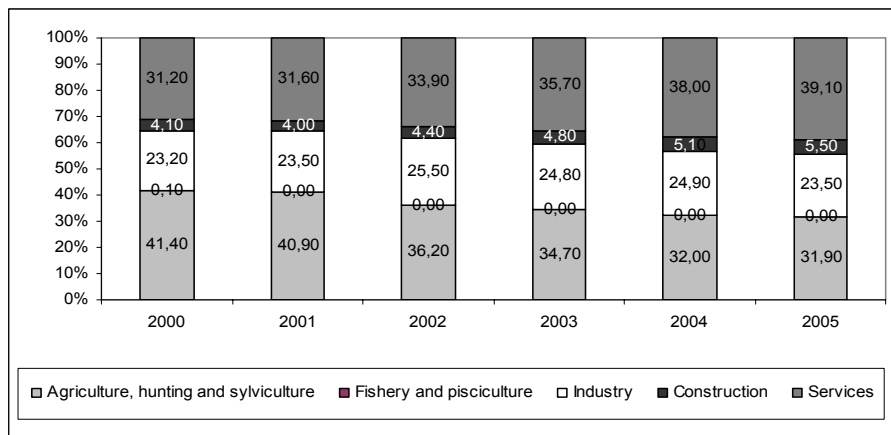


Figure 3. Civil employment, by main activity of national economy

After 1990, Romania's agriculture was not perceived favorably. Agriculture was an *ineffective activity* or hardly effective, avoided by investors, however, an attractive issue for a significant weight of population. It has played and is still playing an important social role, representing a "safety net" for people who cannot find a job or who cannot get convenient salaries in other sectors of economy.

In this regard, for community agriculture, EU suggests the application of an early retiring scheme, that may guarantee a total income up to EUR 150,000 /farmer (in equal installments for ten years). In their turn, Romanian authorities will have to apply this scheme that will suppose that older farmers (minimum 55 years) will stop all agricultural activities definitively, and land use will be transferred to other younger farmers that should prove they are able to improve exploitation viability.

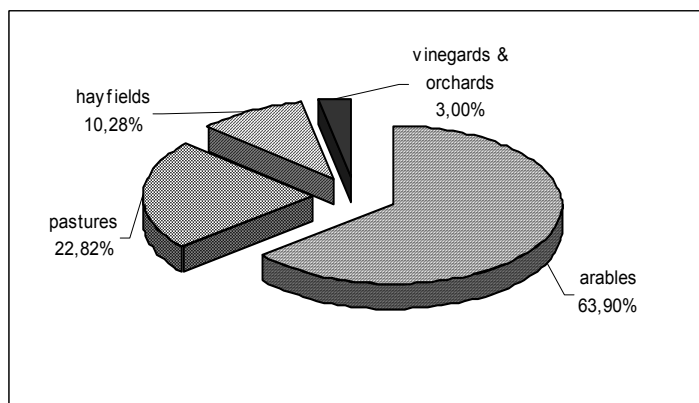


Figure 4. Agricultural area, by use, in 2005 (end of year)

