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## **AGRICULTURE AND RURAL DEVELOPMENT IN ROMANIA – THE MAIN MODALITIES TO ATTENUATE THE CRISIS EFFECTS AND TO RESUME ECONOMIC GROWTH**

### **ABSTRACT**

**The paper presents the main modalities and solutions by which agriculture and rural development can represent factors of economic-financial crisis shock attenuation and resuming economic growth.**

It is without doubt that the main modality to increase agriculture contribution to the general economic growth is the **capital injection** into economic factors (investments that create jobs, increase production and productivity on the agricultural holdings, develop infrastructure in the rural areas), the best use of financial resources by funding systems adequate to the present situation whose effects should stop the economic decline and subsequently generate economic growth.

Romania, a EU Member State since 2007, must “get in line” with the funding systems used in agriculture and rural development in the European Union. However, a main remark should be made. **All the CAP funding systems, adopted by the EU, from its establishment up to the present moment (except for the first system, in use in the immediate period after the Common Market was established), have been funding systems designed and implemented under strong general economic and agricultural growth conditions**, for the equilibration of the agricultural market (in most cases with surplus of agricultural products), family farm consolidation and environment and landscape protection conditions, animal welfare, etc.

Taking into consideration the period of generalized economic and financial crisis, in the paper it is specified that **none of the funding systems of agriculture and rural development in the EU** has been designed for periods of generalized economic-financial crisis or economic recession, so that certain points of view presented below, with regard to the modalities to attenuate the crisis in agriculture and to increase this sector contribution to economic growth relaunching, might be in (relative) disagreement with the present CAP funding system, adopted by the EU.

**Keywords:** agriculture and rural development, economic-financial crisis, recession, CAP, investments

**JEL Classification:** Q01, Q14, Q18

## 1. INTRODUCTION

Knowing the present realities of the Romanian agriculture and rural economy is one of the **sine qua non** conditions for an accurate economic and social diagnosis having in view the application of a coherent program for increasing the contribution of agriculture to the attenuation of the present crisis and for resuming the sustainable economic growth.

Learning the lessons of other countries in which similar problems have been solved up, knowing the situation of agriculture, farmers and rural areas in France or Bulgaria, in Germany or in the Czech Republic, in Belgium or Slovenia, in Italy or Slovakia, in Greece or Hungary, in the European Union in general, or in Romania, we can notice that in these countries there are white, gray and black areas, that life in the countryside can be improved, too; as we found out that in these countries the rural environment and the rural areas have been also deteriorated in certain places, that the farmers are also confronted with more or less problems (even though the problems may be different), and finally, finding out that we have fundamentally different histories but certainly wishing to have a common future, by the present point of view we attempt to highlight a few opinions and solutions with regard to the possible contribution of agriculture and of the rural economy in particular, to the attenuation of the economic crisis effects and to resuming the economic growth in Romania.

We are concerned with the problems of agriculture and rural development in the conditions of Romania as a EU Member State, as we are facing a great compatibility dilemma (coming with one example, namely a highly important group of agricultural products, the cereals, presented in figure 1) between the new Common Agricultural Policy (high technical performance, increased material consumptions and costs, presence of great stocks of agricultural products with significant economic consequences upon the farm economy) and the situation of the Romanian agriculture that should pursue other objectives (deep restructuring and consolidation of farms, massive support to increasing the technical and economic yields, placing the Romanian agrarian products on the EU agricultural market).

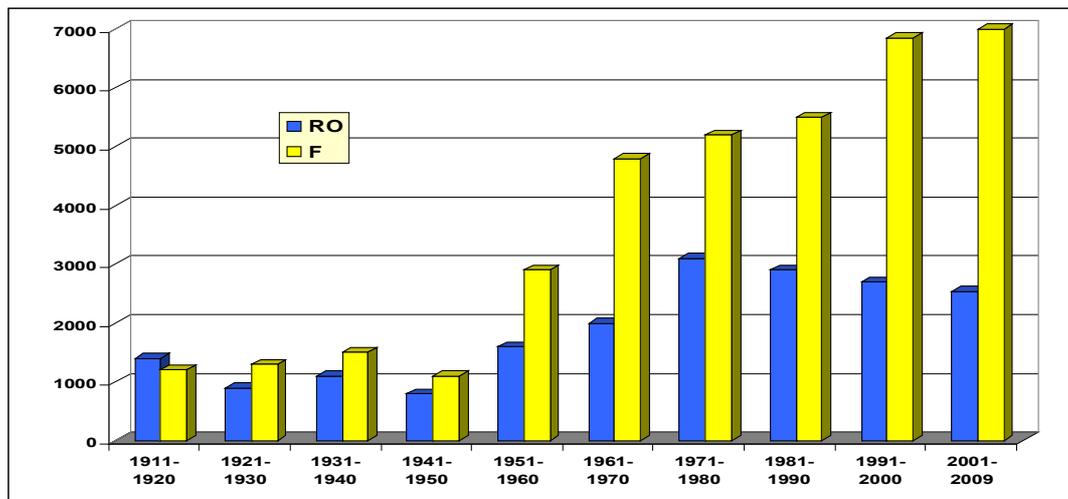


Figure 1. Average cereal yields obtained in Romania and in France throughout a century (1911 – 2009)

The new agricultural policy, by the implementation of the rural development instruments, should lead to the Romanian rural structures getting in line with the EU structures in a short period of time. For this, Romania needs a multifunctional, competitive agriculture, at the same time complementary with the agriculture from other EU Member States. At the same time, the Romanian rural area needs a modern infrastructure, correlated with the present needs of life in the countryside and with the complex rural economic activity.

The quality of the Romanian agricultural area represents the natural, ecological premise for the competitiveness of our products. The basic agricultural products (wheat, maize, sunflower, soybean, vegetables, fruit, grapes, meat, milk, etc.), obtained under average technical conditions, are perfectly competitive with the similar products from other countries, and in most assortments, the quality is even higher. A large part of the Romanian rural area has natural or cultural vocation, which is a basic condition, for the rural tourism or eco-tourism practice.

Starting from the special natural qualities of the rural area, the agricultural policy should provide support to sustainable rural development as economic growth factor and modality to attenuate the causes of the severe rural poverty and gradual shift to a decent economic and social standard in the rural area.

As it results from most studies that have been made, a change of vision, of mentality, a new philosophy of the rural area is needed, correlated with the local and regional autonomy and with the subsidiarity principle.

The new EU rural area development philosophy, in its essence, provides for: ***“The rural area in Europe represents a precious landscape resource, fruit of a long history, the survival of which is a lively concern for the society. The rural area can carry out its supply, recreation and equilibrium functions, increasingly desired by the society, only if it remains an attractive and original living area endowed with: a good infrastructure; a viable agricultural and forestry sector; local conditions favourable for the development of non-agricultural economic activities; an intact environment and a well-cared landscape.”***

At the same time, this new philosophy should be based upon the sustainable local development concept, which presupposes both an agricultural (or forestry) component and a strong non-agricultural economic structure, generating jobs in the rural areas.

The sustainable local rural development issue represents the quintessence of the economic and social policies targeting the development of local (rural) communities under a harmonious framework.

Starting from the “results” obtained in the agriculture and rural development in Romania in the period 1990–2010, we tried to accurately investigate the Romanian rural reform and to present a few economic relaunching solutions.

### **What is the reality of this period?**

The full land ownership right reconstitution was an extremely slow process, full of syncopes, in most cases on an incorrect and unfair basis. After more than 15 years, the land ownership reconstitution process has not been completed yet.

The privatization of state agriculture, by the sales of assets and share packages and the long-term lease of agricultural land (land concession) took place on most

agricultural commercial companies with great doubt with regard to the evaluation accuracy. The value of stocks of finished products and of unfinished production, in many cases, exceeded the amount paid by the “investors”. The privatization of state agriculture, similar to the large land properties from the remote areas of Europe, has created a new class of farmers.

The amounts allocated to agriculture from the state budget and the European pre-accession funds did not have any concrete economic effect. The average yields in the main crops stagnated or even declined in the last 20 years, and the gross agricultural output and the contribution of agriculture to GDP formation (as absolute value) stagnated. The absorption capacity of EU funds is either at the lowest level in Europe, in the case of project eligibility, or at the highest level in Europe, with regard to gaining funds by other modalities.

The village, in its entirety, and we refer here to the evolution of the non-agricultural rural economy and to the technical endowment of dwellings and localities, of the rural territory, “stood still” at the communist standards of the ‘80s for quite a long time. The severe poverty bags, the image of villages and houses destroyed by flooding, landslides or from other causes, and last but not least, the “deplorable” faces of the women who got old too early or of the men destroyed by their vices, are realities that can be most often met in rural Romania, at the beginning of the European era.

**What has to be done so that agriculture and rural development can represent factors of economic-financial crisis shock attenuation and resuming economic growth?**

The answer can be provided only starting from the need of **capital injection** in agriculture and rural development, in economic factors (investments that create jobs, which contribute to production and productivity increase on the agricultural holdings, for infrastructure development in the rural area), from the need to use the available financial resources, through funding mechanisms adequate to the present situation and whose effects should stop the economic decline and eventually generate economic growth.

Romania, as a EU Member State since 2007, must “get in line” with the funding systems of agriculture and rural development practiced in the EU. However, a main remark should be made. **All the CAP funding systems, adopted by the EU**, from its establishment up to the present moment (except for the first system, in use in the immediate period after the Common Market was established), **have been funding systems designed and implemented under strong general economic and agricultural growth conditions**, for the equilibration of the agricultural market (in most cases with surplus of agricultural products), family farm consolidation and environment and landscape protection, animal welfare, etc.

Taking into consideration the period of generalized economic and financial crisis, we should also underline that **none of the funding systems of agriculture and rural development in the EU** has been designed for periods of generalized economic-financial crisis or even globalized economic recession.

That is why certain points of view presented below, with regard to the modalities to attenuate the crisis in agriculture and to increase this sector contribution to relaunching economic growth, might be in a relative disagreement with the present CAP funding system, adopted by the EU.

## **2. COMPATIBILITY (CONVERGENCE) OF THE ROMANIAN AGRARIAN STRUCTURES WITH THOSE FROM THE EU**

### **2.1. Romania-European Union discrepancies in the field of performance and rural development**

From the point of view of agricultural performance and rural development, **the present situation of the Romanian agriculture is similar to the situation of the agriculture in the EU-6 Member States in the period 1957-1962**, namely:

- the primary production value per hectare obtained by the Romanian farmers (about 480-500€/ha) is by 2.5 times lower than the production obtained by the European farmers (1000-1050€/ha);

- the gross value added in the Romanian agriculture is half of that in the EU-15, which results in a final agricultural output of about 960-1000€/ha in Romania compared to 2200-2300€/ha in EU-15 (by about 2.2-2.3 times lower);

- the self-consumption on the subsistence farms in Romania represents 460-480€/ha, accounting for 90-92% of the production obtained on these farms; in the case of semi-subsistence farms, this accounts for 50-52% (compared to 10-12% in EU-15); this situation resulted in the commercial agricultural output value of 400-420€/ha in Romania, four times lower than the EU-15 average;

- the average yields of 2500 kg/ha obtained on the Romanian farms in the period 2000-2008 are at the level of yields obtained by the farmers from EU-6 in the sixth decade of the last century;

- the farmer endowment on the Romanian farms, compared to the farmer endowment in EU-15, is by about 25-26 times lower (9000-9200€ in EU; 350€ in Romania);

- the bank credits on the European farms are by 15-16 times higher compared to those provided to the Romanian farms (1700-2000€/ha in EU, 110€/ha in Romania);

- non-cultivation of an arable land area of 1150 thousand ha/year (40 thousand ha in the year 2002; 2300 thousand ha in 2009 and estimated at about 3000 thousand ha in the year 2010), which represents an average yearly agricultural production loss of 1050 mil. € (290 mil. € in 2002, 2165 mil. € in 2009);

- banning GMO soybean cultivation beginning with the year 2005, a condition that was much too easily accepted during the accession “negotiations”, resulted in a yearly loss of over 330 million \$/year (1.98 billion \$ in the period 2005-2010) for the soybean farmers and the allocation of an amount of about 150 mil. \$/year for the imports of soybean and soybean oilcakes from the United States, Argentina and Brazil, also obtained from GMO crops;

- rehabilitation of irrigation systems on about 30-35% of total irrigated area and their functionality on an area of only 280000 ha (9-10%) per year on the average (in the period 2000-2009);

- the consequence of the non-performance of the Romania agriculture is materialized into the extreme high share of the expenses for foodstuffs coming from imports (42.9% in the year 2008 and 39.8% in the year 2009) and into the high share of imported foodstuffs in total food consumption (25.1% in 2008 and 21.8% in 2009);

- the poor dwelling conditions for about 38% of the rural population due to the high share of dwellings (houses) made from non-durable materials (40-42%) and to the old age of dwellings (75% of dwellings are over 30-35 years old);

- the water supply on dwellings is inadequate, more than half of the rural population not benefiting from the public water supply network;
- the extremely low level of equipment of the rural houses and territory with natural gas, heating systems, drinking water, sewerage system (by about 5-6 times lower compared to the urban area and at a much lower level compared to the average EU-15 and even EU-25 level).

## 2.2. Factors generating non-performance in Romania's agriculture

**The non-performance of agricultural production each year** is generated, in the first place, by the **still (too) high dependence on the weather conditions** (weather-dependent agricultural production) as the irrigation systems are largely degraded and non-functional, the precarious farm endowment in irrigation equipment and the high irrigation water cost; it is also the result of **obsolete agricultural technologies** in use, with low consumption from the category of inputs that foster performance (fertilizers, crop protection substances). The drought, with an increasingly greater frequency, adversely impacts the agricultural production, mainly in the Romania Plain, Dobrogea and Moldova; it is in these areas that the largest irrigation systems are found, built up in the period 1960-1990, yet non-functional or non-utilized for about 20 years.

