## THE CEREAL MARKET IN ROMANIA

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Abstract. In Romania, the production of cereals is determined on the one hand, favourable climatic conditions and on the other hand the food consumption pattern of the population. The importance of grain production is demonstrated by the share of cultivated land and diversity of cereal crops. Cereals occupy a significant position in the structure of agricultural production, holding 1,2-1,5% of world production of wheat and 1.5-2% of the maize. In this context, this study shows the evolution of cereal crops as well as specific indicators of foreign trade trends. In terms of actual cereal production in Romania, it is not constant and therefore is often incoming imports, which have a positive impact on the evolution of the market in cereals. Imports of cereals and processed products adversely affect the trade balance. Producers, processors and distributors of cereals and cereal products face many difficulties, which most often affects the price of products, meaning its growth without the corresponding increase in quality.

A conclusion is that the grain market is a market variable, which succeeds only in favourable agricultural years to cover consumption needs from domestic production. Romanian market of grain is influenced by the European market and world cereals market.

## INTRODUCTION

The main objective of the cereal sector in the new conditions caused by integration in European structures, it is both quantitative and qualitative growth of production, which leads to increasing the amount required to obtain export and price incentives for agricultural producers.

Increasing the quantity and quality of grain products should be carried out in close correlation with human and natural potential available to Romania. This objective is included in a broader context, namely to provide security and food safety at national level.

Market cereals and especially wheat market, in Romania experienced the same process of historical development which they have travelled to other countries and markets around the globe. Expanded and diversified with the development of non-agricultural activities in urban areas becoming more populated and more isolated from the farmers. Component of the food market, grain market was considered a domestic market [3].

Currently, the Romanian market of cereals have to deal with external pressures, especially in terms of raising prices, according to increase production, due grain diversified destination, which is including now besides food and feed, providing raw materials for energy production. The high level of world market prices, directly contribute to increasing global food import costs up to 21%, reaching the highest value (1290 billion) over the past four years.

# **MATERIALS AND METHODS**

In order to perform this study we used data from the National Institute of Statistics, for 2005-2009, and other specialty magazines. There were studied grain sector specific indicators, namely: cultivated area, total production, average production, domestic consumption, average annual per capita consumption, imports, exports, price and trade balance.

## RESULTS AND DISCUSSION

A condition for the realization of this study was the classification of Romanian grain sector in the international sector and specifying direct and indirect factors that influence the production of cereals and prints a variable character.

The Romania has favourable climatic conditions, contributing directly to achieving significant production, both for full coverage of human consumption demand and for export.

In modern economy, grain market is analyzed in several ways, namely: economic, social and ecological. From an economic perspective, grain structure ranks first in world agriculture, over 50% of the world's arable land is cultivated with grains [2].

The social aspect must be considered, primarily in terms of jobs created, which are directly related to grain production.

Cereals contribute substantially to obtain bio-ethanol and thus reduce emissions of greenhouse gases. In Romania, cereals occupy a significant position in the structure of agricultural production, owning a share 1,2-1,5% of world production of wheat and 1.5 -2% of the corn.

Table 1 presents the evolution of main indicators for cereals between 2005 and 2009.

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Specification	Indicator	U.M.	2005	2007	2008	2009	2009/ 2005 (%)
Cereal for grains	Cultivated area	1000 ha	5865,7	5129,2	5210,7	5356,0	91,3
	Total production	1000 t					
			19345,5	7814,8	16826,4	14934,0	77,1
	Average production	Kg/ha	3298	1524	3229	2816	85,3
Wheat	Cultivated area	1000 ha	2476,0	1975,0	2110,3	2185,0	88,2
	Total production	1000 t	7340,7	3044,5	7181,0	5205,0	70,9
	Average production	Kg/ha	2965	1541	3403	2421	81,6
Barley	Cultivated area	1000 ha	484,6	363,8	394,0	524,0	108,1
	Total production	1000 t	1079,1	531,4	1209,4	1183,0	109,6
	Average production	Kg/ha	2227	1461	3069	2284	102,5
Oats	Cultivated area	1000 ha	214,8	208,7	200,4	203,0	94,5
	Total production	1000 t	377,5	251,6	382,0	296	78,4
	Average production	Kg/ha	1757	1186	1906	1459	83,0
Maize	Cultivated area	1000 ha	2628,5	2524,7	2441,5	2373,0	90,2
	Total production	1000 t	10388,5	3853,9	7849,1	8035,0	77,3
	Average production	Kg/ha	3952	1526	3215	3409	86,2

