

Available online at: http://lumenpublishing.com/proceedings/.../rec-november-2017/

18th edition of the Conference "Risk in Contemporary Economy", RCE2017, June 9-10, 2017, Galati, Romania

Risk in Contemporary Economy

Analysis of Agriculture in the Socio-Economic Context of the Romanian Rural Environment

Iulia GRADINARU (CRISTEA), Dorina MOCUTA

https://doi.org/10.18662/lumproc.rce2017.1.28

How to cite: Gradinaru (Cristea), I., & Mocuta, D. (2017). Analysis of Agriculture in the Socio-Economic Context of the Romanian Rural Environment. In S. Hugues, & N. Cristache (eds.), *Risk in Contemporary Economy* (pp. 329-337). Iasi, Romania: LUMEN Proceedings.

https://doi.org/10.18662/lumproc.rce2017.1.28

© The Authors, Faculty of Economics and Business Administration, Dunarea de Jos University from Galati, Romania & LUMEN Proceedings.

Selection and peer-review under responsibility of the Organizing Committee of the conference

This is an Open Access article distributed under the terms of the Creative Commons Attribution-Noncommercial 4.0 Unported License, permitting all non-commercial use, distribution, and reproduction in any medium, provided the original work is properly cited



International Scientific Conference Risk in Contemporary Economy | RCE 2017 | 9-10 June 2017 | Galati – Romania

Analysis of Agriculture in the Socio-Economic Context of the Romanian Rural Environment

Iulia GRADINARU (CRISTEA)¹, Dorina MOCUTA^{2*}

Abstract

I would start wondering what one would respond to a simple question: "What agriculture means? 'Is it just THAT countryside job? Is it working in a farm, feeding animals? Is it sowing corn for home use? Well, agriculture is a huge industry that involves rural areas and its communities, natural resources and not least, human resources. The enlarged European Union and the specificity of rural areas imply a new vision for the application of the common agricultural policy, so that basic principles, such as the maintenance of a single market and financial solidarity, are respected. The purpose of the paper is point out some generalities about agriculture in the socio-economic context in Romania.

Keywords: agriculture, socio- economic context, rural development.

1. Introduction

Agriculture is one of the largest and most significant industries in the world, as we all know, is the backbone of any country.

Agricultural productivity is important not only for a country's balance of trade, but the security and health of its population as well.

Agriculture covers a wide range of subjects: economic situation, financial aspects, structure, trade, rural development, markets et cetera. [6]

https://doi.org/10.18662/lumproc.rce2017.1.28

Corresponding Author: Dorina MOCUTA

Selection and peer-review under responsibility of the Organizing Committee of the conference

¹ University of Agronomic Sciences and Veterinary Medicine Bucharest, 59 Marasti Boulevard. District 1, 011464 Bucharest, Romania.

² University of Agronomic Sciences and Veterinary Medicine Bucharest, 59 Marasti Boulevard. District 1, 011464 Bucharest, Romania, dorinamocuta@yahoo.com

^{*} Corresponding author.

Agriculture is the basic source of food supply of all the countries of the world—whether underdeveloped, developing or even developed. Due to heavy pressure of population in underdeveloped and developing countries and its rapid increase, the demand for food is increasing at a fast rate. If agriculture fails to meet the rising demand of food products, it is found to affect adversely the growth rate of the economy. Raising supply of food by agricultural sector has, therefore, great importance for economic growth of a country [7].

The progress in agricultural sector provides surplus for increasing the exports of agricultural products. In the earlier stages of development, an increase in the exports earning is more desirable because of the greater strains on the foreign exchange situation needed for the financing of imports of basic and essential capital goods [8].

2. Theoretical Background

Romania is one of the European countries with the highest potential in agriculture, with the sixth biggest used agricultural area from EU, but has a low productivity due to several factors. There are 13.7 million farms in EU-27, out of which 3.9 million in Romania (28.7%). While in EU-27 the average farm size is 12.6 hectares, in Romania the average farm size is only 3.5 ha. The differences are even higher if the economic size is considered: the EU-27 average is 11.3 ESU and only 1 ESU in Romania.

