

THE INFLUENCES OF THE CULTURAL MODELS ON AGRICULTURAL PRODUCTION STRUCTURES IN ROMANIA AND SOME EU-28 COUNTRIES - A PERSPECTIVE¹

Andrei Jean Vasile², Dusmanescu Dorel³, Mieila Mihai⁴

Summary

The evolution of the Common Agricultural Policy and the changing of its paradigm was a subject of extensive consideration in the literature, but never the implications of specific cultural aspects on agricultural performance and production structures were ever taken into consideration.

The main aim of the paper is the analysis of the some aspects regarding the influences of the cultural models on agricultural production structures in Romania and some EU-28 countries, from a larger perspective, starting with the CAP transformations over the time and the European agricultural model, analysing the role of the multifunctional agriculture in shaping the holding's structure and performances, and in the last it is considered the role of agriculture and rural communities in promoting renewable including bio-fuels.

Key words: *production structures, cultural model, PAC, multifunctional agriculture, diversification.*

JEL: *Q56, P48, Z1*

1 Paper is supported by the Sectorial Operational Programme Human Resources Development (SOP HRD), financed from the European Social Fund and by the Romanian Government under the contract number SOP HRD/159/1.5/S/136077

2 Andrei Jean Vasile, Ph.D., Assistant professor, Petroleum-Gas University of Ploiesti, Faculty of Economic Sciences, B-dul Bucuresti no. 39, 100680, Ploiesti, Prahova, Romania, Phone: +40 721 146 587, E-mail: ajvasile@upg-ploiesti.ro

3 Dusmanescu Dorel, Ph.D., Associate Professor, Petroleum-Gas University of Ploiesti, Faculty of Economic Sciences, B-dul Bucuresti no. 39, 100680, Ploiesti, Prahova, Romania, Phone: +40740237254, E-mail: zlin50@yahoo.com

4 Mieila Mihai, Associate Professor, Valahia University of Targoviste, Faculty of Economic Sciences, Str. Lt. Stancu Ion, no. 35, 130105, Targoviste, Romania, Phone: +40 726 822 882, E-mail: m_mieila@yahoo.com

Introduction

Agriculture represents a sector that has ample reverberations and significations at the EU-28 level, and, through the medium of the numerous evolutions and transformations that it suffered (Antonio, Alberto, 2007; Ioan et al., 2012; Jean, Mircea, 2012; Filon, 2013), it managed to transcend above the classic role that it used to have- the assurance of alimentary security and support for the rural communities, thus becoming a harmonization reference of the usually divergent interests that the member states have. It integrates the national agriculture politics at the highest level. From this perspective, The Common Agricultural Policy can at the moment be appreciated as a sounding board of the evolution of the European Union during its entire existence, reflecting the ample reforms that it suffered in its process of development. It may represent the most visible result of the harmonization process of the interests of the 28 states that now compose UE.

In a reflexive study (Overmars et al., 2013), analyses the impacts of policy measures adopted through the Common Agricultural Policy (CAP) on the farm production, income and prices, and on farmland biodiversity, using a model direct connected to paradigm changes of the European agricultural model of production.

The CAP evolution and the frequent reforms it suffered made this current policy to be radically different from the ones that dates back to the 1950's, the beginning of the 90's or after the reform from year 2007. The newly built paradigm deepens even more the action range, thus having a refined addressability to the rural communities and space, beyond what classic agriculture means. CAP became an active policy, which has to evaluate its instruments and means of action in order to evaluate the ample transformation processes of the rural space, where agriculture continues to hold a preponderant role.

CAP imprints the European agriculture sector a multifunctional dimension, both from the agro-alimentary production perspective- which turned EU-28 into one of the greatest agriculture producers in the world, as an effect of promoting the measures of direct productions- but especially thought the determining role it plays at the level of the European rural communities, ensuring a great deal of services, from jobs for the rural population, to the protection of the community cultural dimensions- the crafting and the local traditions, of the rural communities cohesion and of the environmental protection.

As Viaggi and associates observed (Viaggi et al., 2013), CAP is one of the most important factors in promoting progress at the level of the rural communities, and of the European agriculture in general. Thereby CAP constitute a defining element in ensuring the well-being of the rural communities in the context of globalization and market integration, as its own very existence ensures a stability factor for the cohesion of the European rural space. The CAP influences on local communities are multiple and resonate equally with their local cultural dimension. The adaptation of the rural communities at the CAP exigencies and the new European agricultural paradigm are closely connected to the compatibility level between the local, rural specific, and the exigencies that are imposed by the sectorial competitiveness.

Recent researches made by El Benni et al. (2012) in Switzerland or by Mishra et al. (2009) for the USA highlighted the fact that some of the financial measures that CAP adopted can have dubitative or even toxic effects without an anterior pertinent analysis, if we take into account the reduction of the total budget that CAP had, and the continuation of the sustenance of the direct payments that will continue to deepen inequity of the income that European farmers have.

