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EFFICIENT MEASURES FOR AGRICULTURAL LAND MERGER IN ROMANIA

Nicolae ISTUDOR[1], Robert CHIRA[2], Romeo CIOCAN[3]

Abstract

Given that our country has become since 2007 a full member of the European Union is necessary for the agrofood producers from our country to work towards compatibility, both with EU regulations and global challenges of the moment. The main problem of the agri-food sector in our country, in the process of European integration, is to ensure the competitiveness of Romanian agricultural products, able to face the strong competition that exists on the single European market and beyond. Among measures that need to be taken in order to ensure the competitiveness of Romanian agro-food products on the European Union market, the most important are: the organization of agricultural production, which involves the creation and strengthening of agricultural organizations of optimum size (sustainable), in order to achieve homogeneous products in terms of quality, and competitive in terms of quality and quantity as well as modernization, namely the distribution of agro-food products by improving and implementing a foundation for effective distribution. Creation and strengthening of agricultural organizations of optimum size (viable) can be achieved through a series of measures aimed at ensuring the competitiveness of Romanian agricultural products on European market and beyond, including effective measures on land like land merger that is considered one of the most important.

Keywords: agricultural associations, agricultural land merger, agricultural products competitiveness, economic size, viable farm, economic performance, food safety.

INTRODUCTION

The competitiveness of agricultural products of EU countries is deeply affected by

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economic disparities that currently exist in this world organization. Although countries in South-East have been subject to economic reforms (which were focused on the agro-food sector), there is still a significant gap compared to EU economic indicators. The promotion of sustainable development across united Europe under the Lisbon objectives should be based on increasing economic and technical performance based on innovation and technology transfer in the agro-food sector. Technology transfer is the movement of technological know-how of technological-organizational between different partners (individuals, enterprises, institutions) in order to enhance / enrich the knowledge of at least one partner and to strengthen the market position of each partner.

However it should be noted that in terms of our country is very hard to talk about technological transfer in agriculture as long as there is a huge number of so-called farms which sizes have below 50 hectares (from the tehnical point of view it is imposible to practice modern technology in this agricultural exploaitations). However, it should be noted that Romania has the particularity of self-consumption due to the very large rural family from household production that does not address to the market (measured at about 30% of agricultural production). Although there are views according to which this high level of self-consumption, caused largely by agricultural land fragmentation has a positive side (considered as a measure of social protection for rural residents), however, we must work towards reducing it because it has negative effects in the economy (poor quality products that causes lack competitiveness, unpaid taxes , imposibility of sanitary and veterinary control of agricultural products, large share of employment in agriculture, etc.).

1. The evolution of farm size in Romania

The mai problem of the Romanian agriculture is the creation and consolidation of modern farms, economically viable. Land restitution made under Law 18/1991, as redress act as forced collectivization, is an act of justice and moral rehabilitation of those affected by injustices bygone era. But this act has brought to the attention for the agricultural sector a complex problem that of land fragmentation. Despite the efforts made by our country for the land fragmentation, since 1991 until now, the average size reached 3.5 ha (compared to 13 ha as the average of farms in the EU), being very hard to realise efficient activities on this farms. Comparing the average size of farms in our country with the most important EU countries, we find that we have the lowest average farm in the united Europe, namely: Austria-20 ha-21 ha Bulgaria, Czech Republic, 90 ha, France - 52 ha, ha-46 Germany, Hungary, 7 ha, Italy - 9 ha, ha-24 Netherlands, Poland, 6.5 ha and Spain 23.8 ha-, etc United Kingdom-53.8 ha.

It would not be a problem only the small size of farms from our country if not accompanied by a number of other indicators that we are backward in the EU, such as yields per hectare and per animal, total agricultural production (on cultivated areas), poor quality of agro-food products, higher product costs, etc. From this point of view it is absolutely necessary to act urgently for the creation of modern and functional

national agrarian structures to contribute to a rural area suitable for achieving a modern and efficient agriculture.

Rational agricultural structures can be considered those that allow land, the main production factor to be organized and arranged in order „to allow the incorporation of capital, labor and management as high as posible in order to obtain quantitative, qualitative and economic results, as high in national and global competition"[4]. It should be noted that during EU joining (January 2007) until now, there is some progress in terms of both number of farmers who have larger areas of 50 hectares and the development farmland in farms over 50 hectares (see table no. 1 and 2.)

Table 1. Evolution of the number of farmers in our country by type of surface during 2007-2010

Year	Number of farmers with surface less than 1 ha	Number of farmers with surface between 1 – 5 ha	Number of farmers with surface between 5 – 10 ha	Number of farmers with surface between 10 - 50 ha	Number of farms with over 50 ha	Total
2007	4 961	1 000 096	162 039	53 335	16 413	1 236 844
2008	5 367	915 897	141 603	51 075	17 022	1 130 964
2009	1 481	857 101	134 442	49 448	15 475	1 057 947
2010	1 633	879 380	137 316	55 204	19 139	1 092 672

Source: Payment and Intervention Agency for Agriculture

Analyzing the data Table 1. shows that the total number of farmers in our country has declined in the period 2007-2010, from 1236844-1092672, which represents a reduction of about 12%. The largest number of farms (879 380) in 2010, represent the holdings of between 1 and 5 ha (representing 80% of all farms). If we add to these farms the ones that have between 5 to 10 ha (137 316 in number), results a total number of farms with areas up to the 10 hectares of 1,016,696, representing a share of 93% from the total numebr of farms from our country. In these circumstances, farmers who are or may become commercial (with area over 50 hectares), although increased in number from 16,413 (as it was in 2007) to 19,139 (as it was in 2010), with 2726 farms (which represents an increase of 16.6%), they represent only 1.75% of all farms in our country. It is gratifying that fell in the period, less than half the number of farms with areas up to the one hectare in 4961 (as it was in 2007) to 1633 (as was the end of 2010). This reduction may be the effect of implementation of direct payments in Romania

4 Blaga I. "Varietatea şi interdependeţa structurilor economice" -Tratat de economie contemporană, Vol. 2, Ed. Politică, 1987

that are granted only for farms with at least one hectare of agricultural land. It must be analised if our country could choose for granting direct payments to an area of over 5 hactare (this would help increasing the average area of farm).

Table 2. Evolution agricultural areas of farms in our country by type of surface, in the period 2007-2010

Year	Total surface of farms having kess than 1 ha	Total surface of farms having between 1 – 5 ha	Total surface of farms having between 5 – 10 ha	Total surface of farms having between 10 - 50 ha	Total surface of farms having more than 50 ha	Total ha
2007	3 287	2 439 137	1 076 625	999 460	5 089 377	9 607 888
2008	3 623	2 194 983	943 402	979 874	5 209 529	9 331 414
2009	1 048	2 065 916	905 891	951 886	4 838 485	8 763 228
2010	1 097	2 093 356	918 819	1 088 130	5 536 881	9 638 285

Source: Payment and Intervention Agency for Agriculture

The situation in the two above tables is the result of monitoring carried out in the PIAA on requests submitted by potential beneficiaries of financial support of direct payments, registered in the IACS database. In 2010, 80% of farmers have requested assistance declared agricultural land with areas between 1 and 5 ha, which represents about 22% of utilised agricultural area. It is however noteworthy that the largest share among all categories of applicants is held by farmers in areas over 50 ha in terms of area they hold about 57.45% even if they have only 1.75% in terms the number of farms (at 2010). This can be a support for a possible strategy to increase economic size of farms in our country. However, it is said that they could have problems in the programming period 2014-2020, when, in one of three scenarios of the European Commission is expected to cap direct payments per hectare to 300 thousand euro amounts exceed this limit (ie 100% reduction). In addition, European legislation will provide measures to discourage sharing of holdings in smaller farms or any other options that lead to the avoidance cap. The proposal is more dramatic than the previous limit of 300,000 € as direct payments, regardless of farm size. Not yet known details of the algorithm to be applied to reflect the number of persons employed by the firm, but I do not think that will lead to a substantial increase in direct payments ceiling. Another sensitive issue is the bureaucracy introduced, paying agencies must perform some additional calculations to determine the exact conditions of application of this algorithm for each firm separately. And economically measure is extremely sensitive, since many of the firm balances its income in years of poor harvests European subsidies. In these circumstances it is expected that an important part of farming without subsidies to deal with problems and even bankruptcy in the years to drought or other unfavorable climatic conditions for agricultural production.

If the direct payments in Romania will reach in 2016 the sum of 203 € / hectare, that basically will be affected all farms receiving more than 150,000 European grant € / year, the farms that use more than 50 hectares. From calculations the number of affected farms in Romania will be about 2000 from a total of 19 139 (which represent about 10%).

Table 3. The situation in our country of the number of farmers by type of area in 2010

	Less than 5 ha	**5-10 ha**	**10-20 ha**	**20-50 ha**	**50 -100 ha**	**100-200 ha**	**More than 200 ha**	**TOTAL**
Numebr of farmers	881 013	137 316	36 475	18 729	7 071	5 022	7 046	**1 092 672**
Total eligible area requested	2094 453	918 819	487 180	600 950	501 539	708 788	4 326 554	**9 638 285**

Source: Payment and Intervention Agency for Agriculture

The analysis of data provided by PIAA, shows there is still a strong fragmentation of land, range up to the 10 hectares are strongly represented, amounting in 2010 to about 93% of all farms and about 31% of total agricultural area of our country (as shown by the data from table no. 3.). Under these conditions, and the upward trend from both the average size of farms, as the number of farms with agricultural land exceeding 50 hectares, can be discussion about a scenario on the organization principles of agricultural holdings in Romania which undoubtedly should be aimed at concrete measures and effective merger of land.

2. Efficient measures regarding land merger in Romania

For a long time (even immediately after the land fragmentation because of law no. 18/1991) is still talking about the need of viable farms establishment able to cover domestic consumption needs (our country) and to increase exports of products on EU market and beyond. But each time, the authorized bodies were hit by a series of factors (subjective or objective) that prevented the implementation of a coherent strategy for land merger. Without claiming that the measures proposed by us are the only ones, I believe that current economical and technical conditions in which it is our agriculture the most effective measures for land merger are: cooperation in production, by association, additional taxation of unworked agricultural land, stimulation of the sale of agricultural land, support for young farmers setting up farms in rural areas (with financial support for early retirement of older farmers).

Cooperation in production, by association. This would be the easiest measure applied by landowners that could contribute to the merging of land. However, given the unfavorable experience of the years after the Second World War (forced cooperativisation) and the trend in most EU Member States (which is not associated in production, but in the marketing field) is extremely difficult . Thus, except in isolated cases, such as former CAP Court in Arad, Buzau county, etc. CAP Smeeni cooperation in joint production can not be present (perhaps in the future when we will realize the seriousness of the agro-food crisis that the humanity already feels).

Additional taxation of agricultural land can lead of so called"city farmers" to decide on the use of land owned through rent, association or sale to those interested. Today, in very rare cases, is appled an insignificant fine (200 lei), which seems a bit forced to amend the economic owner of an asset.

Worse is that there are cases (not isolated) that unworked land is framed by experts from APIA, for financial support for agri-environmental measures (see the provision of direct payments per hectare of arable land for the whole of Romania, conditions under which circulated even by officials, an area of about three unworked hectares).

We must recognize that the agricultural year 2010-2011, it appears that began to work the land, over three million unused land no longer a realistic figure, a phenomenon that can be considered positive for the agriculture of our country.

Stimulation of the sale of agricultural land. To implement this measure should take into account two major issues, namely:

• First, we must recognize that there is a reluctance on the part of landowners living in rural areas, the sale of land. Those who were determined to sell (the poor ones) have already sold, and others who engaged in farming keep it running as a system of life. Moreover, older owners (who can not work the land) ask followers not to sell land unless they are in need.

• Second, foreign investors have been and are still most interested in buying land. There from these investors, now a consistent demand for the purchase of land for land of a thousand hacters. Size is not random because the European Commission discussed the new Common Agricultural Policy that provides direct payments to be capped for large areas. In these circumstances we can already guess which is the maximum size eligible for direct payments - a thousand acres. The application launched on the market has a price, offering approximately 2600 Euro / hectare, while the fields are merged into lots of at least 100-200 hectares. Undoubtedly the extent of agricultural land consolidation through land purchase is one worthy of attention. It should however be very careful about who are these lands. It would be interesting analysis of the structure of land ownership by citizens who have them. There is no official data, but it seems that much of the Romanian agricultural land are owned by foreigners (the Austrians, Italians, Spaniards, Dutch and others are large landowners of Romania). I think we should look very carefully this issue and to draw or

after neighbors of Hungary who requested European Commission to extend the restriction of selling land to foreigners or to obey the law providing for tenure Romanian purchase of land neighbors farmland concerned.

However, the positive evolution of the average farm size and increasing farmers' agricultural land in use is due to this measure, with the establishment of companies dealing with the merging fields of activity (at least 100 ha) and then selling them.

The fourth measure aimed at merging the land refers to two components: **support for young farmers and early retirement.** Both measures are part of the forms of financial support provided from European Funds for rural development. I consider that including in the National Rural Development Program for 2007-2013 only the measure of support for young farmers was very good, because they laid the groundwork for the establishment of farms managed by young farmers to take land for the elderly or from other owners who want to sell their land.

After the first two sessions of projects submission at the end of March 2011 were submitted 6572 projects worth 136.7 million euros, of which 4463 have been contracted (contracts already paid 4012, which is about two young per villige). Maximum amount for the project by the EU through the EAFRD is EUR 25,000, the amount to increase to 40,000 euros from the next session for submission of projects.[5]

It must be said that the amount allocated for each project is not very high, but support for the establishment of young farmers is, they can access and other measures from NDRP. However, it is important that these young farmers (if they have physically installed in rural areas and it is not only streaming in acts of ownership from father to son) can benefit from wider forms of support from national budget (supporting the difference in interest between the European and the average interest rate in our country, the granting of additional payments, etc.).

The early retirement is a measure that was delayed for NRDP 2014-2020, it is very expensive and this is why that was not chosen in the current program. There were similar types of land disposal by stimulating the elderly, such as a life annuity that was just as Romanian, inappropriate European requirements (where early retirement concerns the use and disposal of usufruct and not possession). Another problem that raises is the extent of early retirement difficulties that may arise in developing procedures for implementation, which should answer some questions such as: what is the period for which pension is granted and the amount (for all ten years or less)?, what area to provide financial support (pay the same pension to give possession of a ten hectare or hectares)?, which scales for each culture?, what happens to the land after the period for which the owner receives a pension? etc.

5 Istudor Nicolae, Petrescu Irina Elena, Dobronauteanu Ionut, Lucov Bogdan, Opportunities for increasing the acces degree of structural funds for regional development in Romania, 2010, Quality Magazine, vol. II, no. 118

Conclusions

It is well known that all governments since 1990 have said that agriculture is a national priority, which is why we should not rely solely on European funds but to ensure the competitiveness of the sector in the EU market, must pay the appropriate funds through the national budget. This more so because, for future period (2014-2020) the EU budget is forecast to be at most equal to the previous period, unless it is reduced because of the global financial crisis. In these circumstances, we believe that all professionals in agriculture (not only those in state institutions) have to worry about the technical and economic performance improvement of agro-food sector, especially since the beginning feels a world food crisis (which in my view is a crisis of production costs and selling prices of products).

In this context, it has to take utmost care of the problem of land merger as part of development strategy on the immediate, medium and long the agri-food sector, to include rural development, and to be accepted by all political parties . This is because this sector has a significant market niche that must be well negotiated and future program funding from European funds (this time as a full EU member), which correlated with a complementary program, funded from national budget (so that, if potential beneficiaries that do not meet certain conditions can be ensured that the European national funding).

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POSTINDUSTRIAL ECONOMY AND THE PROPERTY

Gabriel POPESCU[1]

Abstract

The fundamental problem, and at the same time, the great challenge of Romanian agrarian policy, as well as related sciences, is the chronic poverty of peasants, agricultural land owners.

This issue suggests that the land, as an essential element of ownership, paradoxically, no longer creates welfare for the peasants. Hence, is only natural to ask: What does the peasant still wants or expects from the land? or Why is the peasant still attached to the land?

Most researchers of Agricultural Economics would respond to these questions quantifying and analyzing the results of household production. Their approach is not wrong, yet not sufficient. After all, they study the visible part of the iceberg. A complete or nearly complete answer requires deeper inquiries, with reference to other areas of knowledge than the economic one, such as sociology, psychology, culture, history, morality, religion.

Key words: property, capitalism, industrialism, agriculture, land, peasant.

The poverty puts the peasant in contradictory reports towards the:

a. national economy, which, although in the last years has registered obvious transformations and growth, their effects were minimal over the welfare of agriculture;

b. industrial worker who, as a natural homologue in terms of position in the economy and society, although it has a much smaller patrimonial inheritance, is in terms of living standards, on a higher level than peasants. Socioeconomic studies and surveys reveals a ratio of 1-4 between the peasants and workers, in household spending.

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At the same time, the assets of a peasant household (land, buildings, animals, machinery and agricultural implements, stocks) are several times larger than the household goods from a non-agricultural household. Synthetically, and at the same time metaphorically, the cause of this situation arises from the fact that industrial workers labor cost is more expensive than the price of bread, provided by peasants. The more the bread is cheaper, the more deepens the disproportion between urban and rural.

c. Economic theory recognizes that freedom in the capitalist market era is based on possession, with the sole and supreme condition that the possession is engaged in trade relations and not isolated.(1) Therefore, the isolation of peasant property overall (either only through results, as a component part of it) towards the market, does not have the power to generate wealth, and therefore, freedom in economic terms, for the peasants.

In order to reduce those disparities, and contrary to the view of many economists who are considering, as abovementioned, almost exclusively, yields, productivity or viability of peasant agriculture, in this scientific approach, we started from something much deeper, but highly visible and at the same time, constantly neglected, i.e., peasant property, with special reference to its most important component - the earth.

For many economists, the issue in question is perceived epidermal, which is why any entry in the theme is dismissed as irrelevant, in terms of impact on the rural economy.

On the contrary, Alvin Toffler, in "Wealth in motion" made the following remark, which leaves no room for interpretation, when he analyses the foundations of property in the developed countries: „We should start from the property, because it is located at the origin of the capital upon which relies the capitalism". (2)

In fact, on how the ownership right is resolved depend all the other matters that enter in the economic mechanism: market, productivity, profitability, environment and many others. In this regard, the basic economic theory says that "once clearly established the ownership right, the property will receive the most valuable destination" (Coase Theorem) (3)

More specifically, and unequivocally, we believe that during this period any approach to agrarian policy plan should be centered on the property issue, in every aspect that it entails, namely: rights, ratios, content, role and position of the state, markets, cadastre , land publicity and other aspects.

Supporting this view, we argue that what separates rich from poor, or the developed world from developing world, is that both America and Western Europe, as representative exponents of the wealthy, established „a universal formal law of property and invented the process of converting it into capital " (4). But these states, unlike us, that we live our own or collective poverty drama, have the power to recognize that this mechanism, referring to the official regime of property right, goes without saying; in other words, it is a natural component

of social order. But in our country, unlike theirs, the property, especially the reports that it generates, legal, economic, and sociological, do not have the proper maturity to ensure economy, respectively production and trade, a solid basis of manifestation.

Therefore, the recognition of property as a stimulating factor in the economy is, paradoxically, nearly exclusively, a fact of legal theory.

Two remarks are enough to assign lawyers the merit of being one step ahead of the economist in matters of property.

The first one considers that "the property is an essential concept that gives expression to the ultimate access of man, taken individually or collectively, to the acquisition of natural assets or assets created by joint activity" (5), and the second, focused on the links between man and society, argues that "the property stood and still stands at the basis of human society development, as one of the fundamental problems of the individual existence and human society" (6).

