

CAP IMPLICATIONS ON ROMANIAN AGRICULTURE IN THE CONTEXT OF EUROPEAN ECONOMIC INTEGRATION

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Abstract

The present paper aims at presenting a macroeconomic level analysis of the evolution of the Romanian agriculture within the period 2007-2013 and an analysis of the financial allocations within the interval 2008 – 2014. The macroeconomic analysis shows the role and place of agriculture in the national economy, focusing on the evolution of main indicators concerning agricultural real estates, agricultural production, technical equipment and human resources in agriculture, as well as aspects connected with the agro- environment. The analysis of financial allocations shows the evolution of Community support by type of measures, calculating the projects, the sums and the result indicators. Also, a comparative analysis was made at the level of NRDP measures (Pillar II) with estimated realization and result ex-indicators for each measure in order to show the achievement of envisaged targets. Our research identifies the implications of Community support on Romanian agriculture exploitations, especially in the South-Muntenia Region. The results obtained are the foundation of understanding the way in which the Community financial support has an impact at macro and micro levels on the performances of every sector and allows for the identification of the way in which the support needs to be oriented so that it can lead to a long-term development of the Romanian agriculture.

Key words: agriculture, community support, financial allocations, financial execution, rural development measures

INTRODUCTION

In Romania, the agriculture is one of the most important sectors of the national economy, with a current contribution of approx. 6% to the GDP. Weather conditions and the evolution of the economy in the crisis period have determined fluctuations in the evolution of the agricultural sector, characterized by increase in the period 2008-2013, but also by decrease in the backdrop of draught and floods from 2010 and 2012.

As regards the community support, the payments done in the period 2007-2014 had a total of 9,09 billion euros from EAGF, EAFRD and the national budget (in order to co-finance the delegated rural development methods), payments that prove an absorption rate of 81,17%.

MATERIAL AND METHOD

The data concerning the agricultural phenomena at the macroeconomic level were taken from the general data of the National Statistics Institute and harmonized with the EUROSTAT data. Within the framework of the present paper we analyzed in structure and in dynamics a series of NSI data (dynamics and structural indicators), focusing on a series of indicators (Toma Elena et al, 2010) that highlight the role and place of agriculture within the national economy (added gross value in agriculture, agricultural products trade, the value of agricultural production), the dimension of agricultural real estate and human resources (cultivated surface, irrigated surface, population employed in agriculture, etc.) and the dimension of the agricultural sector (agricultural exploitations, technical means, the volume of used fertilizers, etc.).

The main information regarding financial allocations was collected from the Ministry of Agriculture and Rural Development, the Agency for the Financing of Rural Investments, the Regional Centre for the Financing of Rural Investments 3 South Târgoviște.

RESULTS AND DISSCUSIONS

The contribution of agriculture to the national economy

At national level, in 2007, the Romanian agricultural market had a value of approx. 24 billion RON in current prices, representing approx. 6.5% of GVA and 5.8% of GDP.

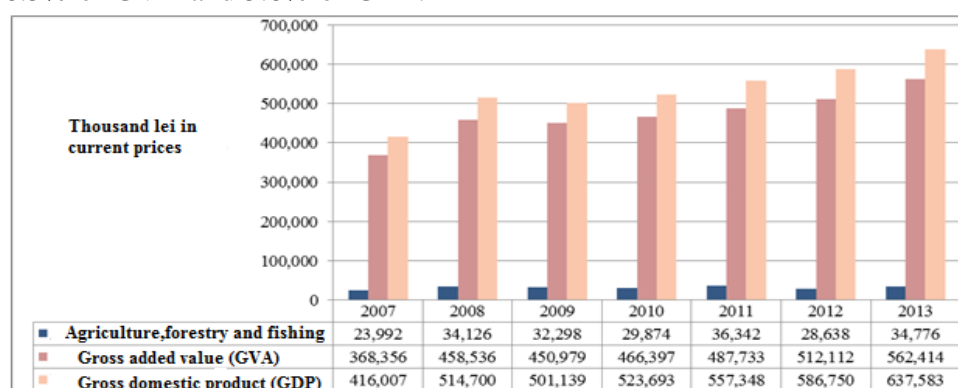


Fig. 1 The contribution of agriculture, forestry and fishery in the IGP/GV
Source: Treatment after Statistical Bulletins 2009-2015 NSI

The largest market value was registered in 2013, approx. 34.78 billion RON (Fig.1). In the analyzed period, the contribution of agriculture to GDP, presents a non-linear evolution, keeping within the interval 5-7%, with an exception in the year 2012, when it fell to 4.9%.