By decoupling, in 2003, most of the direct payments that were accomplished through the medium of the unique payment schema (SPU) for some of the important sectors such as arable crops, beef and mutton production, or in the dairy products sector, or with the reforms that took place in 2006 in the sugar industry, which continued in 2007 with ample reformative measures in the fruits and vegetables sector and in the viticulture sector, a new CAP paradigm has appeared, which orientated from the classic approach of direct support of the production through the medium of the subventions and of the production shares and, obviously, to a new approach of Pylon II, the one of rural development.

Thereby, CAP, through the medium of the component that concerns the rural development, contributes to the improvement of the living conditions in the rural communities, supporting the creation of new jobs in the rural environment through the medium of its multifunctional character, protecting both the environment and the rural landscapes, which are affected by the intensive agriculture. Also, by eliminating the direct help for the production, the European agriculture stimulated the development of its multifunctional character, approaching the problematic of the rural communities, through the medium of active support, eliminating the surplus of production and the supporting prices, considerably transforming the practices of sectorial financing, which determined an improvement of the market balance and the reduction of the budgetary costs concerning the intervention stocks.

Out of these considerations, CAP, but especially the component that concerns the politics of rural development must follow the improvement of the sectorial competitiveness and of the innovation at the level of the rural communities, through the medium of mobilization of the specific non-agricultural components. Integrating the non-agricultural component and its acceptance as a factor which raises the valorization of the rural potential, imprints the rural communities a translation movement from the classic model of the rural development, in which agriculture has the predominant role, to the multifunctional agriculture model, in which the practices and the local traditions, the culture and the environment become production factors, generating additional value.

Methodology and data sources

Analysing the influences of the cultural models on agricultural production structures in Romania and some EU-28 countries implies a broader approach from the perspective of new CAP paradigm and the changes of the European agricultural model during the years. From this perspective, the article is centered on three main axes:

- the transformation of the European agricultural model under the CAP reforms and

the new European agricultural approach;

- the new CAP paradigm and its influence on agricultural production structures;
- multifunctional agriculture and the rural activity diversifying.

In substantiating these perspectives, it was used a wide range of statistic databases, starting with the Farm Accountancy Data Network (FADN-RICA) database and the Eurostat statistic database (Eurostat, 2015), and not in the last the information available on DG.Agriculture and Rural Development website (DG Agri, 2014; DG Agri, 2015).

The European agricultural model and the Common Agricultural Policy tendency

CAP is founded and equally reflects the features and the principles of the European agricultural model, which targets the achievement of alimentary sovereignty and of the durability of the agricultural production in the European space, starting from the real necessities, both of the consumers and especially of the agricultural producers, which have to be harmonized. From this point of view, according to (European Economic and Social Committee, 2013/NAT/449), the main objectives which CAP must promote and achieve in the common space, are mainly centered on:

- achieving the safety and alimentary security by achieving an agricultural production that is quantitatively and qualitatively adequate;
- supporting the production and the marketing of the local products that are specific in the rural zones, and promoting them as interesting vectors for the rural communities, especially of those that have a touristic potential;
- participating at the stabilization of the markets, by limiting the price fluctuations on the agricultural products;
- supporting the incomes that the European agricultures have, usually inferior to those of the employees from the other economic sectors;
- prioritizing the doable utilization of the natural resources, of the biodiversity, along with the preservation of the natural habitats, by highlighting the greening measures of CAP;
- supporting- from Europe 2020 Strategy's perspective - the development and the innovation (smart grow), the development of new renewable energies (durable grow) and the consolidation of the potential of creating new jobs in rural zones (inclusion-favourable grow), by respecting the practices in creating new jobs, contracts and European and extra-community agricultural seasonal workforce. (European Economic and Social Committee, 2013/NAT/449).

Understanding CAP's operating mechanism thus depends on understanding the characteristics of the European agricultural model, which has in foreground performance and high competitiveness of the agricultural sector, founded on an agriculture that has a high level of technical endowment and usage of the intensive production, which is based on promoting large and very large farms. Reorienting to promoting and capitalizing the rural as a determining factor in the promotion of the new European agricultural paradigm imposes a

rethink of CAP's implementing instruments. Thereby, according to a CES opinion (2011), it is appreciated that „the integration of CAP among the other community politics (enterprises and associations, actions of protecting the climate, harmonized inter-sectorial politics, occupying the workforce, energy and natural resources, environment, politics concerning the protection of consumers, development regions and local development, science and technology) (European Economic and Social Committee, 2011/NAT/481)

Agriculture, through the medium of its ample significance it has to the local communities, represents a dominant factor in modeling the rural space, often being the only way to achieve the incomes for a large part of the rural population. Agriculture also contributes to the realization of extensive offers of primary public goods, which represent preconditions for the activities that take place in the rural environment, by the superior capitalization of the available natural resources, of the local cultural potential, of the agro-tourism, of the touristic landscapes along with the possibility of producing renewable.

The extensive reforms that marked the European agricultural sector transformed CAP in a genuine instrument for modeling the rural communities. Rural communities accepted CAP, as it usually was the only source in financially sustaining many rural families, as agriculture had to become multifunctional

Referring to the CAP effects on the occupation in the rural environment (Petrick, Zier, 2012) claim that generating new jobs under the effects of the CAP capitalization is possible only if subsidies of capital are allocated, and in order to create additional workplaces for short-terms, subventions of about 50,000 EUR are needed every year.

