

Contribution of agriculture to national economic development

Iacob, Oana Camelia and Volintiru, Ana-Maria and Marin, Aurel

Valahia University, Târgovişte, Romania, Valahia University, Târgovişte, Romania, Valahia University, Târgovişte, Romania

21 November 2013

Online at https://mpra.ub.uni-muenchen.de/53380/MPRA Paper No. 53380, posted 04 Feb 2014 16:55 UTC

CONTRIBUTION OF AGRICULTURE TO NATIONAL ECONOMIC DEVELOPMENT

OANA CAMELIA IACOB¹, ANA-MARIA VOLINTIRU², AUREL MARIN³

Abstract: At national economic level there is a fierce competitivity, experienced more and more perhaps due to the crisis. Functionality of the economy has been a challenge that many have failed to honor, but at least led us to try to. The chance to succeed was related to everyone's desire to ensure durability. This article is to demonstrate the need to develop agricultural policies in rural areas, but measures to encourage private initiatives are also included in order to satisfy completion of measures on the farm and to provide alternative employment opportunities for the rural population. Improvement of the poverty status of the population employed in agriculture, development of entrepreneurial initiative and increasing economic competitiveness leads to a harmonious development.

Keywords: agricultural policy, productivity, rural development.

INTRODUCTION

Romanian economy after 1989 went through a prolonged period of transition which has had negative effects on all sectors. This transition period was a continuous process which attempted to seek solutions to the country's economy to become functional, search that had different economic and technical means, depending on the programs of political parties succeeded in power.

Based on provisional data of 2010 General Agricultural Census, of the 23.8 million ha representing Romania's total area, utilized agricultural area in farms is about 13.3 million ha (55.9%), of which about 8.3 million ha is arable land. By use arable land covers about 62.5% of agricultural land; cereals and oilseeds occupy about 80% of arable land (see table no. 1).

Land resources by use in Romania (thousands ha.)

Table no. 1.

Land resources by use in Romania (thousands na.)								
Specification	2007	2008	2009	2010 beginning	2010 end			
Agricultural area, of which:	14.709,3	14.699,3	14.684,9	14.690,1	13.298,0			
Arable	9.423,3	9.415,1	9.422,5	9.417,7	8.305,0			
Pastures	3.330,0	3.330,0	3.313,8	3.343,2	4.494,0			
Meadow	1.531,4	1.532,4	1.528,0	1.521,1				
Vineyards and vine nurseries	218,0	214,5	215,4	209,8				
Orchards and tree nurseries	206,6	207,3	205,2	198,3	317,0			
Family gardens***	-	-	-	-	182,0			

Source: www.madr.ro

The ratio of arable land and population means that every citizen of Romania represents about 0.41 hectares of arable land, value superior to many European Union countries and almost double of the EU27 average, which is 0,212 ha per capita. After accession, Romania shall ensure a high degree of convergence of national agricultural policy measures with the community, with some bilateral permitted exceptions and subsequent approvals. Romania opted to introduce direct payments scheme per hectare and per animal (SAPS), introduced after accession and to be applied in 3 to 5 years in order to prepare the required Community demands required for the gradual

¹ Ph. D. Student, Valahia University, Târgovişte, Romania, <u>ioanabaghi@yahoo.com</u>

² Ph. D. Student, Valahia University, Târgovişte, Romania, <u>anavolintiru@gmail.com</u>
³ Ph. D. Student, Valahia University, Târgovişte, Romania, <u>aurel.marin@yahoo.com</u>

introduction of the single farm payment scheme (SPS) which will later be generalized, since by 2013 a further CAP reform is expected.

The LEADER program aims to introduce a new approach to rural development planning, bottom-up, integrated, which builds on identifying local needs and developing local development strategies that combine one or more priority objectives: competitiveness and quality of life.

Payments for market support and rural development have been fully allocated in the first year after accession, in the form of reimbursement of actual expenditure by the paying agencies (if these expenditures are made).

