

THE EVOLUTION OF AGRICULTURE IN ROMANIA AFTER INTEGRATION IN THE EUROPEAN UNION

Student NELA LOREDANA MEIȚĂ Ph.D

UNIVERSITY OF CRAIOVA, FACULTY OF ECONOMY AND

BUSINESS ADMINISTRATION

loredanameita@yahoo.co.uk

Abstract: *This paper presents the development of agriculture in the period 2007-2014, after integration into the European Union. Accession to the European Union marked a new era in the agricultural economy and rural development Romania effectively represents perhaps the strongest factor for pressure rapid reform Romanian agriculture and rural economy. Nationally, agriculture is one of the most important branches of the Romanian economy.*

Keywords: *the dynamics of the agricultural sector, the accession, the land use, production of main crops, livestock, GD*

1. Introduction

If until 2007, the growth of the agricultural sector was rather under the influence of contextual factors, making felt rather lack of coherent policy to allow a unified approach and integrated agricultural sector, with the accession of Romania to the European Union, the agricultural sector subject to strategic approaches that meet on the one hand the challenges and demands posed by a new approach, on the other hand, all factors relating the agricultural sector from producers to leading and coordinating bodies had opportunities to support the current and future work.

2007-2013 can be characterized according to Table. 2 succinctly as a stage adaptation institutions CAP adaptation that came after long periods of search results sterile and often mediocre which resulted in a restriction of all factors of production, which resulted in context restricting the decrease absorption capacity together with financial resources for a period between 1990 and 2007.

Table. 2 - How evolved vision ADR sector during 1990-2011

The period	The main objective of ADR policies
1990-1992	Agriculture as a social buffer
1993-1996	Obtaining agrifood self-sufficiency
1997-2000	Promoting family farms
2001-2004	Promoting big farms
2005-2006	Promoting family farms
2007-2013	Adaptation to institutions CAP

Source: Ministry of Agriculture and Rural Development Sector Development Strategy food medium and long term horizon 2020-2030, Bucharest 2014, p. 16

Accession of Romania to European Union marks a new era in the agricultural economy and rural development of our country. The EU Accession is probably the most powerful factor of pressure for rapid reform of Romanian agriculture and rural economy, given the need for successful integration into the European rural economy.

Nationally, agriculture is one of the most important branches of the Romanian economy. In 2013, the contribution of agriculture, forestry, fisheries in gross domestic product represented 5.6% (see Tabel. 1), while their contribution to GDP other EU countries stands at about 1, 7%.

Table. 1 - Share of agriculture, forestry and fisheries to GDP

Gross domestic product	2007	2008	2009	2010	2011	2012	2013
Agriculture, forestry, fishing and pisciculture	23992,2	34126,3	32297,8	29874,2	36341,6	28638,1	35192,8
Total GDP	416006,8	514700	501139,4	523693,3	557348,2	586749,9	628581,3
% Of GDP	5,8	6,6	6,4	5,7	6,5	4,9	5,6

Source: National Institute of Statistics - Romanian Statistical Yearbook 2013 tab. 11.1

In relative numbers, the volume of GDP created in agriculture, forestry and fisheries is growing by 46% in 2013 compared to 2007, although this increase was not constant evolution during the discussion of the effects felt as a result of the economic crisis, especially for 2010 and 2012 when compared to 2007 increases were 21% and 17%. In any case lower the share of agriculture in GDP from 5.8% in 2007 to 5.65 in 2013 is not in itself a worrying fact, given ultimately increase in absolute gross domestic product created in agriculture, may consider daor turn, prevents the other sectors that have not already able to achieve increases in agricultural sector to resize a weight close to that of the European Union gross domestic product. The main factor of production, nor can it be otherwise, is the area under cultivation and the potential of the total area of land (see table no. 2).