On the other hand, analysing the distribution effect that the instruments of agricultural policy has on the income of the farms in Italy (Severini, Tantari, 2015), we came to the conclusion that the direct payments to CAP and changing the paradigm by reallocating resources from Pylon I b y the rural development component will achieve a more equitable distribution of the farmers' income.

As (Kvakkestad et al., 2015) analysed the attitude of the Norwegian farmers on the agriculture and the necessity of financial support of this sector, through the medium of the CAP instruments, it highlights the special importance given to the multifunctional agriculture and of its effects on the rural communities. According to this study, only a small part of the farmers find producing crop landscapes profitable, rather than other public and private goods that is specific to this sector, for which financial support exists.

As it is established in one of the (European Parliament's Resolutions from the 8th July, 2010), „the agro-ecological indicators are highlighting more and more a special potential of the agriculture in the effort of reducing the effects of the climate changes, of the direct reduction of the net greenhouse gases, and in the production of renewable energy, because, if they are practiced in a sustainable way, the agricultural activities are essential for the conservation of the biodiversity, as combating the soil erosion is, at the same time, a determining factor in the reduction of the climate changes, and promoting the multifunctional dimension of the rural space” (European Parliament, 2010).

One of the imperative challenges at which the European agricultural model must respond and adapt to, are, as found in (Finland's EU Presidency, 2006), mainly centered on:

- the active management of the financial impact of the agricultural sector on the community budget from the perspective of the direct capitalization measurements;
- CAP's paradigm change, from directly supporting the agricultural production and of the farmers to financing the greening and agro-environment measurements;
- the adaptation of the agricultural sector to the environmental changes, by promoting bio-energy production, ecological agriculture and the new ecological technologies of production, which have a much lower impact on the environment;
- the evolution of agro alimentary prices in context of market instability and volatility;
- the liberalization of the international agricultural market and the reduction of internal production shares;
- the challenges that concern anew extension of UE-28 with countries whose alimentary models are having a reduced grade of convergence compared to the European model (Turkey), (Finland's EU Presidency, 2006).

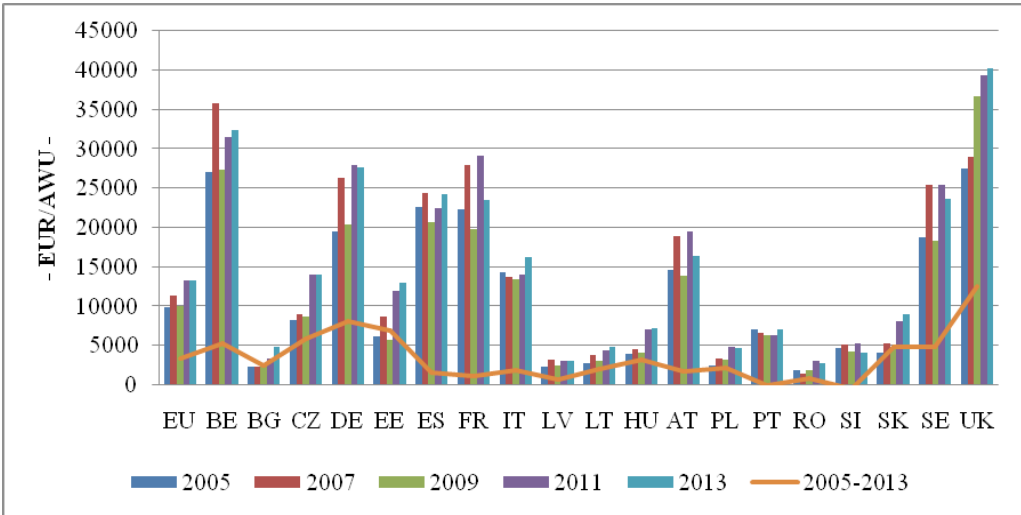
The evolution of CAP is mostly the result of the beliefs according to which the agriculture, beyond its classical aspect of delivering food and raw materials for the downstream sectors, must achieve a superior valorization of the rural space potential, in the context of diversifying the functionalities of the rural communities.

From this perspective, there appears the problem of CAP's complexity in the perspective of the diversification of the rural activities, of the impact of the European agricultural model on the modeling of the rural economy and its valorization through the perspective of a better capitalization of the potential, along with the evolution of agricultural production structures, in the context of significantly reducing the direct support of the production, and of the modernization of the rural communities under the impact of the global cultural transformations.

At the level of UE-28, the rural communities are significantly transforming under the effects of the PAC reforms, and the rural space becomes multifunctional, sometimes having urban aspects, and agricultural activities stop having the determining role at this level, as accent is put on capitalizing the complementary dimensions.

In order to highlight CAP's influences on the European rural communities, in this research it is taken into consideration the analysis of the evolution of certain significant indicators, which equally reflects both the agricultural level of competitiveness and the multidimensional sectorial influences. In order to understand the impact that agriculture has on the European economy in its ensemble, an important aspect is represented by the agricultural evolution expressed in real terms, in some counties UE-28, 2005-2013. Factor income in real terms represents one of the most representative analyse indicators in the agricultural sector, offering information about the viability of the sector itself, representing an element in founding the agricultural sectorial policies.