In countries such as France, Italy and Spain, a maximum differential can be noticed (difference between the yearly maximum and minimum yield) of about 1,300 kg/ha, at an average multi-annual yield of 6,300 kg/ha (20.6%), while in Romania the maximum differential is 2,000 kg/ha at an average multi-annual production of only 2,500 kg/ha (74.1%). Although the (EU:RO) yield ratio is 2.7:1, the ratio of differentials is 1:1.7, which undoubtedly proves Romania's agricultural non-performance.

## 2.3. Agricultural non-performance costs in Romania

Romania's lack of performance in agriculture and the multi-annual fluctuations caused by the obsolete technologies and the minimal inputs application have had most severe consequences upon the supply of agricultural products and upon the general costs of the agricultural sector.

From a recent survey (2008), conducted on several agricultural holdings, it results that about 48% in the wheat crop and 53% in the maize crop represent the fixed costs per hectare (basic mechanization works, land preparation for seeding, crop maintenance, harvesting, etc.), while the difference is represented by the variable costs materialized into the inputs that influence the average yield size. The fixed costs per hectare are 1000 RON/ha, on the average, for both crops. Taking into consideration the fact that in the period 2000-2008 in Romania, a total area of about 5-5.5 million ha was cultivated with wheat and maize, with an average yield of 2.5 t/ha, compared to the average of 7.0 t/ha in France, 6.6 t/ha in Germany or 5.0 t/ha in Italy, the following question arises: what would be the land area under grains necessary for Romania to cover the yearly grain consumption of about 14-15 million tons in the case in which Romania obtained similar yields to those obtained in France and other EU countries? The answer is simple: 2-2.2 million ha. From this calculation, it results that Romania has **annual costs generated by non-performance amounting to about 2.4-2.5 billion RON (710-760 million €)**; this amount could be spent on additional inputs necessary for increasing the average yields at the level of

performance from France, while the land area of 2-2.2 mil. ha could be available for the cultivation of other crops.

#### 2.4. Crises and permanent disequilibria in Romania's agriculture

The Romanian agriculture, as well as the entire agri-food economy, is characterized by the **crisis of the inefficient allocation and use of resources** (which started long before 1989); at the same time it is strongly affected by a **system of disequilibria** of land ownership and agricultural holdings, of the markets, prices of agricultural products and agricultural production inputs, of competitiveness and institutional operation, all these being factors that generate non-performance.

It has to be mentioned that in the period 1993-2008 (with four governmental cycles), the funds allocated to agriculture, under different support firms, amounted to 400-500 million €/year on the average, while the investments in agriculture in the same period amounted to about 400-450 million €/year, and in the last period (2004-2008) they exceeded 100 million €/year. Both the budgetary support schemes and the investments (which totalled about 10-12 billion € in the above-mentioned period) were not reflected in the increase of the agricultural output value and of the GDP produced in agriculture; these indicators were maintained (except for the year 2008) at about the same yearly level of 10-12 billion €/year gross agricultural output and 5.5-6.0 billion €/year GDP produced in agriculture.

The financial support to agriculture practiced under different forms (fixed amounts per hectare, vouchers depending on the cultivated area, payments per animal head, after the accession, SAPS €/ha) largely represented a "masked" form of social protection, without representing a modality for the development of the agricultural holdings and for farm performance increase.

#### 2.5. Funding systems for agriculture in the European Union after the 1960s

We have already mentioned that there is no interface, on the contrary, there are significant discrepancies between the situation of Romania's agriculture in the year 2010 and the present financial system applied in EU agriculture under the New CAP. In order to prove the veracity of the previous statement, it is sufficient to present what the EU Founding Member States conceived and applied, from the financial point of view, in the period when their agriculture was in a similar situation with that of the present Romanian agriculture as regards the institutional structure and performance.

In the period 1945-1950 all the West European countries, but mainly France and Germany, designed the first programs for agriculture modernization and equipment, targeting the **general increase of yields, reconstruction of agricultural holdings based on significant technical endowments and the family farm equipment. The West-European governments had a massive intervention on the agricultural farms** based on the financial support to farmers, having as immediate effect the increase of yields and on subsidizing the agricultural markets through price support, resulting in the diminution of agricultural price fluctuations and by this, the increase of the consumers' purchasing power and finally the agricultural production relaunching.

At the same time, the second important decision targeted the improvement of the **agricultural markets operation conditions through the rationalization of the distribution circuits**. In this period the target prices, the indicative prices and the campaign prices were introduced for the main agricultural products. The public power

got involved in the purchase, stocking and resale of the agricultural products, in the favour of farmers and not of the state or storing entities. The favourable differences between the selling prices to consumers versus the purchasing prices from the farmers did not represent income to the state budget but a source of farmers' support for the next harvest. The unfavourable price difference was transparently supported from the state budget.

The decisions of the West-European governments had immediate beneficial effects upon agriculture, in general, and upon the farmers from these countries, as in the next 4-5 years the farms were technically equipped and the agricultural holdings were consolidated, the agricultural production being relaunched. The relaunching had different costs from one country to another and different market prices. The economic processes in agriculture, together with the other market mechanisms, in general, and of the West-European market, in particular, determined the six states to adopt the decision to establish the European Common Market and the Common Agricultural Policy, with the following objectives:

- agricultural productivity increase based on the technical and biological advances, and on this basis the agricultural production increase through the optimum use of the production factors and increasingly qualified family labour;
- ensuring a decent living standard for the agricultural population, based on a satisfactory individual income for farmers;
- guarantees for the population (consumers) from the Member Countries with regard to the security of agri-food supply;
- guaranteeing reasonable selling prices for the agri-food products to consumers.

**The Common Agricultural Policy (CAP)** relied on three fundamental principles: single market growth and maintenance; respect of the Community preference; Community financial solidarity. The three principles, in correlation, were valuable and efficient only on an aggregate basis. Thus it can be explained that in about 25-30 years, 10 million farmers from 8.6 million agricultural holdings in the EU managed to feed 160-180 million people from the Community, which added to other 70-75 million people from other areas of the world to which EU exported food products.

At the same time, CAP contributed not only to the development of the "agricultural vocation" of the EU, but also to maintaining the equilibrium between the urban and the rural life in Western Europe, keeping in balance the farmers' interests and the consumers' interests. Besides the main CAP economic, commercial and social interests, we should also add **the EU philosophy on agriculture, this being, in the vision of its founders, both an economic activity and a way of living, a lifestyle; the rural area represented both an economic space and a living environment – the rural life.**

## **2.6. Main characteristics of the agricultural market evolution in the decade 2000-2009**

It is well-known that on the agricultural markets, owing to certain disequilibria caused by the relatively constant demand (consumption) of agricultural products and the fluctuating supply (depending on the variable yearly harvests), on the long term (but lately also on the short and medium term) significant variations can be noticed in the prices of raw agricultural products and of the food products.

Table 1  
Long-term price evolution (2000-2008)

Years	Soybean, USD/t		Sunflower, USD/t	
	seeds	oil	seeds	oil
2000	173	569	223	444
2001	167	344	168	365
2002	170	311	167	350
2003	209	363	238	513
2004	291	486	265	741
2005	217	661	282	738
2006	205	507	316	902
2007	301	516	261	896
2008	372	807	329	1566

The discrepancy between the food stability, security and safety as well as financial solidarity requirements and the fluctuating reality of prices on the agricultural market, owing to the disequilibria that appeared between the supply and demand of food products, and mainly to the speculative actions, pushed to the immorality level, determine significant negative economic and financial influences, sometimes insurmountable, both at farmer and consumer level. We exemplify these tendencies on the long term (2000-2008) in table 1 and figure 1 and figure 2 and on the short term (February - November 2008) (table 2) for three products of first importance, both for farmers and for consumers.

Table 2  
Evolution of prices in the year 2008

Months	Paris, €/t			Chicago, USD/t		
	Wheat	Sunflower		Wheat	Soybean	
		seeds	oil		seeds	oil
February	280	605	1840	200	490	1250
June	206	505	2000	280	550	1400
November	140	270	870	150	340	850

Considering the evolution of prices on the short run (year 2008) for wheat, sunflower and soybean, it is natural to ask ourselves who has been acting on the agricultural market in recent times: **the invisible hand** or **the speculative hand**? Our answer is clear: the speculative hand, whose action is amplified by the increasing immorality on the financial-banking market, with strong reverberations on the world agricultural market that adversely impacts the first segment of the agricultural chains in the first place: the agricultural holding and the farmers' economic equilibrium.

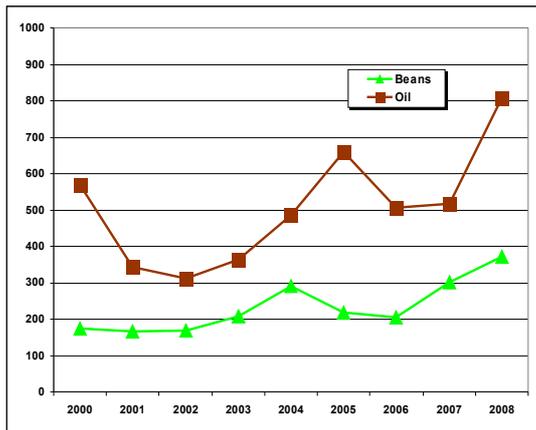


Figure 2. Price evolution in sunflower seeds and oil, (\$/t)

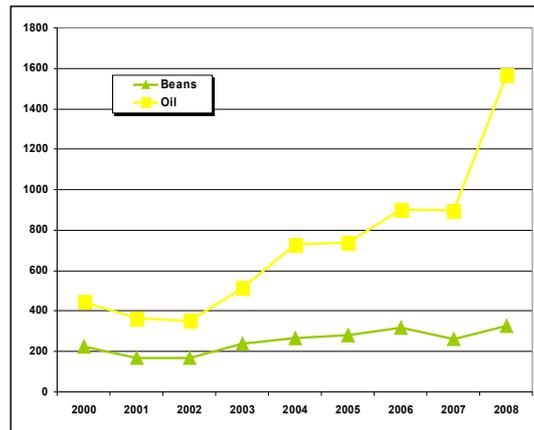


Figure 3. Price evolution in soybean – soybean seeds and oil, (\$/t)

### 2.7. Romania's food consumption in the decade 2000-2009

After 1990 agriculture had a significant influence both upon the general economic growth (agriculture influenced the economic growth by  $\pm 2-2,5\%$ , depending on the agricultural year) and upon the population's food expenses and upon the size and structure of the balance of trade and payments in the agri-food sector.

The evolution of size and structure of Romania's population's food consumption is presented in table 3, while the agri-food trade balance and commercial deficit in figure 4 and figure 5.

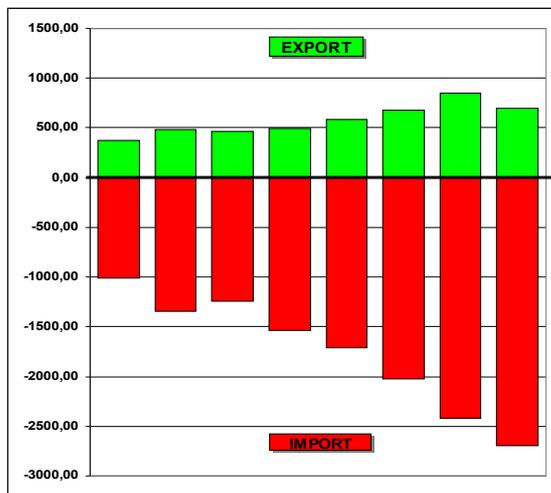


Figure 4. Trade balance

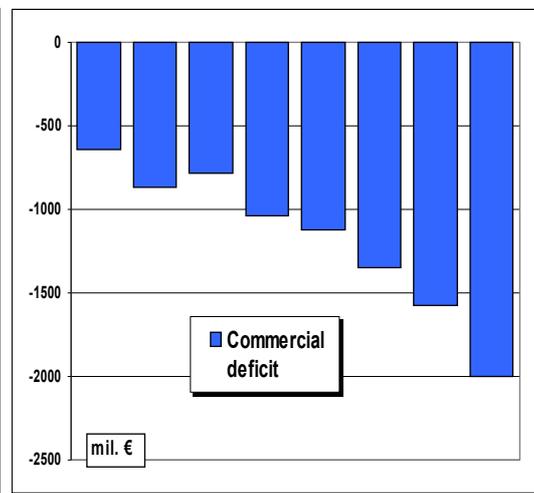


Figure 5. Agri-food trade deficit

It is important to highlight that the products that could have been obtained in the country represent over 60 - 62% of Romania's food imports: meat and meat preparations (over 31-32% in recent years), grains and wheat flour (with a maximum of 20% in 2003, yet with 8% in 2007), soybean and soybean oil cakes (over 50% of the necessary after 2005 when the cultivation of GMO soybean was banned; in the period 2001-2004, the trade balance experienced surplus in soybean and soybean oil cakes), fresh vegetables, fruit and flowers (8-12% each year in the period 2000-2009), sugar, tobacco, hops, etc.