Table 1. Farm structure in Romania and in EU-27

		•		
	Unit of measure	Romania	EU-27	
Number of farms	no.	3.931.350	13.700.400	
Utilized agriculture area	ha	13.753.050	172.485.050	
Labour force	AWU	2.205.280	11.696.730	
Average farm size	ha	3.5	12.6	
Share of farms by different size classes	%			
< 5ha	89.9 70.4			
5-50 ha		9.8	24.5	
> 50 ha		0.4	5.1	
Average economic farm size	ESU	1.0	11.3	
Share of farms by economic size classes		0/0		
< 2 ESU		94.0	60.8	
2-100 ESU		6.0	36.9	

> 100 ESU		0.0	2.2
Importance of semi-			
subsistence farms			
Number of farms under 1 ESU	Nr.	3.064.670	6.389.390
Share of farms under 1 ESU	%	78.0	46.6

Source: calculations based on European Commission's data. 2010

According to the provisional data of the Agricultural Census, Romania's agricultural area totalled 15.86 million ha out of which the utilized agricultural area per total country was 13.298 million ha, with an average agricultural land area per holding of 3.45 ha. Out of this land, 62.5% is arable land. 33.8% pastures and hayfields. 2.4% permanent crops and 1.4% kitchen gardens.

The non-utilized agricultural area totalled 0.88 million ha and the idle agricultural area (according to the statistical research study "Crop production by main crops in 2010") was 1.35 million ha. According to the Agricultural Census provisional data, 55.6% of total holdings have less than 1 ha (2.13 million holdings) and their total area (1.03 million ha) accounts for 6.8% of total [6].

3. Argument of the paper

Out of the Romanian available area (8.2 million ha), 60 percent represents arable area, out of which around two thirds are used for cereals, making Romania one of the biggest 10 cereals exporters worldwide (ninth place in wheat export and sixth place in corn export).

The share of agriculture in Romania's GDP dropped constantly in the last 20 years, from 22.6 in 1993 to under 5 percent of the GDP in 2015, due to the structural transformation of Romanian economy, from an industrial-agricultural economy to one based on services.

Approximately 85 percent of the total workforce from agriculture is unpaid, working on their own agricultural areas in subsistence, compared with the average share of the unpaid workers from agricultural sector in EU, where it is 72 percent.

Romania still has the highest share of the agricultural sector in GDP out of all the EU countries, three times higher compared to the European average. Moreover, in 2014 there was 27.3 percent of the Romanian active population hired in agricultural sector, 6 times higher than the European average of 4.4 percent of the active population.

4. Arguments to support the thesis

Romania is on the last positions regarding the gross added value on hectare, around EUR 600/ha, in 2013, compared with the Western Europe countries where the gross added value exceeds EUR 1,000/ha. The gross added value on every sector from the economy leads to the GDP formation [8].

EU's enlargement to 27 Member States in the year 2007 changed the European agricultural reality, which at present includes a wide range of agriculture types, with large development gaps between the rural areas. Taking into consideration this reality, reforming the Common Agricultural Policy became again a necessity, and in this respect the political will for a significant reform divides the opinions of scientists, farmers' organizations and mainly of the Member States. The new agricultural policy should take this into consideration and try to adjust to the new international context, which is mainly characterized by the instability of markets and price volatility, and provide an integrating vision of the European agricultural policy.

A useful point of view would be to evaluate the share of direct payments in the farm income, and how many European farms would survive if these subsidies were removed. In the study Scenar 2020 – II it is estimated that if the direct payments were removed, the incomes of farms from EU-27 would decrease by 15% compared to the reference scenario. Part of this diminution would be the effect of tariff protection removal, but the most consistent part would be the effect of removing the direct payments. Yet it is considered that this diminution could be lower, if we take into consideration the fact that the removal of direct payments would lead to the decrease of land prices and of rent implicitly, which are included in the costs of agricultural products [2].