Graph 1. Agricultural factor income in real terms (2005-2013)



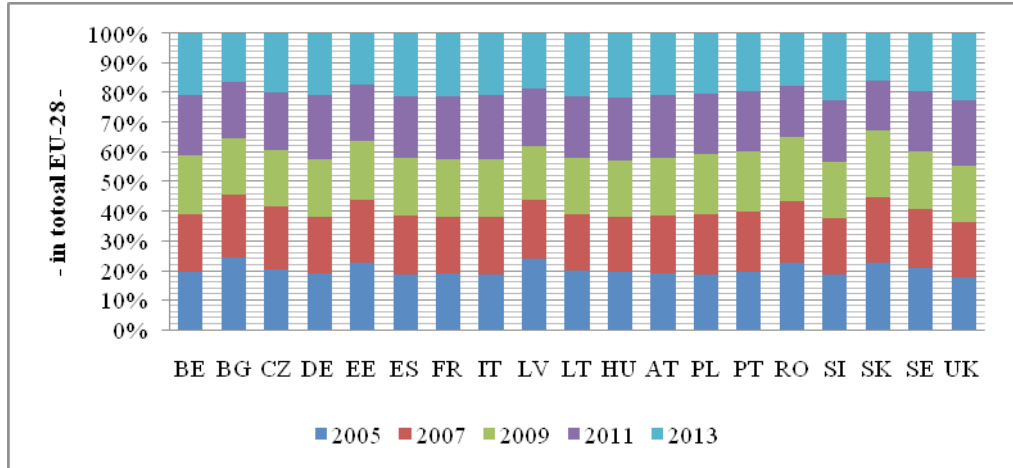
Source: author’s based on (DG Agri, 2014; DG Agri, 2015).

By analysing the data from graph 1, the evolution of agricultural factor income in real terms, achieved for year 2005, expresses a significant growth for the analysed period of time, at the level of EU-28, from 115.5% in year 2007 to 134.5% in year 2013. This evolution is registered for most of the member countries. Thus, for group of countries which have influences of social economic model, evolution of agricultural factor income in real terms is more accentuated than in case of the Anglo-Saxon model. In Romania’s case, agricultural factor income in real terms increases from 76.8 % in year 2005 to 135% in year 2007.

According to a European Commission DG-Agriculture and rural development evaluation, “compared to a five year average of the period 2008-2012, the EU-27 agricultural income per annual working unit in real terms would be 17.5% higher in 2022 compared to the base period”, (DG.Agriculture and rural development, 2015).

The evolution of the agricultural factor income can also be expressed through the Labour force input prism, which, during the same period of time, it registered a significant reduction tendency in the case of most of the analysed countries. The labor force input diminution expresses both the tendency that the agricultural sector to diminish its unique role of employer or preponderant employer in the agricultural zones, in favor of the multifunctional activities. In order to motivate this situation, in graphic 2, the evolution of labour force input is represented in the case of certain countries EU-28, during 2005-2013.

Graph 2. Evolution of labor force input in some EU-29 countries (2005-2013)



Source: author's based on (DG Agri, 2015).

As it can be referred from graph 2, during 2005-2007, the labour force input share in some EU-28 countries has significantly reduced. As if in 2005, the labour force inputs in Romania's case, had a share of 20.28% in UE-27 total, eight years later, it was diminished by 4.41%, reaching a level of 15.87% in 2013. In exchange, in the cases of the economies that had traditions from the common space, this indicator has registered slight growths. If, in Germany's case, in year 2005 it had 4.55%, in year 2013 it grew with 0.52%, reaching 5.07%; in France's case, from 7.09% in year 2003, to 7.92% in 2013, or Poland's from 17.09% in 2003 to 19.65% in year 2013. The workforce continues to represent, in agriculture's case, one of the determining factors in capitalizing the potential, despite promoting technologies, of the diversification of the activities and of the multi-functionality of the sectors. Using labour force input in promoting a sectorial extensive growth in the case of the European economies that have tradition, the process of adjustment of the usage of the workforce is opposing in the countries that are recently included in the common space, such as Romania or Bulgaria's cases.

CAP influences in the agricultural production structures

The agricultural production structures are the ones to best feel the CAP effects and adapt to its exigencies. The way they capitalize the instruments that are promoted by CAP, can represent a trait of the influences that have a cultural and adaptation nature to the specific of the local cultural model, by modeling those elements that can be acquired and supported with minimum resistance to change. Agricultural practices are often, if not always, the expression of an agricultural tradition that is created at the level of each geographic space or local community. Given these conditions, the agricultural production structures manage to integrate the traits of the national cultural model, as they themselves are the result of the rural specific influences. From this point of view, the analyse of the evolution of certain indicators of economic efficiency, such as the rapport Total output /Total input, Farm Net Value Added,

Farm Net Value Added/AWU, Farm Net Income/FWU can express a part of the cultural specific model. Thus, in table 1, it is represented the evolution of these indicators, that were previously mentioned, in some UE-28 countries and Romania, for a period of time during 2008-2012, using the FADN-RICA statistics.