Financial package consisting of allocations from the European Union and the National State Budget, set for Romania, spread over a period of 10 years (Euro 1766 million) was allocated in ascending percent since 2007 (25%) until 2016 (when the full amount may be spend).

The latest official information reveal that the total budget allocations for Romania from the EU budget for 2007-2009 totals approx. 30 billion, of which agriculture accounting for over 40 % (about 12 million Euro)⁴.

These values will be supplemented with considerable additional amounts from the national budget. Aid will continue by supporting measures initiated by the Farmer Program, which provides funding modalities and investment in farms for absorption of amounts and extension of the SAPARD program in mass farm to form a viable commercial sector, as well as the foundations of the future legal framework for creating Houses for Rural Credit.

Due to the excessive number of subsistence and semi-subsistence households, which can only be financed selectively in the future, it is necessary to accelerate the formation of producer groups to focus on the allocation of small areas to invest in modernization⁵.

Economic fluctuations in Romania

The agricultural sector used to occupy a relatively high percentage during the transition to a market economy. The contribution of agriculture, after a decade of transition (1990-2000) to total gross value added declined from 23% in 1990 to 12.1% in 2000. Amid a major expansion of the services sector and revival of industrial production, the contribution of agriculture to GDP has declined continuously. In the years of sustained economic growth (2000-2008), Romanian agriculture reached a maximum weight of about 14% of GVA in 2004; this year was considered an exceptional crop year. Between 2000-2009, in Romania the population employed in agriculture decreased by 41.1%, similar to that of other EU countries, which have a relatively high share of agriculture in GDP. Decreasing workforce input led to reduced utilized agricultural area. Thus, annual fluctuations in agricultural productivity were recorded due to changes of agricultural production instability strongly influenced by climatic conditions. Calculated as gross value added (GVA) per annual work unit (AWU), productivity in agriculture, compared to the EU27 average is significantly lower (see table no. 2). Year 2000 was characterized by a decline in agricultural production, agricultural productivity in Romania being 25.2% in the EU-27 and in 2009; the best year was 43.2%. Such oscillations are also observed in other countries (Slovakia, Greece). One significant problem is our position towards the EU, even during favorable agricultural productivity years, at a level below 50 % of the EU-27 average.

⁵ Zahiu, L. *Agricultura Uniunii Europene sub impactul Politicii Agricole Comune*, Editura Economică, București, 2006, p.155

_

⁴ Mărcuță, L., Mărcuță, A., Tindeche, C., *Analysis of Romanian GDP during crisis*, 20th International Economic Conference - IECS 2013, "*Post Crisis Economy: Challenges and opportunities*", Sibiu, România, mai, 2013

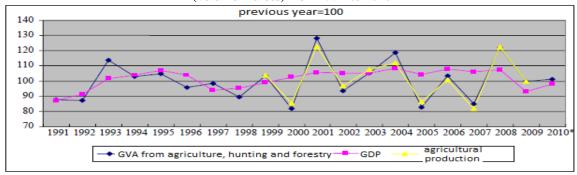
Position of agriculture in some of the EU countries

	(includir and f industr	agriculture ng hunting ishing) y in total VA	Share of employment in agriculture in total employed population	Dynamics of employment in agriculture	Agricultural GVA per person employed in agriculture (EU-27 = 100%)	
	2000	2009	2009	2009/2000	2000	2009
UE-27	2.4	1.6	5	-24.9	100	100
Share of agriculture in GVA> 3%						
Romania	12,1	7,0	23,4	-41.1	25,2	43,2
Bulgaria	13,6	5,6	10,7	-48.1	51,9	59,4
Slovakia	4,5	3,9	3,8	-42.5	109,9	256,1
Poland	5,0	3,6	14,0	-11.3	47,3	51,6
Lituania	6,3	3,4	10,4	-21.1	60,3	55,5
Latvia	4,6	3,3	9,4	-38.2	35,1	53,5
Hungary	5,4	3,3	11,0	-34.8	56,5	60,6
Greece	6,6	3,2	12,0	-2.6	132,8	79,4

Source: www.insse.ro

Romanian economy performance was influenced, from the supply perspective, by four key factors⁶: existence of an important sector of chronically inefficient ventures, underutilization or complete demise of many manufacturing capabilities, undercapitalization of a large part of the viable economy segment, high taxation.⁷ These factors also apply to the agriculture and causes low efficiency of production. Variability of weathering after 2000 led to a change in the agricultural production under the low level of modernization of the sector (lack of irrigation, flood protection system failure). These changes are most prominent at the GVA of agriculture to GDP growth (see Fig. No. 1).