But these jurists' opinions are not random. In their scientific constructions they relied on legal theory which, in logic expressions and widely accepted, recognized that „The property is the foundation of any law system", for which reason "from the property derives, collaterally, the major categories / legal institutions and, furthermore, other and other phyla in a tree representation, which might suggest, in a metaphorical way, the very tree of life". (7)

Mistakes, in matters of property, whether we talk about private or public property, occurred over the last 20 years, will require huge efforts from the following generations for their rectification in the interest of law, as well as in the national interest.

We, as exponents as well as victims of the collision between two opposites doctrinal guidelines, first - left join, which could benefit from a centralized economy type, second - right join, where benefit arises from the selfishness of the free market, naturally we will not be able to resolve this issue. Otherwise, the measure of our value in matter of property is easily seen through chronic imbalances we have created in the economy and society.

Unfortunately, the previously stated, do not concern only the present. They are old shortcomings over whom the economic history records numerous positions taken. For instance, in the late nineteenth century, specifically in 1983, C.D.Gherea states that due to the lack of native literature, scientific judgments concerning the property in Romania can only be made by analogy with what was elaborated in the other European countries.

Another motivation for our demarche has as starting point the fact that, the land, as the main and irreplaceable agricultural asset, requires special attention, both from the perspective of their legitimate owners and of public power. Furthermore, the importance and value of the land increases as the economic development degree is higher. At the same time, the agrarian policy, as any economic policy in order to achieve its objectives requires clarity or, as JC Scott emphasized, **legibility over the property**.

To sum up, we may say that the great challenge, both on scientific and on economic decision plan, is to what extent the agricultural land property, with reference to the peasant one, can generate capitalist links, producing welfare for farmers and food sufficiency for consumers.

Instead of conclusions

The dynamics of the relationships between the type of property and the organization of society shows that nearly every method of social organization except those marking the beginning of human history had its own type of property, because:

- **Common property,** by far the oldest, as well as the one with the longest applicability in time, is the one that recurs in plain capitalism, but in changed and more developed principles and patterns, when put to the basis of social organization by communists. But the communist experiment proved unsustainable both in Soviet Russia, who promoted and imposed it, as well as in other states covered by the "red pellagra" under the Soviet influence.
- **Family property,** under the vice of the other two forms that frame it, had an ephemeral and less nuanced existence, which has determined many theorists to consider it as belonging either to the common property or to the private one.
- **Private property** is symbiotically linked to industrialism and capitalism, because along with these, form the doctrine triangle of present European economies (Figure 1)

Fig. 1 Doctrine triangle of capitalist relations

This last type of property was noted, in the formulas known today, along with the industrial revolution as a result of the selfish actions of the "invisible hand", being recognized and glorified in its early stage by the illuminists and lived through capitalism, which also drew strength from the industrialism.

If one of the previously exposed triangle components weakens or disappears, naturally, capitalism, as a way of social organization, suffers amendments or crucial transformations and private property will be substituted with new forms or with one of the old but other than the previously known formulas.

It is obvious that industrialism, under the pressure of scientific and technical achievements so fast today, with a very strong impact in the productive sphere is the link with the lowest resistance to transformations.

Hence, the threat to capitalism comes, not from the outside of it or from confronting the poor with the rich (according to the classical model, which served as a causal support in the previous social changes), but from the forces that have promoted it and has identified himself throughout the period of its existence, namely industrialism, who under the impact of IT revolution is pushed aside, marginalized in the fight for a better profitability.

Therefore, if the developed European economies are in transition from the industrial model to a new, post industrial type (specialists opinions are not yet clear about its content), issue recognized since 2000 by the European Council, gathered in Lisbon, then the private property in its classical form, will be subject to profound mutation as well.

The essence of these mutations is the fact that the information will be not only an object of property but also an important component of production costs structure.

The future, regardless of the time it will occur, will belong to the post-industrial or post-capitalist society and the property will be, in its structure, mainly of virtual type.

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COMPETITIVENESS OF AGRICULTURAL PRODUCTS ON THE MEAT- DAIRY CHAIN

Sergiu Sorin CHELMU [1]

Abstract

The paper represents an analysis regarding the competitiveness of agricultural products on the meat-diary chain from Romania. Livestock sector is an important sector of national economy in general and agriculture in particular, providing raw material for food and feed people. Revitalizing agriculture is difficult or even impossible without the development of livestock sector, by reconsidering the role and place that this sector must hold in the national economy.

Livestock sector is going through a difficult situation due to several factors: increased production costs caused by import competition, increased feed prices. With our accession to the EU livestock development will be determined by several factors whose combined action leads to the development of animal production imposed standards. Achieving these standards will certainly ensure Romanian agriculture development in general and livestock in particular.

Key-words: competitiveness, agricultural products, European Union

INTRODUCTION

Agriculture is a sector with considerable potential, occupying traditionally an important place in the structure of the Romanian economy. It is an important factor of social stability and maintaining ecological balance; is the branch that provides large quantities of food population and raw materials for food and nonfood industries. Besides the vegetable sector, livestock sector is an important sector of national economy in general and agriculture in particular, providing raw material for food and feed people. Revitalizing agriculture is difficult or even impossible without the development of livestock sector, by reconsidering the role and place that this sector must hold in the national economy.

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Livestock sector is going through a difficult situation due to several factors: increased production costs caused by import competition, increased feed prices. Specifics of the Romanian market is dominated 80% by small farms, for cattle milk subsistence is even more difficult because cattle herds are declining, and improperly sized farms are not competitive and production level is low and away from performances in countries with advanced animal husbandry. Today, in developed countries are shown two main trends of development:

- large and very large farms, which integrates production with recovery;
- small and medium-sized farms, which carries organic production.

In our country currently holding dimensional structure is as follows:

- subsistence farms, with 1-2 cows (95.43%);
- family farms with 3-15 cows (4.45%);
- medium commercial farms with 15-100 cows (0.13%)
- commercial farms with sizes above 100 cows (0.01%).

Therefore, in our country, the average size is 1.45 cows and heifers / holding, and in EU countries: the size varies from 13 dairy farms and 70 cows and heifers. Also in U.S. dairy farm size tends to 100 heads. In terms of area owned, it is considered that farms of 20-50 ha and over 50 ha have the highest economic importance. But the farm livestock is an important indicator of size. Among livestock, cattle in general and dairy in particular and useful agricultural area is a strong correlation. The most intensive livestock farming is in countries with small agricultural areas such as Holland, Belgium and Denmark.

The EU livestock farms are grouped into two categories, small and medium-sized farms. In countries like Greece, Italy, Portugal, Spain dairy farms (for example) do not exceed 10 to 16 heads. In the Netherlands, England, Denmark, Belgium and France the average farm size reached 30-70 cows heads. Pig farms get to the actual annual increase of 300-500 heads in countries like England, Holland, Denmark and Belgium and 20-80 heads in Italy, Greece, Portugal and Spain. Average number of cattle and pigs in EU countries (except Romania) is 40/holding respectively 80/holding. Regarding the distribution of livestock farms by size classes, one fact is clear for Western European livestock, namely the dominant feature is medium size holdings of livestock and livestock tending to increase flow intensification technology. The strength of the main farm animal species and production obtained are shown in Table 1.

The small size of dairy farms in our country, underdeveloped infrastructure, inconsistent agricultural policies and turbulent economic environment, especially in rural areas is reflected very well in the production of milk obtained as well as its structure, regarding its usage. According to the NIS (National Institute of Statistics) 1.3 million cattle live in 900,000 farms and milk for many of them is the only source of income. The problem of milk has become a hot topic with the abolition of many collection centers, small price

to purchase it by the milk processors and the disparity with European norms, as well as processing units, only about 40% of which are standard EU.

In contrast is the meat cattle breeding, which is a good alternative to milk production, a growing future ahead thanks to a large deficit in the European market in this sector due to constant increase in the price of its existing resources unexplored and their economic management. Beef cattle breeding is a new area for Romania, which requires time for education and transformation.

Food materials for meat derived from animal species that are bred to produce meat and meat products. The main groups of animal species that have the most significant share are: mammals (including cattle, sheep, pigs, goats, horses, hares, etc.) poultry (chickens, ducks, geese, turkeys, etc.); Fish ; other animals of culture (clams, snails, frogs, etc.). Unlike wild species from which they originated livestock raised for meat have a higher proportion of power structures, with reference to the muscles. Functions of the meat supply arise from its characteristics that are transformed by heat treatment in food particularly useful for human nutrition. Meat origin (species, breed, morphological parts, lifestyle, etc.) and the conditions for transforming it into food, produces a wide range of meat products. In the sphere of exchange **can define the following animal production:**

a). - Beef meat production represents about 35% of the total annual production of meat and about 5-6% of gross agricultural production in Romania. Thus beef sector includes the chain: production (calves for fattening, calves being prepared for slaughter and older cattle for slaughter including cows for meat), processing (fresh and processed products), wholesale and retail sale (which has links with the milk and dairy products along with other sectors of production and meat processing). Although there is some specialization, many farms and businesses that are involved in the beef (as mixed breeds), act in milk production as well. Also in Romania there are similarities between the systems of beef production and sheep. Beef is often distributed and sold with or very close to pork or lamb.

b). Sheep-meat production is related to increased numbers of this species and is found all over Romania. In the recovered products, meat (along with selling horses and fur animals) have less than 4% of the country's agricultural production.

c). - Production of pork, is the most important type of meat in markets existing in Romania, representing over 50% of the total meat production. Traditionally, Romania was a net exporter of pork, but since 1998, has entered into a trade deficit, caused by a pronounced decline in the pork production.

Among the causes that led to a decrease in the pig population in Romania can be mentioned:

- unfair competition caused by massive imports of live pigs and pork as a percentage of 45-50% subsidized by exporting countries (Hungary and Poland) ;

- lack of financial resources to continue the production process, due to unfavorable market situation;
- late receipt of subsidies;
- lack of fodder and grain for domestic production of protein fodder.

Many slaughter and processing units operate with several species, and pork represent a quarter of value added food industry in Romania. The structure of production is concentrated in two components of the sector: small private producers, with emphasis on their own consumption or local sales, large integrated units, which often deals with growth, fattening, slaughtering and processing, all these activities being carried out under a single commercial enterprise.

d) - Production of poultry, including the production of chickens, ducks, geese, turkeys, guinea fowls and birds of the family of ornamental birds. Poultry production was estimated at about 15% of all livestock production. This sector includes large-scale integrated units (10 companies also supplied about 75% of the total market for poultry) and small-scale household production (but which produce about 60% of total poultry meat).

In 2010, the slaughtering of cattle in specialized industrial units, by the number of heads, increased by 10.5% in comparison with the previous year and slaughter of pigs increased by 0.5%. Beef production increased by 13.7% and pork increased by 5.4%. The number of sheep and goats slaughtered in specialized industrial units increased from the previous year with 213.4% and meat production of sheep and goats has also increased, by 228.5%.

Number of poultry slaughtered in slaughterhouses decreased compared to 2009 by 5.6% and poultry production fell by 4.2%.

Table 1. SLAUGHTER CATTLE , PIGS, SHEEP AND GOATS IN SLAUGHTERHOUSE (by INS)

Name species	Number of heads slaughtered		Live weight (tons)		Average weight (kg)		Carcass weight (tons)	
	2009	2010	2009	2010	2009	2010	2009	2010
Cattle	117358	129699	50531	57336	430,6	442,1	24912	28313
Swine	2887742	2900927	295105	309187	102,2	106,6	222167	234194
Sheep and oats	120241	376877	2683	9348	22,3	24,8	1349	4432

Table 2. Birds slaughter slaughterhouse (as INS)

Name species	Number of heads slaughtered		Live weight (tons)		Average weight (kg)		Carcass weight (tons)	
	2009	2010	2009	2010	2009	2010	2009	2010
Poultry total of which:	186484928	175969903	404691	392241	2,2	2,2	300086	287458
Chicken	185572032	175000827	401908	387692	2,2	2,2	297980	283994
Layers	907517	824198	2724	2586	3,0	3,1	2056	1941

In this context we can say that the Romanian production of meat is less competitive by international standards and should be borne in mind that with the accession of Romania to the European Union is much stronger competition from meat and we have to face. Growth and operating systems for meat animals are mostly extensive, with few exceptions in the pig and trout where there is an intensive, but with less weight. This leads to the development of large periods of weight gain, due to low rates of feed conversion because it does not provide an energetic-protein ratio, leading to the development of reduced average daily gains and lower slaughter weight. Because of this, meat production is a byproduct, such as for example in cattle that are operated primarily for milk or sheep.

Housing conditions are poor and the impact on animal welfare and production performance. Feeding animals in small farms, family is the poor quality of feed raw, which leads to higher, inefficient consumption. Very few small and medium producers have commercial orientation and seeking to improve their technical efficiency. Producers often lack market information. In Romania there is a quality classification of carcasses according to impelled by price, payment being made according to the weight of carcasses. Much of the quantity of meat is sold on the market in the peasant movement which can include public health risks due to low hygienic quality of meat producers. In parallel with these markets there are small shops that provide limited facilities for maintaining quality, especially of fresh produce and supermarkets which, in general, relies on imports for all sorts of meat. Link retailers establish quality and quantity of meat, especially to pork and domestic industry can not meet these requirements, leading to increased imports and decreased exports of Romanian meat.
Slaughtering cattle were predominant in the North-East (41.5%), Northwest (14.6%) and South-West Oltenia (12.9%). pigs held the largest share in the regions: Western (above 25.0%), South-Muntenia (16.9%) and Southeast (15.3%) and the slaughtering of sheep and goats in regions West (40.1%), Southeast (above 20.0%) and South-Muntenia (14.2%). In 2010, slaughter of birds have been prevalent in the South-Muntenia (31.1%), Northeast (18.0), Central (15.7%) and Southeast (13.6%).

Impediments to growth of Romanian exports of meat are: inefficient processing industry, poor market infrastructure development, poor quality of meat, which do not meet European standards. Market information is an important tool to respond to change and to identify possible opportunities. In addition, activities supporting the internal market opportunities and export, would help manufacturers, retailers and processors to know the market requirements and consumer preferences. Limited number of certified slaughterhouses for slaughtering animals according to EU standards currently limit the opportunity for sales transformation on export into carcasses sales (sheep and cattle). At farm level, opportunities for improved efficiency and an increase in quality should be sought in ensuring a better genetic material, improved feeding and care of animals, housing conditions.

The introduction of the classification of carcasses „Europ" will allow a fair payment based on carcass quality and production quality will increase because now the price is not correlated with quality of carcass. It is also necessary to support livestock towards increasing the average size of farms.

In terms of processing is necessary to improve competitiveness of processed and orientation in accordance with minimum safety food requirements imposed by European Union. For restructuring and developing the meat sector there are required investment directions in:

- slaughterhouses ;
- cutting equipment;
- modernization and replacement of refrigeration even in storage to align storage of meat and meat products to EU norms;
- packaging, labeling, promotion;
- modernization and reception control animals, cutting, processing, marketing.

Currently, in Romania, there are few viable small and medium farms livestock for meat and it is necessary to help those subsistence farms that have the potential to develop into commercial units. To improve the flow of animals for meat from small producers who are the majority in organized markets is needed improved market infrastructure. Producers suffer from a lack of market information is needed on prices and volumes traded. In addition, surveys and analysis of market opportunities, internal and external, could help farmers, processors and traders to know the market requirements and consumer preferences. It is necessary to improve the processing sector in satisfying direction in accordance with EU rules and regulations, and consumer food safety in Romania, and especially to produce products with higher added value (high degree of workmanship) required increasingly by consumers and for exports. Animal slaughter and meat processing small scale, taking place today, cause high costs and do not meet hygiene and quality standards. Most of the amount of meat consumed in Romania comes from small-scale breeders. It is difficult to impose quality control for close to subsistence production, which create bad risks for animal health and consumer health. As a conclusion about the efficiency and competitiveness of the Romanian meat should be realized that a competitive economy will involve measures and actions will be felt first of all, the current subsistence producers.

In the chain of milk and dairy derivatives by the concept of milk with no indication of the kind of source, means cow's milk. If it comes from other species, must be specified origin: milk of sheep, goat, buffalo, etc.. Depending on different criteria in practice one can encounter different capitalization names:

- after composition, milk situation that can be fully normalized and creamed;
- after the primary transformation processes (the composition), milk can be: raw, pasteurized, sterilized, concentrated and powder;
- by origin, milk can be: cow, sheep, full or mixed.

In the recovery circuit is taken milk from cows, sheep, goat and buffalo. The largest share is cow's milk (95%) and sheep. Milk supply are complex functions of this product is considered one of the most complete food. Contribution required by the trofin, but also by sensory properties. For this reason milk is considered a strategic product of the food market, which is recovered as such is subjected to fresh or processing. On milk production in 2010 compared to the previous year, the amount of cow's milk collected from farm processing facilities and collection centers decreased by 87 838 tonnes (-8.9%). The largest decrease in production in 2010 compared to 2009 occurred in milk powder by 422 tonnes (-10.3%). Cheese production has also declined in 2010 compared to 2009, with 5520 tonnes (-7.9%). Evolution of the quantity of cheese produced exclusively from cow's milk (94.4% of total production of cheese) remained the same trend. Melted cheese production fell by 874 tonnes (-7.3%), oil production fell by 737 tonnes (-7.0%) and consumption of cream production fell by 646 tonnes (-1.4%) in 2010 from the previous year. Sour milk products (yogurt, drinking yogurt and others) had, in 2010 compared with 2009, the largest increase, with 1948 tonnes (+1.3%) and was followed by production of consumer milk 1258 tons (+0.6%).

Tabel 3. COW MILK PRODUCTION UNITS COLLECTED by subscribers DAIRY PROCESSING AND MAIN development regions in 2010 (tonnes - by INS)

Development regions	Cow's milk collected	Drinking milk	Dairy fresh *)	Cheese (including urdă)
Total country	903750	223176	195118	63962
North - East	197224	46100	15810	13190
South - East	57238	10995	13510	5741
South - Muntenia	64775	17137	18677	8749
South - West Oltenia	7922	2415	882	880
West	26369	c	c	2274
North - West	201589	37867	14001	16359
Centre	275895	86416	52123	15729
Bucharest - Ilfov	72738	c	c	1042

*) Includes sour cream and milk
c =confidential data

CONCLUSIONS

The largest quantities of cow's milk were collected in the Centre (30.5%), Northwest (22.3%) and Northeast (21.8%). Drinking milk occurred mainly in the Centre (38.7%) and Northeast (20.7%).

Bucharest-Ilfov, Central and South-Muntenia have over 70.0% of the production of fresh dairy products (cream and sour milk).

The cheese was mainly in the North-West (25.6%), Central (24.6%) and Northeast (20.6%).

In this context, on the milk market in Romania, you can define the following characteristics:

- required uniform throughout the year;
- consumption of milk and milk products considered below normal;
- the existence of large urban centers that attract large consumption;
- different level of consumption in urban and rural;
- generalization of the individual producers own consumption;
- atomicity and territorial dispersion of supply, with large regional differences and seasonal fluctuations;
- high degree of perishable dairy products requiring enhanced protection throughout the chain flow;
- very low rates of market held by the vast majority of operators in the sector;
- there is increased competition and direct;
- reduced weight of the quantities of raw materials delivered milk processing sector;
- not using the full capacity of processing milk production;
- lack of professional organization of dairy farmers;
- supply-demand imbalance in the internal facilitated external supply milk and dairy products;
- lack of organization milk routes, the prevailing problems of collection and distribution of raw milk dairy;
- practicing a system of prices unfavorable to producers;
- reduced investment funds available to producers who have difficult access to credit;
- lack of coherent policies and guidance and support (especially financial).

Milk supply is conditioned on the technical factors (number and breed herds of cows, their efficiency, growth and feeding system, disease prevention, etc.), economic factors (related to the ratio between milk and feed prices, conditions remuneration of staff working in milk production and outside the industry, changes in the structure of production and dairy farming units, etc.). Today we can say that there is still a low quality milk supply is determined mainly by quality feed and lack of guidelines for quality and hygiene on farms. Milk quality is also adversely affected by the lack of cooling facilities on farms and collection points.

