

## EFFECTS GENERATED BY THE ACCESSION TO THE EUROPEAN UNION IN THE FIELD OF TRADING CEREAL PRODUCTS

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### Abstract

*The European consumer exigencies, the mechanisms of the Common Agricultural Policy, the European norms and standards, the ecological productions are as many challenges to which the producers, processors, traders and decision makers in the agro food field, and specifically for our research, in the cereals field, must face in order for the Romanian products to be present on an external market, as well as on an internal market that are increasingly competitive. In this paper we have concluded a brief analysis of the cereals market nationally and on a European level, and of the common support policies in this sector, of the common market organizations, as well as of the implications of the accession over the trade of cereal products. Also, we have made several recommendations within this paper targeting the specific sectorial aspects of the cereals sector: in order to fully profit from the possibilities offered by the Common Agricultural Policy instruments and from the demand and prices growth its necessary that Romanian producers organize and make, together, major investments in cereals conditioning and storage systems; the majority of Romanian producers sell the cereals immediately after harvest, when prices are at their lowest level; storage in good conditions of the harvest could allow a substantial increase of profit.*

**Key words:** CAP, cereal market, competitiveness, trading

### INTRODUCTION

Cereals occupy an important place in the structure of agricultural crops. In Romania, the structure of the agricultural production is dominated by the cultivation of grains cereals, percentage that has increased after 1990 compared to the '80 situation. In order to analyse the offer on the cereal market we shall first study the cultivated surfaces and the cereal productions. [1] The causes that have determined sudden movements over the years on the cereal production in Romania have been the increase or decrease of the cultivated surfaces and of the output.

### MATERIAL AND METHOD

The methodological basis of the carried out investigation consists in the universal method of studying of the material, phenomena, processes as well as dialectical method, and its components analysis, synthesis, induction, deduction.

### RESULTS AND DISCUSSIONS

In Table 1 we have emphasized data referring to the surface cultivated with cereals in

Romania. Generally, the cereal production is correlated with the seeded surface, though; sometimes there are paradoxes, where even if the cultivated surface is larger, the production is lower. From year to year, farmers and agriculture specialists are confronted with various problems, and find themselves most of the times in the impossibility of facing some difficult situations that might appear. Explanations are multiple: either these are related to weather aspects (repeated floods or prolonged droughts; high or very low temperatures), or the occurrence of different diseases and pests. [9]

Performing an analysis on the **cereal production** level, we found that despite the potential, the cereal production in Romania does not represent more than 5% of the community production. Nevertheless, lately Romania has been among the first five cereal exporters in the EU, thus demonstrating the potential of the Romanian sector of cereal production.

From the point of view of the cereal cultivated surface, with 5.2 million hectares in 2009, Romania occupies the fifth place, and as to the

production levels the sixth place among the producer member states of the European Union.

Table 1. Surface cultivated with the main crops in Romania

Years	Total	Wheat and rye (thousands hectares)	Other cereals
2001	5655	1954	3700
2002	6294	2558	3736
2003	6038	2309	3728
2004	5987	2295	3692
2005	6021	2476	3545
2006	5987	2012	3975
2007	5023	1975	3947

Source: National Institute of Statistics

The comparison on productivity shows yet another picture, unfriendly to our country. Therefore, the production of approximately 14.8 million tonnes attained in Romania in 2009, is comparable to the one of Hungary, of 13.57 million tonnes, but which was attained with a surface of only 2.88 million hectares, nearly half of the one cultivated by the Romanian producers.

The comparison is even more disadvantageous if the situation of Romania is considered in relation to France, which from a surface of 9.38 million hectares, attained a production of 69.86 million tonnes, therefore an average productivity of 7.4 tonnes/ha, compared to 2.8 tonnes/hectare in Romania.

What is more striking in the case of Romanian cereal production compared to any other member state is the very significant variation of the harvest from one year to another.

Therefore, in the analysed years the production on Romania has varied from 7.78 to 24.39 million tonnes, meaning more than 213%. During the same period the cereal harvest in the EU has varied from 258.8 million tonnes to 321.8 million tonnes, thus a fluctuation of only 24%.