Indices of total GDP, GVA from agriculture (including hunting and forestry) and agricultural production (volume indices) from 1991 to 2010



^{*} Preliminary autumn forecast, the National Weather, 6 Sept.2010

Source: www.insse.ro, time series and other NIS

⁶ Dobrescu, E., Albu, L., *Dezvoltare duarabilă in România. Modele și scenarii pe termen mediu și lung*, Editura Expert, București, 2005, p.280

⁷Gheorghiu, A., Gheorghiu, A., Spânulescu, I., *Target market risk evaluation*, Proceedings of the International Conference on Econophysics, New Economics & Complexity - ENEC-2009, Editura Victor, Bucureşti, 2009, ISSN 2065-2550, p.113

There is a low supply of crop products on the domestic market, where the biggest gap is in fruits and vegetables supply. In 2009, due to the crisis that reduced the consumption of vegetables and canned vegetables to 50% of the total, 40% in 2008 and 42.5% in 2004. After 1990, the small subsistence farming sector resisted thanks to the structure of the old rural households. Large companies hold an important role in the domestic market and increase of farms hey. These companies may lead to advantages in the production of pigs, livestock, grain and oilseeds, etc. Peasant households are not excluded from the market, producing mainly for own consumption; they do not meet the acquis in terms of marketing.

Employment in agriculture declined between 2000-2009, measured in annual work units; however, this equivalence does not represent reality in employment in agriculture. The large number of people in agriculture is evident if considering working population in agriculture holdings in European economic size unit. In 2007, a quarter of Romanian population carried work in uneconomic size holdings. Reduction of employment in agriculture is interrupted in 2009 because of the crisis, so we face the same situation in 1990 where agriculture is an occupational damper. In the first three quarters of 2010, data from the INS releaved a decreasing number of employees as well as the unemployment rate. In the South-West Oltenia, Muntenia South and Northeast, the employment rate tends to increase slightly, while in Bucharest labor force is absorbed by the service sector. Agricultural production has not been outstanding as a result of what happened in 2000-2008 by reduction in agricultural employment and then its increase by seasonal labor in response to crisis events.⁸

Meeting the food needs of the population depends not only upon food availability but also on the existence of solvent demand of the population (see table no. 3).

Average annual consumption of main food of plant origin, per capita

Table no. 3.

Average annual consumption of main food of plant origin, per capita						
Specification	MU	2006	2007	2008	2009	
Cereals and cereal products:						
- in grain equivalent	kg	207.9	206.9	204.0	200.8	
- in flour equivalent	kg	157.3	156.0	154.1	151.7	
Potatoes	kg	97.4	96.1	99.5	93.1	
Vegetables and vegetable products (equivalent fresh vegetables), legumes and watermelons	kg	181.7	164.1	176.0	168.2	
Fruit and fruit products (fresh fruit equivalent)	kg	83.2	67.8	62.9	62.3	
Sugar and sugar products (refined sugar equivalent)	kg	29.0	24.9	23.2	25.8	
Vegetable fat (gross weight)	kg	15.4	13.8	14.6	16.0	

Sursa: www.insse.ro

After Romania joined the EU, CAP mechanisms apply in agriculture, providing a mixture of structural adjustment policies required to comply with Community requirements, taking into account national peculiarities. But Romanian agriculture was far from the EU's objectives in terms of cost competitiveness and development of services in rural areas.