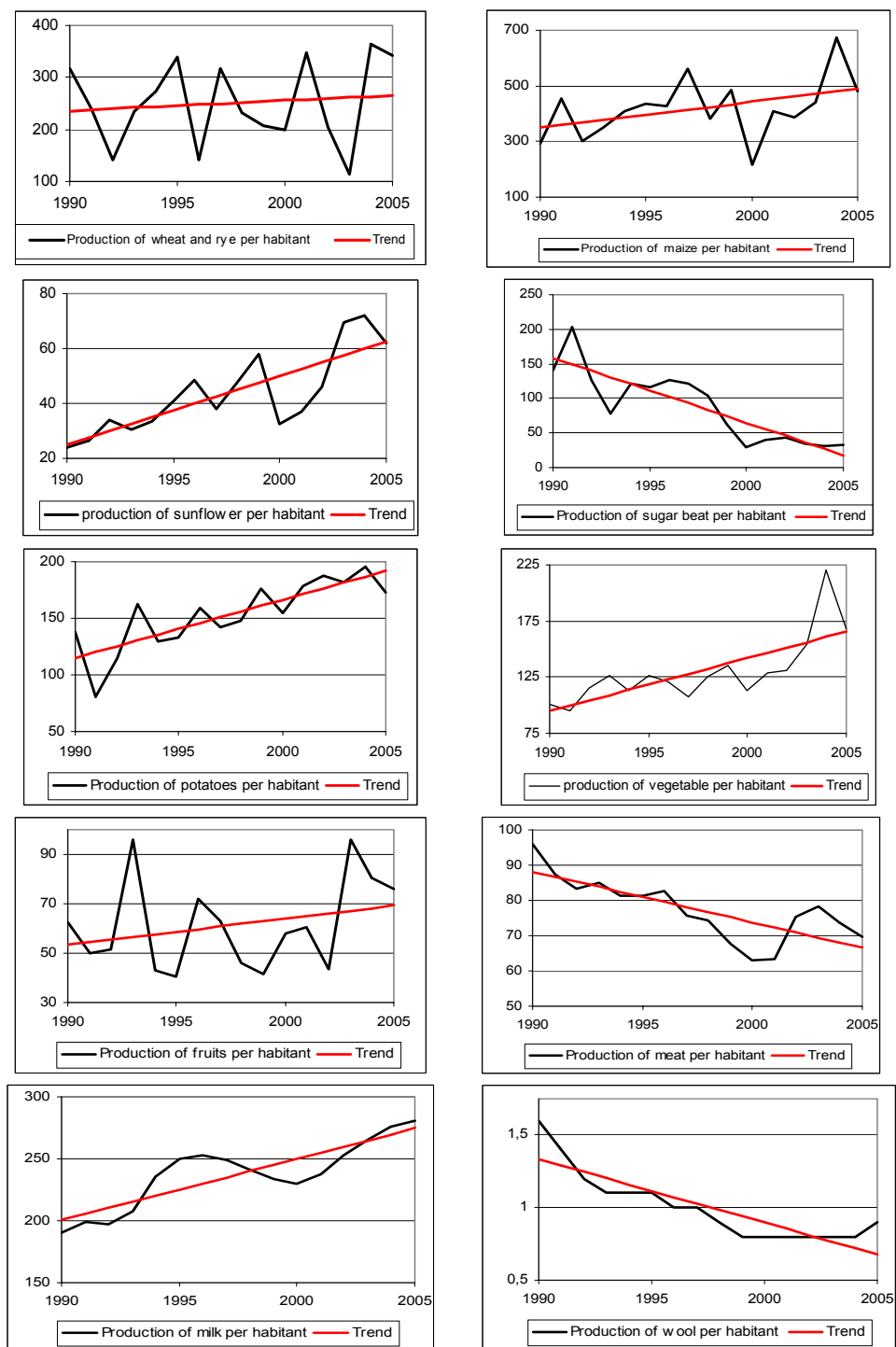
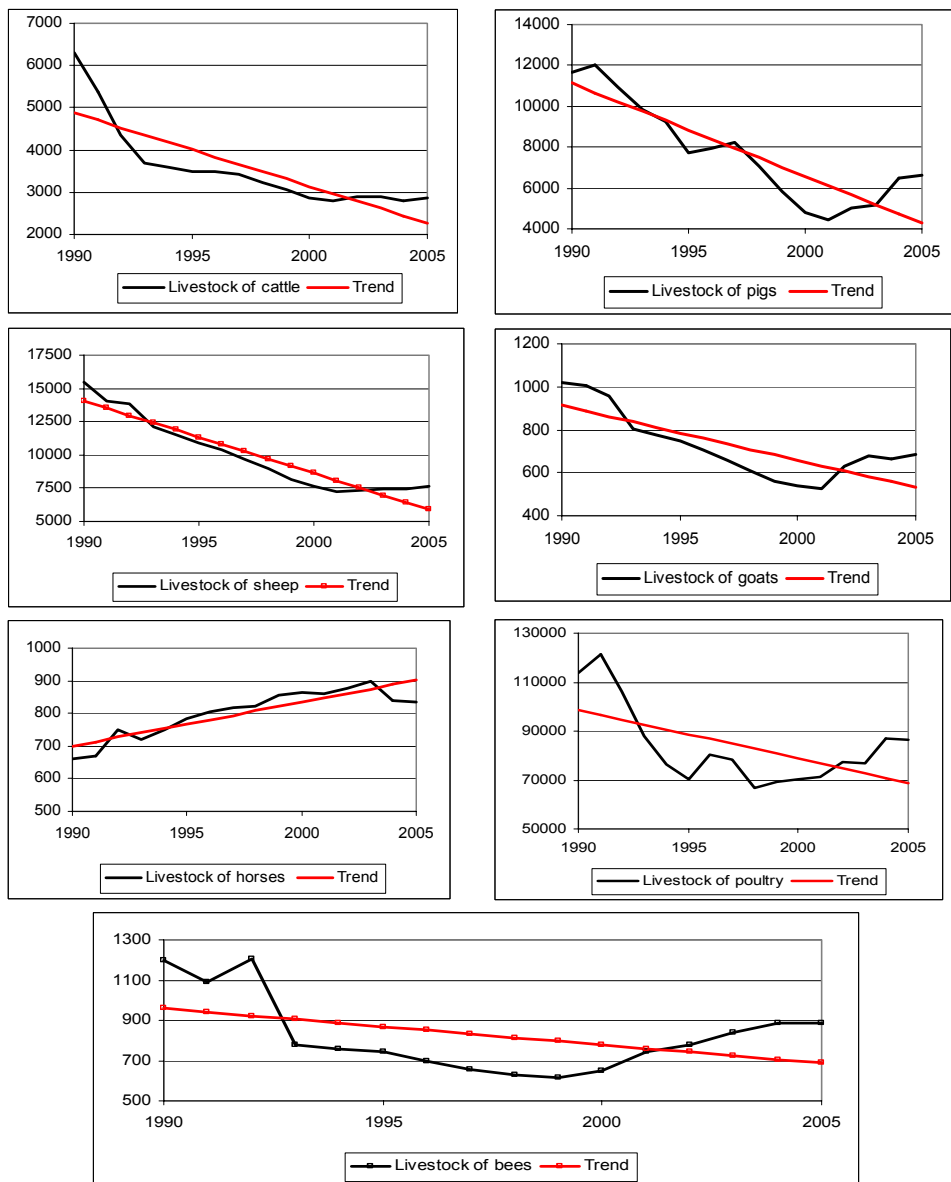