Table no. 2 - The land fund area, according to utilization

- ha -

Specification	2007	2008	2009	2010	2011	2012	2013
Total agricultural area in which:	14709299	14702279	14684963	14634436	14590929	14615057	14611883
Arable	9423255	9415135	9422529	9404008	9352252	9392262	9389254
Grassland	3329984	3333028	3313785	3288725	3277656	3270610	3273961
Hay fields	1531491	1532342	1528046	1529561	1553543	1544957	1541854
Vineyards and vine nurseries	217968	214463	215382	213571	211347	210475	210270
Orchards and tree nurseries	206601	207311	205221	198571	196131	196753	196544

Source: <http://insse.ro> -tempo online

Regarding the total area of the land is not observed significant changes, the total agricultural area available to Romania in 2013 being 14,611,883 ha, representing 99% of the total the land fund area in 2007. The decrease of one percentage point the land fund surface as possible changes in the structure of cultivated areas, before any economic considerations are particularly relevant as soil sealing of land, particularly by category unincorporated legal classification of the category plot, and degradation of land for which policy makers have not found the necessary funds to carry out the time im of pedo-improvement works. There is a consistent decrease around a percentage of all categories of surfaces that are part of the land structure, making it possible to conclude that there were no reductions in areas due to economic effects felt in this time.

Although the land fund surface during analysis showed no significant changes, we observe changes in meaning increases more or less obvious for the main crops cultivated areas.

Table no. 3 - The area cultivated with main crops

- ha -

Specification	2007	2008	2009	2010	2011	2012	2013
Wheat and rye	1987114	2123281	2164347	2176945	1959362	2006306	2114724
Cereal grain	5129183	5210710	5282445	5040646	5224729	5440281	5421181
Barley	363806	394029	517513	515820	419508	424244	495685
Rice	8434	9917	13346	12403	12674	11304	11930
Sunflowers	835923	813891	766080	790814	994984	1067045	1074583
Sugar beet	28730	20445	21329	22029	18816	27303	28144

Source: <http://insse.ro> -tempo online

The explanation lies in the fact that, compared to 2007, the period after accession, Romania was the recipient of programs designed to support the agricultural sector embodied in European funding programs, and an annual sustained program for subsidizing farmers, from both the EU and the state budget source. Increased of cultivated areas of the main crops leads us to conclude that for 2007, compared to the total area of the land fund falling within the category of agricultural land, there were large tracts of land unused, owners Not having the resources to organize operations. We notice that in 2007-2013 have increased area under wheat and 64% rye, and barley of 36%. A significant increase in of cultivated areas observed for sunflower crop (this is an especially positive considering that the processing machine, the final product has a high added value compared to other agricultural products).

At the same time, with significant increase in area under major crops, increases the effect of at least corresponding extensive record a positive change in total output for all crops.

Thus, following an increase of less than 20% of the main crops of cultivated areas where cereal crops have increased by 2.7 times the total production of cereals in 2013 compared to 2007 and 20 897 tones in 2013 compared to 7815 tons in 2007 (see table no. 4). As can be seen, increasing at a much higher rate of production to increase the cultivated area can not be explained only by reconsidering intensive factors. It is assumed that with increasing the absorption capacity and the gradual application of technologies to ensure a high yield investments in agriculture, at the same time increasing the amount of subsidies paid to farmers, had the most important role in obtaining this increases the quantity and value.

Table no. 4 - Total production for the main crops

- mii tone -

SPECIFICATION	Total production (thousand tons)						
	2007	2008	2009	2010	2011*	2012	2013
Cereals total, of which:	7814,8	16826,4	14873	16712,9	20634,1	12824,2	20897,1
Wheat + rye	3065,0	7212,4	5235,5	5846,1	7126,3	5315,9	7320,2
Barley + barley	531,4	1209,4	1182,1	1311,0	1423,8	986,4	1542,3
Oat	251,6	382,0	295,8	304,5	369,1	338,9	373,8
Grain maize	3853,9	7849,1	7973,3	9042,0	11595,6	5953,4	11305,1
Rice	27,5	48,9	72,4	61,6	64,8	50,9	54,7
Sunflowers	546,9	1170,0	1098,0	1262,9	1864,1	1398,2	2142,1
Soybean	136,1	90,6	84,3	149,9	147,2	104,3	149,9
Sugar beet	748,8	706,7	816,8	837,9	675	719,8	1029,2
Potatoes total	3712,4	3649,0	4004,0	3283,9	4155,4	2465,2	3289,7

Source: Romanian Statistical Yearbook, 2013 www.insse.ro, tempo online

* MARD, AGR 2B weeks are exclusively allocated prod. Seed

The considerations listed above are supported by comparative presentation of data on the development areas and productions main crops (see table no. 5, 6). I took to illustrate developments in 2007-2013 to wheat, corn, barley.