CAP is based on two pillars: Pillar 1, including market measures aimed at seeking population food security and food safety, supply-demand adjustment, growth and income stability for farmers, and Pillar 2, which includes measures for restructuring and modernization of agriculture and agro-food sector in connection with the economic development of rural areas, sustainable management of natural resources, economic and social cohesion and welfare of rural inhabitants. The process of globalization and trade liberalization trend that require international competitiveness of agriculture to face tough competition in international markets, the energy crisis,

⁸ Dachin, A., Contribuții ale agriculturii la fluctuațiile economice în România. Economie teoretică și aplicată, Volumul XVIII (2011), No. 1(554), pp. 154-165

which has worsened and global climate change affecting agriculture⁹. The European Union has established uniform strategic lines for all Member States taking into account structural and economic differences between the old Member States (EU-15) and the new Member States (EU 10+Romania and Bulgaria) undergoing a transition in the way to full integration into EU structures. In Romania, direct support from the Community allocated to farmers is based on "Single Area Payment Scheme" (SAPS), designed to move gradually towards "Single Farm Payment Scheme" (SPS) introduced in the EU-15 since 2005-2006. "Complementary national direct payments" (topup mechanism) is also applied within SAPS, providing support to supplement agricultural production by targeting the local market consolidation requirements by up to 30 % of the amount allocated by the Community. Moving from SAPS to SPS is appropriate for Romania in terms of rapid formation of a broad sector of medium farms and small farmers association to prevent excessive concentration of production in large enterprises, abandonment of rural areas for an increase of external workpower drain. New CAP reform, which applies after 2013, will change the current mechanisms by targeting expenditure towards rural development, aiming thereby at increasing investment in alternative economic activities. Supporting agriculture will rely on financing investment projects that lead to accountability applicants for EU and national funds.

Projects will follow objectives relating to complex economic interests of rural communities, aiming at building facilities for processing and forms of association for joint marketing of agricultural products.

Switching to the allocation of payments per farm should be an incentive for economic development rather than social support for farmers who do not produce for the market. Application of CAP requirements in Romania is done by the Ministry of Agriculture and Rural Development, together with its regional structures, while management of funds to support agriculture is done through the Agency for Payments and Intervention in Agriculture (APIA) and the Paying Agency for Rural Development and Fisheries (APDRP). APIA makes direct payments for market measures and state aid from the European Agricultural Guarantee Fund (EAGF) as well as from the European Agricultural Fund for Rural Development (EAFRD) budget, and additional amounts from the national budget are added to these funds. EAFRD makes payments for projects and financial support under the National Rural Development Plan (RDP) and the Plan for Fisheries and Aquaculture (PNPA), approved by the European Commission for 2007-2013. EAFRD funding aimed at both economic development and environmental protection measures. There are a lot of agricultural policy measures applied in Romania in 2007: the single area payment scheme, national complementary payments per hectare and per animal, various forms of support for market measures - intervention. The application of direct payments scheme in Romania (SAPS) and the complementary national direct payments (PNDC) follows the accomplishment of sustainable, competitive market driven farming. Allocation of direct payments is subject to compliance requirements of good agricultural and environmental practices, complementary to some actions supported by Pillar 2 on the environment. Combination of market mechanisms to direct payments and rural development measures aim at the development of the rural economy.

Romania is entrusted with the sum of 101 694 000 Euros for European Economic Recovery Plan, which complements the budget allocated by the European Agricultural Fund for Rural Development (EAFRD) to support investments in energy, climate change, modernization of the dairy sector, water resources management, renewable energy and biodiversity.