Tab.1. Evolution of main indicators at cereals

Source: NIS –Romanian Statistical Yearbook, 2009. -Crop production for the main cereal crops, 2009.

Surfaces used for cereal culture had a different pattern from year to year. In 2009, can be noticed a decrease in cereal for grains surface, by 8.7% compared to 2005, considered the reference year for this study. The only exception cultivated plant that the downward trend is represented by barley. The cultivated areas has increased from 484,600 ha in 2005 to 524.0 thousand ha in 2009, this increase being 8.1%.

Total cereal for grains production declined significantly, from 19,345,500 tons in 2005 to 14934.0 tons in 2009. This decrease was 22.9% and is mainly due to diminishing areas planted with cereals and declining yields per hectare. In 2009, production of barley increased by 9.6%, compared to 2005. Grain production is provided by the private sector, the main crops being wheat and maize.

An important indicator for assessing the competitiveness of the cereals is the average production. Average production for the main cereal crops in 2009, has declined

compared to 2005. The only culture that has seen an increase in average production was barley with (+) 2.5%. What must be emphasized is that there is a large discrepancy between the averages for each crop production cereals (especially wheat and maize) and the national potential average, as follows: for wheat potential is 5500-7000 kg / ha and average production obtained was 2421 kg / ha (2009), and the potential for maize is 8,000 kg / ha and production recorded was 3409 kg / ha in 2009 [1].

We have to remind that Romania holds first place in the European Union as maize cultivated areas, but ranks seven for production obtained.

Between 2005 and 2009, cereal production was supported by state grants especially for the cultivated area. This support was not uniform during the period analyzed, observing the differences from year to year.

Romanian cereal producers should identify the main causes leading to low production and to adopt appropriate measures so as to cope with competitive pressure and gain market access to the 400 million consumers market of the European Union.

After analyzing the main indicators we can conclude that, although Romania has an important agricultural potential, in the analyzed period (2005-2009) agricultural production and cereal production had a differential evolution, which is largely due to climatic conditions, quality of agricultural works, and how chemical fertilizers were provided.

Another important indicator for the cereals market analysis is the price. Price is important for both producers and buyers. In the market of cereal, supply evolution indicate a critical aspect: it establish the realistic price of cereals so as to allow producers to achieve a profit, aiming to ensure on the one hand, acquisition of advanced equipment and optimize applied technologies and, on the other, the producer to be able to accumulate reserves for less favourable periods.

Cereal grain price was and is a benchmark for prices of other goods, in particular the price of feed, and which is found on the price of animal products, etc. [3].

The next table shows prices for the main cereal crops at the farm gate between 2005 and 2009 (Tab. 2).

Tab. 2. The evolution of average prices for cereals at the farm gate in 2005 – 2009

Specification	U.M.	2005	2007	2008	2009	2009/2005 (%)
	Lei/kg	0,36	0,61	0,66	0,47	130,5
Wheat	Lei /t	360	610	660	470	
Barley	Lei/kg	0,35	0,59	0,69	0,61	174,2
	Lei /t	350	590	690	610	
Oats	Lei/kg	0,47	0,76	1,02	0,70	148,9
	Lei /t	470	760	1020	700	
Maize	Lei/kg	0,31	0,55	0,97	0,67	216,1
	Lei /t	310	550	970	670	

Source: Data taken after Letitia Zahiu and collaborators - Agriculture in Romania's economy-2010.