There are multiple causes, from the agricultural structures situation, to the inputs quality, to the organization of the chain, greater dependence on the climate factors (these being much stronger in Romania) etc.

Of course, a central role in the weak performance in Romania is played also by the additional services, such as those of assistance/advisory in agriculture, or facilities for storage and conditioning of the production, that do not allow the attainment of superior

profits with favourable effects over the production. [8]

As to the wheat production, Romania occupies the fourth place for the cultivated production and fifth place for the attained production, obtaining 5.2 million tonnes in 2009.

This production is even lower than the one from Denmark, of 5.94 million tonnes, but which is attained from a surface of only 0.73 million hectares, almost three times lower than the one cultivated in Romania (2.14 million tonnes).

The highest productivity in wheat goes to Germany, with almost 8 tonnes per hectare, compared to an average of only 2.4 tonnes per hectare in Romania.

These numbers indicate clearly an enormous discrepancy between the average values attained in Romania and those from the other member states of the EU. The causes are the same as the ones mentioned for the cereal sector.

The situation is somehow better if only the performances recorded by the trading farms in Romania are analysed, thus obtaining a general average production that exceeds 5 tonnes per hectare.

Such a differentiation, between the production attained by trading farms and the other farms, indicates though the enormous gap that persists for the small farms in Romania, that yet work approximately 55% of the arable land and do not succeed to attain an efficiency that would allow them to develop profitable agricultural activities.[2]

That is why we believe that on the medium term small farms won't be able to face the competition on the European market, and that will lead for sure to the aggregation of the arable land, but much too slow, if there are no acceleration measures taken for the process.

Until then, Romania will continue to record average values that puts it, from the efficiency point of view, among the last places between the EU member states and that doesn't allow it to profit from the potential it has.

The average production per hectare has also been inferior for most analysed crops: wheat, barley, oat, maize, sunflower, soybean, rapeseed, sugar beet, potatoes, tomatoes,

cabbage, carrots, dried onions, peppers, watermelons etc.

Therefore, from table no. 1 analysis it results that, with the exception of 2007, when the climate conditions have especially affected the agricultural production, the Romanian agriculture situation has improved, and peaked in 2008.

This is a normal conclusion if the much bigger subsidies granted to this sector during the post-accession period compared to the pre-accession period are considered.

The highest value of production (over 66 billion lei) for all the analysed years has been recorded in 2008, but this has also been due to the fact that the previous year production was weak, determining an unbalance between offer and demand, having the result of an artificial rise in prices.[3]

From the point of view of the agricultural production structure it cannot be concluded that the accession has brought positive visible changes, variations of the production value in the plant and animal sectors being caused to a larger extent by the climate conditions or due to the circumstances.

As regards to the production per hectare it cannot be stated that during the first three years after accession the application of CAP had any influence, Romania continuing to record some of the lowest average productivities of all the member states of the EU (Table 2, Fig. 1, 2, 3, 4).

Of course, the situation is caused by the large number of farms having reduced sizes that are not capable to record performances comparative to the trading farms. It's possible though, that the system of data collection in agriculture is not appropriate and that the data transmitted does not fully reflect reality.

As a consequence, even if the performances of the trading farms have increased after the accession, the overall amounts received having a greater influence for larger farms, in reality this cannot significantly reveal in the overall figures of all producers, being encumbered with the low performances of small farms.

During the latest period the cereal market has known important mutations, among which thereof appearing at **prices record level**.

Table 2. The evolution of average production per hectare for the main crops ( kg/ha)

Specification	2004	2005	2006	2007	2008	2009
Wheat	3403	2965	2746	1541	3403	2421
Rye	2511	2371	2072	1702	2416	2124
Barley and row barley	3312	2227	2331	1461	3069	2284
Oat	2154	1757	1763	1206	1906	1459
Maize	4441	3952	3565	1526	3215	3409
Sorghum	3270	1304	1799	1128	2608	2359
Rice	4006	3634	3264	3263	4933	5426