So, for integration in the EU livestock sector, measures to meet EU requirements relating to:

- increasing the share of modernized commercial farms;
- stimulate and expand investments in family farms;
- stimulate recovery by quality production;
- ban the sale in inappropriate places;
- the introduction of the farm records;
- individualisation of livestock;
- stimulate the use of calves fed milk powder;
- organize collection centers according to EU principles;
- extension activity artificial insemination;
- quantity and quality control for each supplier, ensuring the processing and storage;
- use of research in animal husbandry as advisory support for a more robust and more efficient consulting.

Farms must comply with internal standards community environmental, hygiene and animal welfare.

With our accession to the EU livestock development will be determined by several factors whose combined action leads to the development of animal production imposed standards. Achieving these standards will certainly ensure Romanian agriculture development in general and livestock in particular.

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PREFERENCES OF COFFEE CONSUMERS ON SERBIAN MARKET[1]

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Abstract

Many citizens of Serbia consider coffee as indispensable food in daily nutrition, so nowadays drinking of coffee turns into a social phenomenon embodied in irreplaceable accomplice in almost all meetings of people.

The main goal of this paper are the factors that determine demand and consumption of coffee, i.e. to gain insight in consumers preferences, motives, attitudes and interests to buy products that contain coffee in the Republic of Serbia. According to that, during 2011 was conducted market research (survey), based on previously created questionnaire. Paper also provides comparison with results obtained by similar survey in 2006 in order to notice the level of consumers' attitudes move in last few years.

Key words: market research, coffee, consumption, Serbia

INTRODUCTION

World-wide over the last few centuries coffee drinks are after the water the most widespread. World Health Organization emphasizes that daily are drank about 1,5 milliard cups of coffee, and way of its consumption greatly affect on the appearance of cultural identity, customs and lifestyles of inhabitants from many countries.

According to the FAO, coffee is grown on total area of about 10 million ha, with average realized yields of approximately 850 kg/ha of green coffee beans, as well as with trend of constant increase of produced quantities. Within the group of leading producers dominate countries from Latin America, Africa and Asia (primarily Brazil, with production of about 2.432.904 t and concentration of around 30% of world production, then Vietnam, with 1.176.000 t, Colombia with 887.661 t, as well as Indonesia, Mexico, India and others).

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Green coffee is in the last two decades, according to the value of foreign trade, consistently in the top 20 world's agricultural products. Brazil is absolutely dominant within exporters, with realization of more than 4 milliard USD. It is followed by Colombia and Vietnam, with export of around 2 milliard USD. It is interesting that among ten world's largest exporter of coffee four states do not have the area under the mentioned plant (Germany, Belgium, Italy and USA). Reasons for this can be found in the fact that the biggest importers of coffee are economically most developed world economies where are located companies with large processing facilities, so imported quantities of coffee besides meeting the needs of their population, often are subjected to re-export of final products that contain coffee. Leading importers are USA, Germany, France, Italy, Japan and others.

Annually, observing per capita, the most coffee drinks people from Nordic countries (11-15 kg). They are followed by citizens of many EU countries (about 8 kg), USA, Canada and Japan (besides Japan is growing coffee consumer, it imports mainly the highest quality and most expensive coffee blends).

Coffee is plant that does not fit to climatic conditions in Serbia, so it is not grown on the Republic territory. Domestic companies[5] usually import green beans of coffee in bulk (organizing its' additional processing) or products that contain coffee.

In total value of imported agricultural products traditionally dominate non-competitive products, such as green coffee, tropical fruits and tobacco products. During 2010, Serbia imported 34.493 t of coffee and products containing coffee, in total value of 83,7 million USD. Within the structure of imported products are coffee with caffeine (raw and roasted, as beans or grinded), decaffeinated coffee (raw and roasted, as beans or grinded) and coffee substitutes that contain coffee. Coffee was usually arrived from Brazil, Vietnam, India and Uganda. In same year from Serbia was exported a negligible amount of coffee with different levels of processing (407 t in total value of approximately 1,8 million USD).

Although there is opinion that citizens of Serbia are great coffee consumers, consumption per capita is estimated at about 1,3 kg (this is a direct consequence of fall of living standards, considering that it was about 3,4 kg during the 80' of XX century).

RESEARCH GOAL, METHODOLOGY AND DATA SOURCES

The survey was conducted with the aim of perceiving of all factors that determine demand and consumption of coffee in Serbia, in other words in order to come to knowledge about preferences and attitudes of domestic consumers. As similar survey was conducted in 2006, in paper wherever obtained results allow, it was made comparison with consumers' attitudes from 2006.

5 In Serbia are registered 50 legal entities that are dealt with import, processing, distribution and export of green coffee and coffee products. According to the sales volume per year and strength of the company's brand impact on domestic consumers stand out Grand Prom ad Beograd, Strauss Adriatic doo Šimanovci, Nestlé Adriatic doo Belgrade, Greenet doo Beograd, Bambi success doo Pozarevac, Bonito ad Beograd, Centroproizvod ad Surčin and others.

In paper is applied research method of survey, based on previously created questionnaire. Study was conducted on simple random sample of 150 examinees on the territory of Belgrade city during the period January-March 2011. Despite, to number of examinees relatively limited sample, generated answers are indicative enough for pointing out the main factors of coffee consumption in Serbia.

Besides internal documentation (questionnaires), paper writing included all available data sources (primarily statistical data and current professional literature). Processing and analysis of collected data was based on standard statistical and mathematical methods.

RESULTS AND DISSCUSION

Great part of population in Serbia considers coffee as indispensable beverage in daily nutrition, and drinking of coffee turns into a social phenomenon embodied in irreplaceable accomplice in almost all meetings of people.

Coffee consumption - The majority of surveyed persons consume coffee products (89%). On other side as main reason for not drinking, examinees mentioned unpleasant taste (41%), or health reasons (24%).

Frequency and place of coffee consumption - Most of examined coffee consumers enjoy this drink 2-4 times a day (66%), while 8% of them drink coffee occasionally. Structure of frequency of coffee consumption is approximately same to the results of survey done in 2006, when more than 75% of respondents declared that drink coffee several times a day.

As most usual place for coffee drinking examinees mention their homes (59%). How only 8% of them consume coffee in restaurants, it can be concluded that under the influence of economic crisis coffee consumption is moving to the locations where additional costs of service for this beverage are not charged[6].

Motive in coffee purchase - What drives consumer to behave in a certain way? Primarily a sense of some need, by which satisfaction he would be existentially safe, accepted in community, or even able to express the prestige over other members. Situation in which company can understand the motives of consumers greatly helps in timely and adequate organization of activities for meeting their needs, as well as for more successful realization of its products or services in the market.

As like in 2006 survey, motif that dominates during the purchase is quality of coffee (65%). It is followed by brand (22%) and price of coffee (8%). It is interesting that examinees are motivated at least by packaging, only 1%.

Importance of brand during the coffee purchase - Brand name is a name of some product, or name under which certain services are done. Brand of coffee brings to consumer the message that with its consumption he becomes privileged, in other words with drinking of certain brand he gets acknowledgement for particularity. Accepting these values, besides

6 It is interesting that younger examinees more often consume coffee in restaurants/bars (20% of examinees of age up to 25 years), what is justified by the fact of more expressed need for socialization within younger population.

needs for pleasure consumer also satisfy segments of power, respect and self-attestation. He truly believes that using a certain brand, he gets a package of added value, so that he satisfies his real needs on much better way.

More than ¾ of respondents (76%) emphasizes the importance of brand name during the purchase, considering brand as guarantor of good quality. It was noticed that with the increase of examinees purchasing power brand plays a major role during the choice of coffee (percentage of marked answers *very important* grow from 17%, at households from the lowest income category, to 41%, at households from the highest income category).

Also, over the 90% of young examinees (age up to 25) believe that brand is very, or in higher degree important to them during the purchase, what leads to conclusion that younger population is more loyal to the selected producer.

Substitution of brand mark - With asked question was tested readiness of consumers to buy some other brand, if they do not find on shelf that one they usually consume. Nearly ¾ of examinees have willingness to buy a product from other producer. Showed level of loyalty can be a good signal to coffee producers to influence with adequate marketing activities on strengthening of customers' trust to the products they offer.

Frequency of coffee purchase - Dominant number of surveyed consumers (48%) buys coffee for weekly, while only 1% of respondents bought this product every day. The results are partly overlap with the results from 2006, when 77% of examinees said that they purchase coffee once a week, or that 3% of them buy this item on a daily basis.

Choice of brand – On segment of the national coffee market, currently is present a number of coffee producers and their brands. In fierce competition, participation of brands in coffee market did not significantly change in compare to 2006 survey. Still dominant are brands *Grand kafa* (39%) and *Don kafa* (29%). Comparing the disposable income and coffee brand selection, it was noticed that with growth of household income demand is moving to above mentioned brands (leaders within domestic market), which attests to the fact that consumers with higher income level usually gravitate only to selected brands.

Packaging size - Dominant number of respondents (72%) are usually buying coffee packs of 200 grams, while only about 1% of examinees purchase larger packages (1 kg). Compared to 2006 survey, there was an increased participation of 200 g packages of coffee in the structure of consumers' choice according the size of packaging[7]. On other side, it was noticed that with increase of number of household members grow the size of purchased packages (20% of five-member households are buying most often 500 g packs, in compare to the same choice of only 3% of two-member households).

7 By domination of 200 g pack, consumers indicate that they are adjusting to economic crisis and rising of green coffee prices in the world market by choosing for them optimal packages (these are often considerably cheaper than 100 g packages, and on the other side by buying of 500 g or 1 kg packages they would unnecessarily tied larger amount of money in household stocks).

The influence of design and quality of packaging on coffee purchase - Although only 48% of respondents made it clear that the packaging (by quality and design) affects their choice during the purchase, it is understood that it plays one of decisive roles (primarily due to preservation of product quality)[8]. Also, it was noticed that younger examinees are more focused on design of package, since they, unlike older people, more prefer the specificity of visual design.

Rating the quality of the coffee in the Serbian market - More than half of examinees (55%) has assessed the quality of the coffee as satisfactory, while unfortunately a small part of them (5%) gave it the highest mark (excellent). About 9% of examinees have not give the quality a passing mark. Compared to the survey from 2006, it is noticeable that today consumers generally assess the quality of offered coffee with poorer marks[9].

Rating of the coffee market supply - A number of respondents (77%) believe that the market supply with coffee and products containing coffee, in its assortment is at satisfactory level.

The influence of advertising on the purchase of coffee - Advertising, as a marketing concept subsystem, represents a paid method of companies' mass communication with consumers, which aims the information transfer that will drive consumer preferences in favour of products and services of the advertised company. Most examinees (71%) believe that advertising has no impact on their choices when buying coffee.

Impact of promotional activities - *The presence of promotional activities* - Functioning of today's society is best described by words of R. L. Stevenson - *Everyone lives by selling something,* and to sell something and win over *the Consumer* is often not an easy task. Sellers in Serbia in cooperation with the producers gladly organize promotional activities, mostly in the retail stores aiming to attract new customers; reward loyal customers; gain the former customers; shorten the time between two purchases; or increase the amount of products in one purchase. The predominant number of respondents (94%) has noted some of the coffee promotional activities in the domestic market.

Types of promotional activities - Provided answers show that TV commercials' message (in 75%) reaches the consciousness fastest and leaves the deepest mark within the coffee buyer. This is valuable information for producers since the conclusion imposes that *the modelling of consumer preferences* is usually done in the relaxing atmosphere of their homes.

8 Estimation is that in 2008 world packaging market reached the value of 470 billion USD, while until 2014 it will worth up to 600 billion USD. Researches show that quality package raises the price of food products up to 20%. As packaging of the future for powdered food is imposing stick pouch packaging (paper or polyethylene bags) which annual production has growth for about 10%.

9 Assumptions are that producers affected by the economic crisis and growth of green coffee prices in the world market are balancing within their offer between the rapid products price jumps and selling of slightly lower quality mixtures.

On other hand, only 12% of examinees are aware of promotional events in retail stores[10].

Strengthening the promotional activities for coffee - Most respondents (78%) believe that promotional activities related to coffee are at satisfactory level and that their intensity should not be increased. On other hand, producers can easily found themselves in situation that their efforts to improve their sales can become counterproductive (consumer irritation).

Coffee price - We are witnessing a continuous rise in prices of food products. In 2009*, Bloomberg agency* estimated that in the world coffee market is present a constant deficit. The causes to this phenomenon can be found in cyclical fluctuations of Brazilian yields and in increasing of world demand at an annual rate of 2%. In early 2011 coffee price increases in the world markets for almost 30% compared to the previous year, reaching the highest value in last 34 years, with experts forecasts that its upward price tendency will continue.

Most examinees (89%) think that coffee is currently accessible by its' retail price. Having in mind that coffee is imported, the increase in prices in the world market also reflects on the increase of prices of these products in retail stores in Serbia. Producers (importers), aware of the situation with consumer purchasing power, often opt for the solution of maximum amortization of pressure on the consumer, delaying the increase in prices, or moderating the rise in price jumps of above mentioned product.

The dominant number of respondents (62%) stated that the retail coffee price has no impact on their purchase. The obtained stances in large overlap with the results of the 2006 research, when on 65% of examinees price did not have significant impact. It is interesting to note that with increase of households' income category, the impact of coffee retail prices on the purchase falls down, from 33% of respondents in the category of households with minimum income to 5% of examinees in households with a maximum reported income.

The differences in prices between brands of coffee on the shelves are often in the range up to 50% for the same size of package. Manufacturers justify these differences by the fact that higher quality coffee blends are more expensive, but with the inclusion of a certain share of surrogates - barley, rye or wheat (in accordance with national regulations), they can become

10 Interesting is marketing phenomenon of the struggle for shelves that is also present in national coffee market (space on the shelves in retail stores is limited resource available to the seller). As average buyer made decision about the choice of products in max 15 sec, usually in front of the shelf (researches show that the products exhibited at eye level achieved up to 40% higher sales), this often leads to adjustment of the strength between producers at the shelves in store. For example, in stores of Delta Maxi Group, Grand coffee as a form of promotional activity has provided to itself a place on the most visible shelves, shelves that are facing the cash registers which customers can not evade in retail store.

considerably cheaper[11].

Presence of competition on the market – slightly less than half of examinees (44%) believes that presence of larger number of producers (brands) in market contributes to the growth of offered coffee quality.

Improvement of coffee consumption – Gained answers may serve primarily to producers and retail chains to fit the best possible way to customers' requirements. Most often answers were: improvement of quality; better price control; creation of new promotional activities; improvement of packaging quality and design.

The impact of coffee on health – Before all results describe level of awareness of coffee consumers about the effects of caffeine on their health. Most of examinees (92%) are informed about potential impacts of coffee, so it is imposed conclusion that there exists good communication between producers, healthcare institutions and consumers.

CONCLUSION

Coffee as global phenomenon, that got in Serbia elements of traditionalism, initiated at the beginning of 2011 survey with main goal to perceive the factors that determine demand and consumption of coffee in Serbia. Obtained results could be useful database for coffee producers in their assessment of current competition strength, as well as position of their products on market. Based on gained results it can be concluded:

a) Most of examinees (66%) consume coffee 2-4 times a day, while only 8% of surveyed persons drink coffee occasionally. As most usual place for coffee drinking appears home of respondents (59%). On the other hand, it was noticed that younger population more often consumes coffee in restaurants (20% of examinees up to age of 25 years).
b) Main motive that dominates during the purchase of coffee is its quality (65%). Timely and complete understanding of consumers' motives could make to producers much easier organization of all necessary activities that will satisfy their needs.
c) Researching results show that 76% of examinees put emphasis on brand importance during the purchase, considering it as a guarantee of good quality. However, nearly ¾ of respondents are ready to buy a product of other producer if did not find brand that usually consume, expressing that within this segment of national market does not exist

11 According to one marketing theory producer worth as much as charges its product, or in situations where the price is the only one differentiating factor of market competition, company has not allow that consumers perceive offered product as mercantile goods, the goods at which is difficult to differentiate the quality and that has the lowest possible value. Companies are striving to offer the coffee that have price expressed through the dealers' brand, high level of recognition in the market and adequate way of sale. The most valuable product that can be sold to the customer is contained in unforgettable experience that he gets in package with original product. Thus coffee can be offered: as mercantile goods (sacks in a warehouse in Brazil); as a trade item (on shelf in supermarket); as service (cup of coffee in restaurant); as extraordinary experience (cup of coffee served to the customer on, for him, exclusive location). Used logic warns that neither top brand name usually is not enough to product in reaching of high profits, but it has to be offered in package with the unforgettable experience.

significant customer loyalty.

d) Almost half of examinees (48%) purchase coffee weekly, while only 1% of them buy this product every day. Although on this segment of national market is currently present a number of producers, two brands are dominated among examinees *Grand kafa* (39%) and *Don kafa* (29%).
e) Dominant number of respondents (72%) chooses 200 gram packages. Guided by this information, producers can adjust their production towards the most required coffee package.
f) Only 48% of examinees pointed that packaging (by quality and design) have influence on their choice during the purchase. Also, it was noticed that younger population are more focused on design of packaging, what is consistent with world trend of packaging materials producers.
g) Slightly more than half of examinees evaluated quality of coffee in national market as satisfactory, while only 5% of them gave the highest mark.
h) Dominant number of surveyed persons (77%) believes that the market supply with coffee by its assortment is on satisfactory level.
i) Most of the respondents (94%) are aware of promotional activities for coffee, so this fact leads to conclusion that producers in cooperation with vendors create and implement this component of the marketing mix on best possible way.
j) Results show that on 62% of examinees height of retail prices has no impact during their coffee purchase.

Most of gained results correspond with answers of similar survey conducted during the 2006. Based on time comparison of expressed examinees' attitudes and preferences it could be concluded that in majority of researched segments was not came to noticeable move of consumers' attitudes.

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THE MARKET OF VEGETABLES FROM ROMANIA

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Abstract

The market of the Romanian agriculture products is chaotic, at the disposal of occasional merchants who speculate the possibilities of negotiation. This is the belief of the agricultural farmers of Romania. There are also speculated the lack of information as well as of the market advice. The lack of a legislation regarding the market of the agricultural products harms the farmers and encourages the illicit transactions. The farmers need possibilities of storing the production for negotiating the terms of marketing, the appearance of an organism for settling the relationship between request and offer for getting possibilities of capitalisation the production, as well as the future request of the market, for structuring their activity.

Key words: Offer, vegetable request, agricultural production, selling price by detail, physiological consumption of vegetables.

INTRODUCTION

An important market, determined for the future of agriculture, but also for ensuring the necessary food of the people at the national level, is represented by a quick development of the food sector. For the national economy, it is extremely important to offer the external market products of meat and milk, instead of basic agricultural products, to offer the internal market Romanian products with accessible prices and to develop the offering of work places in the rural area.

1. THE ANALYSIS OF REQUEST, OFFER, PRICE AND COMPETITION ON THE VEGETABLE MARKET OF ROMANIA

As regarding the organisation and the functioning of the market, the embracing of such an act must take into account the present requests of the internal and the external market, the establishing of the relationship between the farmers and the potential beneficiaries: merchants, storing people, a superior quality of the agricultural products

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and of the products resulted from the processing[2]. No organised market can function correctly, without a concentrated offer, well preserved and capable to speculate the good moments for capitalisation. At present, a great part of the agricultural production is capitalised from the field, more or less legally, but certainly at an offered price and often under the limit of the production cost. The extant stores, former of state and private now, became private monopoly, extremely expensive, especially because of lack of performance or of the urgent necessity for storing the agricultural products. The European programs for investments in this field create modest facilities to a small group of farmers, who can allow such investments, but they can be profitable only for the big farmers. In conclusion, the most efficient solution for covering the necessary to the majority of farmers, is the building of the store – houses in the farms, and for the groups of producers or cooperatives in the area, structured on groups of products, it needs a great contribution of co financing from the state budget.