Table 3  
Evolution of population's food expenses in Romania

Specification	2000		2001		2002		2003		2004		2005		2006		2007		2008		2009	
	mil €	%																		
<b>1. Total population's expenses</b>	16624	100	18496	100	18944	100	19378	100	22836	100	28013	100	32734	100	40899	100	46056	100	44945	100
<b>2. out of which: food consumption</b>	8910	53,6	8970	48.5	8658	45.7	9030	46.6	10299	45.1	11569	41.3	12832	39.2	16073	39.3	17317	37.6	17483	38.9
<b>3. self-consumption</b>	5253	(64,9)	4624	(51.5)	4338	(50.1)	4612	(51.1)	5138	(49.9)	5126	(44.3)	5565	(43.4)	7076	(44.0)	7093	(41.0)	7910	(45.2)
<b>4. cash expenses</b>	3657	(35,1)	4346	(48.5)	4319	(49.9)	4418	(48.9)	5161	(50.1)	6443	(55.7)	7267	(56.6)	8997	(56.0)	10224	(59.0)	9573	(54.8)
<b>5. from domestic production</b>	2642	[72.7]	2996	[64.6]	3074	[71.2]	2883	[65.3]	3447	[67.1]	4421	[68.6]	4842	[68.6]	5659	[62.9]	5878	[57.5]	5763	[60.2]
<b>6. imports</b>	1015	[27.3]	1350	[35.4]	1245	[28.8]	1535	[34.7]	1714	[32.9]	2022	[31.4]	2425	[31.4]	3338	[37.1]	4346	[42.5]	3810	[39.8]
<b>7. share of imports in food consumption</b>	-	11.4	-	15.1	-	14.4	-	17.1	-	16.6	-	17.5	-	18.9	-	20.8	-	25.1	-	21.8
<b>8. exports</b>	368	-	484	-	461	-	498	-	587	-	673	-	854	-	1122	-	2165	-	2234	-
<b>9. trade deficit</b>	-647	-	-866	-	-784	-	-1037	-	-1227	-	-1349	-	-1571	-	-2216	-	-2181	-	-1576	-
<b>10. monthly expenses RON/pers</b>	123	100	179	100	226	100	279	100	356	100	391	100	445	100	528	100	657	100	738	100
<b>11. food expenses RON/pers</b>	66	53.6	87	48.5	103	45.7	130	46.6	161	45.2	162	41.4	175	39.2	208	39.3	247	37.6	287	38.9
<b>12. food purchases RON/pers</b>	27	(40.1)	42	(48.3)	52	(50.5)	64	(49.2)	80	(49.7)	90	(55.6)	99	(56.6)	116	(55.8)	146	(59.1)	157	(54.7)
<b>13. food self-consumption RON/pers</b>	39	49.9	45	(51.7)	51	(49.5)	66	(50.8)	81	(50.3)	72	(44.4)	76	(43.4)	92	(44.2)	101	(40.9)	130	(55.3)

By investigating the Romanian agri-food consumption, we need to highlight a few negative evolutions from the economic point of view both for agriculture and for the general economic equilibrium of the country:

- the share of food expenses in the population's total expenses is maintained at extremely high levels, twice as high compared to EU-25 average and by almost 2.8 - 3 times higher compared to EU-15 average;

- although it significantly declined, from 64.9% in the year 2000 to 41% in the year 2007, the share of food self-consumption is the highest in EU-27, being by more than 3 times as high compared to the EU-15 average;

- in absolute value, the food consumption per capita in Romania is at the minimum subsistence level, in the year 2009 reaching 9.41 RON/day (about 2.24 €/day), much under the daily food consumption (by about 2.2 – 2.5 times lower) in the countries with medium consumption from the EU;

- **the expenses for the imported foodstuffs have a high share, at an unacceptable level for an agricultural country like Romania** (17.9% of the food consumption and 34.1% for the cash expenses for food).

The value of the “bill” paid by Romania for imported food products reached 4.35 billion € in the year 2008.

## 2.8. The economic-financial crisis beginning

Starting with the first signals that appeared in the year 2008 (the months of August-September), at present, in our country, the financial and economic crisis is a noticeable reality. The dramatic decrease of the liquidities of banks, more expensive and diminished credits, increased temporary labour rationalization (by technical unemployment), people becoming unemployed, diminution of the population's purchasing power and consumption, market contraction, production decrease through increasingly more and longer production gaps in the companies from increasingly more industrial, agrifood and services sectors, the drastic decrease of the incomes to the state budget due to the decline of taxpayers' payments who are found in temporary insolvency situation, the exaggerated increase of the budgetary deficit compared to the short-term forecasts, the massive depreciation of the national currency etc. are obvious signals of the economic-financial crisis beginning.

All the economic phenomena characteristic to crisis add to the chaotic changes of prices in the two main categories of products: energy and food; these processes make us consider, as it has been already mentioned, that the world, European and also the Romanian market are “regulated” by a speculative hand (rather than by the invisible hand regulating the economic equilibrium), as well as by the **precarious economic, banking, commercial and mainly political morality situation**.

In such an environment of economic turbulence, agriculture, commercial agriculture in the first place and the agri-food market could not be avoided by the financial-banking crisis. The current financial crisis adversely impacts both the small-sized (subsistence and semi-subsistence) peasant farms and the large agricultural commercial companies in the first place, as well as the storage and processing companies, the effects being different for each category of economic operators from the agri-food sector.

**The small subsistence and semi-subsistence farms** will bear more easily the crisis shocks due to the much looser connections to the financial, banking and commercial system. The crisis effects will be mostly noticed in the obtained yields, performance and domestic consumption (food self-consumption), as these will

decrease. At the same time, the surplus of primary agricultural products, although much smaller compared to previous years, will be delivered in increasingly smaller quantities, due to the lack of performance in the network taking over, storing and processing the products and to the lower prices of agricultural raw materials.

Another effect, considering the precarious situation of labour force use on the domestic and European market, is represented by the strong demographic pressure upon the small-sized farms due to the urban-rural and internal rural migration.

We consider that the strongest effect upon the subsistence and semi-subsistence holdings will be represented by the diminution of their share (in number and area), determined by the transfer of these holdings to the medium and large-sized agricultural companies, associations and farms, through agricultural land sale and/or leasing out by the farmers – owners of these types of agricultural (subsistence and semi-subsistence) holdings.

**The commercial agricultural holdings and the agri-food companies** bear much stronger crisis-induced shocks, mainly manifested into the following directions:

- **diminution of bank credits** (for production and for investments), worsening the crediting conditions (extended guarantees) and finally more expensive bank credits. We must underline that the bank credit in Romanian agriculture has an extremely small coverage area, due to the restrictions imposed to crediting by the banks and to the reduced banking network in the rural area.

**We consider that one of the modalities to improve and expand the agricultural credit would be the capitalization of the Savings Bank (CEC), as a commercial bank with state capital and the specialization of a department from this Romanian bank in the rural (agricultural) credit;**

- **extremely expensive commercial credit** practiced by the companies supplying agricultural inputs and equipment. The commercial credit, although attractive at first glance (yet unfavourable from the point of view of costs), is much more expensive compared to the credit from the banks, the farms having to accept it and ask for it due to the convenient repayment modality (at harvesting or at the moment when the production is sold);

- **the decrease of agricultural prices – of agricultural raw materials** strongly affects the financial equilibrium and the cash flow on the agricultural holdings;

- the commercial farms, agriculture in general, take over the negative inter-sectoral economic effects, permanently determined by the transfer of costs of the governmental policies, non-stimulating for the agricultural holdings. Since 1990 (but also before, in the communist period) up to the present moment, agriculture has been (and still is) a priority only in declarations and theory.

In practice, however, agriculture and rural development in general have never represented a financial support priority, in any governmental cycle, mainly in the field of investments, in the equipment of the rural area and agricultural holdings. Suffice it to mention the “parody” program of irrigation system rehabilitation, which in 20 years has had the same rehabilitation rate as the construction of motorways in Romania.

From the analysis as well as from the data of table 4, it results a high economic non-convergence between the Romanian agricultural holdings and the agricultural holdings from several (advanced and economically comparable) EU countries.

Table 4  
Compatibility indicators (RO:EU)

		Germany	France	Poland	Hungary	Romania
Economic size, ESU		49.5	53.6	3.20	3.60	1.0
Fixed capital	€/ AH	19535	18636	592	1425	575
	€/ AP	7995	9261	280	707	350
Bank credits, €/ ha		2126	1696	180	255	110
Gross capital formation, €/ ha		390	345	120	184	54
GAO, €/ ha		2535	2265	940	1080	865
Average yield	Cereals	6600	6970	3100	4900	2500
kg / head / ha	Milk	6850	6440	4490	6770	3010

AH – agricultural holding; AP – agricultural person; GAO – gross agricultural output;

The previous conclusion can be explained by the persistent discrepancies between the levels of certain partial, yet relatively relevant indicators for measuring the agricultural output value (gross agricultural output), the physical productivity of land (average yield in grains) and the investment effort (gross fixed capital formation), in Romania and in other six EU Member States.

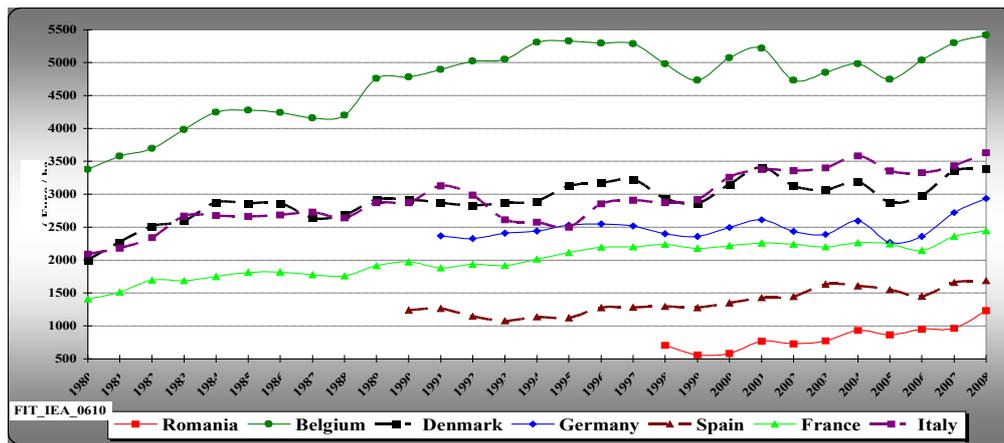
Taking into consideration the valoric performance of the agricultural hectare, Romania has the highest variation coefficient among the seven investigated countries (table 5), i.e. 23.5 %, compared to only 6.5 % in Germany.

Table 5  
Gross agricultural output in Romania and other EU Member States (euro/ha)

	Romania	Belgium	Denmark	Germany	Spain	France	Italy
1980		3378	1998			1408	2090
1981		3579	2274			1515	2184
1982		3695	2515			1695	2340
1983		3983	2597			1688	2668
1984		4247	2879			1752	2678
1985		4277	2863			1812	2664
1986		4242	2864			1819	2686
1987		4161	2643			1778	2726
1988		4201	2685			1758	2640
1989		4760	2916			1912	2875
1990		4783	2916		1243	1973	2875
1991		4894	2874	2367	1262	1883	3127
1992		5024	2832	2329	1147	1938	2986
1993		5051	2870	2409	1076	1916	2612
1994		5307	2897	2441	1135	2014	2578
1995		5328	3126	2533	1124	2114	2501
1996		5297	3175	2552	1277	2196	2856
1997		5287	3224	2520	1284	2198	2907
1998	703	4980	2935	2399	1295	2237	2875
1999	559	4730	2863	2361	1277	2179	2916
2000	580	5074	3152	2497	1348	2219	3260
2001	770	5216	3409	2614	1429	2258	3379
2002	726	4731	3128	2435	1447	2242	3360
2003	774	4852	3066	2390	1633	2199	3398
2004	932	4981	3185	2596	1610	2263	3581
2005	865	4747	2876	2268	1548	2245	3353
2006	951	5038	2981	2357	1449	2147	3328

2007	962	5302	3353	2725	1659	2360	3432
2008	1231	5420	3387	2936	1687	2447	3632
<b>Average</b>	<b>823</b>	<b>4709</b>	<b>2913</b>	<b>2485</b>	<b>1365</b>	<b>2006</b>	<b>2914</b>
<b>Standard deviation</b>	<b>193.3</b>	<b>566.5</b>	<b>312.2</b>	<b>161.2</b>	<b>192.7</b>	<b>261.7</b>	<b>409</b>
<b>Var.Coeff.-%</b>	<b>23.5</b>	<b>12.0</b>	<b>10.7</b>	<b>6.5</b>	<b>14.1</b>	<b>13.0</b>	<b>14.0</b>

The large economic performance gap between Romania and the other countries is also obvious under the graph form (figure 6).



Source: Own calculations, on the Eurostat database, 2010;

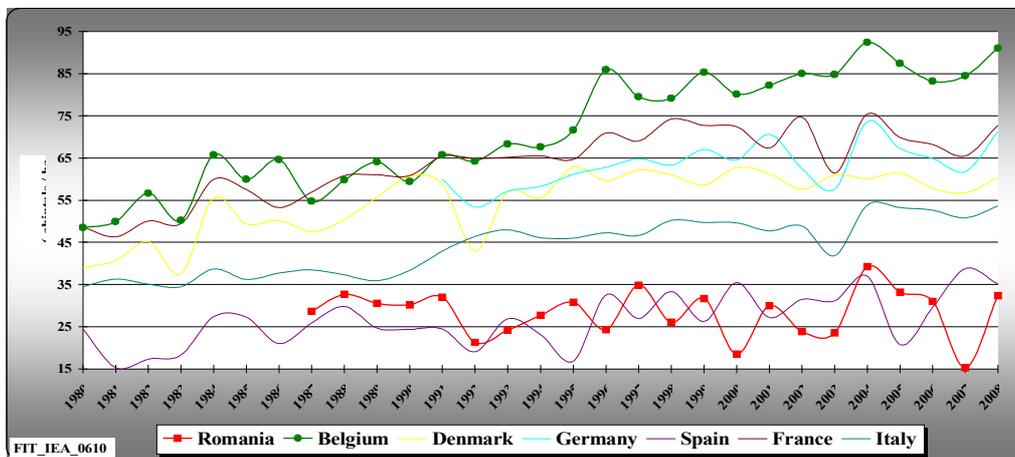
Figure 6. Gross agricultural output in Romania and other EU countries, 1980 – 2008

The technological performance gaps, expressed in the average grain yield per hectare, are also noticeable, not only by its low level, but also by the strong instability, measured by the variation coefficient (table 6 and figure 7), accounting for 25.2 %, almost double compared to the other investigated countries.