Source: Data processed from the Statistical Year-book of Romania

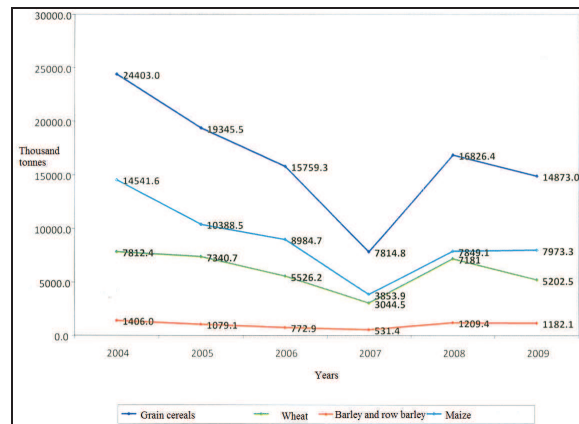


Fig.1. Evolution of the total cereal production (wheat, maize, barley and row barley)

Source: National Institute of Statistics, Statistical Year-books of Romania 2004-2010 and www.madr.ro

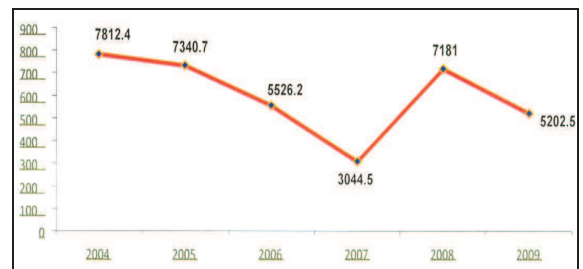


Fig.2. Evolution of the total wheat production

Source: National Institute of Statistics, Statistical Year-books of Romania 2004-2010 and www.madr.ro; years & thousands of tonnes

The factors that have determined the recent evolutions are of the following kinds:

- structural, such as: the growing demand for basic agricultural products due to some high economic increase ratios; changes in consumer preferences (especially for meat) in many countries, especially in India, China and Latin America states; bio-fuel market development;
- contextual, such as: reduction of the cereal production as a consequence of unfavourable weather conditions, determined by the drought in Australia, the high temperatures from East

Europe (especially in Bulgaria, Hungary and Romania), torrential rainfalls from North-West Europe and in particular, from Germany and France, low temperature in Russia and Ukraine. Combining these factors has generated unfavourable market conditions, the stocks reaching the lowest level in the last 10 years in the EU. [5]

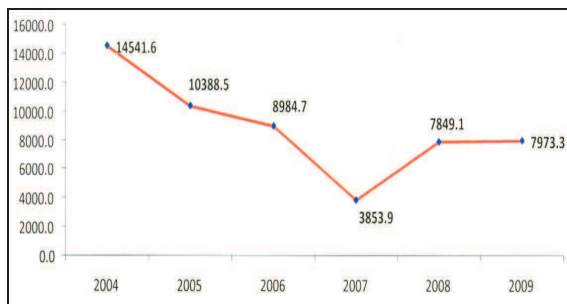


Fig.3.Evolution of the total maize production  
 Source: National Institute of Statistics, Statistical Year-books of Romania 2004-2010 and www.madr.ro; years & thousands of tonnes

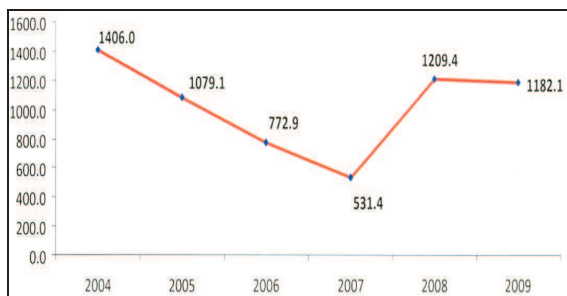


Fig. 4.Evolution of the total barley and row barley production  
 Source: National Institute of Statistics, Statistical Year-books of Romania 2004-2010 and www.madr.ro; years & thousands of tonnes

On the medium and long term, we consider that the cereal prices in the EU and in the world shall be situated at a higher level than the one of the last decade, the demand of food products being the main determinant of this situation. Under these conditions, is expected for prices volatility to increase.

The growing demand for maize in the United States shall lead to the price increase on the world market, fact that will encourage the EU exports for this agricultural product.