1.1. The offer of vegetables

In the agricultural production of Romania, vegetable growing represents a branch with a great importance, with major implications in the national economy and, especially, in the people's food. Its place and role are given by the following elements:

- the importance of vegetables for the human consumption;
- an important request on the town markets;
- the favourable climate for many species of vegetables;
- the high natural fruitfulness of soils;
- the ability and the traditions of the farmers.

On the market of vegetables, the offer is made up of the internal production, the initial stock and the importation of such products. The increasing requests of people for vegetables determined the continues increasing of production in the world, but the volume of production is very different and it is determined by the climate extant conditions and by the economical potential of every country.

After 1989, a great part of the vegetables basins of Romania remain without the work object. The formers state societies became the object of transactions, either real, or for selling at old iron of the agricultural equipments from patrimony. A part of the old exploitation was assumed by the private enterprises, some of them had success, and others have not. In the last period, the majority of producers from the vegetable field complained of the negative influence of the weather, but also of different diseases. The official data contradict these assertions. The information of the National Institute of Statistics shows that at about equal surfaces, the productivity increased. The data shows that in 2008 the production of vegetables was of 3820 thousand tones, comparatively with 2000 when was a production of 338, 1 thousand tones (table 1).

From the point of view of the achieved productions, according to the statistical

2 Rahoveanu T. Adrian and co- workers, 2009, The Analysis of the vegetable – fruit field in Romania, Ars Academica Publishing House, Bucharest, pag.219

data offered by the United Nations Organisation for Food and Agriculture (FAO), comparatively with the countries from Europe, Romania was placed on the place[3]:

- the ninth, for potato production, after Russia, Ukraine, Germany, Poland, Belarus, The Netherlands and Great Britain;
- the eighth, for vegetable production, after Russia, Italy, Spain, Ukraine, France Poland and The Netherlands.

Table 1: The production of the main agricultural products, on inhabitant **Kg**

	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
Potatoes	112,7	128,4	131,4	154,5	195,2	172,9	186,1	172,4	169,7	186,5	150
vegetables	58,0	60,4	43,7	96,1	220,3	167,6	191,8	144,7	177,6	181,7	230

Source: MADR

Although there were reported increasing for more vegetable crops as for example for tomatoes, cucumbers and pepper, there were also diminutions at the production of carrots and at the hot house vegetables. Although the harvested surfaces were bigger in 2009 then in the previous year, it is expected that the vegetable production to be significantly more reduced in the future. A comparison with the efficiency got for vegetables in the countries of the European Union shows that the production potential of our country is not totally used, that in Romania the technologies are not at the level of those used in the European Union, where the vegetable works are mechanised, chemicalised and irrigated. This aspect places the vegetables got in the agricultural exploitations of our country in the range of the ecological vegetables. The big disparities between the efficiencies got in our country and those got in the European Union, disparities that arrived for some species up to four times, are caused by the modern technologies used in the community countries. The disadvantages of some reduced productions are compensated by the quality of our products, in the sense of lacking chemical substances or their reduced use. The ecological alternative for getting vegetables must be included into a modern system, based on the increasing of efficiency for ecological vegetables, tending to use fertilizers, the use of water for irrigation in good conditions, the maintaining of the traditions concerning the association of the crops.

1.2 The request for vegetables

The request represents the quality of products which can be bought al a special price, in a period of time. The request varies according to the price, sex, preferences, consumer's traditions and the specific of food used by the people of different areas. The level of consumption increased constantly up to 2004, then it was a diminution in

3 Food and Agriculture Organization of the United Nations, http://faostat.fao.org/site/342/default.aspx

2005, following a small increasing in 2006-2007, arriving at 156 kg/ inhabitant in 2007. In this way, the production vegetables on inhabitant arrived in 2004 at 180 kg, and in 2005 this was of 167,7 kg/inhabitant, registering a constant increase comparatively with 2000, when it was of 112 kg/inhabitant (Table 2).

Table 2: Consumption vegetable on inhabitant kg

Year	2000	2004	2005	2007	2009	2010
Consumption vegetables	112	180	167,7	156	110	120

Source: MADR

The total quantities of vegetables, dedicated to the internal consumption depended on the obtained productions, whose level was determined by the climate conditions. In 2004, 2005 and 2007 it was an increase of the internal consumption both because of the increase of the human consumption and of the production losses recorded, which in 2006 and 2007 doubled because of the unfavourable conditions (flood and drought).

1.3 The price and the competition on the vegetable market

The price of the vegetable s plays a role of regulating the request and the offer and it is formed freely by negotiating between suppliers and beneficiaries. During the season, in summer and in autumn the price of the vegetables is reduced comparatively with winter and spring, i.e. not in season, when the price increases. For each sort of vegetables, the prices vary from a region to another one according to the natural conditions and the culture possibilities of these.

The farmers are menaced by the big hyper-markets but also by the massive importations. On one hand, the great ranges of shops refused to buy the goods at a correct price, and on the other hand, the importations compete the internal production. About 60 per cent from the Romania vegetable production is marketed in the peasant markets which are organised in towns and at the gate of the farm. Although the prices have an increasing tendency, even when the farmers signed commercial contracts, the beneficiaries don't take the goods unless the prices diminished. Excepting July and August, when the local production of vegetable reaches a yearly maximum level, all the rest of the year the importations are those which have the supremacy. Nevertheless, the supermarkets and the hyper-markets can't be totally accused of this situation, because they need a sail which is ensured by firm contracts and in adequate volumes, so that the eventual risks being able to be minimized in a great extent. Combining the forces of the local producers in associations is very important for their future, because the competitions of the countries of the European Union will remain high.

CONCLUSIONS

The studies showed an increase of the use of vegetables and fruits in the daily diet of the people. However, the total consumption of the vegetables remains inferior to the nutritionists' advice with all their benefits upon the health, being an important source of vitamins, minerals and a factor for avoiding fatness by reducing the energy of the food. The specialists recommended a rational consumption of vegetables with a diverse structure during all the year.

Given the recommended consumption of vegetables for some sorts is much more reduced than the necessary. The most important socio-economical factors associated with the vegetable consumption are the age and the people's income. The young people and the people with small incomes consume reduced quantities of vegetables. It is established that it is an important part of the people for which the vegetable consumption is not a priority. Unfortunately, the variety of the fruit and vegetable offer doesn't imply automatically an increase of consumption.

The appearance of the big shops, the change of the consumers' preferences towards the sorted, packed and labelled products which obey (respect) the quality and the food certainty principles continue to reduce the percentage from the marketed production at the firm gate in the favour of the organised markets. This percentage is also diminishing as a result of the trade intensifying by means of intermediaries. A decisive role has in this sense the producers' organisations whose main purpose is to concentrate the offer. The most supermarkets, hyper-markets or malls prefer to sell imported products with quick access. In these conditions, the rigidities met in establishing the prices of the food product s on the local market will diminish, while the local production of agricultural products will continue to find hardly the way to the final consumer.

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SUSTAINABLE DEVELOPMENT STRATEGIES

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Abstract

The concept of sustainable development means the totality of the forms and methods of socio-economic development, whose foundation is primarily to ensure a balance between these socio-economic systems and the natural capital elements.

The most common definition of sustainable development is certainly the one given by the World Commission on environment and development (WCED) throught the report named "our common Future", also known as the Brundtland Report: "sustainable development is the development that seeks to meet the needs of the present without compromising the ability of future generations to meet their own needs".

The following paper seeks to analyse the of various sustainable development strategies, both at European Union level and at the level of Romania.

Key words: sustainable development, structural funds, environmental policies

1. Introduction

Sustainable development has become a political objective of the European Union since 1997, through its inclusion in the Maastricht Treaty. In 2001, the European Council in Goteborg has adopted the Sustainable development strategy of the European Union, to which was added an external dimension in Barcelona in 2002.

2. European Union Strategy on sustainable development

In 2005, the European Commission has launched a process of review for the strategy, by publishing, in February, a critique evaluation of the progress recorded after 2001, the score and a number of directions for the follow-up action. The document underlined some unsustainable trends, with some negative effects on the environment, which could affect the future development of the European Union, respectively the

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climate changes, threats to public health, poverty and social exclusion, the depletion of natural resources and the erosion of biodiversity.

As a result of the identification of these problems, in June 2005, the heads of states and governments of the European Union countries have adopted a Statement on the guidelines for sustainable development, which will incorporate the Lisbon Agenda, for economic growth and the creation of new jobs as an essential component of the objective of sustainable development.

After a wide consultation, the European Commission presented on 13 December 2005, a proposal for the revision of the strategy at Goteborg in 2001. As a result of this process, the EU Council adopted, on 9 June 2006, the strategy of sustainable development, the shield for an extended Europe. The document is designed in a coherent, strategic targeting and the overall aim of improving the continuous quality of life for present and future generations through the creation of sustainable communities able to manage and to use resources effectively and to exploit the potential of ecological and social innovation of economy with a view to ensuring the full protection of the environment.

The EU strategy on sustainable development, which represents the foundation of the National Strategy of Romania in the field, is filling in the Lisbon strategy and wants to be a catalyst for those who prepared and elaborate public policiesand for the public opinion in order to change the behaviour in the european society and in the romanian society and to the active involvement of the decision-makers, public officials and private citizens, as well as in developing, implementation and monitoring of the objectives of sustainable development.

The responsibility for the implementation of the strategy is the responsibility of the European Union and its Member States, involving all the institutional components at the community and national level.

It is also emphasized the importance of a close contact with the civil society, social partners, local communities and citizens to attain the objectives of sustainable development.

For this purpose are identified four **key objectives:**

- Environmental protection, through measures that boost economic growth by the negative environmental impact;
- Equity and social cohesion, while respecting the fundamental rights, cultural diversity, equal opportunities and combating discrimination of any kind;
- Economic prosperity by promoting knowledge, innovation and competitiveness to ensure high standards of living and plentiful and well paid of jobs;
- Fulfilment of the international responsibilities of the EU by promoting the democratic institutions in the service of peace, security and freedom, the principles and practices of sustainable development throughout the world.

In order to ensure the integration and correlation of the economic, ecological and socio-cultural components of the Sustainable Development, UE Strategy states the following **guiding principles**:

- The promotion and protection of fundamental human rights;
- Solidarity within and between the generations;
- The cultivation of an open and democratic society;
- Informing and engaging citizens in the decision-making process;
- Coherent policies and the quality of Government at the local, regional, national and global level;

3. Romania's National Strategy on Sustainable Development

Romania's National Strategy on Sustainable Development is the result of consultations within the framework of the National Council for Public Debate, the Regional Groups, The Scientific Council under the aegis of the Romanian Academy.

The defining element of the national strategy is a full connection of Romania to a new philosophy of development, the one of the European Union – that of sustainable development.

It was started from the note that, at the end of the first decade of the 21st century, after a prolonged transition to democracy and market economy, Romania still has to recover considerable gaps ahead of the other Member States of the European Union, together with knowledge and implementation of the principles and practices of sustainable development in the context of globalisation.

With all the progress made in recent years, is a reality that Romania still has an economy based on intensive use of resources, a society and an administration still in search of a unitary vision and a natural capital affected by the risk of damage that may become irreversible.

The National Strategy on sustainable development established targets for moving within a reasonable and realistict time, to the development model that generates high added value, driven by the interest in knowledge and innovation, focused on improving the quality of life of the improvement of people and relations between them in harmony with the natural environment.

As a general guideline, the achievement of the following strategic objectives is targeted in the short, medium and long term:

- ***Incorporating organic practices and principles of sustainable development in all programmes and public policies of Romania as a EU Member State.***
- ***Reaching the average level of the European Union countries present at the main indicators of sustainable development.***
- ***The significant approach of Romania to the medium level from that year to EU member countries in terms of sustainable development indicators.***

The conformation to these strategic objectives will provide medium-term and long-term economic growth and, in consequence, a significant reduction of social and economic gaps between Romania and the other EU Member States.

Through the synthetic indicator which measures the real convergence process, GDP per capita, to the standard power purchase, implementing the strategy creates conditions for GDP per capita expressed in PCS exceed, in 2013, half of the EU average

at that time, to approach 80% of the average EU 2020 and be slightly higher than the average european level in the year 2030.

This ensures the fulfilment of commitments made by Romania as a member of the European Union in accordance with the Treaty of accession, and also the effective implementation of the principles and objectives of the Lisbon strategy and the renewed Sustainable development strategy of the EU (2006).

4. Sustainable development in the context of the structural funds

When we talk about the concept of sustainable development in the context of the regional development policy[3] in Romania, a few details will be corrected. First, we refer only to the programmes and projects financed by the Union through structural and cohesion funds. Secondly, the requirements of sustainable development should be pursued on two distinct levels:

a) At the level of the operational programmes and the approved strategic axes. Although the principle of sustainable development regional development guides the whole development of the EU, there are still Operational Programmes which have strategic axes that target the sustainable development, with this concept in the title, or other, without using the term explicitly, subsumate usually proposed objectives of sustainable development. Below are listed a few examples.

Table 1. Presentation of economic funds for social and economic cohesion

Operational Programme	*Management Authority*	*Intermediate Authority*	*The allocated fund*
OP for the Growth of the Economic Competitivity	Ministry of Economy and Finances	National Agency for Small and Medium Companies, Ministry of Education, Ministry of Comunication and Information Technology, Ministry of Economy and Finances, National Authority for Toursim	FEDR
OP for Transport	Ministry of Transport		FEDR, FC
OP for Environment	Ministry of Environment and Waters	Regional Agencies for Environmental Protection (8)	FEDR, FC
Regional Operational Programme	Minsty of Development	Agențiile de Dezvoltare Regionala (8), Agencies for Regional Development (8)	FEDR
OP for the Development of the Human Resources	Ministry of Work, Solidarity and Equity	National Agency for Employment, Ministry of Education and Research	FSE
OP for Administrative Capacity Development	Ministry of Interior		FSE
OP for Technical Assistance	Ministry of Economy and Finances		FEDR

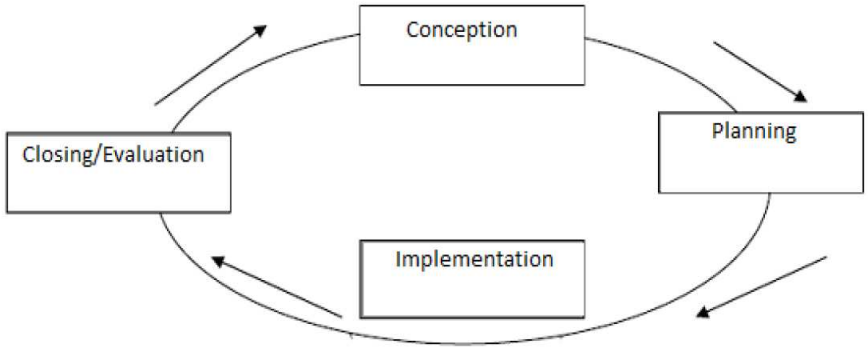
Source: http://www.fonduricomunitare.ro/prezentare.html

3 http://modernizare.mai.gov.ro

b) Absolutely all the projects financed from EU funds that contain as a requirement for eligibility inclusion during the life cycle of the project of subsumate elements of sustainable development. These items do not necessarily relate to the general porpouse, but the manner in which the activities are conducted within the project. Below are some of the requirements of the sustainable development contained in the Guide to the applicant on PODCA (Operational Programme for Administrative Capacity Development). We can see that all stages of the life of a project are targeted.

- Projects integrating sustainable development in the early stages of life have added value to both promoting organizations that and target groups and can become examples of good practice in this area. The importance of this theme should be recognized in development projects, among policy-makers and throughout project implementation.

Fig.1 Life cycle of the projects in 4 phases



Sursa: http://www.apubb.ro

- Activities proposed through the funding applications submitted in the context of applications for projects

Open by AM PODCA will aim that the principles of sustainable development on the during all stages of implementation will be respected, through measures that will decouplate the economic growth from the negative environmental impacts.

- Development projects must be addressed in all three dimensions of the concept of sustainable development and environmental, economic and social development dimension. The environmental dimension refers to sustainable consumption and production, conservation and management of natural resources, climate changes and clean energy. Economic dimension refers to the socio-economic development (economic prosperity) and sustainable transport, and the social dimension refers to social inclusion, demographic change and public health.
- We expect that after the implementation of the projects, the environmental, economic and social activities effects, that are made with support from the community to be audible/visible.

- A mandatory aspect is the inclusion in the project, depending on the specifics, of a module/course/seminar or a Conference, aimed at raising awareness of the importance of the concept of sustainable development.

CONCLUSION

There are many ways in which certain types of economic activities may protect or improve the environment.

These include measures for increasing the utilization of natural resources, energy, materials, information, technologies and improved management techniques, a better design and marketing for the products, minimizing of the damage to the environment, friendly agricultural practices, better use of the land and buildings, transport efficiency improved, etc.

One of the major challenges of sustainable development is to find ways to encourage friendly economic activities on the environment and to discourage activities that inflicts environmental protection. Since the environment and its resources are shared between different users, for extension of their protection and saving, a *collective action* is needed.

That is why the various strategies in the field of sustainable development are particularly important, both in our country and throughout the European Union.

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AGRICULTURAL DECENTRALIZATION IN ROMANIA - ROMANIA'S AGRICULTURAL ORGANIZATION OF CHAMBERS[1]

Bogdan BAZGA[2]

Abstract

In this article are theoretical and real explanations on Romanian agriculture decentralization process and the importance of creating and organized of the Agriculture Chamber. The need to be more presents in all the Romanian regions in order to develop the agriculture consultancy and all the factors that influence them. It also shows the status of national consultancy level, illustrated by a series of specific indicators and trends of their evolution. Finally, make some assessments about the prospects for Agriculture Chamber in our country.

Keywords: decentralization, Agricultural Chamber, Common Agricultural Policy, agriculture consultancy, agriculture potential.

INTRODUCTION
Description of current situation in Romania

Review common European agricultural policy, requires simplification and modernization of policies and procedures in terms of community outcomes "healthcheck", which are currently being conducted. In this context, Romania aims to identify and promote win-win solutions for Romanian agriculture, enabling the achievement of European integration.

At European level, promoting the interests of Romanian institutionalized framework involves organizing and representing and promoting socio-economic interests of farmers, whose activities are in the fields of agriculture and food production, rural development, fisheries and aquaculture, forestry, land reclamation, scientific research

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specialist, plant protection and soil conservation farm optimization.
Supporting a Common Agricultural Policy that can provide farmers and long-term perspective and resources needed to reduce the gap to the other Member States and to solve the structural problems facing Romanian agriculture (high fragmentation of plots, weak equipment and outdated technology and technical for most small and medium-sized farms, etc.) can not be done without **the legal framework necessary to form a representation of institutional device in agriculture and related workers.**
Therefore should be promoted at European level a common position, both from authorities and the beneficiaries. Responsible dialogue promotes sustainable agriculture and competitive by exploiting local agricultural potential and strengthen partnership between public authorities and beneficiaries throughout the country legitimized representation.
In recent years, the reality of agriculture reveals that there are many social needs that consisted of the rural population need to be represented in relations with third parties, people with the same objective, democratically elected under rules territorial and demographic providing representation and the need for access to information, agricultural advice and quality services in training. Improved quality of life in rural areas is intrinsically linked to the rate of absorption of European funds that Romania has access and community revitalization.

In agriculture, the strategy of decentralization requires the establishment of a national network of autonomous structures that promote the public interest by going local general and specific regional integration in the development of sectoral policies. Thus, administrative decentralization, the establishment of Agricultural Chambers is a close process to the farmers, a form through which it can be achieved business counseling to local farmers.