In 2011, Romania was in top 10 regions at EU level with the greatest increase of the agricultural contribution to GVA. Thus the influence of the primary sector in GVA from the extra-Carpathian areas increased the most (+4.7%) in comparison with the other EU regions, as compared to 2007, while at EU level the indicator did not register any modifications.

In 2013 the GDP had a value of 631.1 billion RON, an increase by 3.5% as regards 2012. This evolution was mostly determined by the increase of activity volumes and the gross added value from agriculture, forest industry and fishing (+23.4%), as well as from industry (+8.1%).

Analysis of the agricultural exploitations during the interval 2007-2013

In the period 2007 – 2013, Romania registered a decline regarding the used agricultural production, this being the trend on the rest of the European continent. If, in 2005, approx. 13,907,000 ha of land were used for agricultural activities, by 2010 this surface decreased by approx. 600 000 ha (4.3%). The interest for putting together lands is increasing, simultaneous with giving up lands for those with very small exploited surfaces, this aspect creating a major discrepancy between the small and large farms.

In Romania, there are approx. 4 million individual agricultural exploitations without legal personality (households with own land especially for own consumption) (Table 1). In 2007 more than 99% of the exploitations were households (in slight decrease until 2013) and only a worrying percentage of 1% of the number of exploitations had as object the agriculture with economic purpose (Structural Enquiry in Agriculture 2013).

Table 1
Number of farms that have owned agricultural land/animals, in accordance with the organizing form

Indicator (no.)	2007	2010	2013
Individual agricultural exploitations	3,913,651	3,823,069	3,587,691
Authorized natural persons			
Individual enterprises, family enterprises	0	5,215	14,052
Autonomous companies	0	50	86
Agricultural enterprises/associations	1,475	1,381	1,342
Commercial societies	5,147	16,475	14,510
Other types (foundations, religious institutions, schools etc.)	11,077	12,767	11,920
TOTAL	3,931,350	3,858,957	3,629,601

Source: Data treatments, the National Statistics Institute, the Statistical Yearbook of Romania 2013 (data 2007 and 2010); Structural enquiry in Agriculture 2013

Analysis of the value of agricultural production

The evolution of the agricultural production (producer price + subventions per product – fee on the product) in Romania is determined by

the evolution of the vegetal sector. It has the largest percentage, ranging between 60% and 70% of the total value, in the analyzed period, determining its increase by 8.4% in 2013 as compared to 2007 (Fig. 2).

Animal production shows a relatively linear trend, with a percentage of approximately 30% and 40% of the total value of the agricultural production. The best agricultural year was recorded in 2011 (with a production value of more than 76.5 billion RON, current prices); in that year weather conditions were favorable for the agricultural crops, and the largest percentage of cultures is represented by cereals (more than 30% of the value of the vegetal production). In the year 2008, Romania contributed with approx. 6.2% to the vegetal production of the EU and with 2.8% to the animal production (NSI – Romania’s Statistical Yearbook 2013).

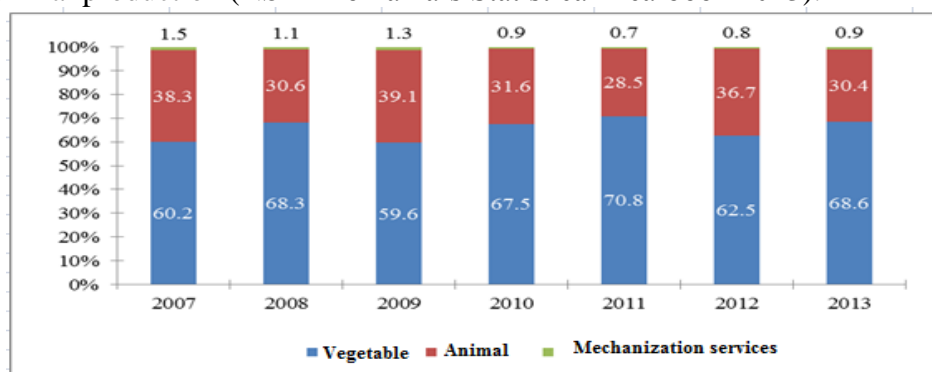


Fig.2 Agricultural Production

Source: Data Treatments National Statistics Institute – Romania’s Statistical Yearbook 2013

Evolution of technical equipment in agriculture

Romania is the EU country with the lowest mechanization rate in agriculture. Most farmers have approx. 1-3 ha, not enough to attract financial resources necessary for mechanization.