⁹ Burghelea, C., Crăciun, L., Molănescu, A., G., *Goals of the national agricultural policy*, International conference, Fifth edition, Ecological performance in a competitive economy, Bucharest, Proceedings Supplement of "Quality-Access to Success" Journal, ISSN 1582-2559, Vol. 14, S1, March 2013, p.315

CONCLUSIONS

In 2007-2013 the amount allocated from the EU budget for agriculture, rural development and fisheries is over 13.5 billion Euros, of which 39.29% for the single area payment, 1.77% for market measures, 57.29% for rural development and 1.65% for the fisheries sector ¹⁰. Of the 7.5 billion allocated by the EU to Romania in 2013 for rural development, 45% are provided to finance competitiveness of agriculture and forestry. Measures under Axis 2 funded through APIA, supporting disadvantaged areas or agro-environment payments have a much higher level of access to the measures outlined above. Between 2007-2013, under Axis 2 financial resources were allocated for measures for the sustainable use of agricultural land.

Measures included within RDP Axis 3 aim at attracting existing resources as natural resources on which businesses can emerge and develop in rural areas, but measures are also included aim to encourage environmental initiatives to comply with measures of the farm and to provide alternative employment opportunities for the rural population. This axis was developed primarily to help improvement of the poverty of the population employed in agriculture, development of entrepreneurial initiative and increase economic competitiveness in rural areas, as well as infrastructure development. LEADER program is an important component of the National Rural Development Programme (Axis 4), whereas aims to create the design and conduct of strategies and sustainable rural development projects. Romania is implementing the LEADER program in the timeframe between 2007-2013. In preparation for implementation of the program, 120 sub regions were shortlisted from 37 districts, their representatives being trained for constructor of partnerships, local development strategy, territorial action plan etc.

BIBLIOGRAPHY

Burghelea, C., Crăciun, L., Molănescu, A., G. (2013), *Goals of the national agricultural policy*, in Proceedings Supplement of "Quality-Access to Success" Journal, ISSN 1582-2559, Vol. 14, S1, p.315

Dachin, A. (2011), *Contribuții ale agriculturii la fluctuațiile economice în România*. Economie teoretică și aplicată, Volumul XVIII, No. 1(554), pp. 154-165

Dobrescu, E., Albu, L. (2005), *Dezvoltare duarabilă in România. Modele și scenarii pe termen mediu și lung*, Editura Expert, București, p.280

Gheorghiu, A., Gheorghiu, A., Spânulescu (2009), I., *Target market risk evaluation*, Proceedings of the International Conference on Econophysics, New Economics & Complexity - ENEC-2009, Editura Victor, Bucureşti, ISSN 2065-2550, p. 113

Iancu, A. (2005), Dezvoltarea economică a României, vol. 1 și 2. Competitivitatea și integrarea în Uniunea Europeană, Editura Academiei Române, București

Istudor, N. (2006), Dezvoltarea Rurală și regională a României în perspectiva integrării în Uniunea Europeană, Editura ASE, București

Mărcuță, L., Mărcuță, A., Tindeche, C. (2013), Analysis of Romanian GDP during crisis, 20th International Economic Conference - IECS 2013, "Post Crisis Economy: Challenges and opportunities", Sibiu, România

Pasti, V. (2009), Noul capitalism românesc, Editura Polizom, București

Rădulescu, C. (2007), *Integrarea cerințelor dezvoltării durabile în agricultură. O cale spre performanță economică, ecologică și socială*, Editura ASE, București

Rojey, A. (2011), Viitorul încotro? Schimbare pentru supraviețuire. Editura Didactică și Pedagogică, București

Socol, C. (2004), Opțiunile de politica agricolă și dezvoltare durabilă a agriculturii. Editura Economică, București

Tanase, I., Angelescu, C. (2006), Integrarea României în Uniunea Europeană. Editura ASE, București

Toma, E. (2010), Agricultura României în procesul de integrare europeană, Editura Ars Academica, București

Zahiu, L. (2006), Agricultura Uniunii Europene sub impactul Politicii Agricole Comune, Editura Economică, București

Zahiu, L. (2005), Politici și piețe agricole - reforma și integrare europeană. Editura CERES, București

www.apia.org.ro; www.ec.europa.eu; www.infoeuropa.ro; www.insse.ro; www.madr.ro.

¹⁰ Toma, E., Agricultura României în procesul de integrare europeană, Editura Ars Academica, București, 2010, p.21