Currently, the institutional construction of agricultural administration does not give farmers the opportunity to actively participate in making decisions on strategies and agricultural development programs. National Agency for Agricultural Consulting (ANCA) is the only institution that supports to some extent farmers in their efforts to positively influence the development of rural economy. But as a public institution advisory network has limited powers and resources imposed by the civil service and budgetary constraints. Compared with the situation in other EU Member States to meet the needs of beneficiaries, agricultural consulting staff is much undersized, and network development prospects are reduced through fiscal discipline and limit expenditure. Therefore, ANCA has been the subject of the decentralization strategy of agricultural administration and will ensure, in the initial phase of institution building, financial resources, material and human Agricultural Chambers.
Associative forms, regardless of their status, are not yet sufficiently functional or active only in the interests of small groups of farmers, not sufficiently well organized to develop and implement projects for the benefit of larger groups of farmers or local community. A major problem faced by most forms of association, regardless of the level of representation (local or national) is funding, their members are not interested to support their own associations. This situation discourages and weakens people's

confidence in the possibility of achieving public interest projects.
The authorities have leverage to encourage the establishment and operation of farmer associations and organizations. In this context, the discrepancy between the general economic interests and the organization becomes more evident.

1. Agricultural Chambers appearance in Romania - expected changes in Consulting

Establishment of Agricultural Chambers stake is the creation of a legal framework for representation of all persons engaged in agricultural activities in the sense of involving farmers in making decisions that affect them through those willing to promote the public interest based on territorial representation.
Designed as an organization of the rural population, emanating from among those directly involved in specific activities of agriculture and related sectors, knowledge of reality in communities, its role, functions and mode of establishment of the Chamber of Agriculture should be promoted among all partners dialogue of MAPDR.
Thus, within the Agricultural Chambers, MAPDR creates the institutional framework for dialogue and consultation with representation at national level, through which farmers can be responsible and accountable for the development of sustainable agriculture, quality of life and active participation in the development and implementation of agricultural policies at local, national and European level.
In a first step, creating County Agricultural Chambers will result in the creation of new jobs, both at county and at community level.
However, Agricultural Chambers will provide technology transfer of applied research in modern production, becoming a promoter of new technologies. Institutional construction of Agricultural Chambers will mean the establishment in each county of Agricultural Chambers to hold elections following administrative territorial unit level. At national level will be established, all the criteria of representativeness, the National Agricultural Chamber in Romania. Agricultural Chambers will become autonomous, ensuring their network at national level, the necessary training, information and public services for all people engaged in specific agricultural activities and assimilated.
Establishment of Agricultural Chambers was asked repeatedly whether the beneficiaries of agricultural policies, the positive association of farmers within a public organization is reported and representatives of other EU Member States.

Socio-economic impact[3]

Macroeconomic impact

The main goal in creating these public organizations is to promote socio-economic interests of the rural population, engaged in specific agricultural activities and assimilated.

3 www.madr.ro

Along with efforts to transform agriculture MAPDR in a competitive sector, Agricultural Chambers can be accountable and involved in the promotion of domestic and foreign Romanian agriculture.

Impact on business

Agricultural Chambers County and National Agricultural Chamber in Romania will develop proposals of tax regulations on agricultural activities, as well as regulations on the pricing methodology, the procedures for marketing of agricultural products and / or processed. County Agricultural Chambers will provide assistance to farm accounting upon request, will advise and will provide technical assistance for those representing the completion of payment applications and preparing documentation on accessing European funds, financial support and other national aid or European. However, through the Agricultural Chambers County farmers and farm representatives will be supported in the management of farm production in the marketing organization and the establishment and consolidation of associative forms, routes of product and local market organization, aiming them the measures to avoid market imbalances.

Together with local and county agricultural Chambers County will promote the organization of local markets for direct marketing of agricultural products by producers. Also, Agricultural Chambers can establish commercial companies, according to the law and the statutes but they can not carry out its candidates.
Technological facilities in various branches of agriculture are not yet required standards, Agricultural Chambers can stimulate investment in technology, can support research and innovation, can ensure the transfer of modern technologies in production of applied research.

Romania's integration into the European Union assures, in addition to access to financial resources needed to develop agriculture and related areas, access to expertise, partnerships, exchange information and experience. In this sense, Chambers County and Chamber of Agriculture National Agricultural in Romania will establish contacts with counterparts in the European space institutions to exchange experience and consistency at Community level the procedures and quality standards, promoting Romanian products and services industry in the country and abroad.

Social impact

The target groups considered are the people who conduct activities in the fields of agriculture and food production, rural development, fisheries and aquaculture, forestry, land reclamation, specialized research, plant protection and soil conservation farm optimization.

County Agricultural Chambers will make proposals for laws or underlying normative acts on the training of farmers and agro-tourism activities.

Thus, they will draw up annual plans for training of farmers in their fields of interest based on requests and forecasts for rural development and will organize training courses to farmers through operational or technical service in collaboration with

training providers. The collaboration with educational institutions for agriculture and forestry and multi-annual plans will lead to harmonization of the school profile and specialized education structure of labor demand in the market, increasing the number of jobs growth and increased competitiveness of the agricultural and related.

On the other hand, tourism development will increase employment and integration of sustainable employment in the labor market of the unemployed and inactive people.

Agricultural Chambers County farmer certifies quality.

Chambers County and the National Agricultural Chamber of Romania will represent and promote specific interests, and local professional and general interest of the farmers / rural population, and will resolve conflicts amicably, serving as an intermediary and set the framework for discussion between all beneficiaries. These organizations will provide a public guarantee of respecting and protecting the interests of beneficiaries, ensuring their cohesion.

Environmental impact

Chambers County and the National Agricultural Chamber of Romania will provide advisory opinions on issues related to land use and rural management, promote good agricultural practices and animal welfare rules. Thus, they will make proposals for laws or underlying normative acts on good agricultural practices, treatment and improving plant varieties and animal breeds.
Also, there will be ensured presentation and dissemination among farmers of European norms and national agricultural and food production activities, environmental protection, disease control in plants and animals, animal welfare and other regulations related to work on farms. Through the Agricultural Chambers there will be created the necessary institutional framework for promoting the rational use and conservation of the productive potential of agricultural and forest land, water reserves, biodiversity conservation and environmental protection.

CONCLUSIONS AND PROPOSALS

Currently, the food security system[4], knowledge transfer market and hence the market for technology transfer and innovation to ensure the obtaining of information between producers and consumers, are vectors by which there can be accessed new technologies (consulting agencies, agricultural extension, mass media, education). The process of technology transfer and innovation in agri-food system has as main beneficiaries natural or legal persons engaged in agriculture so that farmers in the industrial system and the traditional system.

4 V. Manole, N.Istudor, B. Bazga, - Food Safety in Romania, The International Conference "Present Issues of Global Economy" - 8th Edition - APRIL 16th-17th, 2011 Constanta 2011, Ovidius University.

The shortcomings of this system are related to poor cooperation and collaboration between actors involved in the transfer of information, as well as the ways of disseminating information to all beneficiaries.

The European model of the transfer of technology and innovation differs from the Romanian one, in terms of the important role of the research centers between producers and consumers of information both rural and urban. These centers, in particular those of rural development is the "true core information where the entries are the results of research, information provided by rural actors, political and legislative information of interest, funding opportunities, etc., and the outputs are responses to the needs of farmers and rural entrepreneurs ".

Universities, public research and development and other public research entities in the EU play a clear role in the knowledge market. Transformation of universities and public research institutes and development in the international knowledge market actors and their increased capacity of cooperation with companies is a goal toward which the Romanian universities aim.

In Romania, the Factivity of agricultural consulting is a particularly important factor for the development, diversification and specialization of agricultural production and to stimulate the transformation of subsistence households in modern commercial farms. Therefore consulting activity should focus increasingly more market in order to offer qualified advice farmers problems in management and organization of the food industry.

In addition to stimulating the initiative of producers to associate and cooperate in agriculture, agricultural advisory work for technology transfer is a vector and a vector of knowledge in food system, essential to the whole rural area, which is addressed in particularly farms that want to develop and can not define and solve problems they are facing.

The large number of subsistence or semi-subsistence farms (3,931,350) that the small number of units with legal personality (17.699) are important issues that face Romania's agri-food system, representing a major obstacle in the development and upgrading. Small consumers, represented by subsistence farms, lack of information and the available funds, do not have too many opportunities to access innovative technologies that can lead too soon to turn them into viable commercial farms.

In this regard, we propose that public research institutions should become more involved in managing the transfer of knowledge / technology because it ensures the generation of socio-economic benefits and to attract research funding.

Another proposal would be to strengthen cooperative structures to collaborate with research centers to optimize the transmission of information, experience and best practices, and cooperation to promote innovation, support those who want to create innovative businesses and to support innovative projects.

I believe that agriculture, food safety and security is for Romania, an area of fundamental research with great potential, and modernization of this sector by introducing and implementing innovative technologies will enhance its performance clearly.

Given the above and the potential we can say that the Romanian agriculture to be the competitive market, food companies must promote technological progress and national food, in order to meet European requirements.

From this work results also the fact that **consultancy** = transfer of knowledge, is absolutely necessary, both at urban and rural level, whereas the use of innovative technologies is leading to improved working conditions of the beneficiaries (farmers / businesses) but also increased profitability of the activities undertaken.

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DIAGNOSIS OF VITICULTURE POTENTIAL IN ROMANIA

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ABSTRACT

This research investigates Romanian viticulture potential. In pursuing this, statistical data were analyzed, related to the areas occupied by vines and grape production per hectare of the Romanian and European Union vineyard. Romania is among the countries with a millenary tradition in vines. Climatic and soil conditions of our country are favorable for growth and fruiting vines.

Key Words: yield, wine, grape, wine sector

INTRODUCTION

For Romania, EU accession was a major challenge for the whole economy, including wine sector, which was forced to adapt to the realities and rules of the most important market in the world of wine products. The strictness of the Community market has added unprecedented dynamism to the European wine sector, under a common management and offered a very rigorous quality promotion at the expense of quantity. In appearance, the benefits are available to Romania, manifested at low cost inputs (land and labor force) were quickly dismantled once Romania entered the EU, through participation in the European single market, which runs an intense competition.

Despite existing difficulties, Romanian wine sector and wine capital integration in appropriate structures of the EU act as a positive event in activating the revival of Romanian wine industry, plus other economic activities, technical and technological, legislative and institutional, which, have allowed the development of this sectora and the functionallity of the wine market.

Also, the Romanian wine sector must face strong competition from the substitutes for this product, especially beer and spirits, areas that have recently been „injected"

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with important domestic capital investment, especially foreign spirits which have expanded the market, including wine sector.

Undoubtedly, Romania has favorable conditions in order to revive the wine market, holding an important vineyard heritage, consisting of large areas occupied by vineyards grafted on their own roots and direct producing hybrids, building design and construction in the wine sector, plus a strong cognitive heritage, culturally and scientifically linked to the culture of the vine and the art of wine.

RESULTS AND DISCUSSION

In the context of this brief analysis on the potential of Romanian wine sectior, a wine market faces expansion and diversification, including the quality of the product. Grape production continues to grow, ever larger quantities of grapes of wine is for this market sector. (see the Table 1)

Table 1. Grape production (thousand tonnes) and average grape production (tonnes / ha) in the period 2000-2009

Specification	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009
Grapes production, of which:	1295.3	1121.7	1076.7	1078.0	1230.4	505.8	912.4	873.2	996.0	990.2
• grafted vineyard	769.1	612.8	609.8	546.8	866.6	231.0	502.1	511.3	589.0	587.5
• hybrid vineyard	526.2	508.9	466.9	531.2	363.8	265.1	391.4	361.9	407.0	402.7
Average of grapes production, of which:	5.23	4.59	4.43	4.62	5.99	2.65	4.79	4.65	5.30	5.37
• grafted vineyard	5.99	5.01	5.08	4.72	6.60	2.34	5.19	5.54	6.27	6.26
• hybrid vineyard	4.42	4.17	3.80	4.52	4.91	2.88	4.17	3.80	4.33	4.45

(*Source:* author adaptation from INSSE, available at: www.insse.ro, accessed on: 10.09.2011)

Grape production faced an extremely fluctuant evolution, showing a growth peak in 2004, followed by a sharp decline caused mainly by adverse weather conditions in recent years. Despite the favorable conditions in some years of the culture of the vine, the average production per hectare is low compared with that ones recorded in other EU countries, a situation which leads to the conclusion that such activity reflects dysfunction in major wine business management. (see the Table 2).

Table 2. Average grape production (tonnes / ha) in the period 2005-2009

Nr.crt.	Țara	Anii				
		2005	2006	2007	2008	2009
		Average grape production (tonnes / ha)				
1	Austria	8.37	6.60	6.85	7.93	6.95
2	Belgium	9.80	9.09	9.17	9.08	
3	Denmark	-	-	-	-	-
4	Finland	-	-	-	-	-
5	France	8.88	7.94	7.66	7.26	7.41
6	Germany	12.03	14.65	13.06	14.85	13.33
7	Greece	9.94	8.94	10.13	8.71	6.80
8	Ireland	-	-	-	-	-
9	Italy	11.04	10.79	10.59	9.45	10.28
10	Luxembourg	16.44	14.25	12.21	12.21	12.07
11	United Kingdom	1.60	1.60	1.60	1.43	
12	Netherlands	2.50	2.50	2.50	2.50	
13	Portugal	4.60	4.45	4.63	3.71	2.19
14	Spain	6.03	5.22	5.81	5.27	4.81
15	Sweden	-	-	-	-	-
UE-15 Total		**8.30**	**7.82**	**7.65**	**7.49**	**5.80**
16	Czech Republic	5.38	4.39	3.71	5.82	4.27
17	Cyprus	6.83	3.30	4.27	3.08	2.17
18	Estonia	-	-	-	-	-
19	Latvia	-	-	-	-	-
20	Lithuania	-	-	-	-	-
21	Malta	3.81	5.27	6.38	4.23	6.03
22	Poland	-	-	-	-	-
23	Slovakia	4.71	4.12	4.42	4.27	4.51
24	Slovenia	8.14	7.36	6.42	7.62	7.02
25	Hungary	8.46	5.54	6.91	7.18	7.24
UE-25 Total		**7.56**	**6.82**	**6.84**	**6.74**	**5.59**
26	Bulgaria	2.71	2.10	2.38	3.13	2.77
27	Romania	5.99	2.65	4.79	5.30	5.37
UE-27 Total		**7.23**	**6.37**	**6.50**	**6.46**	**5.43**

(Source: author adaptation from FAO)

In terms of property regime of wine-grape production, the main share belongs to the private-owned sector in the reference period ranged from 81.53% in 2000 and 99.13% in 2009. Another issue which arises from the corresponding data analysis vines bearing surface refers to its reduction since 2004, so in 2009 compared to 2000 it decreased by 25.50%. Therefore one can observe a decrease in area occupied by vineyards and fruit-bearing and the bearing with hybrid vines.

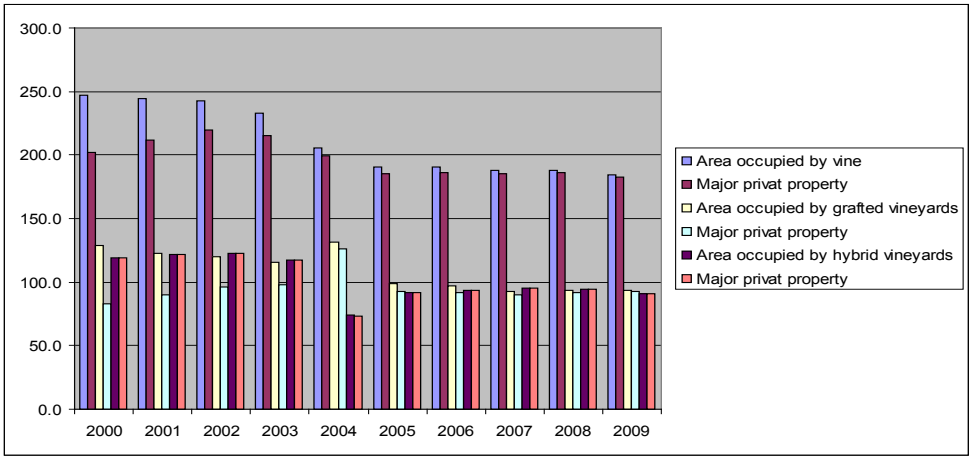
Table 3. The area occupied by vine in Romania in the period 2000-2009

YEARS	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009
Wineyard surface (thousand of hectars)										
Total	**247.5**	**244.4**	**242.9**	**233.3**	**205.4**	**190.6**	**190.5**	**187.6**	**187.9**	**184.4**
• out of which major privat property:	201.8	212.1	219.3	215.6	199.4	185.0	185.9	185.4	185.9	182.8
Grafted vineyard surface (thousand of hectars)										
Total	128.5	122.3	120.0	115.8	131.3	98.6	96.7	92.3	93.9	93.9
• out of which major privat property:	83.1	90.0	96.5	98.1	125.8	93.0	92.1	90.1	91.9	92.3
Hybrid vineyard surface (thousand of hectars)										
Total	119.0	122.1	122.9	117.5	74.1	92.0	93.8	95.3	94.0	90.5
• out of which major privat property:	118.7	122.1	122.8	117.5	73.6	92.0	93.8	95.3	94.0	90.5

(*Source:* author adaptation from INSSE, available at: www.insse.ro, accessed on: 10.09.2011)

Graphical representation of the structure occupied areas with vines is shown in the figure below:

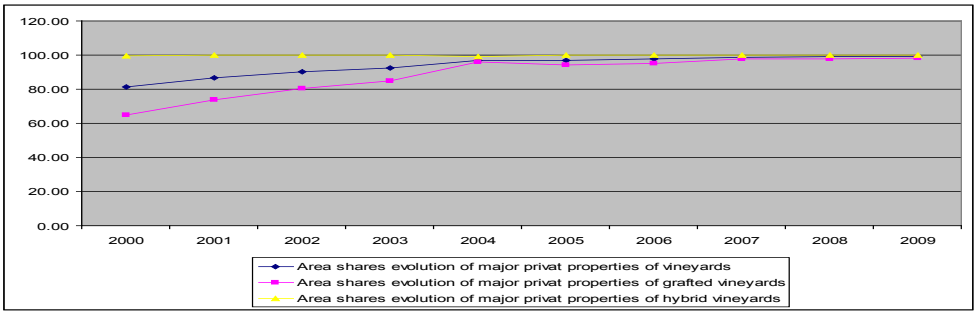
Figure 1. Structure of area occupied by vine in Romania in the period 2000-2009



(Source: author adaptation from INSSE)

If we analyze the dynamics of grafted area occupied by vineyards bearing and bearing with hybrid vines, we see an increasing trend towards private majority ownership.

Figure 2. Area shares evolution of major privat properties of grafted vineyards in the period 2000-2009



(Source: author adaptation from INSSE)

CONCLUSION

Romanian wine potential registers structural changes likely to slow economic development. The divising of property, the dissolution of forms of exploitation, the delay of privatization, de-capitalization of companies, planting and fourgery are just a few of the factors that affect the wine sector development in Romania. On the other hand, the trend of globalization of world economy that requires removal of barriers to trade between states wine market in Romania found unprepared to face stiff competition in a market that tends to restrict the overall quantitative and qualitative diversification.

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RURAL LABOR AND RURAL ECONOMY

Catalin Gheorghe BOLOGA[1]

Abstract

The development of agriculture requires greater emphasis on human capital and, in addition to material capital, by providing better educational and health services in rural areas. The precarious situation prevailing in rural areas in education and health Romanian would justify granting of some priorities in this situation and prevent it worsening, especially in the future.

In an economy like Romania, where agricultural production has significant annual fluctuations, without an ascending trend, to say that agriculture has the potential surplus of labor, food, and capacity of saving that requiers only an appropriate agricultural policy for their mobilization ,is a static approach, incorrect transfer of resources to the problem. Unless agricultural production will increase or stabilize the investment and technical progress, it will become more significant part of available resources, production and transfer of income from non-agricultural sectors.