This, correlated with the elimination of the support for maize, shall be able to lead to the fluidization of the market in Hungary and Romania (two of the main maize producers) for the medium term and shall reduce the risk of

regional surpluses, even in the case of high harvests and of transportation costs in continuous rise. [4]

In our country, the **cereal prices** have loosened, but have remained under the direct influence of processors, who are better organized and have the interest for this price to be in their advantage, as a consequence, as low as possible. The wheat price has increased each year, but each time the increase was under the annual inflation rate, fact that has made the economic power of the wheat producers to have an upward trend.

On the other hand, the extensive availability and the perspectives of good productions at a global level have led to the increase of pressure over the cereal prices.

The listings, in the case of certain exporters, just as EU is, have been favoured by the American dollar increase compared to the euro.

Table 3.The average price of wheat

Year	Standardized price/kg
2001	2990
2002	3044
2003	5050
2004	5530
2005	5790
2006	6023
2007	6350
2008	6890

Source: National Institute of Statistics

As regards to the exports we present few listings recorded in 2010 for the main products. Following the controls on the CAP implementation, in 2008, the European Commission has proposed to continue the application of SAPS for the new member states until 2013. Romania chose for this option because of its simplicity in the application of direct payments.

It was expected that the cereal surfaces cultivated would grow in order to face the community and world demand, especially because of the consumption increase in emerging countries such as India and China, and due to the demand increase in the bio-fuel sector. [6]. It is worth mentioning that the cereal production was consistently reduced during the past years worldwide, the main cause being constituted by the climate change,

that have led to the lack of stocks and significant escalation in prices.

Table 4. Product price

Product	Price	Conditions
Baking wheat	120 Euro/tonne	CpT Constanța, with delivery in August-September
Fodder wheat	105 – 110 Euro / tonne	CpT Constanța, with delivery in August-September
Barley	97 – 101 Euro / tonne	CpT Constanța
Rapeseed	332 Euro / tonne	Matif price, FOB Rouen
Maize (August)	167 Dollar/tonne	Delivery in August
Maize (September)	155 Dollar/tonne	Delivery in September
Source: www.recolta.eu		

Since the demand exceeds the supply, there is every chance that much of the uncultivated or abandoned land would be included in the agricultural circuit, of the Romanian sector for cereals, which beneficiaries by the advantage of the world prices increase.[7]

As to the **wheat increase**, this crop traditionally has occupied in our country between 25-30% of the arable land. As a consequence to the price increase, producers shall be stimulated to invest in technologies that would allow the attainment of superior average output per hectare, thus having positive effects over the demand-offer balance.

Also, producers shall be stimulated to increase the wheat cultivated surfaces in order to increase the offer in view of compensating the market deficit. Still, because of the demand increase a decrease in prices is not projected. The growing demand of pastas shall lead also to the growth of the surface cultivated with durum wheat, even if producers won't be able to beneficiate from the specific subsidy for the durum wheat granted on the community level - Romania did not have, on the accession negotiation moment, data that would determine the allocation of subsidies for this crop.[10]

As to the **maize crop**, under the terms of the demand increase in the livestock sector and the diversification of this product usage, especially for bio-ethanol, maize shall maintain its position of most important crop in Romania. In this context, the application of the common

agricultural policy mechanisms shall encourage both the production, as well as the increase of the average output per hectare. Worth mentioning is the fact that the EU support for maize is practically abolished, being applicable only in case of crisis, the only mechanism that remains being that of the direct subsidy for cereals/arable crops. The demand and prices increase do not make the intervention necessary, and the stimulating prices shall determine producers to expand the maize cultivated surfaces. As a consequence the offer will increase allowing among others the development of the livestock sector, that is confronting major difficulties due to the increased prices on fodder; even if the prices for cereals won't go back to the levels recorded before 2007, a significantly better offer shall determine still a stress relief for the maize prices.

## CONCLUSIONS

The European Union accession and the undertaking of the specific instruments and measures of the Common Agricultural Policy have strongly influenced the agro-food market and the rural areas from Romania.

The impact of the rural development funds allocated to Romania after accession was significant and constantly offered **increased opportunities aiming for the increase of agriculture and food industry competitiveness**, but above all for the rural environment due to the measures intended for rural infrastructure and economic activity diversification in rural areas.