Table 1. The evolution of some representative indicators in analysing the farm performance, in some Eu-28 countries (2008-2012)

Country	Year	Farms represented	Total output / Total input (%)	Gross Farm Income (EUR)	Farm Net Value Added (EUR)	Farm Net Income (EUR)	Farm Net Value Added / AWU (EUR)	Farm Net Income / FWU (EUR)
Bulgaria	2012	115,640	1.05	23,502	18,969	8,669	7691.95	3650.33
	2008	146,770	1.1	11,824	9,994	5,189	3965.93	2460.77
Germany	2012	192,450	1.06	121,912	91,540	47,984	41232.39	33067.55
	2008	201,680	0.98	88,217	63,100	27,271	29251.47	19642.62
France	2012	304,190	1.09	108,434	77,253	47,403	38041.34	33115.55
	2008	303,340	1.03	89,297	61,433	34,676	30964.73	23966.13
Hungary	2012	105,320	1.07	37,427	31,419	18,817	19889.24	21586.51
	2008	94,240	1.03	38,640	30,517	16,444	16017.9	12423.4
Italy	2012	80,4670	1.46	35,721	28,653	22,469	22698.85	23435
	2008	818,740	1.54	34,701	27,555	21,695	21064.66	21736.99
Poland	2012	728,160	1.21	17,028	12,736	10,681	7375.49	6710.55
	2008	735,110	1.13	15,173	10,530	8,197	5897.85	5344.72
Romania	2012	1,042,390	1.47	8,329	7,084	5,853	5433.27	4090.05
	2008	1,289,250	1.35	6,181	5,171	4,077	3011.29	2307.05
Sweden	2012	27,890	0.9	80,741	53,537	16,492	37205.63	14710.56
	2008	29,850	0.95	68,818	51,979	26,163	35832.93	22501.9
United Kingdom	2012	92,180	1.03	120,359	87,960	51,632	39419.71	39470.17
	2008	96,740	1.02	97,088	74,800	45,090	36456.72	35505.89

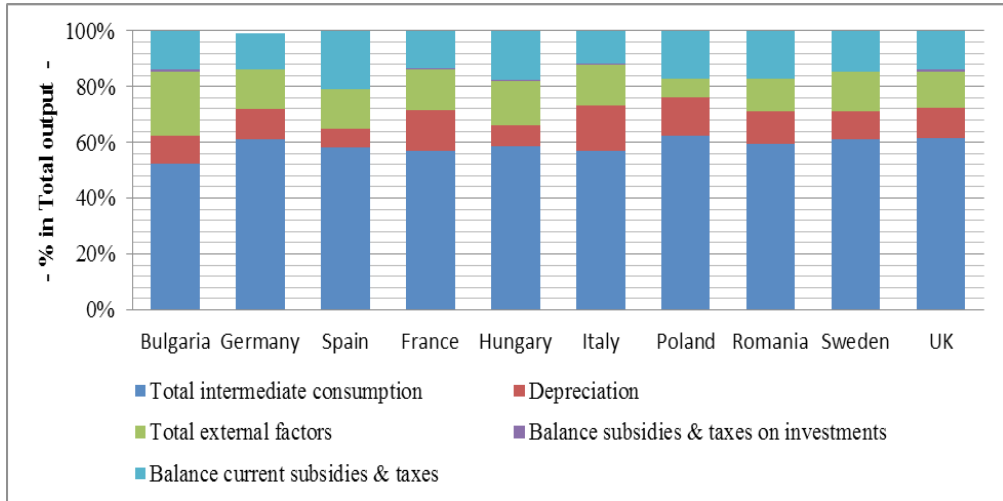
Source: author's based on (FADN-RICA, 2015)

From table 1, it can be easily observed that in year 2002, in the case of indicators like Total output/Total input, most of the analysed countries register above par values, as the greatest value is for Romania (1.47), followed by Italy(1.46), Poland (1.21) and France (1.09). Concerning the efficiency level that is expressed by the other two relations, Farm Net Value Added /AWU and Farm Net Income/FWU, the situation is unfavorable for Romania, confirming the low efficiency of the national agricultural sector, compared to the efficiency of other countries with European tradition.

As it has been highlighted in other previous studies (Ene, Matei, 2012; Andrei et al., 2014; Andrei, Ungureanu, 2014; Adrian, 2015; Tătaru, Nedelcu, 2015; Ciutacu et al., 2015), the agriculture production structures have a determined role in capitalizing the national agricultural potential, from the agriculture exploitations dimension point of view, the level of endowment with technique and technology, of the mobilized workforce, along with the financial support they benefit. Thus, in graph 2, there are represented, at the level of year 2012, the last year

for which there exists available data in the FADN-RICA database, the dimension of relevant indicators from the perspective of which the performances of the agricultural farms can be explained, in the case of the countries that were taken into consideration in this analyses.

Graph 3. Dimension of some relevant indicators in understanding agricultural farms performances



Source: author’s based on (FADN-RICA, 2015).