Key words : labor, agricultural production, rural economy, productivity

Employment situation in rural areas

Steady employment is an acute problem of Romanian agriculture, it limits the possibility of increasing labor productivity and thus to create viable farms and increasing revenues.

Surplus agricultural labor is manifested in many forms, expressing the different characteristics of this situation:

- people work fewer hours than they would accept to work on the existing average income;
- there is no need to recruit labor from agriculture;
- private marginal productivity of agricultural labor is zero, that leisure has no value;
- private marginal productivity of working hours, even if positive, is below the

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average hourly income of labor in other branches;

- agricultural sector may have left the labor force without agricultural production to reduce, etc.

Mobilizing the workforce completely unused now require increasing solvent demand for labor is in agriculture or in other branches. In the case of agriculture, but one aspect is limited: while the expected changes in production techniques through mechanization, which increases labor productivity, create new cuts workforce needs. Theory wrongly assumes that technical progress in agriculture would be necessary only in a more advanced stage of development because, without ensuring that agricultural labor productivity growth could occur and reduce agriculture's output. Even if the economy is open, ie admit a relatively liberalized trade, Romania does not have a non-food export potential that can effectively counter a possible food shortage, so at least the domestic consumption of agricultural production must be assured of their own, carried out effectively.

It is obvious that the absolute number of active population in agriculture (about 3.3 million) can not be reduced until the growth rate of non-agricultural employment growth rate will not exceed the total working population. There is a turning point when the growth rate of agricultural labor is zero, but is reached only after a certain level of economic development. Reaching this threshold, then the need for employment in agriculture becomes less stressful and out of the sphere is also underdevelopment.

Transfer of rural labor is economically rational in other sectors if it is ensured adequate supply of food provided. For example, if the population increases by 2% and 4% increase agricultural production and agricultural labor demand by 1.5%, the rural exodus is economically justified and even necessary, to prevent rural unemployment.

In Romania, 45% of the population lives in rural areas, which means 10.2 million souls, of which 5.8 million are active. These high figures, especially from a European perspective, shows the importance of addressing the problem of employment and income structure in rural areas.

Employment structure of rural working population in Romania is characterized based on quarterly surveys conducted on a nationally representative sample (2008). From these data show that 45.8% of the population with 15 years and over living in the country. Rural population is 49.4% of the total active population, while rural population is occupied 50.7% of those employed. For these synthetic data show that Romanian village lies an important function of employment. Group on Contingent, 18.3% of rural population is aged between 15 and 24 years, 39.1% over 50 years, both figures are above average throughout the country. In these two extreme groups, activity and employment rate is much higher than in the interim. Romanian agriculture is the oldest branch of the national economy workforce. In rural areas, unemployment is lower than the country, but here is characteristic of youth unemployment increased.

In 2008, the active rural population, 34.5% were employed persons, 33.1% private entrepreneurs, namely agriculture, 28.65% family labor (unpaid) and only 0.4% employers. Show that already over one third of the villagers are engaged employees, mostly outside agriculture.

The employment structure in agriculture is as follows: 48.1% are hardworking individuals, 43.5% family labor, and only 6.9% are engaged employees, and 1.5% work in associations.

Distribution branch of active rural population shows that 65.1% work in agriculture, 11.1% in manufacturing and 3.6% in trade, the three main branches covering almost 80% of active rural population. The vast majority of employers operating in rural trade and manufacturing.

Private entrepreneurs group, 94.5% are individual householders. Most active rural population engaged in agriculture (61.8%), in addition to these, the most important groups are made up of skilled workers (11.1%), unskilled workers (4.9%), technicians, respectively traders (3.2%), clerks (1.4%), intellectual (1.3%) etc.

Those employed in agriculture is characterized by:

- proportion of women (47.8%);
- high proportion of elderly (32.9% between 50 and 64, 20.4% for 65 years and older);
- small proportion of youth (11.9%).

Romanian rural economy

Romanian rural agricultural economy is mainly because their agricultural economy - itself accounts for 60.5%, compared to 14.1% in the EU. Deeply distorted structure of the Romanian rural economy determines a similar structure of the rural population by sector (primary sector 64.2%, of which 56.6% agriculture, 18.5% secondary sector, tertiary sector 17.3%) . Romanian rural scale, non-agricultural economy (SMEs industrial, services, rural tourism) has a low weight, and rural tourism in all its variants, except for some mountain areas (Bran - Moeciu, Apuseni, Maramureş , Bukovina) and the Danube Delta is almost nonexistent (11,000 beds in about 1,600 Farmhouses).

Stimulating investment in rural areas to expand SME non-agricultural economy and processing of primary agricultural products, should become a permanent local authorities, by making the process of economic decentralization and subsidiarity decision, in rural areas (or rural areas), with surplus labor, of industrial micro village, county or regional level with financial support by equipping them with the necessary industrial activities (electricity, heat, gas, water, sewer, roads and inland , telecommunications, etc.), the lines of those created, for a long time in rural areas of EU countries.

Investments in non-agricultural and food economy in rural areas, in addition to increasing the gross value added by processing agricultural raw materials and non-local resources, has a great advantage, both in times of crisis and recession and growth in the in the sense of creating new jobs and stabilizing using local labor (rural), rural revitalization, especially those from disadvantaged and peripheral areas.

The rural economy as a whole and agri-food economy, as an important element of the rural economy, have different rule structures in Romania to the European

Union (not to mention the sheer size of it). Romanian economy is mainly agricultural countryside (about two thirds) or agro-food (more than three quarters). In the European Union, the dominant economy of the rural economy is services, accounting for 42.2%, up 2% from the agri-food economy.

Are marked differences in terms of agro-food economy. While the processing of agricultural raw materials in food (gross value added carrier) accounts for over half the agricultural economy in the European Union in our country the production of agricultural raw materials (agricultural economy) has much higher proportion (over 75%).

Food economy of Romania has a much higher level of national economy, yet because much of it is concentrated in urban areas (agro-processing enterprises former high during the command economy), though privatized, still have the same layout geographical, in major urban centers (plant oil, beer, meat, milk, mill, bakery, etc.).

Non-agricultural rural economy in the EU represents almost 60% of the rural economy, while in Romania it has a weight of about three times lower (21.8%).

Large discrepancies are noted in non-agricultural rural economy terms. Ie much smaller share of services (non) from rural areas and, particularly, the tourism which, in Romania, actually has a nearly zero contribution to the rural economy.

The analysis of the causes that generate the technical and economic nonperformanța agriculture dictate that there is a chronic shortage in the allocation of production factors, with poor management in the majority of farms and businesses (and small) processing and weaknesses in management routes for the acquisition - storage - marketing of food products.

All strategies, programs and projects for agriculture in their center of sustainable rural development, sustainable economic growth as a factor. This means strong rural economy, rural infrastructure built on a modern technical equipment suitable land areas, towns and rural homes, the use of renewable natural resources in the economic cycle, environment and landscape and their effect, or acceptable standard of rural life comparable to the EU.

Sustainable growth can be achieved, above all, invest only if the medium and long term productive agricultural sectors in advanced technologies, competitive commercial circuits Romanian agricultural products, by extension agricultural market, mitigate and reduce turbulence fluctuations production and prices, by extending the participation of Romanian agricultural products in third markets, primarily the European single market.

Sustainable growth in agriculture is questionable, as long as the "performance" of the Romanian agriculture is the lowest limit, so long as the environmental conditions of our country, we import over 25% of the Romanian consumption.

CONCLUSIONS

In the villages can not be applied consistent measures for rural development. The changes have increased polarization in both villages and between villages. Symptoms appear more intense poverty in some demographic and ethnic groups, so the elders could not work and a part of Roma. Formed a segment of the rural population - partly in active age group - which is not able to join the labor market, welfare so requires. and among villages, there are some technical and social infrastructure with a so weak that they are unable to initiate development themselves.

- Reprivatization land agricultural cooperative created a small subsistence farms and only slightly formed viable farms.
- Mechanisms of market economy, agricultural policy instruments can influence only slightly subsistence farms so that it will take much time to develop competitive farms.
- Low level of cooperation between villages and households almost total lack of professional organizations prevent effective organization of production, supply and sale especially as they become more expensive.
- The opinion of those living in villages about their lives is different depending on the area. The share of discontent is much lower in traditional farming villages, where unemployment is less felt the effect and people feel safer.
- Among the villagers, most dissatisfied are young, especially those with less training, which hardly find employment in cities and agricultural workers do not like.
- Share the content is relatively high among entrepreneurs and pensioners, and carrying out farming activities in order to realize additional revenue and for self-sufficiency.

Knowledge about the employees and reality in Romania predict the likely increase in unemployment areas. If that agriculture can provide only part-time employment and work is uncertain, we estimate an increase in the number of constraint based business employment insurance.

Although the concerns of rural labor employment is presented in various other areas, is a common feature that, because of its small size, can provide farmers farm only part-time employment and low incomes. Problem is the low share of enterprises and the growing insecurity of employment of current employees. The village where the first half of the ‘90s was hoping to guarantee a place for commuters redundant, as well as descendants of former owners who have returned from town, is now less and less able to bear the burdens of occupation in November, even the term short. Official unemployment rate relatively low area, hide a latent unemployment rising, so rural development can be achieved only by ensuring long-term employment outside agriculture.

The current situation of the villages, characterized by decreasing possibilities to deal with labor in agriculture and the small number of jobs in non-agricultural activities is an obstacle to achieving a more effective agricultural policy, especially in the urban

unemployment increased. The new agricultural policy, geared towards increasing the competitiveness of Romanian agricultural products by increasing the efficiency of agricultural production structures towards the formation of viable farm property and would increase maintenance capacity decline of agriculture, rural unemployment would increase. Because of this, you will need to stimulate rural industrial production, the development of trade, services, rural tourism, etc.

In conclusion, in addition to the low per capita agricultural, rural economy and agricultural structures are still far from what we call a competitive rural economy in Romania.

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SUSTAINABLE DEVELOPMENT – CONDITION FOR THE SURVIVAL OF THE PLANET

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Abstract

Society's desire for continued progress has found in the economic development the necessary support to foreshadow the future of human evolution. This attempt is another characteristic of people, to try to guess the direction, purpose and manage all of this at individual, community and nation level. This has created a range of possible options for an economic future, differentiated after the author's philosophy, simplifications made in the choice of variables etc. This shift of emphasis from man to nature was the result of limited intake of natural resources proving in the process of human evolution, continued growth of world population, extention of environmental pollution process. New limiting or pessimistic concepts of economic development appeared, which foreshadow the deep crisis that threatens civilization today. The man's complex thinking systems at the beginning of the third millennium should also outline the bi-univocal nature-society dimension.

Key-words: sustainable development, the new economy, economic growth, ecology

The concept of sustainable development – brief history

Prediction regarding the evolution of society was a man concern as at the individual, city, and nation level and a focus on the philosophical level, long before the relationship man-environment-economy in the context of the human society development became an stuying issue. Since the eighteenth century, thinkers reported the limited natural resources and the need, given the increasing population of Earth, to maintain a steady state between the natural resources and environment, stable on the

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long-term, as beeing a prerequisite for any development.

Early twentieth century marks the emergence of concerning of the neccessity to protect the resources and promote through various means their rational use . Although scientists have been sided, over time, often diametrically opposed positions, oscillating between pessimism and optimism in the Planet future assessment, in the recent decades, the need for major changes in world economic order by reducing disparities between rich and poor countries by profound social, political and institutional development in developing countries, became a must (Bruntland, 1987).

„The Club of Rome" begins to report the disparities between the rising industrial civilization and its impact with the planet's resources and environmental quality.

Five factors were considered essential for economic development: population, natural resources, industrial production, agricultural production and pollution. It was noted that two of them are positive loops of opposite connections of the economic system (stimulates exponential growth) and three other factors could be negative loops - development restrictions such as pollution, natural resource depletion and hunger (poverty).

The scheme in which are inserted the five types of reverse connections easily lead to the observation that the management of such a system is primarily the control of population growth, and the harmonisation of the output growth with the resources potential, in the long term.

The report's conclusion, expressed concisely by „stifling economic growth," or imposing „zero growth" has not satisfied the expectations of scientists or the representatives of less developed countries at the UN Summit meeting, in Stockholm in 1976.

Another interesting conclusion finds that the development of poor countries on the model of industrialized countries would stronger request the Earth's natural resources.

"Mankind at the crossroads" report, coordinated by M. Mesarovic and E. Pastel, proposes a compromise between linear growth and exponential growth by introducing the notion of „organic growth". The authors highlight the explosive accumulation of factors and the existence of the crisis in the economy phenomena. Inequalities between geographical regions and countries, economic and social criteria, must be managed differently, according to their level of development.

The critics of the Pastel & Mesarovic model warned that the model did not reflect the differences in the social order and its own value systems.

Third Report of "The Club of Rome" (Jan Tinbergen, 1978) focuses on the resolution of the sixth special session of the UN General Assembly in April-May 1974, which proposed "the establishment of an international economic order". The report noted that "the political independence does not necessarily lead to an economic independence, and without economic power, the independence of a nation is incomplete and uncertain".

The Fourth Report of "The Club of Rome" entitled "Time to get out of waste", authors Dennis Gabor and Umberto Colombo, presented a rigorous analysis of present and future natural resources, focusing on their irrational management, especially in industrialized countries.

The reduction of the industrial technologies, the saving of resources, promotion of production and consumption behavior compatible with the environment are suggested solutions to the reduction of resources and environmental conservation need (Rădulescu et al., 2010).

In 1968, in a thematic UN General Assembly, is the first concern for environmental protection issues. Later, in Stockholm in 1972 takes place at the initiative of U.S. and Scandinavian countries, the Conference on the Human Environment (ECO 1), recommending and organizing a UN Environment Program, an event that will become real as the United Nations Environment Programme - UNEP. It also takes place the first World Climate Conference (Geneva 1979) and also the foundations of an international policy consensus for this purpose.

In the early '80s, the UN has asked former Chancellor Willy Brandt to conduct a study on "North-South, a program for survival", published the same year that identifies the current crisis situations, the most serious and urgent to solve is considered the reducing disparities between the countries of North and South, between the rich and the poor.

Commission on Environment and Development proposed UN General Assembly in 1983 to discuss the report "Our Common Future", prepared under the direction of former Prime Minister Gro Harlem Brundtland, who has the authorship concept of "sustainable development".

Essential components of a strategy for a sustainable development are generally considered the following: stabilize the population; reducing dependence on oil; development of renewable energy resources; soil conservation; protection of Earth's biological systems; recycling.

Closer today are the following reformulations and additions: resizing the economic growth, having as a model a more balanced distribution of resources and emphasis on quality production side; eliminate poverty conditions in order to meet the essential needs for jobs, food, energy, water, housing and health; controlled population growth; preserve and enhance the natural resources, biodiversity of ecosystems, monitoring the environmental impact of economic activity; reorientation of technologies and risk control implementation; decentralized forms of government, increasing participation in decision making; harmonization of the decisions regarding the environment and the national economy with the international plan.

Many experts debate around the concept, as seen from the number of the definitions and the theoretical interest. Detailing these issues makes Miron Popescu from Bucharest Polytechnic University in "Energy Management Treaty", published in 2005.

The two interpretations could be avoided if sustainable development would be focused on human forces so that the correct definition in the European Union's vision of sustainable development is "the capacity of all human communities, including those deprived, to satisfy the basic needs in terms of housing, drinking water, food, health and hygiene conditions, participation in decision making, social, cultural and spiritual. "

From civil society, "the green movement" is expected to develop a concept supported by the UN General Assembly to be taken into account in the preparation of national development strategies and economical policies, to look at the current challenges to the economic development.

Alternatives to the concept of sustainable development

Other institutions, organizations, independent researchers, in addition to the above, have signed the „campaign" for deciphering the future world economy and find a paradigm to guide mankind, nations and individuals to be guided to this future, that must be removed from uncertainty and must be made possible.

By far, stands an institute dedicated to the study of global issues, namely the World Watch Institute, led by Lester R. Brown, that became an important center for monitoring the threats to economic development, human society and environmental quality. Since 1984, it published an annual report entitled "State of the world", in which are the results and proposed solutions in their studies. Favorite topics addressed are: irrational use of resources and environmental deterioration, energy chapter; population: twenty-two dimensions of population policies, malnutrition; environment: the desert expansion, loss of fertile land, species extinction, acid rain; first steps towards a sustainable society: recovery, reuse, recycle; modern urbanism: „cities growth", air pollution; clima şi viitorul pădurilor; climate and forests future.

After the year 2000, Lester R. Brown founded a new institute - Earth Policy Institute - in which the concept of "eco-economy" was launched, with the creation of a subtitle for our planet: Eco-economy is trying to remedy, to replace the current economy that was out of sync the ecosystem that it depends. It recognizes that the economic theory and economic indicators do not reflect how the economy undermines and destroys the planet's natural systems.

The concept requires the establishment of the new proposed frame of economic policies based on ecological principles, and economists and ecologists work together to shape this new economy.

Transforming the current economy - distinct from the environment - in one that can support progress is conditioned by a revolution in our economic thinking and recognition that the economy is part of the planetary ecosystem (Popescu and Rădulescu, 2010).

In view of applying the concept to the realities of the twenty-first century, two studies were developed: "Plan B 2.0 - Rescuing a Planet Under Stress and a Civilization in Trouble" and "Plan B 3.0 - Mobilizing to save civilization", both studies completing plan A.

Plan B 2.0 suggests the following courses of action: eradicating poverty and stabilizing population, restoring the meals a growing population, climate stabilization, sustainable urban design, building a new economy.

Plan B 3.0 finds the aggravation of the problems mentioned above, but most urgently to be addressed are energy and food security deterioration, climate change,

effects of temperature increase, the shortage of water resources, natural systems at risk, the economic effects of large economical differences.

Lester R. Brown outlined a budget for combating poverty, ensuring access to education, eradicate illiteracy, basic medical services and to control reproduction through family planning, which requires financial funds of 70 billion dollars. Achieving the other goals set out in Plan B 3.0 for restoring the Earth would cost another 95 billion dollars, so a total of 165 billion dollars or 16.5% of the total of about one trillion dollars from the annual military budget of expenses recorded in each year in the world.

The human-environment-economy relationship

From a random selection and order of the approximately one hundred concepts that refer to human-environment-economy relationship, a few concepts are mentioned below, to emphasize the premises and grounds of the economic development .

The difficulty of using the logical models, mathematical, tracking developments in national and world economic space is not only methodological, but new variables appear in the equations - many incompletely known, that can change the hierarchy of the known variables.

On the other hand, the last 50-60 years researchers have focused their attention on the triad: human-environment-economy, and this no longer satisfactory, the information technology and technical progress is added.

"The new economy" means changes in the essence of the concept. Researchers have highlighted the relationship between the economy and the social complex, and allowed the economy to evolve as a science, away from the social human nature.

But the term economy could not develop alone, it got the political economy where the economy is taken by the political elements. Subsequent theoretical developments have given shape to the normative dimension of the political economy based on capital accumulation and led to the neokeynesism and neomonetarism, the development of neoclassicism, which are found in the free market fundamentalism.

The new economy changes the functional structure (Figure 1) and its object: the joy of living is replacing the obsessive objective of materialism, the political interest is replaces by the spiritual criteria, of the human being.