Table 6  
Average grain yields in Romania and certain European countries (centners / ha)

	Romania	Belgium	Denmark	Germany	Spain	France	Italy
1980		48.5	38.9		24.5	48.6	34.5
1981		49.9	40.7		15.3	46.3	36.3
1982		56.6	45.2		17.3	50.1	35.1
1983		50.2	37.6		18.3	49.5	34.5
1984		65.7	55.6		27.4	59.9	38.7
1985		59.9	49.4		27.3	57.5	36.2
1986		64.6	50.2		21	53.2	37.7
1987	28.7	54.7	47.6		25.9	56.9	38.5
1988	32.7	59.8	50.4		29.8	60.8	37.3
1989	30.6	64.1	55.7		24.7	61	35.9
1990	30.2	59.4	60.7		24.4	60.8	38.4
1991	32	65.7	58.7	59.9	24.5	65.4	42.9
1992	21.3	64.2	43.1	53.4	19.1	64.9	46.4
1993	24.2	68.3	57	57.1	26.9	65.2	48
1994	27.7	67.6	55.6	58.3	23.1	65.5	46.1
1995	30.8	71.6	62.9	61.1	16.9	64.7	46
1996	24.3	85.9	59.6	62.8	32.5	70.9	47.3

1997	34.9	79.5	62.1	64.8	27	69	46.6
1998	26.1	79.1	61	63.3	33.4	74.2	50.2
1999	31.7	85.3	58.6	67	26.3	72.7	49.7
2000	18.5	80.1	62.8	64.5	35.5	72.4	49.6
2001	30	82.2	61.3	70.6	27.2	67.4	47.7
2002	23.9	85	57.6	62.5	31.5	74.7	48.9
2003	23.6	84.8	61	57.6	31.2	61.4	41.9
2004	39.2	92.4	60.1	73.6	37	75.4	53.8
2005	33.2	87.4	61.5	67.2	20.8	69.9	53.2
2006	31	83.2	57.8	64.9	29.6	68.2	52.6
2007	15.3	84.5	56.8	61.8	38.8	65.5	50.8
2008	32.4	91	60.4	71.2	35.2	72.7	53.6
<i>Average</i>	27.7	71	55	63	28	64	44.1
<i>Standard deviation</i>	7.0	13.4	7.6	5.3	6.2	8.298	6.56
<i>Var. Coef. %</i>	25.2	18.8	13.9	8.3	21.7	13.0	14.9



Source: Own calculations, on the Eurostat database, 2010;

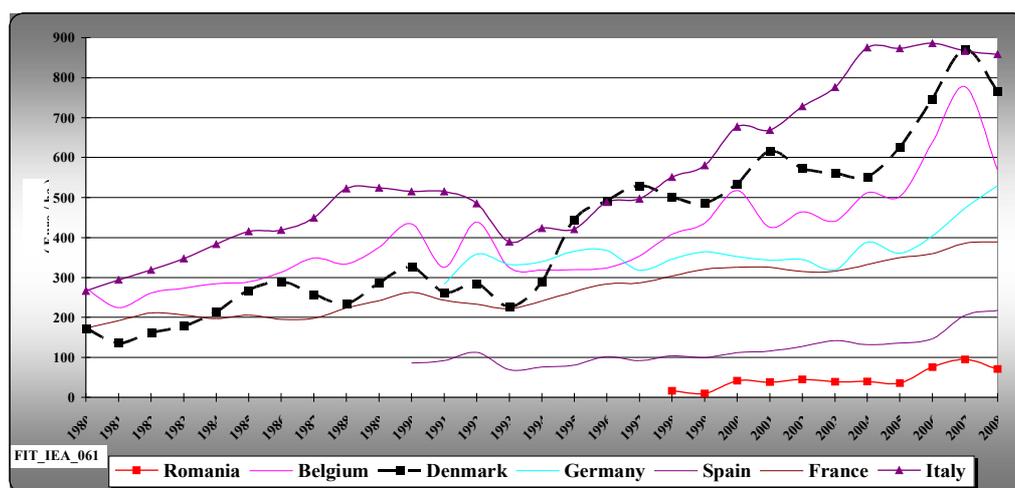
Figure 7. Average grain yields in Romania and other European countries, 1980 – 2008

Finally, the third performance indicator (gross investments per hectare) seems to cumulate the instabilities of the other variables, featuring unusually large variation coefficients (54.4 %), with the only amendment that in the other countries this parameter is also high (table 7 and figure 8).

Table 7  
Gross fixed capital formation in agriculture in Romania's and other countries (euro / ha)

	Romania	Belgium	Denmark	Germany	Spain	France	Italy
1980		273	173			174	266
1981		225	136			192	294
1982		261	162			211	319
1983		273	179			206	347
1984		285	214			197	383
1985		289	268			206	415
1986		313	290			195	418
1987		349	258			198	449
1988		334	234			224	523
1989		376	286			242	524

1990		434	326		86	263	515
1991		326	263	283	92	243	515
1992		438	284	358	113	233	485
1993		325	227	332	69	222	389
1994		318	290	340	76	241	423
1995		320	445	366	81	265	421
1996		324	492	367	102	284	488
1997		354	530	318	92	286	497
1998	17	408	501	346	104	304	551
1999	10	436	486	364	99	321	580
2000	42	518	535	352	112	326	677
2001	38	426	615	343	116	326	669
2002	45	464	573	345	128	315	728
2003	39	441	561	319	142	316	776
2004	40	512	552	388	132	332	875
2005	36	503	626	361	136	350	873
2006	76	639	747	404	147	360	886
2007	95	777	871	473	205	386	867
2008	71	569	766	529	218	389	858
<i>Average</i>	46	397	410	366	118	269	552
<i>Standard deviation</i>	25.2	123.9	202.1	56.8	39.7	63.22	191
<i>Var. Coef.%</i>	54.4	31.2	49.3	15.5	33.5	23.5	34.6



Source: Own calculations, on the Eurostat database, 2010;

Figure 8. Gross fixed capital formation in Romania and other European countries, 1980 – 2008

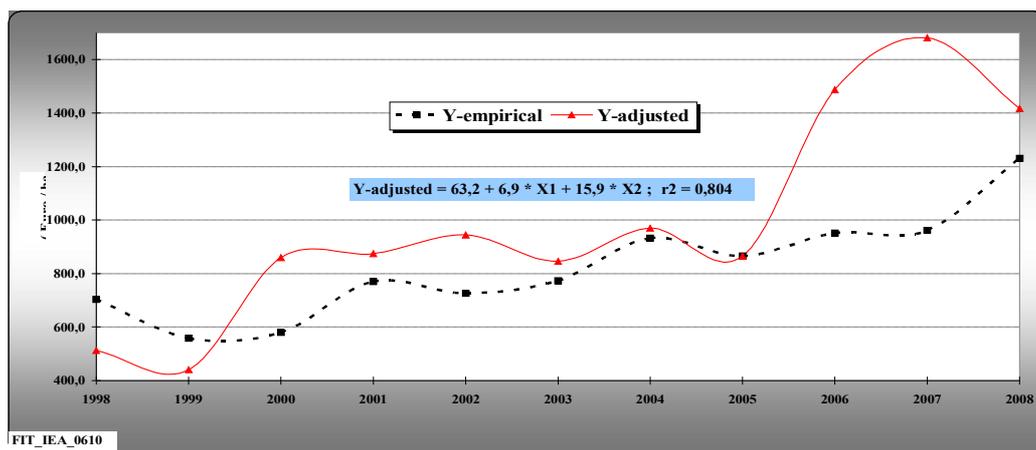
Only the behaviour of different indicators – performance factors in time is not enough for the identification of potentialities for improving the economic results, derivable from the simultaneous effects of the variables under discussion.

In this respect, the results of the multiple correlations between the gross agricultural output (Y), the average grain yield (X1) and the gross investment (X2) converge to the conclusion that our agriculture represents a performance potential, measurable by assigning desired levels to each of the two explanatory variables of the gross agricultural output, in the multiple regression determined for Romania's agriculture in the period 1998 – 2008 (table 8 and figure 9).

Table 8

Multiple correlation between the gross agricultural output, the average grain yield and the gross investment in Romania, 1998 – 2008

RO	FBCFha (X2)	qCERha (X1)	VPAha (Y)		Empirical Y	Adjusted Y
1980				1980		
1981				1981		
1982				1982		
1983				1983		
1984				1984		
1985				1985		
1986				1986		
1987		28.7		1987		
1988		32.7		1988		
1989		30.6		1989		
1990		30.2		1990		
1991		32		1991		
1992		21.3		1992		
1993		24.2		1993		
1994		27.7		1994		
1995		30.8		1995		
1996		24.3		1996		
1997		34.9			Empirical Y	Adjusted Y
1998	17	26.1	703	1998	703.0	513.5
1999	10	31.7	559	1999	559.0	440.6
2000	42	18.5	580	2000	580.0	859.3
2001	38	30	770	2001	770.0	874.8
2002	45	23.9	726	2002	726.0	944.2
2003	39	23.6	774	2003	774.0	846.6
2004	40	39.2	932	2004	932.0	969.9
2005	36	33.2	865	2005	865.0	864.9
2006	76	31	951	2006	951.0	1486.7
2007	95	15.3	962	2007	962.0	1681.2
2008	71	32.4	1231	2008	1231.0	1416.7
<i>Average</i>	<b>46.3</b>	<b>27.7</b>	<b>823</b>			
<i>Stand. deviation</i>	<b>25.2</b>	<b>7.0</b>	<b>193.3</b>			
<i>Var. coef.%</i>	<b>54.4</b>	<b>25.2</b>	<b>23.5</b>			
<b>LINEST</b>	<b>FBCFha (X2)</b>	<b>qCERha (X1)</b>	<b>VPAha (Y)</b>			
<i>mX; b</i>	<b>15.9</b>	<b>6.9</b>	<b>63.2</b>			
<i>Se m; se b</i>	<b>4.6</b>	<b>1.3</b>	<b>158.1</b>			
<i>r2; se Yest</i>	<b>0.804</b>	<b>95.6</b>	<b>#N/A</b>			
<i>Fstat; df</i>	<b>16.4</b>	<b>8.0</b>	<b>#N/A</b>			
<i>ss reg; ss resid</i>	<b>300480.1</b>	<b>73097.9</b>	<b>#N/A</b>			



Source: Own calculations, on the Eurostat database, 2010;

Figure 9. Multiple correlation between VPAha (Y), qCERha (X1) and FBCFha (X2) in Romania's agriculture, 1998 – 2008

### 3. AGRICULTURE – BACKBONE OF THE ROMANIAN RURAL ECONOMY

Agriculture, in the predominantly agricultural areas, and forestry, in the mountain rural areas, represent the backbone of the rural area. No rural development program can be designed without agriculture having an essential role. Although significant changes have been produced in agriculture role and functions in recent times, this continues to remain the main component of any rural development program. At the same time, the vision on agriculture also changed, resulting in the idea of the shift from the **production aspect** to the **multifunctional aspect** of agriculture.

**Multifunctional agriculture**, even though less performant from the strict point of view of yields and profit, is preferred from other points of view (tourism, landscape, ecology, social point of view, etc.). Multifunctional agriculture, in principle, fulfils the economic functions as in the case of super intensive and specialized agriculture, yet taking over new functions, such as:

- production of raw materials for energy production (new and extremely important function in the areas with surplus food production);
- tourism capital increase, through the preservation and enrichment of the landscape heritage;
- conservation of vital elements (soil, air, water, flora, fauna), through their sustainable exploitation, in the ecological agriculture context, resulting in the agro-eco-system stability;
- harmonization of the social and cultural functions of the rural area, in close connection to a healthy and diverse agriculture.

The increase in the number of households (farms, agricultural holdings) that practice the multifunctional and biological agriculture cannot take place beyond the limit of agri-food market solvency. It is estimated that, in the rich countries, the organic farming system accounts for about 4-5% of the arable land and 5-6% of the gross agricultural output and agri-food consumption. As the prices of organic products are higher compared to those of products obtained on the basis of conventional technologies, the demand for such products is strictly limited and has a slow

evolution. Hence, on the short term, we do not expect a “massive ecologization” of the agricultural production.

The society, as beneficiary of the multiple functions of agriculture, should pay not only for the agricultural products, i.e. for food, but also for the **indirect services**, which contribute to habitat improvement, landscape enrichment, etc. The present price system, as well as the permanent tendency to reduce prices, so as to get cheap food, without using compensation forms for the subsidiary services, will have adverse consequences on farmers on the medium term, and indirectly negative consequences on the longer term, as regards food security inclusively. Thus, the correct evaluation of these compensations becomes necessary (for tourism, maintenance “in operation” of the less favoured areas, organic production, environment protection, diminution of the application of chemical fertilizers and pesticides, etc.), the government having the duty to ensure the funding sources.

Agriculture acquired a new function in the last decade: **producer of raw materials for energy production**. The production of oil and alcohol from the agricultural raw materials make it possible for the present diesel engines, with small adjustments, to use the rapeseed oil or the alcohol obtained from different crops as fuel. At this time, even though the vegetal fuels are more expensive, they are less polluting and as a result they begin to be demanded by an increasingly large number of users.

The present CAP reform brought about significant changes in the system of financial support to agriculture, by decoupling a large part of the direct payments from production and by the application of a new system of single area payments, calculated on the basis of historical reference data (average yields obtained in the reference years). At the same time, the new CAP promotes a stronger link between the agricultural systems and the agro-environmental policies, introduction of environmental standards (cross-compliance, good agricultural practice), of animal welfare standards, focusing upon the equilibrium between the competitiveness of agricultural production, the technical and economic performance and the environment and landscape protection.

It is worth mentioning that there is still a large discrepancy between the new CAP reform principles and the Romanian reality. On about half of the arable land, on the subsistence and semi-subsistence farms, rather “archaic technologies” are used, while on the other half, organized under agricultural associations and companies of different types, in most cases, due to the worn-out and obsolete assets and knowledge and non-performant management (still a large part of managers and owners of the large agricultural holdings come from the socialist agriculture, with all its drawbacks), old technologies are applied, with a negative impact upon the soil (and upon the environment, in a more general sense), which are expensive and great energy consumers.

The large agricultural holdings, financially consolidated and with a high technical potential, should shift from the energy-intensive farming systems to the **conservative agriculture system**, characteristic to the sustainable use of the natural resources, of soil and water in the first place. From the world experience we can find out that the adoption of conservative agriculture by farmers does not place on an ad hoc basis. In the first place, it is necessary to know and prove the advantages of conservative agriculture through the extension system and by legal and financial support provided to the farmers who apply this system.

Conservative agriculture, by the technologies it applies, significantly contributes to the agricultural environment protection, to the diminution of the carbon

dioxide and smoke gas emissions (in the mechanization works), to the quasi-permanent soil cover, to biodiversity conservation, to the improvement and enrichment of the natural landscape and to the optimum use of the main agricultural resource, the soil.