Table no. 5 - Evolution and wheat production areas in Romania

Specification	UM	2007	2008	2009	2010	2011	2012
Area	thousand ha	2524,7	2441,5	2338,8	2098,4	2589,7	2721,2
Average production	Kg/ha	1526	3215	3409	4309	4525	2188
Total production	thousands to	3853,9	7849,1	7973,3	9042,0	11717,6	5953,4

Source: INS tempo online - Crop production for main crops in 2012

Table no. 6 - The average price of wheat domestically

Specification	UM	2007	2008	2009	2010	2011	2012
Wheat	lei/kg	0,61	0,66	0,47	0,59	0,88	0,91

Source: INS tempo

If in 2007 the total production of 3853.9 thousand tons were performed on an area of 2524.7 thousand hectares in 2012 on an area of 2721.2 thousand hectares were produced in total 5953.4 thousand tons of wheat. The work itself is not spectacular if we look only through the cultivated surface evolution recorded in the reporting year to year based on a 5% increase. In contrast, the average yield of wheat produced in Romania per unit area increases from 1526 kg to 2188 kg ha in 2012 (significant is another aspect, namely that for the years 2008.2009, 2010 and 2011, average yields per hectare increased from 3215 kg to 4525 kg ha ha) therefore we are dealing with an increase in average production per hectare at

end of period 43%, well above the increase in the total area planted with wheat at the end of the same period was only 5%. In other words, we can conclude that increases ease of Gau agricultural production based on extensive actor not via intensive factors embodied by increasing yields and productivity. The only problem that arises in this case is whether a funding volume performed in the same time or just via funding by increasing the volume of the same period is or is not consistent with the growth of yields and productivity. Otherwise, the average price level on the domestic market for a bushel of wheat could be obtained in 2012, 0.91 lei, compared to 0.61 in 2007, which corresponds to the price increase 49% domestic market for producers, somewhat consistent with the increase in the same period labor productivity, expressed as the ratio between the total and the cultivated area, ie a growth rate of 43%. If we go to the second product that you submit analysis (corn) observed a similar pattern in terms of acreage and yields dynamic environments.

Table no. 7 - Evolution surfaces and corn production in Romania

Specification	UM	2007	2008	2009	2010	2011	2012
Area	thousand ha	2524,7	2441,5	2338,8	2098,4	2589,7	2721,2
Average production	Kg/ha	1526	3215	3409	4309	4525	2188
Total production	thousands to	3853,9	7849,1	7973,3	9042,0	11717,6	5953,4

Source: INS tempo online - Crop production for main crops in 2012

Table no. 8 - The average price of domestic corn

Specification	UM	2007	2008	2009	2010	2011	2012
Grain maize	lei/kg	0,77	0,97	0,67	0,71	0,79	0,87

Source: INS tempo

Thus, in the period 2007-2012 is an increase in the area under maize from 2524.7 thousand tons in 2007 to 2721.2 thousand tons in 2012, which corresponds to an increase of 7.8%. The total output dynamics corresponds to an increase in average production per ha at end of period 43%, as in the case of wheat production with the same graphical development sinusoidal growth until 2011 and a decrease during 2012. The decrease in total output obtained at the end of 2012 is explained by the influence of exogenous factors generally related on the one hand the prolonged economic crisis, but also the existence of grain market product offerings from major grain exporters offering the same products at much reduced prices. However, the dynamics of animal production has justified the increase in absolute production by maintaining a high grain corn producers somewhat comforting the end of 2012 by increasing the price of grain Porum 13 percent compared to 2007, and from 0.77 lei / kg to 0.87 lei / kg.