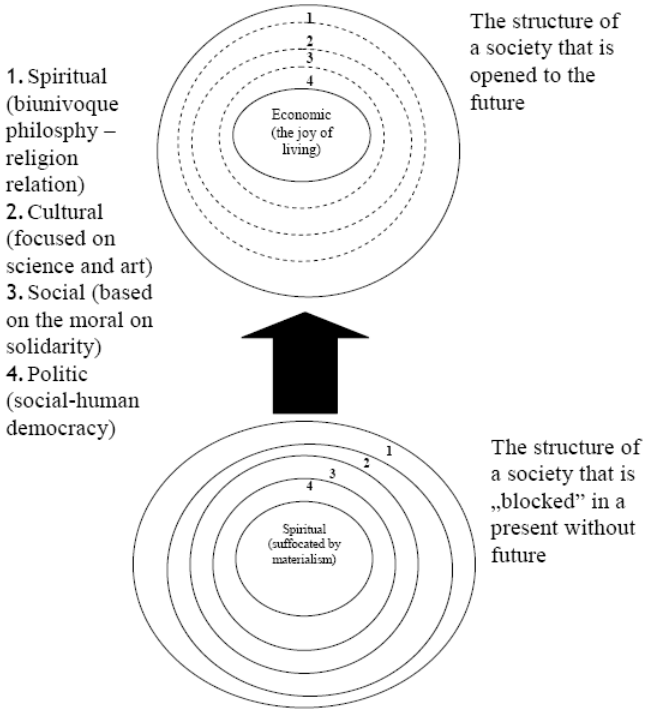
It is expected that the new economy will facilitate, the reintegration of the economy at a macro-economy level and mondosocial level, freeing it from the guardianship or from the political dictatorship. It can also achieve a balance between positive and normative in the new social economy.

And finally, the new economy makes the transition from today's society, where the spiritual matters are considered minor, in a society where economics replaces the joy of living well - a summary of the Aristotelian ideal of N. Georgescu-Roegen desire.

The approach spectrum of the new economy is much broader than the one outlined above. There were novelties reported in the political economy, as the occurrence of a mixed economy, that allowed China PR to exceed the state of a developing country, propelling it to the top of the world hierarchy, recording growth rates of GDP of about 10% per year over long periods of time.

Functional structure of an „open to the future" human society

Fig. 1. To a future generating human society



Source: Saptamana financiara, no.976, 2009

Human development - concept belongs UNDP - calls for good governance that guarantee the implementation of a development strategy that is sustainable for the therm. Four components are essential for a sustainable human development: productivity, equity, sustainability and participation.

Prerequisite for achieving the four requirements is the concomitant simultaneous progress, to ensure economic growth for scaling qualitative aspect of production and elimination of poverty.

National government or inside government is the mechanism that enables human development as a model that will include both national interests, the identity of nation, culture, people calling and ability to adapt to world integration into global flows of products (Brown, 2008).

The concept of "human development" is the materialization of the decision of the UN Conference on Human Rights (1992) which considers that "the right to development is an inalienable human right and that is part of fundamental human freedoms. They do not concern only the person but all peoples that can exercise their full and complete sovereignty over their natural resources for social and cultural development".

According to the Preamble to the Declaration of the Right to Development, UN General Assembly in 1986, art. 1 (1), developing means a "comprehensive process of

economic, social, cultural and political that aims at continuous improvement of living standards, both in the general population, and in each individual".
Analyzing the UN definition of the development process, shows that there is no upper limit to development. In this case the lower limit would represent a fundamental need, and then the upper limit should not be dependent on natural resources?

UN avoided this statement, but if it was made, it would have been correct at a global level, but at national level it would have complications, given the uneven distribution of resources and excessive consumption of developed countries: 5% of Earth's population consumes 25 % of world energy resources, for example. It can retain the notion that improvements are needed for development, for the sake of avoiding the development of rich and developing countries, and finding the tools to ensure countries possessing natural resources and their ability to promote them in their own interest (Rădulescu, 2008).

Smart economic growth or "green" economic growth is provided in European Socialists Manifesto as a paradigm of the European economy which has the purpose not only to protect the environment, but to create new jobs in "green" technologies. It is expected that two million people will work in these new areas (Farmache and Andreica, 2010; Andreica et al., 2009).

"Entropic approach to the economy" of Nicholas Georgescu-Roegen emerges as the best illustration of the presence of the romanian thinking in the debates regarding economic development.

According to Georgescu-Roegen, a monopoly of the present generations at the expense of the future generations could be reduced in the context of any economic system based mainly on the exploitation of solar energy. But, such an economic system would continue to source from terrestrial dowry, especially with materials, which requires as a necessary first order, to avoid as much as we can, the use of social importance resources.

How can this objective be achieved? In the context of his bio-economic concept, a concept that attaches great attention to the energy used by man in his economic activities, Georgescu-Roegen propose a "minimum bio-economic program", which, despite its obvious utopian character, traces a series of viable guidelines.

CONCLUSION

1. Most concepts converge to warning the trend of depletion of natural resources, followed by deterioration of the quality and integrity of the environment and maintaining the production and consumption behavior unrelated to people's basic needs.

2. Human activities, when they manage their future, they should be of a negentropic type, calling for more scientific and technological progress, moderation and reason.

3. A third of people are living near or in poverty and are hopeful that the short or medium term solutions appear to eradicate poverty. Number of "failured" nations increase, and inequalities between rich and poor is widening. In common parlance, these inequalities form the "gap" - a term that wants to show the difficulty of passing

from one side to another socio-economic condition of the population.

4. The current model of civilization, based on natural resources consumption, reducing bearing capacity of natural ecosystems, the consumption of fossil fuels, the lack of ideas, the lack of real solutions to control the number of inhabitants of the Earth is unsustainable. Unfortunately, it is the ongoing and is followed by emerging countries like China PR, India, Brazil, which will exacerbate some dangers for the future of Earth.

5. The emergence in the economic and social world of novelties such as information, biotechnology, globalization, weapons aimed at climate change or human behavior, altered food quality, etc.. do not facilitate the predictability of the future and adds new hazards to man and nature.

6. There are some type of pessimistic concepts, falling directly into the category of survival, providing arguments that deserve to be taken into account.

7. The variability of the concepts is explained by the main criteria taken into account (for a variety of other criteria), the authors options focusing between centralising the analysis on man, environment or economy. Their integration into a unitary conception, would find the desiderata for a new economy.

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VEGETAL AGROBIODIVERSITY IN THE ECONOMIC DYNAMICS OF BULGARIA

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Abstract

In the context of the current world crisis and the global climatic changes, Bulgarian agricultural and rural food economy is based on the sustainable preservation and management of natural resources and biodiversity in compliance with the European research field. Biodiversity as a complex interaction on Terra comprises living organisms and social and economic systems to which such is connected. In economic point of view are of significance cultivated species liable for the assurance of the necessary food to the population. The agricultural production is performed both traditionally and conventionally, in agricultural units of varied types. Such removed sugar-beet from the list of cultivated species due to the high level of production expenses for setting up and maintenance, the non-stimulating prices offered by processors, the dropping of the price on the world market and the cheap imports of unrefined raw sugar. The structure of cultures is dominated by cereals due to the economic interest manifested not only by small-size exploitations. Their technical outfit and high costs to assure the inputs influence the yields per hectare.

Key-words: biodiversity, vegetal species, production, economy, agriculture

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INTRODUCTION

The adhesion of Bulgaria to the EU is the decisive factor for a reform in agriculture and rural economy, as European agriculture is based on a market-oriented sector, concurrently with the integration of agriculture in the environment and forestry. With this background, vegetal biological diversity represents the variety and variability of numerous species and the ecologic ambient in which such are found. Vegetal organisms are organized on varied levels in Bulgaria, within the period 1992-2002 and 3,572 species (5,714 species worldwide) are known: among these, indigenous forestry species 128. There were no endangered species on the specified date.

Concurrently the increase of the anthropic impact and global weather changes impose the quantitative and qualitative valuation of biodiversity from natural and anthropized ecosystems and social-ecological complexes in view of environment protection and sustainable development. As agriculture uses external energy as inputs, it is necessary that such should be alloted in a balanced way and administered only within optimal periods.

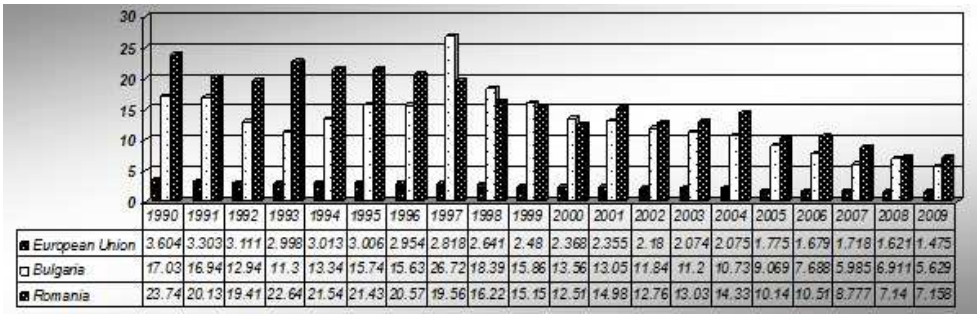
The deficit of indigenous products deriving from inaccurate management impairs the supply of the Bulgarian market with vegetable products and the acceptance of import.

MATERIALS AND WORK METHOD

Bulgaria benefits in the largest part of the territory of a continental climate with cold winters and hot summers. Precipitations are in average of approximately 630 mm per year. Within this area, vegetal biodiversity is represented by agricultural (field cultures, vegetables, fruit-trees, vine, pastureland and hay-fields) and forestry species.

The agricultural area of Bulgaria is of 5,174 mil. ha, out of which 2% in irrigation conditions (in the year 2008); arable land (3,031 mil ha) is serviced by obsolete mechanization, to one tractor being assigned 57.65 ha arable land. The fertilization of cultures is executed with chemical NPK products in the quantity of 77.1 kg active substance/ha (with approximately 33kg active substance/ha more than in Romania).

Within the period 1990-2009, Bulgaria recorded high values of the agricultural weighting in GDP, in the conditions of the lasting decline of agricultural production (image 1). Thus, in 1990, agriculture participates with 17.03% in the forming of GDP; in 1993 it dropped to 11.3% due to the structural changes generated by the land reform and then on the background of the powerful crisis manifested in economy, in 1997 agriculture reached the maximum level of the period, i.e. 26.72%. Since 1998 and until 2009 the weighting of agriculture in GDP showed evident descending trends, reaching thus 5.63%. The labor force in agriculture is old, similar to Romania; in 1991 it represented 19.5% from the total working places and in 2009 it dropped to 7.5%.



	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009
European Union	3.604	3.303	3.111	2.998	3.013	3.006	2.954	2.818	2.641	2.48	2.368	2.355	2.18	2.074	2.075	1.775	1.679	1.718	1.621	1.475
Bulgaria	17.03	16.94	12.94	11.3	13.34	15.74	15.63	26.72	18.39	15.86	13.56	13.05	11.84	11.2	10.73	9.069	7.688	5.985	6.911	5.629
Romania	23.74	20.13	19.41	22.64	21.54	21.43	20.57	19.56	16.22	15.15	12.51	14.98	12.76	13.03	14.33	10.14	10.51	8.777	7.14	7.158

Fig. 1 - Agriculture (cultivation of plants, livestock production, forestry, hunting, fishing), %GDP

The determination of productive limits of vegetal species on Bulgarian farms was possible by a thorough documentation regarding the ecological conditions and the statistical regional and local data, but studying also the know-how of certain cultures.

RESULTS AND DISCUSSIONS

Cultivated area. Due to the favorable relief, soil and weather conditions, but also the experience and tradition in production, *cereals* are the dominant agricultural cultures. Thus, their weighting in arable cultivated area was at the level of the year 1990 of 53%; after two transition decades, the areas assigned to cereal cultures extended to 60.15%.

In the structure of areas cultivated with cereals, wheat and corn occupy significant places: in 1990, 30% and 11% respectively; in 2009, 40.16% and 9.73% respectively.

The growing trend of the cereal domination in the structure of cultures is the direct result of the economic interest manifested by small-size exploitations that resulted concurrently with commencing the land reform at the beginning of the 90's.

From among plants destined to industrialization, *sugar-beet* records the deepest decline in view of the cultivated areas. The causes of this phenomenon were generated by the high level of production expenses for the setting up and maintenance of the culture, the non-stimulating prices offered by processors to agricultural producers, the dropping of the price for sugar-beet on the world market and the cheap imports of unrefined raw sugar. The weightings of sugar-beet cultures in the total arable area was at the level of the year 1990 of 1%; during the last decades, areas destined to this culture have been considerably reduced[5] and as of 2008 this species was given up.

Sunflower experienced during the analyzed period an extension of the cultivated areas; it recorded an ascending evolution within the period 1990-2009 (from 7.3% to 22%). This positive evolution was influenced both by the suitability of the culture to the natural conditions, but especially the competitiveness and the comparative advantage

5 Statistical Yearbook of Bulgaria 2010

of such culture versus others (sugar-beet) in the new conditions of the domestic market and the maintaining of a high price on the international market.

Areas cultivated with *potatoes* have had negative dynamics. In the year 2009 versus 1990, the weighting of the areas cultivated with potatoes within the arable area has been reduced to 0.45%.

In regard to *vegetables*, within the period 2005-2009[6] general decreases have been recorded (ha), as follows:

Year	Species						
	tomato	cucumber	green pepper	onion dry	cabbage	potatoes	melons
2005	5394	777	5129	1527	3304	23999	7069
2006	7022	991	8516	2217	2818	24471	10069
2007	4828	850	5497	1262	2246	22427	4572
2008	3474	371	3751	1281	2093	21711	4749
2009	3007	876	5013	1179	1596	14002	5593

Areas occupied with *fruit-trees* recorded descending dynamics, as follows:

Year	Surface-owned orchards, ha	
	total	in which production
2005	71457	26343
2006	71084	25978
2007	64800	28361
2008	65100	21978
2009	63102	24269

In Bulgaria, the restitution of areas occupied with orchards has been accompanied by the payment to the State of taxes that should cover the value of the plantations and this led to the decrease of the interest for tree-growing and the increase of the number of abandoned orchards. In order to stop such degradation were taken a series of measures that compelled owners to keep the orchards and to set up production cooperatives for the exploitation thereof[7].

The area held by vineyards within the period 2002 – 2009 was reduced to approximately one half.

Productions. As presented in table 1, one could say that neither extraordinary productions have been obtained, but in comparison to the records of the Romanian agricultural sector, they are larger in their majority.

6 Statistical Yearbook of Bulgaria 2010, pg. 298

7 Constantin Florentina, *Privatizarea agriculturii in unele tari est-europene*, Teza de doctorat, ASE, 2005

Table 1: Average productions obtained at agricultural cultures from Bulgaria[8]

Specification	2005	2006	2007	2008	2009
Field crops, kg/ha					
Wheat	3157	3403	2197	4167	3187
Barley	2487	2942	2247	3943	3322
Maize	5308	4533	1459	4155	4707
Beans	1160	1318	1394	1169	1003
Sunflower seeds	1472	1594	937	1802	1928
Seed cotton	1148	1044	988	983	983
Tobacco	1427	1533	1374	1678	1842
Sugar beets	19112	19749	12684	-	-
Vegetable species in the field, kg/ha					
Tomato	16811	24283	19709	28345	24182
Cucumbers	13504	22224	16216	28394	23764
Green pepper	13418	17993	14395	15124	13648
Onions dry	9364	9143	8396	12485	6973
Cabbage	20939	25727	22055	30957	24636
Potatoes	15641	15771	13317	16258	16539
Melons	13759	18453	20894	19641	19757
Forage species, kg/ha					
Maize for silage and green fodder	12605	12823	3909	12804	13070
Alfalfa hay	4701	5251	3424	4671	4727
Meadows hay	3324	3276	2283	2804	2557
Fruit species, media, kg fruits/ha					
Apples, pears, plums, cherries, apricots, peaches	4663	5535	4558	4912	4978
Grape vine, kg/ha					
Wine grapes	3067	4494	4855	4390	4944
Table grapes	2640	4383	5460	7305	5315

It can be noticed that cotton cultures are maintained and areas cultivated with tobacco have increased; cotton may be a profitable variant in terms of global warming, as the resistance is rendered by the deep pivoting root of the plant; tobacco, by its tropical origin, may be cultivated on significant areas in Bulgaria, as the trend of the species is already increasing.

If the distribution on the market is considered, costs with the vegetal production are high. Thus, for one hectare of wheat, Bulgarians invest Euro 970 (table 2) and the result is 0.2425 euro/kg grains; further to making the conversion into RON and capitalizing the product in Romania, if it is produced with RON 1.05 and the market price is RON 0.8 – 1.0, the loss is obvious.

8 Surse: Ministry of Agriculture and Food, Agrostatistics Department

Table 2: Technological expenses for the wheat culture (4t grains/ha + 1.5 t hay/ha)

No.	Activities	Mechanized work	Material expenses / fuel, fertilizer, seeds, pesticides, water	Manual labor	Total costs
		Euro/ha			
1	Basic fertilization / NH_4NO_3; P_2SO_4; K_2O	50	275	5	330
2	Fall show + discussion	25	60	10	95
3	Sowing	20	60	15	95
4	Spring fertilized with N	40	20	10	70
5	Plant-protection spray	40	85	10	135
	fungicides	10	25	5	40
	herbicides	15	30	5	50
	insecticides	5	20	5	30
6	Harvesting	40	40	30	110
7	Closely straw	10	5	-	15
	Total costs	***255***	***620***	***95***	***970***
	Costs, %	26,30	63,91	9,79	100

Field cultures are obtained in exploitations of the type of such presented in table 3. The structure of the species is generally adequate; an exception is individual exploitation, in which the rotation of sunflower cannot be accomplished at the necessary interval.

Table 3: Types of exploitations (households)

No.	Types of exploitations/ households	Surface household, ha		Structure	
		min.	max.	species	%
1	Individuals	1.5	250	wheat	65
				sunflower	35
2	Unique traders	250	800	wheat	64
				maize	10
				sunflower	26
3	Household rent / lessor	800	6500	wheat	40
				maize	10
				sunflower	30
				rape	20
4	Agricultural cooperatives	500	2500	wheat	40
				maize	10
				sunflower	30
				rape	20

Vegetable production. Vegetables are demanded at local level and on export both in fresh condition and industrially processed.

On the territory of Bulgaria have been identified approximately 46 vegetable species that are reproduced in their majority by seeds and a couple of them by vegetative

organs (garlic, onion, horseradish etc.). The tradition of Bulgaria in vegetables is renowned. And in order to strengthen this, Professor Kolev[9] specified a number of 64 commercial enterprises and firms out of 28 countries that as early as 1970 were supplying themselves with seed material from the Bulgarian vegetable genome.

During the last years, the vegetable production was impaired and difficulties were visible. In regard to the area held by vegetables, we found its decrease by approximately 31% in 2009 versus 2005. From the cultivated area, 90% represent vegetable cultures in the field.

The area occupied by vegetable species is held by varied types of households (table 4), with a general average of 5.0016 ha/household. Individual producers predominate, who although not even cultivating 2000 m^2/producer, exploit a significant area. Nevertheless, 67% from the production is performed in agricultural cooperatives.

Table 4: Types of exploitations (households) and the related average area

Types of households	Suprafata medie/gospodarie, ha
Individuals	0,19
Unique traders	0,49
Agricultural cooperatives	13,83
Societies, registered under the law come	13,45
Civil associations	0,35
Other status	1,7

Further to comparatively analyzing the vegetable activity, a significant discrepancy is recorded between the Southern and the Northern part of Bulgaria: in the Southern part, the vegetable production is higher (within the period after 1989) by 5-6 times than the one from the Northern part.

In Southern Bulgaria, the predominant species are: onion (70%), cabbage (82%), carrot (94%), leek (96%), radishes (98%), savory (95.8%) etc.

Seed assigned to the setting up of vegetable cultures is produced in qualitative proven spaces that satisfy the requirements of each species and even variety, but the know-how is obsolete (works are manually performed in their majority). In the current conditions, State policies are liable to keep local sorts by stimulating the selection activity. The situation is so much more sensitive, as the seed material from the import is not suitable to the Bulgarian vegetable zones. In Northern Bulgaria are assigned 95 ha to seed cultures for vegetable species and in Southern Bulgaria 475 ha. Profitable productions are obtained by placing species (varieties) in favorable ecological conditions and using competitive and innovating know-how both in the production of the seed material and in the market vegetable products.