Concerning farm viability in the situation of abolishing the direct payments, in the study Assessment of the impact of changes in farm payments [9], it is evaluated that only 11% of the farms from EU-25 will have negative incomes in this eventuality. There are huge differences between countries and regions and between the different farm specializations. For instance, almost 90% of the dairy farms and mixed farms would continue to have positive incomes after the abolishment of direct payments, but only 60% of the farms specialized in cereals. Such an evaluation would be useful in Romania's case, too.

Another problem is whether direct payments contribute to the increase of farmers' income. In the situation in which they are received by

the land owners (and a significant part of these do not farm the land themselves), they rather lead to the increase of incomes in urban areas and miss the objective of a balanced territorial development. According to the European statistics, the tenant farmers benefit from direct payments only to a lesser extent. A significant part of the European agricultural land is leased out, from 20% to 80%, the percentage being different among the Member States. In Romania, the percentage of the leased land areas in total UAA reached 17% (2007), and in general it is the tenant farmers that receive the subsidies, according to the provisions from the land lease agreements [1].

Three scenarios were designed that concentrate the main options on the reform measures and correspond to the opinions expressed during the public debate.

The reference scenario "Status-quo" examines the trend extrapolation effects with regard to the economic, social and environmental effects generated by the European agriculture evolution under the current Common Agricultural Policy, the measures that will be eliminated in the future included. The prolongation of the present Common Agricultural Policy towards 2020 will have as economic consequences the increase of agricultural production due to the increase of the world food demand and to the increase of biofuel demand. From the social point of view, the present structures will be largely maintained in the future, referring here to the share of the agricultural sector in GDP and in the employed population, to the farm structure, to the urban/rural income gaps. At the same time, a diminution of the share of the population employed in agriculture is expected.

The scenario "Integration" proposes an integration of the three main CAP objectives (viable production of foodstuffs, sustainable development of the environment and the revitalization of rural and territorial equilibrium) under the two CAP pillars and the development of complementarities between these.

The scenario "Re-focus" – this scenario proposes the concentration of support only on funding those measures targeting the environmental objectives and the attenuation of climate changes, through the rural development programs and strategies. The regional productions from many zones will disappear, which will adversely impact the local markets and the downstream chains, with negative effects upon incomes and upon territorial cohesion implicitly. At the same time, the concerns regarding the environmental indicators will be minimal, and the function of agriculture as supplier of public goods will be attenuated. The main social impact will be that many farmers will close down their business and the agricultural incomes will decrease.

5. Arguments to argue the thesis

Both in EU-27 and in Romania, the rural areas (predominantly rural and intermediate rural) have a much lower population density compared to urban areas. As regards the evolution of population density in the period 1995 - 2007, Romania, compared to EU, experienced population loss in all the three types of areas.

Table 2. Population density and population density evolution by types of areas, in Romania and in EU-27

	Romania		EU -27	
Types of areas	Population density 2007	Population density evolution (1995-2007)	Population density 2008	Population density evolution (1995-2007)
	inhabitants/k m2	%	inhabitants/k m2	%
Predominantly rural regions	72.4	-3.1	48.3	0.4
Intermediate rural regions	102.7	-4.7	119.3	3.8
Predominantly urban regions	1272.9	-24	513.9	20.3
Total	93.7	-3.9	115.3	3.3

Source: European Commission, 2010

The population structure by age groups does not feature significant variations by the three types of regions (see Table 3). However, it can be noticed that the share of population of working age is slightly higher in the predominantly urban areas while the predominantly rural areas have a higher share of persons over 65 years of age. Except for the predominantly urban areas, Romania has a less demographically aged population than that from EU-27.