For barley crops is more pronounced developments both in terms of total area and average yields and from the point of view of the average price on the domestic market. Here we are dealing with the end of the period increased by 14.6% compared to the base year while increasing the average production per hectare is 59% (see table no. 9). In these cultures, although related in biological and technological competitors act two factors namely increasing animal production for barley is an important element in the production of concentrated fodder or food consumption demand growth, which implies a quantity of barley higher raw material in brewing. That is the average price on the domestic market in barley submitted in 2012 an increase of 37% compared to 2007, according to table. 10.

Table no. 9- Evolution of surfaces and barley production in Romania

Specification	UM	2007	2008	2009	2010	2011	2012
Area	thousand ha	363,8	394,0	517,5	515,8	419,5	423,4
Average production	Kg/ha	1461	3069	2284	2542	3170	2330
Total production	thousand tons	531,4	1209,4	1182,1	1311,0	1329,7	986,4

Source: INS tempo online - Crop production for main crops in 2012

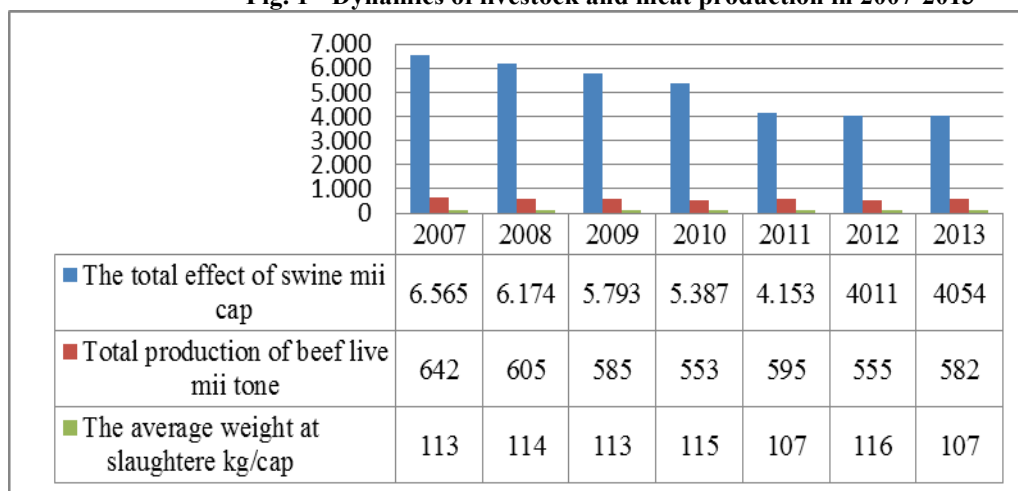
Table no. 10 - The average price on the domestic market in barley

Specification	UM	2007	2008	2009	2010	2011	2012
Barley	lei/kg	0,73	0,89	0,61	0,64	0,92	0,86
Row barley	lei/kg	0,62	0,70	0,49	0,44	0,91	0,86

Source: INS tempo

The situation is even worse when you use and especially livestock yields. There is a decrease in absolute numbers of livestock throughout the period 2007-2013, although 2010 is a turning point followed by a slow increase herd. The total number of cattle in 2007 is 2819 thousand heads, will arrive in 2010-1985 thousand heads, and finally in 2013 to the 2197 thousand heads (see Fig. 1). It would seem that show positive aspects analyzing the characteristic growth average weight at slaughter, from 280 kg / capita in 2007 to 327 kg / capita in 2013. Increase average slaughter weight but not compensate decrease in the total of cattle, total beef subtracting live in the analyzed period 333 thousand tons in 2007 to 232,600 tons in 2013, which corresponds to a decline of almost 1 / 3 of the total production of beef produced in Romania live in a period of six years.

Fig. 1 - Dynamics of livestock and meat production in 2007-2013



Source: author chart data NIS - online tempo

It is true that much of the existing herd in Romania in 2010, but the observation is equally valid for the present period, actually consists of a queen of low productivity obtained by încrucișeri uncontrolled actually operated family-household system subsistence and indiscriminate slaughter of petty needs occasional or due to lack of feed.