Figure 5. The evolutions and the trend of the main produce per capita in 1990 - 2005



**Figure 6. The evolutions and the trend of the livestock in 1990 - 2005**

As regards the Common Agricultural Policy, arable cultures include a wide diversity of important annual crops, such as: wheat, barley, maize, rye, sunflower, pea etc. They have the highest weight in the cost budget of the EU and Romanian agriculture could utterly benefit by these finances. At the end of 2005, the agricultural area divided on types of use was in line with figure 4, the main weight being covered by arable - 63.9 %, followed by pastures - 22.82 %, meadows - 10.28 % and only 3 % of agricultural area is covered by vineyards and orchards.

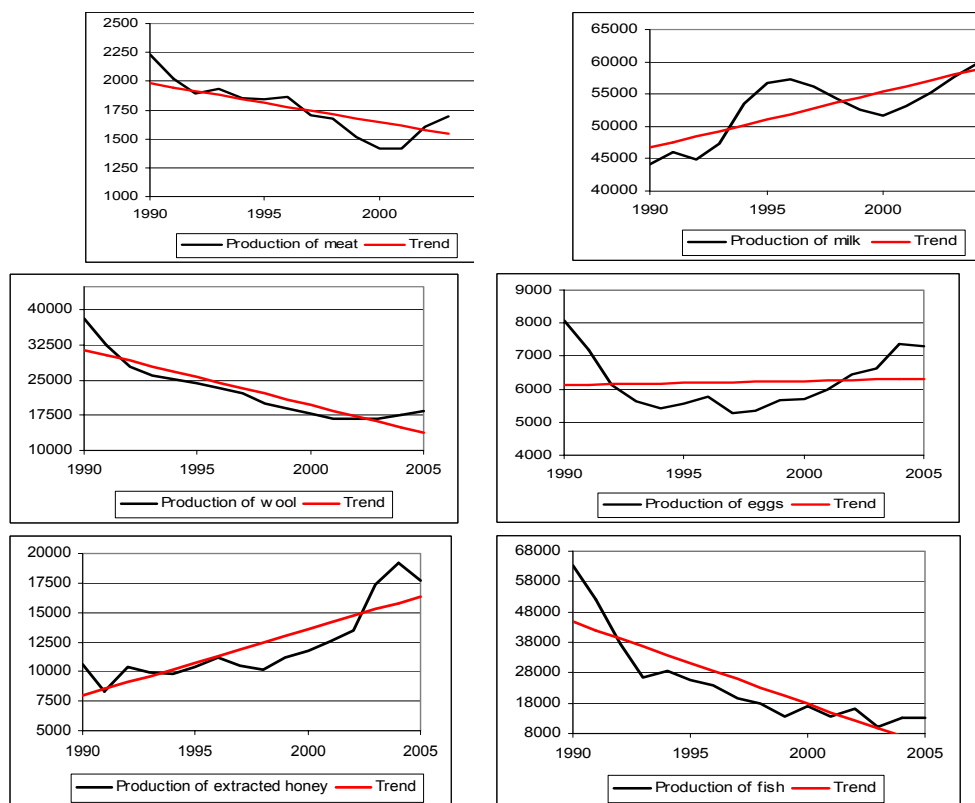


Figure 7. The evolutions and the trend of the animal production in 1990 - 2005

For a better illustration of the main indicator development of Romania's agriculture trends recorded by productions of main vegetal products and animals (figure 5) as well as the trends in livestock development in 1990 – 2005 will be described below (figure 6).