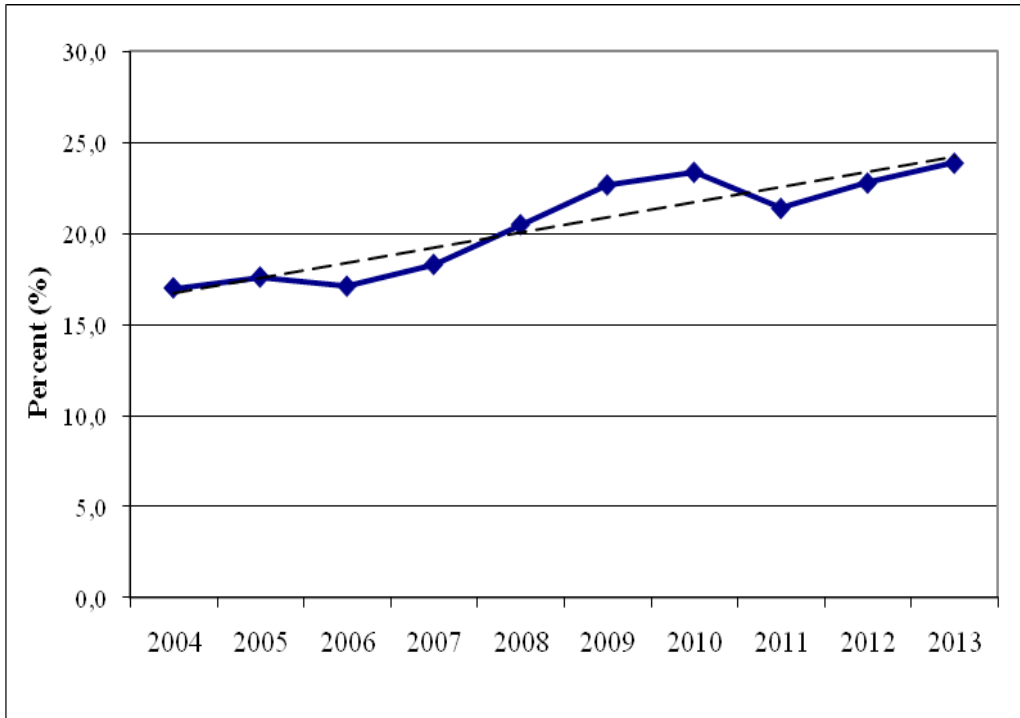
Thereby, even though Romania, along Italy, recorded, in year 2012, in the case Total intermediate consumption, a value that was low compared to the total output, and the lack of vision concerning the replacement of the used capital, highlighted by the relatively low value of depreciation, only in the case of European economies with tradition in CAP, makes that the level of endowment with capital of Romanian agriculture is low (Graph 3).

Another factor that influences the agricultural production structures is connected to the Romanian cultural model, especially to the economical culture of the population. Unfortunately, during the communist regime, the economical culture was negatively influenced. This influence was strongly felt in the Romanian agriculture due to the fact that in that domain of activity, entrepreneurship, under the form of the agricultural exploitation(farms), represent an important factor for the development of the rural spaces, and of the living conditions of the population in the rural environment. The breaking of the great national agricultural properties in a lot of small parcels led to the impossibility to apply modern technology for production, and led to correspondent decreases of the productivity. Only after the adherence to UE in year 2007, a coagulation of the agricultural surfaces that began to be bought or worked by firms which had the ability to ensure a modern exploitation, which had technologies that ensured a productivity that was at least good

If we analyse the agricultural production structures, another factor that we should take into consideration is another aspect of the economical culture of the Romanian society from the past years, which is the orientation to energetic crops. The need of energy of the modern society is growing while the production of fossil fuels is inevitably decreasing. Given these

conditions, starting to use renewable sources of energy becomes a necessity, along with the need to reduce the volume of gasses that have the greenhouse effect (carbon dioxide, water steam, nitrogenate oxides'). One renewable source of energy is represented by bio-fuels (biodiesel, bio-ethanol) which can be obtained from colza and sunflower oil (biodiesel), and cereal, potatoes and sugar beets (bio-ethanol).

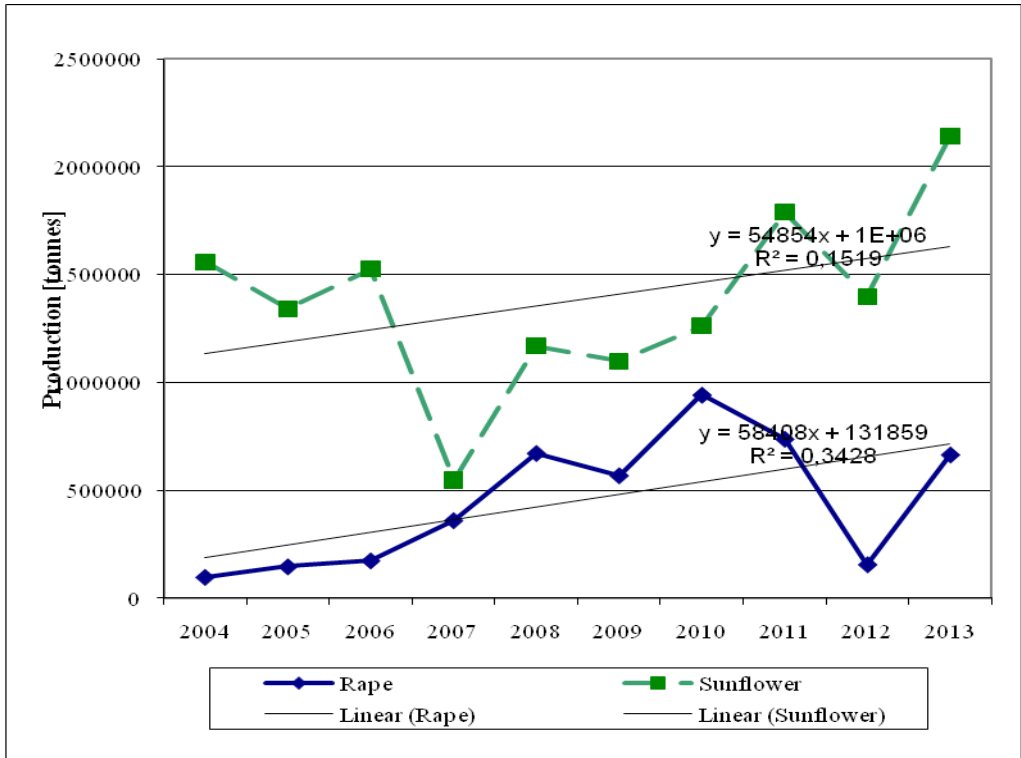
Graph 4. Share of energy from renewable sources for Romania (2004-2013)