Table 3. Structure of population by age groups and the population's ageing index by types of areas, in Romania and in EU-27

	Romania		EU -27	
Age category	Structure by age groups (2008)	Population's ageing (0-14 years/ >64 years)	Structure by age groups (2008)	Population's ageing (0-14 years/ >64 years)
Predominantly rural regions				

0-14 years	16.10		15.7		
15-64 years	68.40	1.03	66.5	0.88	
> 64 years	15.60		17.8		
	In	termediate rural regions	S		
0-14 years	15.10		15.6		
15-64 years	70.50	1.06	67.3	0.92	
> 64 years	14.30		17		
Predominantly urban regions					
0-14 years	12.00		15.9		
15-64 years	73.80	0.84	68.1	1	
> 64 years	14.30		15.9		
Total					
0-14 years	15.20		15.7		
15-64 years	69.90	1.02	67.2	0.92	
> 64 years	14.90		17.1		

Source: calculations based on the European Commission's data, 2010

The gross domestic product per capita is higher in the predominantly urban areas than in the rural areas, both in Romania and in the European Union (EU-27, EU-27, EU-15 and EU-12). The difference between the rural areas and the urban areas is stronger in Romania. While in EU-27, in the period 2000 – 2006, GDP remained relatively constant, in Romania, the situation was quite different: it increased by 7% in the predominantly rural areas and by 12% in the intermediary rural areas. While the primary sector represented 4.6% and 2.4% respectively of the gross value added in the predominantly rural areas and intermediate rural areas in EU-27, in Romania the share was much higher: 11.2% and 6.1% respectively.

Table 4. Evolution of the gross domestic product per capita, by types of areas, in Romania and in EU-27*

	GDP evolution/capita			
	RO	UE 27	UE 15	UE 12
Predominantly rural regions	7	1	-2	5
Intermediate rural regions	10	0	-3	8
Predominantly urban regions	30	0	-3	16
Total	12	0	-3	8

^{*} GDP in current price / capita; EU-27 average =100; 2006 is the average of years 2005, 2006, 2007; 2000 is the average

Source: calculations based on the European Commission's data, 2010

6. Conclusions

It can be noticed that in Romania a bipolar agrarian structure is in place, consisting of small-sized farms, with extensive production systems, on one hand, and very large farms, which apply intensive, modern production systems, on the other hand. In the last 20 years, this structure did not experience major changes, both types of farms playing an important part in land operation and each having its economic and social role and specific development potential.

At the same time, the rurality level of Romania compared to the EU-27 average can be seen, as well as the specificities in relation to the social aspects from the rural area. Taking into consideration these specific characteristics as well as the evolution of the agricultural and rural sector in Romania, mainly after Romania's accession to the EU, as well as the need to increase competitiveness, it is of utmost importance to use all the possibilities made available by the agricultural and rural policy instruments proposed by the Commission, so as to provide support to both types of farming, to respond to their development needs and niches [5].

References

- [1]. Turek Rahoveanu A. Economic Evaluation in the Structure of Production of an Agricultural Holding Case Study. Proceeding of the 28th International Business Information Management (IBIMA28) Conference Seville. Spain; 2016.
- [2]. Turek Rahoveanu A, Stoian E, Turek Rahoveanu M. Analysis of the exploitation structures and land management in Romania vs. European Union, International Journal of Sustainable Economies Management; 2013
- [3]. Commission Communication to the European Parliament, Council, European Economic and Social Committee, Committee of the Regions and the European Investment Bank the Conclusions of the Fifth Report on the economic, social and territorial cohesion: the future cohesion policy. November 9th; 2010.
- [4]. European Institute of Romania. Strategy and policy studies SPOS; 2011.
- [5]. The Reform of the Common Agricultural Policy in the Context ofPost-2013 Budgetary Perspective
- [6]. Agricultural census in Romania, available at http://ec.europa.eu/eurostat/statistics-explained/index.php/Agricultural census in Romania.
- [7]. Romania has significant potential in agriculture, but low productivity, says PwC Romania study, available at http://www.business-

Analysis of Agriculture in the Socio-Economic Context of the Romanian Rural (...)

- review.eu/news/romania-has-significant-potential-in-agriculture-but-low-productivity-says-pwc-romania-study-132113.
- [8]. Role of Agriculture in the Economic Development of a Country, available at http://www.economicsdiscussion.net/economic-development/role-of-agriculture-in-the-economic-development-of-a-country/4652.
- [9]. Vrolijk HC, De Bont CJ, Blokland PW, Soboh RA. Farm viability in the European Union: assessment of the impact of changes in farm paymen. LEI Wageningen UR; 2010.