The farmers' performance who adopt the conservative agriculture system on the short (and even medium) term is not equal to that obtained by the farmers who apply energy-intensive technologies. However, taking into consideration the long-term effects of conservative agriculture upon the environment, upon soil in the first place, the technical performance difference of the respective farms should receive financial and fiscal support. Otherwise, the conservative agriculture, mainly in the case of land areas leased in by farmers, will remain only a desideratum, as the managers of these areas will not apply this farming system.

#### **4. THE ROMANIAN RURAL ECONOMY AND THE NEED TO RESTRUCTURE IT**

**The Romanian rural economy** is mainly an agricultural economy, as the share of agricultural economy is 60.5% compared to 14.1% in EU. The extremely distorted structure of the Romanian rural economy also results in a similar structure of the rural population by activity sectors (primary sector 64.2%, out of which agriculture 56.6%, secondary sector 18.5%, tertiary sector 17.3%). In total Romanian rural area, the non-agricultural economy (SMEs in industry, services, rural tourism) has a low share, while the rural tourism, in all its variants, except for certain mountain zones (Bran–Moeciu, Apuseni, Maramureş, Bucovina) and the Danube Delta is poorly developed (11,000 beds in about 1,600 agro-tourism boarding houses).

The stimulation of investments in the rural area, for the development of the SME sector in the non-agricultural economy and in processing the primary agricultural products, should become a permanent activity of the local authorities; in this respect, under the process of economic decentralization and subsidiarity in decision-making, in the rural localities (or the rural areas), with labour surplus, certain **industrial village micro-zones** should be established, with financial support from the county or regional authorities, by equipping them with all the necessary utilities for the industrial activities (electric power, thermal energy, gas, water supply, sewerage networks, access and interior roads, telecommunications, etc.), similar to those that were created in the rural areas of the EU countries a long time ago.

The investments in the non-agricultural and food economy, while contributing to gross value added increase through the processing of agricultural and non-agricultural raw materials from local resources, has another great advantage, both in the periods of crisis and economic recession and in the periods of economic growth, by creating new jobs and by using and maintaining the local (rural) labour, revitalization of rural localities, mainly those in the less favoured and remote rural areas.

Both the rural economy, in its entirety, and the agri-food economy, as important element of the rural economy, present extremely different structures in Romania compared to the European Union (not to speak about its absolute value) (tables 9 and 10).

The Romanian rural economy is predominantly an agricultural economy (about two-thirds) or an agri-food economy (more than three quarters). In the

European Union, it is the economy of services that prevails in the rural economy, which accounts for 42.2%, up by 2% compared to the agri-food economy (table 9).

Table 9  
Rural economy structure, %

	<b>Romania</b>	<b>EU</b>
Agriculture	60.5	14.1
Food industry	15.8	20.5
Tobacco industry	1.7	3.2
Fisheries	0.1	2.5
<b>Agri-food economy</b>	<b>(78.1)</b>	<b>(40.3)</b>
<b>Forestry economy</b>	<b>(6.3)</b>	<b>(8.2)</b>
Extractive industry	2.6	4.1
Processing industry	3.1	5.2
<b>Industrial economy</b>	<b>(5.7)</b>	<b>(9.3)</b>
Agro-tourism services	0.1	4.4
Other services	9.8	37.8
<b>Economy of services</b>	<b>(9.9)</b>	<b>(42.2)</b>
<b>Non-agricultural economy</b>	<b>(21.9)</b>	<b>(59.7)</b>
<b>TOTAL</b>	<b>100.0</b>	<b>100.0</b>

There are also great differences with regard to the agri-food economy (table 10). While the processing of agricultural raw materials into food products (carriers of gross value added) accounts for more than half of the agri-food economy value in the European Union, in our country the production of agricultural raw materials (agricultural economy) has a much higher share (over 75%).

Table 10  
Agri-food economy structure, %

	<b>Romania</b>	<b>EU</b>
Agriculture	77.5	35.0
Food industry	20.2	50.9
Tobacco industry	2.2	7.9
Fisheries	0.1	6.2
<b>TOTAL</b>	<b>100.0</b>	<b>100.0</b>

Romania's food economy has a much higher value, at national economy level, as still a larger part of it is concentrated in the urban area (former large agri-food processors in the command economy period), and although it has been privatized, it continues to have the same geographic location (edible oil factories, breweries, meat factories, dairies, milling and baking units, etc.).

The non-agricultural rural economy in EU accounts for almost 60% of total rural economy, while in Romania this share is by about three times lower (21.8%).

There are also large gaps with regard to the non-agricultural rural economy (table 11). We mention here the much lower share of (non-agricultural) services in the rural area and mainly of agro-tourism, which has practically almost no contribution to the rural economy in Romania.

Table 11

Non-agricultural rural economy structure, %

	Romania	EU
Forestry economy	28.8	13.7
Industrial economy	26.0	15.6
Economy of services,	45.2	70.7
- out of which agro-tourism services	(0.4)	(7.7)
<b>TOTAL</b>	<b>100.0</b>	<b>100.0</b>

To sum up, besides the low level per agricultural inhabitant, the rural and agri-food economy structures are still far away from what we could define **a competitive rural economy in Romania**.

The comparative analysis of the present development level of the rural economy, in general, and of the agri-food economy, in particular, enable us to formulate a few questions:

- Is the present rural economy level compatible with the European sustainable rural development concept?
- Can the present rural economy level support an accelerated rate of sustainable rural development in Romania?
- Can the present EU agricultural policies, with obvious ceiling tendencies of agricultural productions (in the European Union), be applied as such in Romania as well (and also in other countries with precarious agricultural and rural development)?

The correlated strategy of the two pillars of rural economy, namely **the development of agri-food economy – market economy** and **the non-agricultural rural economy – rural development policy** will also depend on the correct answer to the first question.

From the analysis of causes that generate the technical and economic non-performance in agriculture, it results that a chronic scarcity exists in the allocation of production factors, together with a deficient management on most agricultural holdings and processing commercial companies (and SMEs), as well as serious drawbacks in the management of the chains that take over, store and sell the agri-food products.

All the strategies, programs and projects for agriculture have **the sustainable rural development** at their core, as sustainable economic growth factor. This means a strong rural economy, based on a modern rural infrastructure, adequate technical endowment of the rural territory, localities and dwellings, use of renewable natural resources in the economic flow, natural environment and landscape protection and as a result, acceptable rural living standard, comparable to that in the EU.

The sustainable economic growth can be obtained only if medium and long-term investments are made in the agri-food production sectors, in competitive commercial flows for the Romanian agricultural products, by enlarging the agricultural market, attenuation of turbulences and diminution of production and price fluctuations, by an increased participation of the Romanian agricultural products on third markets, on the European Single Market in the first place.

**The sustainable economic growth** in agriculture is under question as long as the “performance” of the Romania agriculture is at its lowest limit, as long as, under the ecologic conditions of our country, we import more than 25% of the value of the Romanian food consumption.

The Romanian agriculture getting in line with the EU competitiveness level, through CAP – Health Check (CAP – HC), with the new financial agriculture support system remains a problem as long as the investment program for the sustainable economic growth is almost non-existing, compared to the real production investment needs.

When, in what period and by what financial support systems did the EU Member States perform the “CAP miracle”? In the period when massive financial support was provided to the agricultural holdings by investments, in the ‘60s and ‘70s last century or at present, when CAP - HC is applied (table 12).

For the EU countries with developed agriculture, the new CAP - HC fits like a glove, but for Romania’s agriculture this is not the case. Why? The answer is simple: the funds that reach the farmers by the single area payment scheme (SAPS), of about 100 € / arable ha (direct payments from the EU budget + complementary payments from the national budget), i.e. 420 RON/ha (at the current exchange rate), in the case of non-commercial (subsistence and semi-subsistence) agricultural holdings, covering more than 60% of the country’s total agricultural area, are rather used as an allocation for farmers, in the best case as necessary funds for covering a minimum part of the yearly production costs. These amounts are largely used as “social protection”, for covering certain expenses that are absolutely necessary for the rural households.

Table 12  
CAP funding systems

<b>EU-6, 1960 – 1970</b> - Average grain yields 2700 - 3000 kg / ha - Average milk yield 2500 - 2800 l / head - Food imports 25 - 30%	<b>EU-15, 2000 – 2009</b> - Average grain yields 7000 - 8000 kg / ha - Average milk yield 7000 - 7500 l / head - Food surplus 20 – 25 %
<b>CAP objectives supported by financial solidarity:</b> - <i>agricultural productivity increase based on the introduction of technical and biological progress, resulting in the agricultural production growth, by the optimum use of production factors and of the increasingly skilled family labour force;</i> - <i>ensuring a fair living standard for the agricultural population, by farmers’ getting a satisfactory individual incomes;</i> - <i>guarantees for the population (consumers) from the EU Member States referring to the security of agri-food supply;</i> - <i>guaranteeing reasonable selling prices for the agri-food products to consumers.</i>	<b>CAP objectives supported by Health - Check (CAP - HC):</b> - <i>increased competitiveness of agricultural products on the EU and world markets;</i> - <i>food safety improvement by an increased food quality;</i> - <i>reaching social equilibrium through the stabilization of agricultural incomes and creation of new income sources;</i> - <i>an environment friendly agricultural practice, resulting in animal health and welfare, by decoupling the payments from production and establishment of a single farm payment scheme, together with the introduction of cross-compliance principles.</i>
<b>Funding effects:</b> - farm consolidation - doubling and even tripling the yields - 20 - 25% surplus (exports)	<b>Romania:</b> - average grain yields 2500 - 2700 kg / ha - average milk yield 2800 - 3000 l / head - food imports 25 – 30 %

For the EU-10 or EU-15 Member States, each of these having food surplus, the CAP-HC application, by the single area payment scheme (SAPS), of 300 € / ha on the average, having in view the farm performance and farm consolidation, can be considered much more adequate to the new funding policy (that does not distort the market).

## 5. INVESTMENTS IN AGRICULTURAL AND RURAL INFRASTRUCTURE

Under Romania's weather conditions, **the refunctionalization and modernization of the irrigation systems** represent one of the top investment priorities in agriculture. We would like to highlight this priority here, as the National Rural Development Program (NRDP) only briefly mentions the rehabilitation of irrigation systems, when the consistency with the national programs is presented, placing the *“modernization of the primary irrigation network and association forms for their functionality”* only on the sixth place.

In chapter 2 of NRDP, when presenting the general strategy, the EU and the national priorities, the following is mentioned: *“for the continuation of the sustainable economic, environmental and social development of rural farms in Romania and of the development oriented to foreign trade, mainly to the trade with the EU, the general rural development strategy should focus on competitiveness increase ...”*. How? What is the modality? In the conditions of a non-performant farming system, in the absence of investments in stable performance growth factors on the agricultural holdings?

Although at the end of the year 1989, the area equipped with large-scale irrigation facilities totaled 3.1 million ha (21% of the agricultural area), out of which 2.9 million ha arable land (30% of the country's arable area), Romania being on the 3<sup>rd</sup> - 4<sup>th</sup> position in Europe in this respect, the effects of the irrigation on the average yields per hectare were not very noticeable before 1989 and at present either. In reality, the huge financial and material effort was not justified as the area equipped with irrigation facilities was only partially used due to the extensive farming system and the low utilization efficiency.

The low performance of the irrigation systems derived, among other things, from the low density of the pipeline network (of only 18.5 ml / ha, compared to 60 - 90 ml / ha in the developed countries), from the water losses by infiltration in open and non-insulated canals and by evaporation (over 50 % in Romania, compared to 10 - 20 % in the West-European countries, Israel, USA) and finally, from the technical solution of water pumping from the Danube, in two or several steps, requiring high energy consumption for the transport of water from source to crops, compared to other countries, where the gravitational water delivery system on main canals is used, the energy being used only for water supply from the interior canals (pipelines) on the agricultural holdings to crops.

From the statistical data it results that in no year before 1989, out of electric power saving reasons or because of the permanent energy scarcity, no more than 1.5 million conventional hectares were irrigated. Even on these areas, the crop irrigation technology was deficient, both as regards the irrigation rates and the periods between irrigations. It is well known that an inadequate irrigation has much smaller effects compared to the optimum rate / average allocated rate ratio.

After the year 1990, the irrigation systems have been physically deteriorated by clogging and destruction of the pipe tightness, as well as by the theft of technical pumping equipment, of the water supply pipes and watering equipment from the irrigation stations. The effects of this situation were felt mainly in the years 1992, 2000 and 2007, extremely dry years, when we estimate that Romania lost about 6 million tons of cereals, soybean and sunflower due to the impossibility to irrigate minimum 1 million hectares.

Besides the degradation-destruction of irrigation systems by the Land Law application and related regulations (Law on agricultural companies and associations, Law on the privatization of agricultural commercial companies, etc.), agriculture experienced a deep restructuring of land properties and holdings, with important implications upon the cropping technologies, upon crop irrigation implicitly. Since 1991 up to the present moment, 11.2% of the area equipped with irrigation facilities and 23.1% of the rehabilitated area were irrigated on the average, representing 775,000 ha in 1994 (maximum level) and 45,700 ha in 2005 (minimum level). In the driest years of the last two decades, only small areas were irrigated, namely: in the year 1992 – 465,000 ha (15.0%), in the year 2000 – 216,000 ha (7%) and in 2007, the year with the most severe drought – 320,000 ha (10.1%), resulting in extremely high harvest losses (about 6-8 million tons each year). The average yields in the main cereals (wheat and maize) were 2075 kg/ha in the years 1992 and 2000, and 1540 kg/ha in 2007, representing 22-25% of the average grain yields in the European countries with similar ecologic conditions and areas equipped with irrigation facilities almost equal to those from Romania.