Source: author's based on (Eurostat, 2015).

As you can observe in graph 4, the percentage of energy from renewable sources out of a total of consumed energy has constantly grown since 2004 until now. This correlates to the colza production, which substantially grew due to the alignment to the EU requests concerning the usage of a percentage of at least 5% biodiesel out of the entire quantity of diesel fuel that has been sold in EU, so in Romania too.

Graph 5. Production evolutions` of two major renewable raw materials – Rape and Sunflower in Romania (2004-2013)



Source: author’s based on (INS, 2015).

It can conveniently notice (Graph 5) an important variation of the sunflower production due to the fact that the sunflower oil is seen as an alimentary factor rather than as a diesel fuel resource, so that the percentage of it in the agricultural production structures is influenced by other factors than in the case of colza.

The growth of the biodiesel percentage that will have to be found in the quantity that will be sold in future will lead to a growth in the quantity of colza that is needed, quantity which will lead to a growth in the surfaces where colza is planted. In this case, a balance should be found between the existent agricultural surface and the surface that will be cultivated with energetic crops, but effort will have to be made in order to convince farmers of the necessity of these energetic crops, in a way that would not endanger the alimentary production that the population needs.

Conclusions

The evolution of the Common Agricultural Policy, but especially the paradigm shift from providing direct financial assistance and support for agricultural production to rural communities and environment protection through the greening measures, has imposed dramatically changes in considering the role of agricultural on rurality. During the last two

decades the European agricultural model represents the leading instrument in valuing the EU-28 agricultural potential, both by promoting public goods as the main frame of the historical experience and as a production model for the rural communities, where agriculture remains, after numerous reforms, one of the most important economic activities for rural households.

The main argue of CAP consists in valuing the rural communities' potential by diversifying the activities, where agriculture despite its determinant role is completed by complementary activities as rural tourism, handicraft, renewable production and preserving rural traditions and specific. Greening the CAP is a basically step in promoting and accentuating the multi-functionality role of the rural communities in the EU-28 economy. The influence of cultural model among the rural communities has imposed a specific way of valuing inland agricultural potential and rural community's traditions. We are witnessing a return to the rural traditions and specific, as a component in a higher access of the financial support allocated by Pillar II of the CAP.

During the analysis it was reviled, also that the CAP evolution could be considered as an implicit result of the cultural models influence on production structures including the actual status of the European agricultural model paradigm. The values of some representative indicators in analysing the farm performance, for some of the EU-28 countries took into consideration, during 2008-2012, highlights the discrepancies dispersion in accordance to the cultural models patterns developed during the years by each member state.

As per general, the influences of the cultural models on agricultural production structures in Romania and some EU-28 countries are quite visible and continue to shape both the CAP evolution and the European agricultural model paradigm. In this context, it is important to rethink, both the agricultural production system and the rural paradigm in a larger context of greening the CAP and promoting multi-functionality.

Literature

1. Adrian, S. (2015): *An Analysis of the Relation Between Wine Consumption and Cultural Models*, Economics of Agriculture, vol. 62, pp. 207-227.
2. Andrei, J. V., Ungureanu, A. (2014): *The importance of economic structure evolution in achieving performance - from agrarian economy to competitiveness in Romanian economy*, Economics of Agriculture, vol. 61, no. 4, pp. 945-957.
3. Andrei, J., Eftimie, M., Matei, M. (2014): *The role of Romanian farms in valuing the inland agricultural potential*, Journal of Food, Agriculture & Environment, vol. 12, no. 1, pp. 1532-1535.
4. Antonio, G. S., Alberto, G. G. (2007): *A comprehensive assessment of multifunctional agricultural land-use systems in Spain using a multi-dimensional evaluative model*, Agriculture, Ecosystems and Environment, vol. 120, pp. 82-91.
5. Ciutacu, C., Chivu, L., Andrei, J. V. (2015): *Similarities and dissimilarities between the EU agricultural and rural development model and Romanian agriculture - Challenges and perspectives*, Land Use Policy, vol. 46, pp. 258-266.