It's present in figure 5 production development related to the main produce per capita in Romania in 1990 – 2005, wheat and rye, maize, sunflower, sugar beet, potatoes, vegetables, fruit, meat, wool and eggs respectively, whose trend is upward for most products without being accompanied by a significant rise of agricultural production.

Following data analysis, it is noticed that, on the whole, production of the main produce per capita shows an upward trend except sugar, meat and wool products whose tendency was downward in 1990 - 2005, mostly due to imports (for meat).

As regards grain production, Romania has a well-known tradition in Europe for this product. In Braila, in 1883, the Grain Exchange ran even after the Second World War. It ran according to international standards, Romania being at that time, after Russia and the U.S.A., the third grain exporter in the world and at the beginning of the XXth century, grain production was supplying the Romanian State

with more than two thirds of the social income and represented 83 % of the country's total export. In the same period, Romanian wheat was requested for its nutritive content recognized worldwide.

The trend recorded in 1990 – 2005 is important to analyse as it relates to livestock development (figure 6).

Following the analysis of trends concerning livestock development in Romania's agriculture in 1990 - 2005 it results that, apart horse livestock, all the other livestock's indicate a downward trend in 15 years, but it should be mentioned the downward trend of horse livestock is not due to this sector development but to the fact that, Romanian farmers use primitive means of agricultural land exploitation ("traditional").

With an area of nearly two thirds of total arable, pastures, meadows, Romania has the necessary conditions to develop the zootechnical sector, but this sector under development is caused on the one hand by non-subsidizing this sector by the Romanian state and on the other hand, the Romanian farmers had no access to loans for the development of agricultural activities.

The last indicators reviewed, agricultural and animal productions respectively, in 1990 - 2005, show the same downward trend with minor exceptions (figure 7).

The analysis of the current agriculture situation in Romania indicates the need of accelerating the restructuring and modernization processes in agriculture, rural development and fishing, taking into account their economic and social importance to ensure an integrated and sustainable development of rural space.

## CONCLUSIONS

Romania is the second major agricultural producer in Central and Eastern Europe, after Poland. It has the advantage of having a significant agricultural area, 14.8 million hectares respectively. Both soil and climate in Romania fosters an efficient agricultural exploitation. As Romanian farmers will benefit by a similar community support, our country may show major advantages compared to EU for a number of produce. However, in the short term, a significant restriction for Romanian agriculture in competition with community farmers is the significant technological gap, that can be recovered only by capital investments.

However, a positive effect of the major lack of real and moneyed capital in Romanian agriculture was represented by the development potential of environmentally friendly agriculture share (*organic farming*), thus meeting the trends recorded in the EU. However, in this regard, Romania did not exploit its advantage fully. Although ecological produce is made in the country, they have not been certified nationally for a long time, being exported under foreign certification.

Another potential advantage of Romania, starting from the traditional and non-intensive methods used, is maintaining the rural landscape and traditional character in many areas, and this may be of help to rural development, especially through rural tourism.



## REFERENCES

1. Biji E. M. (coord.), 1998 - *Statistica managerială a agentului economic din agricultură*, Ed. Ceres, București.
2. Ciucă D., Hurduzeu Gh., Rusu M., Sălășan C., 2004 - *Study no. 6 - The agricultural sector in the perspective of Romania's accession to the European Union: implication upon the system of payments*, European Institute of Romania, București.
3. Gabor M. R., Niță M.C., 2007 - *Structural Funds, Agriculture and Marketing. Quantitative Aspects and Characteristics of the Agricultural Sector in Romania*, 6<sup>th</sup> International Symposium "Economy & Business 2007", Bulgaria.
4. Isaic Maniu Al., Mitruț C., Voineagu V., 1995 - *Statistica pentru managementul afacerilor*, Ed. Economică, București.
5. \*\*\*, 2005 - *Anuarul statistic al României*, Institutul Național de Statistică, București.
6. \*\*\*, 2006 - *Anuarul statistic al României*, Institutul Național de Statistică, București.
7. \*\*\*, 2005 - *Ancheta structurală în agricultură*, Institutul Național de Statistică, București.
8. \*\*\*, 2005 - *Economia mondială în cifre*, Institutul Național de Statistică, București.
9. \*\*\*, 2005 - *România în cifre*, Institutul Național de Statistică, București.