The studies conducted by the great specialized foreign companies in the period 1991-1995 estimated average investments for total revamping of the systems of about 1500 \$/ha (with large variations depending on the system, from 338 to 2500 \$/ha) and average investments for the endowment with irrigation equipment of about 110-115 \$/ha (from 80 to 150 \$/ha depending on the type of irrigation equipment). In the same studies, it is mentioned that, at the current electric power price, the area that could be rehabilitated for irrigation, at acceptable costs, from the point of view of yields in the next years, is about 1.3 million hectares, as this area needs pumping – repumping of water from the Danube up to 85 m height (this being the maximum economic pumping height). If it is also taken into consideration that an area of about 2000 thousand ha (67%) has the Danube as the irrigation water source, and almost 1000 thousand ha (33%) the inland rivers and the accumulation lakes, while the remaining area (about 100 thousand ha) other sources; in the next period (2010 - 2020) the suitable area for rehabilitation for irrigation is estimated at 1.5 – 1.7 million ha (1.2 million ha – the Danube as source; 0.3-0.5 million ha – the inland rivers as source).

The necessary investments for the above-mentioned systems amount to about 2.25 – 2.55 billion USD (1.7-2.0 billion €) and about 165-170 mil. USD (125-135 mil. €) for the irrigation equipment (water supply to crops). In the highest areas, as in the case of the irrigation systems from Dobrogea, with an area over 400,000 ha, the irrigation cost is prohibitive for farmers, reaching an electric power consumption estimated at over 2,100 kw/h/ha and an irrigation cost of about 860-900 RON/ha.

To sum up, we consider that **the top investment priority in Romania's agriculture, which must be included on the first place in all the strategy programs of Romania's agriculture and rural development** (either with national or foreign financial support) should be **the investment in the rehabilitation and equipment of the irrigation systems on 1.7 million ha in the shortest time possible (maximum 5 years).**

For the remaining area of 1.4-1.5 million ha, which represents the difference up to the total area equipped with irrigation facilities in the period previous to 1990, feasibility studies are needed for the establishment of the technical solutions for water pumping-supply, as well as of the necessary funds, costs and the investment profitability for the farmers as water users. In the situation when certain systems cannot be rehabilitated through revamping and modernization, as in the situation of the irrigation systems from Dobrogea, the renaturalization is imposed by the

establishment of permanent pastures and of forest plantations (shelter belts and forests).

Starting from the need to save water, in increasingly larger amounts, as well as from the prohibitive costs of the irrigation water from the Danube, other urgent solutions should be adopted for the application of irrigation under the currently operating systems and for the enlargement of the new systems. In the first case, those irrigation systems with low water consumption should be enlarged, sprinkle irrigation being preferred in the case of crops that are suitable for this type of irrigation. In the second case, the new irrigation systems, on lower scale compared to those built up in the 1980s, should be designed in another vision, so as to use water from interior resources (inland rivers, local accumulations, ground water), by water pumping using gravitational systems, with lower energy consumption and accessible costs for the small farmers.

**The social desertification in the rural area**, in the less-favoured areas or mountain areas in particular, is a phenomenon that has reached an alarming level lately, by the rural-urban, rural-rural and rural-external migration, with yearly acceleration trends. There are extremely beautiful authentic villages, with a nice natural landscape, with an intact natural environment, where the depopulation and demographic and physical ageing are common phenomena, being on the verge of disappearance, due to the diminution or cessation of agricultural, fruit-tree farming, livestock raising, mining activities or of other economic activities.

The rural development of rural areas, both from the economic and social, habitat and cultural (conservation of traditional cultural values) point of view, presupposes, first of all, the development of economic activities, increase in the quality of working and living conditions, by the access to facilities similar to the urban areas, thus creating the necessary conditions for maintaining the population, mainly the young population, in the rural areas.

In this respect, the NRDP strategic objective **increase of activities in the rural areas** has in view *“the development of integrated village renovation projects, targeting the development of an adequate **infrastructure** and certain basic social and economic services for the rural population, on one hand, and the necessary protection, which should be brought about by a positive contribution to social and cultural activities and to the preservation of the natural cultural identity on the other hand”*. As infrastructure represents an important sub-system and at the same time a first condition for the sustainable rural development, involving massive financial support, this can be improved by local development projects, by governmental programs as well as by structural and cohesion instruments.

## **6. MOUNTAIN ECONOMY REVIGORATION AND GREEN COVER EQUILIBRATION**

The mountain economy, by the national resources it includes, represents one of the economic and social issues of first importance for Romania. If we take into consideration the fact that the mountain area covers almost 73,300 km<sup>2</sup> (29% of the country's area), out of which 44 300 km<sup>2</sup> is covered by forests, 24,000 km<sup>2</sup> by natural grassland and the arable land totals about 5,000 km<sup>2</sup>, with a population of 2.1 million inhabitants living on 1.2 million households, having 2.9 million ha agricultural land into ownership, the importance of the mountain economy can be easily evaluated.

In order to get an accurate picture of **what should be done in the Carpathians** on the short run, a comparison must be made in the first place between

the main branch of the mountain economy in the Alps, the **mountain tourism economy** of Austria and Italy and the mountain tourism economy in Romania's mountain area. Austria or Italia have an alpine area slightly smaller than the alpine area of Romania's Carpathians (54,620 km<sup>2</sup> Austria, 51,466 km<sup>2</sup> Italy), and the population in this area is almost similar to that living in our Carpathians. Yet, both Italy and Austria have more than 2.5 million beds in over 100,000 agro-tourism boarding houses and hotels, where over 50 million tourists are accommodated each year, with an accommodation activity averaging 60 tourism days per boarding house. In order to get a picture of the large gap between Romania and Austria or Italy, we should mention that in Romania the number of agro-tourism boarding houses in the mountain area totals about 1,600, where the number of beds does not exceed 11,000, and the average yearly occupation time does not exceed 25-30 days, equally shared between the winter and the summer seasons.

The extremely various rural landscape, well-preserved in most cases, the life in the countryside, with significant traditional components, the agricultural and forestry potential of the mountain area, the specific architecture of the rural area are all factors favouring rural tourism development in our country. Unlike other tourism forms, rural tourism must be "diffuse", imperceptible from the habitat component point of view, it should be based upon the natural, folkloric and ethnographic, spiritual, (cultural, in general), architectural and gastronomic heritage specific to the agro- tourism areas.

At the moment, although certain positive signals exist with regard to agro-tourism development, there are certain constraints to rural tourism development at the capacity provided by the favourable landscape and traditional culture. The constraints are the following: deficient **infrastructure** (highways, railways, banking and mail services, fast and safe telecommunications services), modest **living conditions** (unacceptable even by the less demanding tourists) on most mountain peasant households, **insufficient educational and training level** of household members (minimum knowledge and information in the field of tourism, of specific local quality gastronomy, not knowing a foreign language), which add to the tourists' **personal unsafety, insecurity**, etc. The fact that only 0.1% of Romania's rural economy comes from agro-tourism, compared to 4.4% in the EU Member States represents an obvious economic indicator for the Romanian agro-tourism situation. Significant investments are needed for putting into value the local resources (educational, financial, infrastructure, etc.).

**Agro-tourism**, by the internal agri-food consumption on the household where the foodstuffs have been produced, has an important function to potentiate the economic capacity of the mountain peasant households. In the case of foreign tourists who spend their vacation on the rural boarding houses, agro-tourism represents a form of "internal" export of agri-food products. As most foodstuffs consumed in the agro-tourism activity come from the production obtained on the respective household, it results that the agro-tourism activity profitability is high, and the prices of the agro-tourism services are lower compared to other tourism forms. From the calculations made by the specialized tourism services, it results that on all boarding houses, the lunch price is by 40–50% lower compared to the lunch served in a restaurant from the tourism hotel network (at the same classification level). This price difference can be easily explained. The price of the agricultural products obtained and consumed on the agro-tourism household does not include commercial margins, VAT, excise taxes, transport expenses, storage and preservation costs. The meat, the meat preparations, eggs, cheese, milk, butter, fruit jam, pickles, wine, plum brandy, cherry brandy, blue-

berry brandy, etc., prepared according to traditional methods, go directly from the agro-tourism farm production to the tourist's table. At the same time, the tourism services (accommodation, services, etc.) are not carriers of additional indirect costs, commissions, etc., which makes the price of agro-tourism product lower than the urban tourism product. The agro-tourism policies should stimulate the rural tourism advantages, on the basis of tax exemption, fiscal pressure diminution, in general, in order to lower the prices and to maintain the traditional customers (town people with lower incomes, foreigners willing to get familiar with the rural traditions of the respective area, town children, etc.).

The support and development of the agro-tourism in the mountain area also has an educational component that mainly refers to getting familiar with the cultural traditions or landscape and historical values of the rural area. The educational component is mainly addressed to the town children who, we must recognize, suffer from the complex of urban concrete spaces. The two-week participation to the activities on the rural household, together with hiking, swimming and bathing in clean waters, horse riding, etc. greatly contributes to the enlargement of town children's learning and knowledge horizon. In many EU countries, spending the holiday and/or practical activities periods on the rural boarding houses are included in the curriculum of urban schools. It is the case of Austria, Sweden and Switzerland, etc., where this system has had extremely good educational results.

In the case of mountain areas, the **mountain agricultural economy**, the forestry economy and the rural tourism are intimately intermingled. The mountain agricultural economy, largely ecological or organic, focusing on the pastoral economy (raising of dairy cows, calves and sheep) can be mixed on pluriactivity basis with the harvesting and processing of wild berries and medicinal herbs from the wild mountain flora; both activities can be connected to winter or summer rural tourism activities based upon the pastoral and ethno-folkloric customs, to religious activities, sports and hiking, all these representing significant modalities for the rural economy growth in the mountain areas, for the best use of the natural capital from the mountain areas.

The **forestry economy** represents the second great rural development problem in the predominantly forestry regions (forest exploitation and timber processing, harvesting and processing of the forest products: berries, mushrooms, medicinal herbs, etc., the zone-specific traditional trades related to the processing of forestry products, etc.). The Romanian forestry economy is far from being an important component of the rural economy in the mountain area. In Romania's rural economy structure, the forestry economy, with all its structural components (timber harvesting and processing, harvesting and processing of wild berries, medicinal herbs and mushrooms, hunting and fishing, etc.) does not exceed 6%. The rural development projects in the mountain areas should obligatorily include solutions for the development of small and medium-sized enterprises for processing the timber and other forest products, etc. The forestry economy is still a sector that, similarly to agriculture, holds multiple functions in the forest ecosystems. Forestry, in correlation with agriculture, can have a complementary function or a basic economic function in certain areas.

In the enlarged **forest economy** framework, two aspects should represent objectives of the rural development programs. The first aspect refers to the increase of land areas under forests by new forest plantations, shelterbelts, maintenance of present forests; the second aspect covers the rational forest exploitation and the processing of timber into highly processed finished products with value-added. Referring to the rational forest exploitation and the processing of timber into highly processed finished

products with value-added we should specify that, at the moment, Romania gets for one ton of final wood product on the average by 3.2 times less compared to the EU countries (80 €/t in Romania and 260 €/t in EU). The explanation is quite simple: a too high percentage of the forest product value still comes from the export of logs (46%) rather than from the export of furniture (54%). At the same time, the domestic market is full with the wood products of the large European companies and with the furniture supply of the Romanian commercial companies that import a large part of these products. The policy of the National Forest Administration, which enables the organization of auctions not conditioned by the processing of timber in Romania, is mostly damaging for Romania's economy.

For Romania, the increase of land areas under forests is a priority for the ecological reconstruction of many zones, as there are still too many hilly areas (Transylvania Plateau, Dobrogea Plateau and Moldova Plateau) with a low forest cover. In the plain areas, the excessive deforestation resulted in the aridization, steppization and even desertification of certain areas, and in massive soil erosion in the hilly areas. For these agricultural areas, the reforestation on certain land areas is imperiously necessary out of ecological re-equilibration reasons. In the conditions of private land ownership, the afforestation should take place under long-term programs, with economic advantages for the owners. The projects targeting the afforestation and planting shelterbelts should have a coverage area at the level of the local or regional (zonal) communities. The contribution to the ecological re-equilibration of properties should be paid by all its beneficiaries, i.e. either by the local or regional communities or, in case of larger-scale works, from public investments, through the state budget.

An important component of the rural economy in the mountain area is represented by the **sportive hunting and fishing economy**; these activities are extremely demanded and well paid by the Romanian and foreign tourists. However, these two activities, due to the absence of infrastructure and of the necessary facilities on the boarding houses, represent constraints that make the sportive hunting and fishing economy still non-competitive. Suffice it to mention that our neighbouring country, Hungary, with a mountain area covered by forests by 7–8 times smaller than Romania's, gets by 5.5 times more incomes from the mountain hunting than Romania.

We cannot complete the presentation of the forestry economy, as a rural economy component, without making a few comments on the maintenance of a conservative vision of etatist origin from the part of the national and territorial forestry bodies. It is necessary to highlight that in the period between the two World Wars, only about 1.8 million hectares of land (about 27%) out of over 6.5 million hectares of forestland from Romania were forests into state property. Regardless of the forestland owner, this forestry ownership structure did not have a negative impact upon forest management under silvicultural system, but on the contrary. In the communist period, the entire area under forests was nationalized in Romania, and the mentality of "the superiority of state forest management under silvicultural system" continues to prevail in most decision-makers opinions.

The exemplary management of the private forests in Banat, of the compossessorates from Transylvania were soon forgotten or denied by the silviculturists nowadays. Thus, the critical condition of the localities in the mountain areas can be explained, which are largely dependent upon the forestry economy, where nothing has happened after 1989, except for forest exploitation for commercial purposes by companies managed by dishonest managers, in many cases alienated from the true interests of the respective zones. In these zones no forest ownership reform has been implemented, not even designed. Although Romania went through

several agrarian reforms, out of (false) considerations related to the forest exploitation interests, in the first place, no reform in the forestry sector has been designed and applied, and the severe poverty condition of the people from many mountain rural communities, extremely dependent upon the forestry economy, such as the case of the zone Penteleu in the Buzău mountains (Gura Teghii, Nehoiu, Varlam, Siriu etc.), reveals the precarious mentality that exists in this important maintain economy sector.

Other priority investment, targeting the **equilibration of the green land cover**, with multiple beneficial effects upon the ecological equilibrium, environment protection, landscape improvement, carbon dioxide absorption, the protection of agricultural land, of localities, communication ways and dykes, water accumulation in soil, attenuation of the hot weather effects in summer and of the extreme frost in the cold season by the diminution of the wind power, etc. is represented by the **plantation of degraded land and setting up shelterbelts**.