According to the data from the Ministry of Agriculture and Rural Development for the end of the first quarter of 2014, a total of 2,249,334 units of exploration and production, the share of family farms account for 92%, while for companies and private associations correspond to 6 percent and industrial flow units 1 percent.

The situation is similar for pig herds is decreasing compared to 2012, increasing by about 1/3, as in the case of cattle, and considerations regarding the number and farm structures are similar to those made for holding specialized in raising and exploiting bovine (see Table no. 11).

Table no. 11 - Dynamics herds and swine meat production in 2007-2013

Specification	UM	2007	2008	2009	2010	2011	2012	2013
The total effect of swine	thousand head	6.565	6.174	5.793	5.387	4.153	4011	4054
Total production of beef live	thousand tons	642	605	585	553	595	555	582
The average weight at slaughter	kg / head	113	114	113	115	107	116	107

Source: MADR

2. Conclusion

Reducing meat production and the restriction of livestock production were the natural consequence of the existence of livestock unprepared to face the challenges of the European market in absolutely all elements of structure, based on farm size in equipping and modernization of industrial spaces, the selection of staff animal species other processing yield and reaching lack of financial resources to support the modernization of the livestock sector from domestic resources. Sizing

unrealistic farms, farms and livestock farms, keeping weight under subsistence farms made improper use of funding from the European Union, unreachable given that their purpose and mission is to develop farms and farm size medium and large. Agricultural credit, in turn declined to extinction for at least 92% of the farms, in the extent corresponding number of farms than 10 ha, the difference up to 100% with a restricted, or much diminished, but this time not because of farm size, but due to the poor service preformed recorded. Finally, restriction and resizing agricultural output was the direct consequence of imports of agricultural products and food products directly resulting from higher processed products that have gradually replaced the indigenous, mainly due to the high quality of the report advantageous for money, but also because of the large volume of such products, why not recognize the lack of market promotion of domestic production. A revival of domestic agricultural production is impossible to predict in the absence of significant changes aimed at both structural changes and legislative, whose effect will be seen just when the share holdings that exceed the 10 ha will approach half of the farm. This will increase the absorption of agricultural funds geared for EU source, while credit growth to accompany support projects based on the absorption of these funds.

3. References

- [1] **Lavinia Maria Nețoiu, Nela Loredana Meică, Titu Nețoiu, Romanian agriculture, where to challenges after eu integration**, University of Craiova, Romania, Annals of the University of Craiova Economic Sciences Series – ISSN 1223-365X, 2013 Vol. 1, pag. 256;
- [2] **Oana Brînzan, Rural Development**, University Aurel Vlaicu, Arad, 2006 ISBN -10973-752-094-7;
- [3] **Mirela Adriana Rusali, Rural economic development in Romania**, design and evaluation, Publishing Digital Data Cluj, 2013;
- [4] **Oțiman P., Romania Agriculture**, Publishing Agroprint, Timișoara, 2002;
- [5] **Oțiman P., Sustainable rural development in Romania**, Romanian Academy Publishing House, 2006;
- [6] **Dumitru M., Agriculture in the European Union in step with time**. European Dialogue, 2001;
- [7] **L. Buse, Siminică M., Mark N., Economic and Financial Analysis**, Publishing Writing Romanian, Craiova, 2003.
- [8] **Vâlceanu Gh. (Coordinator), Economic and Financial Analysis**, Economic Publishing House, Bucharest, 2004;
- [9] *** <http://www.madr.ro>
- [10] *** <http://credit-agricole.ro>
- [11] ***<http://ec.europa.eu/eurostat>
- [12] ***<http://agroinfo.ro>
- [13] *** <http://fonduri-ue.ro>
- [14] ***<http://www.pndr.ro>

This paper has been financially supported within the project entitled “Horizon 2020 - Doctoral and Postdoctoral Studies: Promoting the National Interest through Excellence, Competitiveness and Responsibility in the Field of Romanian Fundamental and Applied Economic Research”, contract number POSDRU/159/1.5/S/140106. This project is co-financed by European Social Fund through Sectoral Operational Programme for Human Resources Development 2007-2013. Investing in people!”