NRDP effects in the period 2007 – 2013 were felt through the increase in number of agricultural machinery and equipment at national level. Thus the tendency (in accordance with the European one) is to modernize tractor and equipment and to increase activity efficiency. If, in 2007, in Romania, there were 174,000 tractors, one per 54 ha, their number increased by 6% in the following 6 years, with the decrease of the payload per tractor (table 2). If, in 2007, there were 10 plows per 10 tractors, until 2013, although their number increased, the proportion remained the same. It means that the Romanian farmers who bought mechanization means targeted the entire technological chain. The number of combines increased by 8.5% in the analyzed interval.

Table 2

Romania's agricultural machinery and equipment 2007-2014

Indicator (pieces).	2007	2008	2009	2010	2011	2012	2013	2014
Agricultural tractors	174,003	174,790	176,841	180,433	183,064	184,446	191,301	193,120
Plows	139,782	141,512	142,519	142,671	146,386	147,471	152,031	156,964
Self-propelled combines for cereals	24,656	24,769	24,900	25,285	25,418	25,625	26,454	25,694
Seeders	67,761	68,308	68,916	69,337	71,554	73,519	74,805	76,301
Payload per tractor - ha	54.1	53.7	53.1	52	51.3	50.7		

Source: Romania's Statistical Yearbook 2013 NSI, Statistical data bases – Tempo online 2013-2014

Workforce resources in the Romanian agriculture

The studies of the Romanian National Statistics Institute have shown that approx. one quarter of the country's employed population undertakes activities in agriculture, forestry and fishing. In Western European developed countries the rate of agriculture employment is much lower, on average only a little over 5% (Figure 3) of the EU employed population working in the agricultural sector.



Fig.3 Workforce in agriculture in Romania

Source: NSI, Employment and unemployment 2007 – 2013, Annual reports

Evaluation of community support through Pillar II

The funds allocated to the second pillar, the one of rural development, whose policies got the upper hand only at the end of the 1990's, with Agenda 2000 (Agricultural Policy) showed an evolution based upon the specificities of the Romanian agriculture and rural areas, through funds reallocations in accordance with the necessities identified on the duration of the implementation of NRDP.

Since February 2008, the moment of the approval of NRDP 2007 – 2013, and until the autumn of the year 2014, due to legislative modification of the approval in December 2009 of the European Economic Recovery

Plan and due to the economic crisis that manifested itself across Europe, and the evaluation of the agriculture health check, NRDP 2007 – 2013 suffered 14 modifications in the 7 years of implementation.

NRDP modifications also had implications on axis funds allotment as compared to 2007. Following the programming period there were reallocations among axes, considering the higher requests on certain axes.

Table 3

Total public contribution according to NRDP 2007-2013, version 14, September 2014

Axes	NRDP 2007-2013 - VERSION 14 SEPTEMBER 2014				
	Total public contribution				
	Total public estimated 2007-2013 euro	Indicative average for the entire period	Applicable for the calculus of the payments FEADR 2007-2013	FEADR amount 2007-2013 euro	% of the total allocated
Axis 1 – The increase of the competitiveness of the agricultural and forest sector	3,048,543,554	88.81	95	2,707,446,638	33.75
Axis 2 – The improvement of the environment and of the rural space	2,947,951,688	86.32	95	2,544,568,978	31.72
Axis 3 – The quality of life in the rural areas and the diversification of the rural economy	2,325,223,944	85.54	95	1,988,980,790	24.79
Axis LEADER	366,917,508	94.46	95	346,590,603	4.32
Technical assistance	132,008,738	91.58	95	120,895,835	1.51
Compensatory payments	392,527,376	80	80	314,021,901	3.91
Total	9,213,172,808	87.08		8,022,504,745	100.00

Source: Treatments after NRDP 2007 – 2013, version September 2014

From the data analysis we can notice that the financial execution for the period 2008 – 2014 on axis had a different distribution, registering various absorption degrees on axes such as the following (Table 4):

- compensatory payments had a the highest absorption degree 99.7%;
- at the end of 2014, Axis 1 had a degree of absorption of 67.7% ;
- Axis 2 registered a degree of absorption of 93.3% ;
- Axis 3 registered a degree of absorption of 74.0% ;
- The lowest absorption degree was registered by Axis 4 with 36.7%.