Romania, from the point of view of forest cover (26.8%), is under the European average and much under the optimum level of forest cover (40% for the year 2035 as stipulated by the Forestry Code), although the mountains represent one-third of the country and another one-third is represented by the Sub-Carpathians hills and high plateaus. Besides the general deficient cover, the distribution by relief units features deep disequilibria in the territory, as the forest cover accounts for only 10.9% in the plain area.

NRDP provides for the forest cover increase, on the long term, without specifying its duration, from 25.8% to 32%, which represents an increase of the land area under forests by 1.24 million ha. In the case when this desideratum were reached in 14 years (two EU budgets), it results that the average yearly afforestation rate should be about 80,000 ha (compared to the present afforestation rate of about 10-12 thousand ha/year), the investments amounting to about 800 million RON/year.

Taking into consideration the urgent need for zonal equilibration, of the deficient plain area in particular, we express the opinion that it is necessary to give priority to the planting of shelterbelts and of the non-productive land areas in the plain, so that the forest cover in the plain zone can reach 14-15%.

Among the concerns for the ecological equilibration of Romania's territory by the increase of the permanent green land cover, carbon dioxide emissions diminution and desertification decrease, **the development of permanent grassland areas** (pastures and renaturalized hayfields) stands out, mainly in the deficient zones. In Romania, the grassland area totals 4.9 million ha, out of which 3.4 million ha pastures and 1.5 million ha natural hayfields (33.2% of the agricultural land area and 20.6% of the total country's area), yet with a non-uniform distribution by the main relief units of the country: 2.4 million ha in the mountaineous and alpine zone (32.7%, 49%), 2 million ha in the hills (24.4%, 40.1%) and under 0.5 million ha (6.1%, 10.2%) in the plain (the first percentage share in parentheses represents the share of grassland in the total area of each relief unit, and the second percentage share is the share of grassland from each relief macro form in the total grassland area from Romania).

Taking into consideration the present uncultivated areas from the plain zone, which exceed 1-1.2 million ha each year, we consider that, on the basis of a financial support from both public and private sources, the share of grassland in the plain zone can be increased to 15-16%, compared to 6.1% at present. Our opinion is that the permanent green land cover in the plain zone should also receive support from public funds, as this action has beneficial effects upon the environment, upon the diminution of carbon dioxide in the air, the landscape variety improvement, which is rather dull

in the plain area; all these should also receive support from the societies, through funding from the state budget.

## **7. FUNCTIONAL IMPLEMENTATION OF THE COMMON AGRICULTURAL POLICY**

### **7.1. Increased number of contractual arrangements in agricultural production, diminution of underground market, increase of taxation in agriculture**

The greatest deficiency in the domestic agricultural market is represented by the quasi-total absence of the regulations on primary agricultural production contract arrangements with silos and processors and their consistent application. In order to prove the previous statement it is sufficient to show that, while in EU the primary agricultural market (the so-called peasant market) accounts for 9-10% in total, while the contractualized (chain) market 90-91%, in Romania the situation is exactly contrary, i.e. only 10-11% of the primary (raw) agricultural production is contractualized, the remaining primary products being sold on the underground, non-regulated and non-fiscalized markets).

The largest agricultural market is **the cereal market**, which also includes the oilseeds, energy crops and industrial crops, the value of which can reach about 12-15 billion euro.

In order to regulate this extremely important market, **we propose to urgently adopt the Warehouse Receipt Law**, which regulates the grain storage and market, as well as other agricultural products that can be stored on longer term. By this law, the professional storage activity has a public nature and it can be performed only after public authorization in the agricultural field, i.e. MARD, the grain silo ensuring the interface between the agricultural production and the grain market.

As a result, this law has to regulate, in reality, **the grains entering a legal chain**, without permitting their transaction under raw form, from the field, but only after storing them in a licensed grain warehouse, where the amount of raw commodity is determined and its quality is evaluated, the technological operations are established for its quality homogenization according to the quality standard and on the basis of calculations or weighing, the final quantity to be delivered is established.

Following these operations and storage in a licensed silo, the owner of a stock of grains receives a ***Warehouse receipt***, issued by the warehouse administrator, also certified on the basis of the same law. The receipt is a ***title document for its holder***, issued by the MARD certified depositor, by which it is confirmed that the holder of this certificate has stored a certain quantity of grains, of certain quality in the warehouse, for which all the legal storage costs for a given period of time have been paid. This certificate can be used as a pledge in a bank or it can be deposited on the cash market for stock exchange transactions or introduced into the intervention system on the grain market.

### **7.2. Improvement of the agri-food chain operation – promoting agriculture based on harvest contracting**

At present, the agricultural markets in Romania are characterized by a low organization level, and this deficiency adversely impacts the activity of the operators on the respective markets, and has a series of negative influences upon the sale of agricultural products.

The sale of agricultural products is facing a series of already well-known problems: in the post-harvest period, there is an increase in supply and prices decrease, and farmers are often in the situation of not being able to recover the production costs.

In order to improve the operation of agri-food chains, we propose the following set of measures:

***Measure 1: Executory contracts from the legal point of view.***

*Expected impact:*

- improvement of taxation on the agri-food chains;
- ensuring stable incomes for farmers;
- gradual increase of domestic production and consequently the agri-food imports diminution.

*Motivation:*

**The executory contracts from the legal point of view represent an essential condition to facilitate the exchanges and investments in the economic activity in general and in agriculture in particular.**

In the countries where the market economy operation is not perfect yet (such as Romania), the executory contracts from the legal point of view are not commonly found or they are absent. At the same time, the government's intervention is necessary as a precondition for the establishment of a favourable environment for business and investments. The executory mechanisms can include private sanctions such as getting out of the contract, entailing the reputation loss and suing in court.

The more complex a farmer's contract-based production is, the higher the risk of an emerging dispute. The contractual clauses should provide for a system of resolutions regarding the disputes that may appear, resulting in conflict safeguarding, if appropriate.

In Romania, the contracts are regulated by the Articles 1410-1453 of the Civil Code and they are not executory contracts from the legal point of view; in other words, if a part gets out of a contract, in order to recover the money the respective part must be sued in court, which is a very difficult procedure and needs time and money, and may even result in the company bankruptcy until the dispute is settled in court.

*Present situation, problems:*

At present, most Romanian farmers establish crops without having concluded a production delivery contract. At the harvest time, they have to sell at the best price and accept, in certain cases, to sell without legal documents, which represents a tax evasion case.

There are cases when the farmers conclude production delivery contracts and at delivery, the buyer gets out of the contract, so that the farmers find themselves in the situation of not having where to sell their production. In order to recover their money they should sue the buyer in court, and the trial may last for several years as the contract is not executory from the legal point of view and the farmer may go bankrupt until the case is settled.

The most relevant examples of **non-executory contracts** in the agricultural sector are the following:

- **Contracts concluded between farmers and breweries** for the delivery of malt barley (with low protein content). At the moment of taking over the barley, if the prices on the foreign market are lower, the brewery gets out of the contract without paying any penalties to the farmer for this and it buys barley from a foreign market as the price is more attractive there. Under these conditions, the farmer will have to change the product destination from malt barley – where the technical specification

was low protein content, to barley for feed, where the technical specification is high protein content, and hence the farmer will lose from this process.

- **Contracts concluded between farmers and the processors of fruit and vegetables.** During the field visits to the farmers who cultivate fruit and vegetables, these complained about having established vegetable crops for processing on significant areas of 400 – 500 hectares, and at the moment of delivery, the processing plant got out of the contract and the farmer was not able to place such a large quantity of vegetables on the market.

*Proposal - Solution:*

- Completing the Articles 1410 - 1453 of the Civil Code with the specification that “**a contract has executory character from the legal point of view**” so that when a contract is not respected it is not obligatory to go to court with the part that has not respected the contract terms, but the contract should be directly executed.

***Measure 2: Improvement of chains operation and the increase of the fiscalized production: the case of vegetables***

*Present situation, problems:*

- High non-fiscalization level along the marketing chains. Only 5% of the domestic production of vegetables is sold through the large store chains, hence it is fiscalized. More than 60% of production is sold by intermediaries, whose legal status is not clearly defined and they are not controlled with regard to their commercial activity. 20% of production is sold directly on the market, and part of the sellers have producer certificates without being producers, and sell directly on the markets, without permanently using the cash registers.

- Sales of fruit and vegetables from imports from EU or non-EU countries on the agri-food markets, as well as from the domestic production, without issuing fiscal receipts each time, although in the law it is specified that each trader must have a cash register. The specialists in the field estimate that out of the imported quantity of fresh vegetables, 40% is sold through the large chain stores. The remaining 60% is sold on the agri-food markets without permanently using cash registers. The imports are not traced and correctly fiscalized.

- Imports of tomato paste from non-EU countries (China), at dumping prices and insufficiently controlled from the quality point of view. In this situation, the vegetable farmers remain with the tomato production on the field, unsold, as even though when they have contracts with the processors, the contract terms with regard to prices are not respected. As a result, there is a low number of legal formal contracts along the vegetable chain, but these are not executory contracts.

- The lack of labour force in the sector: the vegetable farmers are confronted with the lack of labour force, as people refuse to work in vegetable farming on a seasonal basis, due to the social aids the local people receive from the town hall or from other sources, and another part of the labour force has left for work to foreign countries.

*Proposals - Solutions:*

- Banning the non-fiscalized sales, of fruit and vegetables coming from imports, on the agri-food markets. Each trader involved in the retail sales should have and use a cash register. The fiscalization of transactions between the seller and the final consumer may also gradually lead to the fiscalization of transactions between the intermediaries and the sellers on the markets;

- The fiscalization of wholesalers / intermediaries at national level and their rigorous control by the fiscal bodies. The clear definition of intermediaries from the legal point of view and their control by the habilitated bodies. Due to the high

production perishability, and also from lack of time, the producers are obliged to sell their products at half of the selling price to final consumers;

- Contract execution from the legal point of view. The contracts must become executory titles without being necessary to appeal to court for settling up the disputes;

- Elimination of the social aids provided by the town halls from the rural area and mainly in the agricultural season (March – October);

- Technical support to access the NRDP measure on the producers' groups and the establishment of marketing cooperatives;

- Technical support to farmers for investments in specialized marketing infrastructure: sorting – calibration – packaging stations, cold storage, laboratories, distribution equipment, etc.;

- Special program having in view the support to investors in the field of the trade with vegetables and adequate commercial infrastructure.

*Expected impact:*

- on the short term:

- Increase of budgetary incomes through the fiscalization of the imported vegetables sold on the agri-food markets by 40% and by more than 60% in the case of imported fruit;

- Labour force orientation towards the production activity. The labour force used in vegetable farming could increase by 40%. At the same time, a diminution of the budget expenditures could take place, by giving up the social aids provided by the town halls. At the same time, this would entail a diminution of the farmers' labour costs, as the labour supply in the rural area would increase.

- on the long term:

- Promoting the formal contractual relations, in which the contracts should become executory titles, might lead to the stabilization (regularization) of production (supply) on the medium and long term, to the improvement of the farmer's production decision (avoiding the surplus production for certain vegetable species and the difficulties in the sale of the obtained production), to the improvement of fiscality along the chain.

### ***Measure 3: Improvement of milk chain operation***

*Present situation, problems:*

Lack of information or rather the form under which this information reaches the rural area.

The constraints to the milk production development would be the following:

- Fragmented structure of holdings: 92% of holdings have only 1-2 cow heads and only 0.02% have over 100 heads;

- 72.50% of the dairy cow herds is found on the holdings with 1-2 cow heads;

- Insufficient development of the milk collection infrastructure;

- Modest competitiveness of the average milk yields, compared to the West-European countries;

- The restructuring process of the dairy farms was slow, so that the average size is only 1.63 cow heads;

- Insufficient finance for farm modernization and revamping;

- Old age of dairy cow holders;

- Still high percentage of non-conform milk;

- High price of inputs for milk production;

- Anti-competitive practices in the dairy sector

*Proposals - Solutions:*

- Framework-contracts between farmers and processors, where the contract terms are respected;
- Programs targeting the association of the dairy farmers at commune level, by funding communal milk collection centers; in this way, the producers' organizations would increase their negotiation power;
- Investments in the genetic potential improvement of the dairy cow breeds;
- Best use of the opportunity to export traditional niche dairy products both on the national and European market;
- Support to milk production in the less-favoured areas or to environment-friendly milk production, as it is well-known that milk production is one of the most suitable activities for maintaining the farmer families in the less-favoured areas and, together with sheep raising, it plays a main role in the landscape and environment development;
- Milk quota removal – at a first glance, it would enable the development of a number of farms that do not depend on the milk quota. The risk would be a too large increase of the milk quantity produced, and the farmers will be economically influenced in the sense that they would not have any outlet for their production or they would be obliged to sell their production cheaply. This quota removal aspect can be discussed after 2013, when the sector will have developed in Romania as well.

***Measure 4: improvement of the pork chain operation***

*Present situation, problems:*

- From the consultations with the representatives of the pig-raising commercial companies, it resulted that the state support, under the form of direct subsidies or production or investment credits, had quite good results, leading to production increase, increase in the quality of pig herds and meat, maintenance on the national market under the conditions of strong European competition and to investments;
  - Continuation of the financial support at the level of the support provided in the period 2007 - 2009;
  - Regulating the trade and operation of the supermarket networks, which by their offensive behaviour in recent years take hold of the national market, impose non-profitable selling conditions for the local pig meat producers, contributing to the bankruptcy of the smaller stores and butcher's shops;
  - In Romania, three forms of pig production coexist:
    - 1.7 million farms for self-consumption, which also use a non-organized and non-legal trade system with live animals and pig meat, to obtain subsistence incomes. In the year 2008, out of total production of 5660.0 thousand heads, 2224 thousand heads, i.e. 44%, went to self-consumption and 976.0 thousand heads, i.e. 14%, were sold at fairs;
    - small-sized farms, household farms, family associations or authorized natural persons, registered from the sanitary-veterinary point of view, which deliver pigs to slaughterhouses. From the evidence of the Agency for Payments and Intervention in Agriculture it results that in the year 2009, 112 small-sized farms applied for financial support;
    - Commercial companies raising pigs, with sanitary-veterinary authorization, supplying about 40% of the total meat production.