6. DG.Agriculture and Rural Development (2014): *Economics of rural areas. Agricultural income*, available at: http://ec.europa.eu/agriculture/rural-area-economics/income/index_en.htm,
7. DG.Agriculture and Rural Development (2015): *CAP monitoring and evaluation indicators - CAP CONTEXT INDICATORS – 2014 update*, available at: http://ec.europa.eu/agriculture/cap-indicators/context/index_en.htm
8. El Benni, N., Finger, R., Mann, S., Lehmann, B. (2012): *The distributional effects of agricultural policy reforms in Switzerland*, Agricultural Economics - Czech, vol. 58, no. 11, pp. 497–509.
9. Ene, C., Matei, M. (2012): *New dimensions of food security in Romania from the European perspective*. The 3rd International Symposium “Agrarian Economy and Rural Development - realities and perspectives for Romania”, Bucharest, Romania, October 11-13, 2012, pp.135-140.
10. European Economic and Social Committee (2011): *Opinion of the European Economic and Social Committee on the Communication from the Commission to the Council*, the European Parliament, the European Economic and Social Committee and the Committee of the Regions – The CAP towards 2020: Meeting the food, natural resources and territorial challenges of the future, NAT/481 The future of the CAP, Brussels, 16th March 2011, Reporter: Franco Chiriaco, available at: http://www.eesc.europa.eu/?i=portal_en.nat-opinions.15467
11. European Economic and Social Committee (2013): *Opinion of the European Economic and Social Committee on the Reform of the common agricultural policy in 2013 (own-initiative opinion)*, NAT/449, Brussels, 18th March 2010, available at: www.eesc.europa.eu/.../ces452-2010_ac_en.doc
12. European Parliament (2010): *European Parliament resolution of 8 July 2010 on the future of the Common Agricultural Policy after 2013*, (2009/2236(INI)), available at: www.europarl.europa.eu/sides/getDoc.do?type=TA&reference=P7-TA-2010-0286&language=EN
13. Eurostat (2015): *Environment and Energy Section*, database of EUROSTAT, available: <http://ec.europa.eu/eurostat/web/energy/statistics-illustrated>
14. Filon, T. (2013): *Aggregate efficiency of resource utilization in the Romanian agri-food sector – macroeconomic evolutions*, Agricultural Economics and Rural Development, vol. 10, no. 2, pp. 155-176.
15. Finland’s EU Presidency (2006): *The European Model of Agriculture - Challenges Ahead*, A Background Paper for the Meeting of Ministers of Agriculture in Oulu 26.9.2006, SN 3098/06, available at: www.euroqualityfiles.net/Documents%20EUAM%20and%20CEECAP/Europe/Future%20policy/oulu_european_model_agriculture_en.pdf
16. INS (2015), National Institute of Statistics, Bucharest, TEMPO online database, available at: <http://statistici.insse.ro/shop/>

17. Ioan, D., Luminita, C., Jean, A., Mirela, M. (2012): *Using labor force and green investments in valuing the Romanian agriculture potential*, Journal of Food, Agriculture & Environment, vol. 10, no. 3&4, pp. 737– 741.
18. Jean, A., Mircea, U. (2012): *Through Common Agricultural Policy Reforms: A Short Analysis*, International Journal of Sustainable Economies Management, vol. 1, no. 3, pp. 32-40.
19. Kvakkestad, V., Rørstad, P. K, Vatn, A. (2015): *Norwegian farmers perspectives on agriculture and agricultural payments: Between productivism and cultural landscapes*, Land Use Policy, vol. 42, pp. 83-92.
20. Mishra, A., El-Osta, H., Gillespie, J. M. (2009): *Effect on agricultural policy on regional income inequality among farm households*, Journal of Policy Modeling, vol. 31, pp. 325– 340.
21. Overmars, K. P., Helming, J., van Zeijts, H., Jansson, T., Terluin, I. (2013): *A modelling approach for the assessment of the effects of Common Agricultural Policy measures on farmland biodiversity in the EU27*, Journal of Environmental Management, no. 126, pp. 132-141.
22. Petrick, M., Zier, P. (2012): *Common Agricultural Policy effects on dynamic labour use in agriculture*, Food Policy, vol. 37, no. 6, pp. 671-678.
23. Severini, S., Tantari, A. (2015): *The distributional impact of agricultural policy tools on Italian farm household incomes*, Journal of Policy Modeling, vol. 37, no. 1, pp. 124-135.
24. Tataru, A., Nedelcu, A. (2015): *Territorial and Agricultural Resources from the Rural Vrancea Area with Decisive Role in the Development of the Local Economy*, Agricultural Management Strategies in a Changing Economy, p. 161.
25. The Farm Accountancy Data Network (FADN-RICA) database (2015), available at: http://ec.europa.eu/agriculture/ricaprod/database/database_en.cfm
26. Viaggi, D., yPaloma, S. G., Mishra, A., Raggi, M. (2013): *The role of the EU Common Agricultural Policy: Assessing multiple effects in alternative policy scenarios*, Land Use Policy, vol. 31, pp. 99-101.