Table 4

Financial execution of NRDP/ Financial allocation for 2008-2014

AXES	Financial execution Total 2008-2014	Valued paid per axis /Total payments %	Financial allocations in accordance with the NRDP version XIV	Value paid per axis of the total allocated per axes %
Axis 1	2,073,675,647	26	3,061,429,988	67.7
Axis 2	2,824,734,002	48	3,026,911,507	93.3
Axis 3	1,734,694,355	15	2,345,009,115	74.0
Axis 4	134,834,231	8	366,917,508	36.7
Technical assistance	90,493,003	3	132,009,738	68.6
Compensatory payments	391,437,007	0	392,527,376	99.7
Total	7,249,868,244	100		

Source: Treatments based upon the NRDP Annual Progress Reports 2008-2010

Analysis allocations- achievement for Measure 121

Following the analysis we performed at the level of the evolution of the accomplishment and result indicators of M121, we can prove that the target intended for realization for the period 2007-2013 could not be reached for all the indicators; thus, from the accomplishment indicators, that of the total volume of investment was overcome by 14.67%, this volume of investments being attributed to a number of 44,458 exploitations, which represent an indicator realization of 6.95%, exploitations that would receive a support of a medium value of the investment of 43,623 euros (Table 5), which was not achieved given the fact that the value of the support per investment was between 1,000,000-2,000,000 euros in accordance with the legal form of organization of applicant, respectively of the beneficiary.

Table 5

Evolution of realization and results indicators related to Measure 121 established through the Measure Chart

Type of indicator	Indicator	Target 2007-2013	Total done at the end of the year 2014	% done
Realized	the number of exploitations that receive support for investments divided according to the legal status, genre male/female, age and category of the beneficiary	44,58.00	3,088.00	6.95
	The total volume of investments (euros) divided in accordance with the type of investment (investments in improving the land, investments in buildings, in equipment, other investments, in accordance with the Decision EC no. 369/2003*)	1,927,797,229.00	2,210,595,480	114.67
Result	Number of exploitations that realize/introduce new products and/or new technologies divided in accordance with the reorganization of the	22,982.00	1,550.00	6.74

Type of indicator	Indicator	Target 2007-2013	Total done at the end of the year 2014	% done
	production			
	GVA increase in supported exploitations (mil. Euro)	2,172.00	513.34	23.63

Source: Treatments after the Annual Report Progress NRDP PNDR 2008-2014

The results indicators at the end of 2014 were accomplished in a small percentage, the higher percentage being represented by the VAN increase in the exploitations that benefited from community support within the period 2007-2013, a percentage that reached 23.36% of the total target envisaged for realization. Only a fraction of 1,550 agricultural exploitations developed new products/introduced new technologies, out of the total of 22,982 exploitations related to the envisaged target for accomplishment.

Analysis of Measure 121 at the level of South-Muntenia Region

In the period 2007-2013, within the framework of NRDP, at the level of South Muntenia Region 1,785 financing requests were submitted for financing within Measure 121 – modernization of agricultural exploitations, a thing that shows the interest for the investments financed for the improvement of the activity of agricultural exploitations through investments eligible within the framework of this Measure. In the entire period, the most required investments were in the acquisition of new performing agricultural equipment, a thing that can also be noticed from the analysis of the degree of mechanization in agriculture at region level.

From the total of the financing requests submitted at region level in M121 start year, Călărași county had the greatest financing requests submitted, being followed by Teleorman, with a number of 172 projects. Giurgiu and Argeș counties were at the opposite side, with a number of 88, respectively 79 projects submitted in 2008. In the analyzed period at region level a number of 585 projects were approved with a value of 161,091,512 euros (2014 Annual Progress Report), the majority of investments being represented by the acquisition of agricultural equipment; thus we notice the same tendency as at the national level for investments in the branch of ‘field crops’.

CONCLUSIONS

The evolution of agriculture post-accession has shown a contribution of to GDP creation of approx. 5-7%, with the exception of the year 2012, when it fell to 4.9% of the GDP. Approximately 99% of the exploitations are households and only a worrying 1% of the number of exploitations had as object agriculture with an economic purpose. One fourth of the employed population in our country undertakes activities in agriculture, forest industry

and fishing. The number of tractors increased by 6% with the decrease of the payload per tractor, and the combine numbers increased by 8.5%.

The result indicators related to Pillar II NRDP – Measure 121, at the end of 2014 were achieved in a small percentage, the highest being represented by the VAN increase in the exploitations that benefited from community support within the period 2007 – 2013, percentage that reached 23.36% of the total target envisaged for accomplishment.

Axis 1 projects attracted in the South-Muntenia Region 13% of the total national registered in the axis, the biggest value being destined to Measure 121, followed closely by Measure 123, but the highest percentage in total Axes was registered by Measure 121 with 21.1% of the total payments.

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