The Single Area Payment Scheme (SAPS) had positive effects both over large farms as well as over the smaller ones, even if it was to a lesser extent; small scale agriculture uses SAPS to compensate the lack of performance and shall continue in this manner to obtain products with high quality value, from different varieties and breeds, and practice an agriculture that complies with the environmental conditions and maintains diversity.

The accession has allowed the **increase of the services value for agriculture**, even if this is situated yet much under the level of those in the developed member states, as a consequence of

important funds being allotted within the two CAP pillars.

From the point of view of the **agricultural production structure** it cannot be concluded that the accession has changed anything, the variations of the cereal sector production value being caused mostly by climate conditions or as a consequence to specific situations; the only sector where production increased substantially after the accession is the one of rice, because of the stimulating foreign investment and the perspective of accessing European funding.

As to the **production per hectare** it cannot be stated that during the first three years after the accession the CAP application had any real influence; the situation is due mainly to the lack of organization on the channel of products and the large number of small sized farms, that are not capable to record performances comparative to those of the trading farms.

After the accession **the trading exchanges of Romania with the EU member states intensified**, but most of all the imports. In recent years and as a consequence of receiving European and national subsidies, Romania has succeeded to produce cereals in quantities that exceed the internal need, becoming one of the most important European cereal exporters.

In view of improving the management administration agricultural markets and the rural environment, both the political factors responsible with the agricultural field, as well as the agricultural producers must consider few aspects namely:

-in order to fully take advantage of the possibilities offered by the instruments of the Common Agricultural Policy and the demand and prices increase its necessary that Romanian producers organize and perform together major investments in cereal storage and conditioning facilities; the majority of Romanian producers sell the cereals immediately after harvest, when prices are at their lowest level; storage in good conditions of the harvest may practically allow a substantial increase of profits.

-adoption of political measures meant to ensure the fully use of the arable land; Romania cannot allow under the actual conditions to leave outside the productive cycle nearly 2 million hectares every year, while a large part of the

products that could be produced on these unworked fields continue to be imported;

-measures for the productivity increase in the agricultural sector and especially with the reduction of the reliance on climate conditions, that presently categorically influence the performances of the Romanian agriculture; establishment of an advanced irrigation system, of some varieties resistant to drought and the creation of protection forest belts represent some of the most pressing measures in this respect;

-acceleration of the development process and consolidation of the agricultural structures;

-increase of the average farm size, by regrouping of the arable land;

-organization of channels by product and facilitation of the agricultural products access to markets; therefore such necessary political measures must be adopted to ensure that a large part of the agricultural products reach the markets and avoid that Romania is a net importer any longer, for a series of products, that quantitative and qualitative, it produces or it could produce itself;

-establishment of a credit system accessible to agricultural producers, with costs similar to those practiced in the member states in West Europe;

-stimulation of the introduction of modern agriculture and food industry systems, efficient in organization, marketing and management.

## REFERENCES

- [1] Annette Piorr, Klaus Müller, *Rural Landscapes and Agricultural Policies in Europe*, Springer, 2009
- [2] Chakraborty Kiran Sankar, *Rural Markets and Agricultural Marketing*, Mittal Publications, 2009
- [3] Ciaian Pavel, Kancs d'Artis, Swinnen Johan F.M., *EU Land Markets and the Common Agricultural Policy*, CEPS, 2011
- [4] Clanche Jean-François, *Agricultures, territoires et société*, Educagri, 2010
- [5] Dona Ion, *Economia rurală*, Editura Economică Publishing House, Bucharest, 2000
- [6] Directorate-General for Agriculture and Rural Development, *Prospects for Agricultural Markets and Income: in the EU-25 2005-12*, Dictus Publishing, 2011
- [7] Ministry of Agriculture and Rural Development – [www.madr.ro](http://www.madr.ro)
- [8] European Commission – The CAP explained Luxembourg: EUR-OP\*, 2008
- [9] [www.infoeuropa.ro](http://www.infoeuropa.ro)
- [10] [www.fermierul.ro](http://www.fermierul.ro)