Since 2005 the cereal prices have evolved differently from year to year. In 2009 there was an increase in cereal prices in all categories compared to 2005. Significant increases were recorded for barley (74.2%) and corn (116.1%). These price increases are due on the one hand increase the cost of production, and on the other hand decrease the domestic supply in certain periods of drought. The most acute problem for some countries in Europe and not only is the market price of raw materials, which is determined by several factors, including: inflation, high interest rates on loans, monetary policy.

<sup>-</sup> www.recolta.eu

<sup>-</sup> www.preturi-agronet.ro

Regarding the forecast for grain prices, both domestically and the world market shows an increase in prices due to lower inventories, supply of grain and its use to obtain energy.

In a market economy with price, one important place is taken by intern consumption of cereals and its structure. If, feed cereal consumption is determined by livestock and the quality of cereals, for human consumption, it is influenced by several factors, including the most important: economic, demographic, psychological, social and cultural. Average domestic consumption of cereals in the analyzed period was 14876.4 thousand tons / year, of which the available average for human consumption was 4457.2 thousand tons / year and 8873.4 thousand tons / year average consumption of feed.

Distribution of domestic consumption of cereals (in cereal grains equivalent) is presented in the table no.3.

Tab. 3. Evolution of internal consumption cereal and cereal products in Romania, (in equivalent grains)

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Specification	U.M.	2005	2006	2007	2008	2009	
Domestic consumption	1000 t	16858	16135	15194	13478	12717	
Domestic consumption	%	100,0	100,0	100,0	100,0	100,0	
Available for human	1000 t	4644	4488	4456	4387	4311	
consumption	%	27,6	27,8	29,3	32,5	33,9	
Loss	1000 t	121	73	49	81	62	
LUSS	%	0,7	0,5	0,3	0,6	0,5	

Source: NIS –Romanian Statistical Yearbook, 2009. NIS -Crop production for the main cereal crops, 2009.

Quantities of cereals and cereal products (cereal grains in equivalent) for domestic consumption had a decreasing trend in 2005-2009, as follows: domestic consumption fell by 21.5% in 2009 compared to 2005 (base year). Feed consumption decreased by 35, 1% over this period, and availability for human consumption followed the same downward trend (-7.1%).

Cereals trade plays an important role in Romania's foreign trade. After 1990, it was influenced on one hand by the weather conditions, the oscillations being recorded annual for imports and exports, and on the other hand, the lack of accessible infrastructure for producers.

Exports and imports of cereals saw increases in season 2008 / 2009, from season 2004/2005. The most significant increases were recorded for maize and wheat, as follows: the amount imported maize increased from 83,200 tons in 2005 to 1.0594 million tons in 2009, and on wheat exports increased from 50.9 thousand tons in 2005 to 2.7854 million tons in 2009.

Massive amount of wheat exported in the 2008/2009 season was mainly due to favorable world conjuncture, as Romania became a net exporter of wheat country. Significant imports of maize were due to climatic conditions as well, attractive prices that led to the re-exported imported maize.

Normal situation for our country would be that always to have higher exports than imports, because production there is an unrealized potential and tradition in the cultivation of cereals.

## CONCLUSIONS

Study of cereals market in Romania, 2005-2009, is not an exhaustive study, but after its realization can be drawn some conclusions that can be extrapolated to the entire agriculture.

The cereals market analysis of specific indicators highlight certain aspects that influence the production, distribution, import, export and consumption, as follows:

- Areas under cereals have changed from year to year, resulting in the present situation when there are not attracted in production large areas of land;
- Average production obtained from cereals is low compared with the average potential in the country;
- Total production has fluctuated in the period under review, but an overall picture shows a tendency of reducing cereals production. This reduction adversely affects both producers and consumers;
- The price of cereals is growing in domestic market, due to increased raw material costs, which often is imported;
- Domestic consumption of cereals has declined. This reduction is reflected in the evolution of average annual consumption per capita, based on the trend of change in food consumption pattern;
- Exports of cereals have increased in the period under review, but it was not possible to significantly reduce imports, though, Romania has potential to ensure consumption of cereals.

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