Out of 238.0 thousand tons liveweight meat delivered to slaughterhouses, 203.0 thousand tons come from commercial companies. There are 82 commercial companies for pig raising in the MAFRD evidence, out of which 39 are former state farms, with large accommodation capacity, which at present are modernized for biosecurity, animal welfare and environment protection purposes.

The state support should be oriented to the commercial farms. From the existing statistical data, it results that the selling prices on the pig meat market do not cover the production costs. Some other European countries that produce pig meat are also in the same situation, but they benefited from significant financial support throughout the years, so that the gap between the European farmers and the Romanian farmers cannot be bridged up only in three years after the accession.

The European Commission has certain regulations that diminish the state aid scope, yet in the **Community Guidelines on the state aid in the agricultural and forestry sector 2007 - 2013** it stipulated the following:

*Article 23: "The Commission will evaluate from case to case the aid measures that are not regulated by the present guidelines taking into consideration the principles provided under Art. 87, 88 and 89 of the Treaty and by the common agricultural policies in the field of agriculture and rural development. The Member States that propose a support for the agricultural sector that is not regulated by the present guidelines will have to present an economic evaluation of the positive impact of the agricultural sector development measure and of the competition distortion risks that the respective measure involves. The Commission will approve such measures only in the case when the positive contribution to sector development clearly exceeds the competition distortion risks."*

*Proposals - Solutions:*

- In order to give up the pig meat imports, a program is needed for the increase of pig herds by 3.5 million pig heads, which can be realistically achieved in 7 years, by a rate of 500 thousand heads / year, which implies building up 175 pig fattening farms, with an accommodation capacity of 10000 places or 350 farms with 5000 accommodation places or 875 small farms with 2000 accommodation places;

- Production crediting conditions, the soybean oil cakes and import costs for the feed additives, the veterinary drugs and other components generate higher costs for the Romanian producers compared to the European producers. **Competition distortions appear on Romania's market, where the commercial flow of pig meat will continue in the year 2010 as well, from Europe to Romania;**

- The European Commission statistical data reveal that the large pig meat producers from Europe cannot cover the production costs by the selling price. The differences are compensated by national support schemes. Yet, at the same time, the costs in Romania are the highest among the presented countries, hence the need to continue the financial support to the pig meat producers, so that these can resist on the European market.

- The calculation of funds from the state budget in 2010 for the pig sector, which will be lost by non-granting the subsidies:

- estimated production for 2010:

- 2.8 million pigs delivered to slaughterhouses, out of which 86% E quality class and 2% U quality class;

- 2.4 million heads x 120 RON/head =288.0 million RON;

- 56.0 thousand heads x 100 RON/head =5.6 million RON;

- 47.0 thousand young sows at first farrowing x 150 RON/head =7.0 million RON
- 380.0 million RON credits according to Law 150/2003 with 30% discount =114 million RON
- total necessary funds from the state budget 2010 = 414.6 million RON.

- These calculations are based upon data and information from MARD and the Carcass Classification Commission, having in view the achievements from previous years, when the number of slaughtered animals in the specialized units and the meat production increased as a result of subsidies received. .

- Starting with 2010, the financial support could be received according to other criteria as well, namely: complying with the hygiene and animal welfare requirements on the farms, application of technologies that should protect the environment, measures that are to be notified by the European Commission. At the same time, a sustained activity should exist in the management of waste, dejections, and used water on farms, ensuring minimum standards with regard to the pig maintenance spaces; these problems can be solved up by large investments, considering the EU animal welfare and environment protection standards.

## CONCLUSIONS

- Knowing the realities of Romanian agriculture and rural economy is one of the **sine qua non** conditions for a correct economic and social diagnosis, having in view the application of a coherent program for increasing agriculture contribution to the attenuation of the present crisis and for resuming the sustainable economy growth.

- We are facing a great compatibility dilemma, between the new Common Agricultural Policy (CAP), adapted to the present situation of agriculture in the European Union (high technical performance, increasingly high technical performance, increasing higher material consumptions and costs, presence of large stocks of agricultural products with significant economic consequences upon the farm economy) and the Romanian agriculture situation, which should target other objectives (deep farm restructuring and farm consolidation, massive support for increasing the EU market).

- The quality of the Romanian agricultural area represents the natural, ecologic premise of our products competitiveness. The basic agricultural products (wheat, maize, sunflower, soybean, vegetables, fruit, grapes, meat, milk, etc.). obtained under medium technical conditions, are fully competitive with similar products from other countries, while in most assortments, the quality is even higher. A large part of the Romanian rural area has a natural or cultural vocation – as basic condition for the rural tourism or eco-tourism practice.

- A change of vision, of mentality is needed, a new philosophy of the rural area, correlated with the local and regional autonomy and the subsidiarity principle

- We should start from the need of **capital injection** in agriculture and rural development, through adequate funding systems for the present situation, the effects of which should stop the economic decline and finally generate economic growth.

- Romania, as a EU Member State since 2007, must get in line with the agriculture and rural development funding systems practiced in EU. It is worth mentioning that **none of the funding systems for agriculture and rural development in EU** has been conceived for periods of economic – financial crisis or even of globalized economic recession.

- From the point of view of agricultural and rural development performance, **the present stage of the Romanian agriculture is similar to that of the agriculture of EU-6 Member States in the period 1957 – 1962.**

- The **agricultural non-performance** is generated by the **still (too) high dependence on the annual weather conditions**, as the irrigation systems are largely degraded and non-functional, the farms are poorly equipped with irrigation facilities and the irrigation water cost is high; at the same time, this situation is the result of using **obsolete agricultural technologies**, with a low consumption of performance-inducing inputs (fertilizers, crop protection substances).

- Romania's agricultural non-performance and the multi-annual fluctuations, caused by the obsolete technologies and the minimal inputs applied, have mostly severe consequences, both upon obtaining the necessary agricultural products for the population and upon the general costs of the agricultural sector. It is estimated that **Romania's costs generated by non-performance amount to about 2.4 – 2.5 billion RON each year** (710 - 760 million €); this amount could be spent on additional inputs necessary for production performance increase to the level of performance from France, while an area of 2 – 2.2 million ha could become available for other crops.

- The non-performance from Romania's agriculture, as well as from the entire agri-food economy, is also the result of the **crisis of inefficiency in the allocation and utilization of resources** (which began long time before 1989), and it is strongly affected by a **system of disequilibria** as regards the land and farm ownership, the agricultural markets and prices, the farm production inputs, in competitiveness and institutional operation.

- **The financial support to agriculture**, practiced under different forms (fixed payments per hectare, vouchers by cultivated area, payments per animal head, and SAPS € / ha, after the accession) represented, in its largest part, a “hidden” social protection form, without being a modality for farm development and farm performance increase.

- **The discrepancy between the stability, food security and safety needs and the fluctuating reality of the prices on the agricultural market**, due to the disequilibria that emerged between the demand and supply of food products, and mainly to the speculative actions, pushed to the immorality limit, has significant negative economic and financial influences, sometimes insurmountable, both upon farmers and consumers.

- After 1990, agriculture has had a significant influence both upon the general economic growth (agriculture influencing the economic growth by  $\pm 2 - 2.5\%$ , depending on the agricultural year), and upon the population's food expenses and the size and structure of the balance of trade and payments in the agri-food sector.

- **60-62% of Romania's food imports are represented by products that could have been obtained in Romania:** meat and meat preparations (over 31 - 32%, in recent years), grains and wheat flour (with a maximum of 20% in 2003, also 8% in 2007), soybean and soybean oil cakes (over 50% of the necessary after 2005, when the GMO soybean cultivation was forbidden in Romania, in the period 2001 - 2004, the trade balance was positive in soybean and soybean oil cakes), fresh vegetables, fruit and flowers (8 - 12% each year in the period 2000 - 2009), sugar, tobacco, hops, etc.

- **The imported food expenses have quite a high share, which is unacceptable for an agricultural country like Romania** (17.9% of the food consumption and 34.1% of the cash expenses for food).

- **The present financial crisis is also felt by the small agricultural holdings** (subsistence and semi-subsistence holdings), but mainly by the large agricultural commercial companies, as well as by the companies storing and processing the agricultural raw products, the effects being different by category of economic operators from the agri-food sector.

- There is a **high economic non-convergence level of the Romanian agricultural holdings**, compared to those from certain EU (advanced and economically comparable) countries, which can be explained by the persistent discrepancies between the levels of partial but relatively relevant indicators, for measuring the agricultural output value (gross agricultural output), the physical productivity of land (average grain yield) and the investment effort (gross fixed capital formation), between Romania and a number of six EU Member States.

- **The results of multiple correlations** between the gross agricultural output (Y), the average grain yield (X1) and the gross investment (X2) lead to the conclusion that our agriculture has a performance potential, measurable by assigning desired levels to each of the two explanatory variables of the gross agricultural output, in the multiple regression determined for Romania's agriculture in the period 1998 – 2008.

- **Agriculture, in the predominantly agricultural areas** (and forestry, in the rural mountain areas), represents the backbone of the rural area; no rural development program can be designed without agriculture having an essential role. Although significant changes have been lately produced in the role and functions of agriculture, this sector remains the main component of any rural development program, leading to the idea of the shift of focus from **the productivist character** to **the multifunctional character** of agriculture.

- **Multifunctional agriculture**, from the strict production and profit point of view, is less performant, yet it is preferred from other points of view (tourism, landscape, ecological, social, etc.), having, in principle, economic functions as in the case of super-intensive and specialized agriculture; yet, it acquires new functions, namely: production of energy raw materials; increase of tourism, natural landscape potential; conservation of vital environmental elements (soil, air, water, flora, fauna) so as to ensure the agro-ecosystem stability; harmonization of the social and cultural functions of the rural area in close connection with a healthy and diverse agriculture.

- **The society, as beneficiary of the multiple functions of agriculture**, should pay not only for the agricultural products, i.e. the food, but also for **the indirect services** of agriculture, which contribute to the improvement of habitat and natural landscape quality, etc.

- Agriculture acquired a new function in the last decade, i.e. **producer of energy raw materials**, the vegetable fuels, even though more expensive at present, being demanded by an increasing number of users.

- The large agricultural holdings, financially consolidated and with a high technical potential, must shift from the energy-intensive agricultural systems to the **conservative agriculture system**, characteristic to the sustainable use of natural resources, of soil and water in the first place. However, if we take into consideration the long-term effects of the conservative agricultural practice upon the environment, upon soil in the first place, the technical performance difference between the energy-intensive farms and the conservative farms should receive financial and fiscal support.

- **The investments in the non-agricultural and food economy in the rural area**, besides adding value to products by the processing of agricultural and non-agricultural raw products, from local resources, has another great advantage, both in the crisis and recession periods and in the economic growth periods, by creating new jobs, through the local (rural) labour force utilization and stabilization, revitalization of rural localities, mainly in the less favoured and remote areas.

- **The comparative analysis of the present rural economy development level**, in general, and of the agri-food economy, in particular, enable us to formulate the conclusion that the correlated strategy of the two pillars of the rural economy, namely **the development of the agri-food economy – market economy and the development of the non-agricultural rural economy – the rural development policy** will also depend upon this.

- **The sustainable economic growth** in agriculture becomes debatable, as long as the “performance” of the Romanian agriculture is at the lower limit and as long as, under the agro-ecological conditions of our country, we import more than 25% of the Romanian food consumption value.

- **The first investment priority in Romania’s agriculture**, which must be on the first place in all the strategic programs of agriculture and rural development in Romania (funded both by internal and external resources), should be the investment in the rehabilitation and equipment of the irrigation systems, on an area of about 1.7 million ha, in the shortest time possible (5 years at maximum).

- **Although the mountain area provides an extremely diverse rural landscape**, well-preserved in its most part, life in the countryside, with significant traditional components, agricultural and forestry potential, architecture specific to the rural area, as factors favouring the rural tourism development, there are also a series of constraining factors, such as precarious **infrastructure** (highways, railways, banking services, fast and safe telecommunications), modest **living conditions** (that are not accepted even by the less demanding tourists) on most peasant households in the mountain area, **insufficient training** of household members (minimum knowledge and skills in tourism, in local quality gastronomy, not knowing a foreign language), which add to tourists’ **personal unsafety and insecurity**, etc.

- **The mountain agricultural economy**, ecological or organic in its most part, focusing upon the pastoral economy (raising of dairy cows, calves and sheep), can be mixed on pluriactivity basis with the harvesting and processing of wild berries and medicinal herbs from the wild mountain flora; both activities can be connected to winter or summer rural tourism activities or related to the pastoral and ethno-folkloric or religious customs, sports and hiking activities, all these contributing to the significant growth of the rural mountain economy, to the best use of the natural capital in the mountain areas.

- **The agro-tourism**, by the internal agri-food consumption on the household where the foodstuffs were produced, has an important function to potentiate the economic capacity of the mountain peasant households.

- The priority investment in the **green cover equilibration in the territory**, with beneficial effects upon the ecological equilibrium, environment protection, landscape improvement, carbon dioxide absorption, protection of agricultural land, of localities and communication ways and dykes, water accumulation in soil, attenuation of hot weather effects in the summer period and of the extreme frost in the cold season by the diminution of the wind power, etc., presuppose the **planting of degraded land, establishment of shelterbelts or increasing the areas under**

**permanent grassland** (pastures and renaturalized hayfields), with priority in the deficient areas.

- Among the concerns of ecological equilibration of Romania's territory by the increase of the permanent land cover and diminution of carbon dioxide emissions and desertification diminution, the **increase of land areas under permanent grassland** (pastures and renaturalized hayfields) must represent a priority, mainly in the deficient areas.

- The functional implementation of the Common Agricultural Policy presupposes the following: increase of agricultural production contractualization level, diminution of underground market and fiscalization increase in agriculture, as well as the improvement of the agri-food chain operation by promoting the agriculture based on harvest contracting.

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