"Bulgaria should use more effort to develop its potential in the agricultural sector that has been neglected in previous years", admitted the Minister of Agriculture from Bulgaria at the International Agriculture Show 2011.

9 EE&AE'2004 – International Scientific Conference, Rousse, Bulgaria

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CONCLUSIONS

Further to the analysis and interpretation of the data on the average productions per hectare for the main vegetable cultures, it results that: due to the low degree of the technical outfit and the assignment of chemical fertilizers, very high oscillations can been noticed from one year to the other, at the level of yields per hectare and furthermore descending trends. It should be specified that oscillations of average productions occurred also according to the weather conditions; in all agricultural cultures, save small exceptions, in certain favorable years, large discrepancies versus the average of yields per hectare recorded within the European Union are experienced.

The reduction of the area cultivated with vegetables experienced in Bulgaria occurred due to the transition of the areas to other cultures, such as wheat and sunflower.

Although reputable by the vegetable production, the productive deficit is also generated due to the week preoccupation regarding the preservation of biodiversity of vegetal species (genetic material).

The impact of biodiversity researches influences decisions at the level of the economic and social environment, concurrently with taking measures regarding environment protection and nature preservation.

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SHAPING A SUSTAINABLE FUTURE IN THE ENERGY SECTOR

Paul Calanter[1]

Abstract

The growing consumption of energy is felt worldwide, and because of this issue the application of measures are required in this area. These measures are stipulated in the framework of policies and strategies in the energy field, whose objectives can be more easily achieved if the principles of sustainable development are taken into account.

Confusion is created between these principles and the dimensions of sustainable development; this paper wants to emphasize the difference between the two notions, with examples edifying in this respect.

Once the policies and strategies are formulated, things can move in any direction, and to demonstrate this, we considered it appropriate to present scenarios on energy policies and to try to identify where Romania stands right now, according to the axis that separates the two scenarios: a government commitment and degree of cooperation and integration.

Starting from the idea that "the main tool in the fight against climate change (...) is the energy policy" (A. Leca, V. Musatescu, 2010), the paper presents the premises of formulating viable policies and strategies, making some observations on Romania's Energy Strategy 2007-2020.

Key words: energy, GHG emissions, sustainable development, climate changes

INTRODUCTION

As the world increasingly feels the consequences of the growing of the energy consumption, the application of measures in this field is required, in order to minimize the adverse effects and lead to the increased quality of life through sustainable development. These measures are stipulated in the policies and strategies in the energy sector.

Once the policies and strategies are formulated, good or bad things can evolve, depending on their credibility, according to government involvement and the degree of cooperation and integration of the state.

XXI th century world faces a growing demand for energy and also with a decrease

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in the reserves of conventional resources, oil, natural gas, coal. If in the year 1950, world energy consumption was somewhere around 2 billion tonnes of oil equivalent, in 2010 it climbed to about 11 billion tonnes of oil equivalent (H. Wagner, 2010). About 20% of world population consumes 60% of the total energy produced and the remaining 80%, representatives of the less developed or developing countries, are consuming 40% of the total energy produced (J. Mohammad et al, 2010). This energy production (K. Kachkynbaeva) is materialized in: heat, electricity, and mechanical energy.

Associated with the energy consumption are: the growing high levels of water and air pollution, global warming, greenhouse gas emissions, all with negative effects on the quality of life and the environment.

"Energy is an indispensable input for economic activity. Economic growth will not be possible if a stable energy reserves will not be provided; it must come at a reasonable price and in a sustainable manner"[2]. This last point is actually one of the most important, given the vast spread of the concept of sustainable development, first formulated in 1987 by the World Commission on Environment and Development, in the raport named Our Common Future: "Sustainable development is one that satisfies needs of the present without compromising the ability of the future generations to meet their own needs."

To ensure a sustainable development, the first solution is to use renewable energy sources, thereby reducing dependence on fossil fuels and, covering a big part of the energy demand and decreasing the pollution.

The dimensions and principles of sustainable development in the energy sector

When talking about sustainable development dimensions, it refers in fact to the scope of sustainable development, namely the elements, called dimensions, to whom the sustainable development is aimed. A confusion is often being made between the size and the principles, the latter derives largely from the definition of sustainable development.

One approach that comes to support the idea above is to define the following dimensions of sustainable development in energy (according to International Atomic Energy Agency, United Nations Department of Economic and Social Affairs, International Energy Agency, Eurostat and European Environment Agency) :

Social dimension. The existence of energy impacts on education, poverty, people health. For the most part, sustainable development aimes the social dimension through the following fundamental aspects: the distribution of energy resources to be a fair one, and pricing schemes to be formulated so as to provide access to resources. "Energy should be available to all at a fair price" (Jonathan M. Harris, 2000). Also, the fact that the energy is used from various sources, should not be life threatening, but rather improving to our living.

1. ***Economic dimension***. All activities that take place in the sectors of an economy are energy consuming, their deployment depends on enough and

2 Asian Economic Integration and Energy Cooperation, http://www.rieti.go.jp/users/tanabe-yasuo/pdf/20050800.pdf

safe quantity. Therefore the economic dimension circumscribes on the energy security aspects, but primarily on the production structure and methods of use.

2. ***Ambiental (environmental) dimension***. Obviously, in order to talk about sustainable development, we must consider the impact that production and the use of energy from various sources have on the environment, especially on water, air, soil, and biodiversity.

3. ***Institutional dimension***. Institutional dimension includes elements of the energy system infrastructure in a country, and policies and strategies that aim to apply a sustainable energy future.

In the view of the World Energy Council, the dimensions of sustainable energy[3] are:

Energy security. This concept refers to the management of primary energy supply with internal and external sources, to the reliability of energy infrastructure, and to the capacity of the suppliers to meet both current demand, and future demand.

Social equity. Aims to see what percentage of the population has access to energy.

Environmental impact mitigation. This dimension is what brings in the notion of energy efficiency and renewable energy.

We can say that this approach is incomplete because the dimensions should include several aspects on which to act to achieve sustainable development.

R.J. Fuller, a researcher at a university in Australia, makes a description of the following four principles that underpin sustainable development in general, to customize the energy sector:

- ***Futurity*.** This principle focuses on carrying for the future generations and to substantiate an energy demand based on the need and not the false impression that we need to consume to more.
- ***Environment***. This principle supports the care for the environment, on which no human activity consequences should fall. Most often, the nature supports these consequences, whether we talk about waste generation, land usage, water use, pollution, etc.
- ***Equity***. The principle is very reasonable, but in the author's opinion, its the hardest to meet. We can see this, trying to answer the following question: to what extent people that are living in developed countries are willing to consume less energy, in the favour of the poor, in the underdeveloped areas, which can receive only the light of day to ensure daily living.
- ***Participation***. Last but not least, the principle of participation, follows the idea that each of us must take part in the decision process, to understand all the implications and potential risks.

The order in which they are mentioned is not related to the importance of taking every single principle, nor the importance of compliance with them. Really important is the bond that forms between them and the fact that only taken together they provide guidance to sustainable development.

3 Pursuing sustainability: 2010 Assessment of country energy and climate policies, World Energy Council

Possible evolution scenarios in the energy sector

An approach worthy of consideration, is the one of the World Energy Council, the study Deciding the Future: Energy Policy scenarios to 2050, which, in the idea of promoting sustainable energy, used to achieve the following graph, whose axes are the elements: government commitment, which may have a low or high expression, respectively, the degree of cooperation and integration, which also can be low or high.

To better understand why these two components have been proposed, it seems appropriate to analize their definition. Thus, the government commitment refers to how it is involved in the power system operation, the intervention ways in the energy market through various actions and regulations.

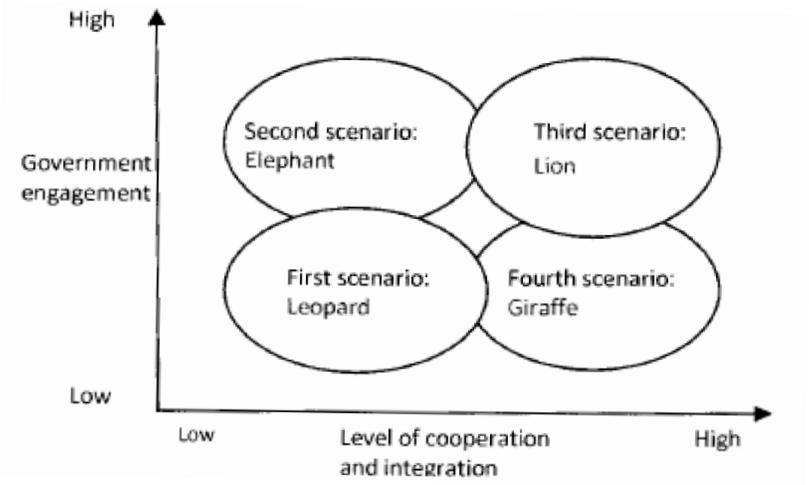
The degree of cooperation and integration in energy development, aimes at forming join ventures in order to solve common problems. The most common are the regional and international cooperation and integration. As we can see, these two notions are taken together, as they influence each other, although they can be defined separately (according to Asian Development Bank), for example:

- Regional integration refers to the process by which the economies of a region develop more connections between the elements which worked separately before in that area.

- Regional cooperation refers to the policies and initiatives of the cooperative countries, which could be included in intergovernamental treaties.

According to the two coordinates, four possible scenarios for energy policies are revealed, which can fit within the current energy policies, and to which they may tend, depending on the decisions that are taken. Thus, it outlines the following situations or so-called scenarios, named suggestively after animals, according to their characteristics (see Figure 1):

Figure 1. Graphical representation of the four scenarios that concern energy policies



Source: After the model of the scenarios presented in "Deciding the Future: Energy policy scenarios to 2050", WEC 2007

1. The first scenario is governed by the ***LEOPARD***

To designate the low degree in terms of cooperation and integration as well as government commitment, we used the comparison with the leopard, a solitary animal, which acts only when opportunities arise, defend their territory from intruders and not divide the spoil with anyone.

All this transposed in to the economy, means difficulty in transferring technology and know-how, deepening poverty level, and if we consider a low degree of cooperation and integration; if this is supplemented with a low government involvement, then the result is weak capacity to react to external events such as the influence of economic crisis, energy crisis etc.

2. The second scenario is the subject of an ***ELEPHANT*** behavior.

The elephant, although it is a social animal, once they build a family, they prefer not to relate too much with other families.

High government involvement translates into energy security. Cooperation and integration at low levels, results in pursuing their own interests, their needs, without taking into account the various programs and projects developed by the regional or international organizations.

3. The third scenario refers to the characteristics of the ***LION***.

The lion is a social animal and has nothing against the share of their food with others, is a good game art professor, teaching youngsters how to carefully plan a future attack.

In this case we can speak of a high-level cooperation, the pursuit of common interests, important at a global level, technological barriers removal by providing financial assistance in this regard, the development of programs whose objectives will be consistent with the principles of sustainable development.

4. The fourth scenario is based on studying the behavior of ***GIRAFFES***.

A very adaptable animal, the giraffe is doing well on its own, but also in alliances, it does not depend on anyone to survive and it defends itself in dangerous situations. The similarity made wants to emphasize the idea of government intervention, usually low, the short-term effects without proactive strategies that would save an economy in crisis. Salvation comes from the private economic agents that promote new technologies and open borders pertaining to transfer of know-how and for understanding with the powers in the field.

Therefore, the careful study of the four scenarios described briefly in this paper provides a starting point for establishing and targeting strategies and policies in the energy sector, depending on the framing in one of them. It should be noted that the analysis was done not by country, but by regions: North America, South America and Caribbean region, Europe, Africa and Asia. You can also see that there were considered only extreme possibilities. Most times, there are situations in which, the countries that try switching to a level of cooperation and higher integration, and the government is making efforts to involve and engage more in the field etc.

Romania seen from the perspective of sustainable energy

In Romania's Energy Strategy for the period 2007-2020, the principles mentioned in this paper, can be found translated into strategic objectives, covering: *energy security, sustainable development and competitiveness factors*, considered primarily by the European Union by the common energy policy.

"The overall objective of the strategy of the energy sector is meeting the energy needs both now and in the medium and long term, at a suitable price, appropriate to a modern economy and a civilized life standard, in terms of quality food safety, complying with the principles of sustainable development. "(the Romanian Energy Strategy 2007-2020).

Each EU country has, primarily a different degree of development, therefore, to claim the same objectives can cause imbalances in other areas, which ultimately will not target the concept of sustainability. Some targets are challenging even for developed countries of the European Union, not only for the developing countries like Romania.

The European Union started the program 20/20/20, which aims that by 2020[4]:

- to record a reduction in greenhouse gas emissions by 20% in comparison to the year 2005;
- to increase the share of renewable energy in total primary energy production, by 20%;
- to increase the energy efficiency, by 20%;
- to change the share of biofuels, to increase the content of transport fuels by 10% in 2020;

Towards these targets, Romania follows: the use of renewable energy at a level of 24% from the total use by the year 2020, the reduction of the greenhouse gas emissions by 21% and the percentage of biofuel to be at least 10 % in terms of using the new generation of biofuels (as PNAER).

The World Energy Council calculates the Energy Sustainability Index, taking into account two aspects: Energy Performance (75%) and Contextual Performance (25%). Energy performance includes in equal proportions of 25%, three elements: Energy Security, Social Equity, Environmental Impact Mitigation. The second aspect, the one related to the Contextual Performance is also measured by three items: Political Strength. Societal strength, Economic strength. All these elements are measured through indicators, giving scores from 1 to 10, obviously a larger score means a better situation in that category.

The table below shows the results for the year 2010 for Romania and the countries that occupy the higher and low places. We can easily see where are the lower scores, but on overall we have a touch of 5.13, which ranks us on the 40th place out of 91 analyzed countries.

4 According to Romania's Energy Strategy for 2007-2010

Table 1. **Rankings based on the Energy Sustainability Index in 2010**

		ENERGY SUSTAINABILITY INDEX 2010						TOTAL
Place	Country	Energy security	Social equity	Environmetal impact mitigation	Political strenght	Societal strenght	Economic strenght	
1	Switzerland	9.88	6.66	10.00	10.00	9.77	8.88	9.02
2	Sweden	9.00	6.22	9.88	9.66	9.88	7.22	8.51
…	…	…	…	…	…	…	…	…
39	Cameroon	8.88	1.22	8.44	1.22	0.33	5.00	5.18
40	**Romania**	**6.44**	**6.77**	**3.77**	**4.77**	**5.11**	**0.77**	**5.13**
41	Filipines	4.00	5.55	6.88	2.77	2.44	5.22	4.98
…	…	…	…	…	…	…	…	…
90	Ethiopia	0.22	1.77	5.44	0.77	1.22	0.44	2.06
91	Mongolia	0.77	1.11	1.11	2.88	1.66	3.55	1.42

Source: Table based on data available at www.worldenergy.org/documents/index_2010.xls

The lowest scores are found to Economic Strength indicator, calculated on Macroeconomic stability, Cost of living expenditure, Availability to the private sector, and the Environmental Impact Mitigation calculated from the Energy Intensity, Emissions intensity, effects on air and water and Efficiency of Electricity Production. Also, political strength does bot have a passing grade because our country does not sit well at the following chapters: Political Stability, Regulatory Quality and Effectiveness of Government, the indicators on which the note was obtained.

It is known that Romania is a net importer of energy, although we have an energy potential resulted in a wide range of resources: natural gas, oil, coal, uranium, and renewable resources.

If we consider the presented analysis, we can make the following observations:

- The results depend on the availability and degree of the data accuracy;
- Is hard to give shares to such indicators, given to the fact that the states considered differ accorindig to the degree of development, size, resources, priorities, concerns, etc.;
- We can make an integration of the policy and energy strategy of Romania in one of the four cases, respectivelly these four scenarios of evolution presented above.

As we all know, there was no need to confirm our notes, that in Romania, the Government does not have a high envolvment degree when it comes to development and especially in the energy sector. The government is unaware of the current issues, and the political instability disturbs the legislative, so most often cases it diminishes the effects of targeted measures in the strategy.

Therefore, on the graph whose axes have been given by the government's commitment and degree of cooperation and integration, we can not choose anything but a low level of government involvement. Regarding the second axis and considering the definitions of cooperation and integration and that we have already adopted the energy strategy, and the national policy in energy from renewable sources from the requirements of Directive 2009/28/EC, we can appreciate, but with great indulgence as we head to a high degree of cooperation and integration and that we can find a place in

the fourth situation, symbolically called Giraffe.

What this positioning of our country actually means? It means that we can expect the following developments:

- Cooperation between states and cooperation between private sector businesses, with potential positive influence on the economic growth;
- A decrease in energy intensity, which refers to „The amount of energy used in producing a given level of output or activity. It is measured by the quantity of energy required to perform a particular activity (service), expressed as energy per unit of output or activity measure of service" (according to the U.S. Department of Energy). This decrease is attributable to new technologies used, whose effects will begin to materialize;
- The increasing oil prices will lead to a lower demand for this resource;
- A tension caused by a larger demand for energy from renewable sources will be felt;
- Because of the poor government involvement, there will be increases in emissions of greenhouse gases;
- Total primary energy required will increase as a result of the free cooperation and the use of new technologies.

Romanian energy sector

In Romania, the energy is produced primarily in plants based on coal, natural gas and oil, plus the energy from hydroelectric plants and a few years now, specifically since 1996, nuclear power. There are three major energy consumers (INS, 2008), in order of use: industry, households and transport.

The entire energy sector is regulated by National Agency for Energy Regulation (ANRE), which "has the mission to create and apply the system for the functioning of energy sector regulation and market power, heat and gas in terms of efficiency, competition, transparency and consumer protection, and the one necessary to assure the implementation of the regulatory system and promoting energy efficiency to end users use of renewable energy".

Although considered to be an authority of national interest, ANRE is suffering because of the political influence since Romania's Prime Minister appoints the President of the agency. The European Commission has threatened to apply sanctions precisely because of this, and the lack of specialized training people in leadership positions.

The national companies acting in energy are: Nuclearelectrica, for generating nuclear power; Hidroelectrica, for hydropower production, thermoelectric power generation and electricity; Transelectrica energy transport in the national grid; Electrica for distribution and supply; Romgaz, the gas largest national producer; Transgaz, the national company for gas distribution.

Renewable energy in Romania

The specific types of energy resources in our country, and also the potential of renewable energy are presented in the National Action Plan for Renewable Energy

Sources Sector. But using these sources is restricted, so the potential is lower than the one presented in Table 2, because of the appearence of technological barriers, economic efficiency implications, but also on the environment.

Table 2. Annual energy potential of renewable energy in Romania

No.	Renewable energy source	Annual potential (thousand toe)
1.	Solar thermal energy	1 433
2.	Photovoltaic Solar Energy	103,2
3.	Wind energy	1 978
4.	Hydropower	3 440
5.	Geothermal energy	167
6.	Biomass	7 597

Source: National Action Plan for Renewable Energy Sources Sector

Romania produces and consumes energy from renewable sources (the sources mentioned above), according to Eurostat, as follows:

Table 3. Production and consumption of energy from renewable sources during 2002-2008

	2002	2003	2004	2005	2006	2007	2008
Primary production of renewable energy (thousand toe)	3748	4061	4594	4984	4831	4717	5418
Gross domestic energy consumption from renewable sources (thousand toe)	3749	4002	4567	4940	4781	4753	5483

Source: Eurostat

If we study briefly the data presented in Table 3, we see that in some years, the consumption of renewable energy exceeds the production. This is possible because Eurostat calculates this consumption, accounting the primary production with the production recovered, with total imports and variations in stocks, minus total exports and bunkers.

Investments in the energy sector, especially in renewable energy

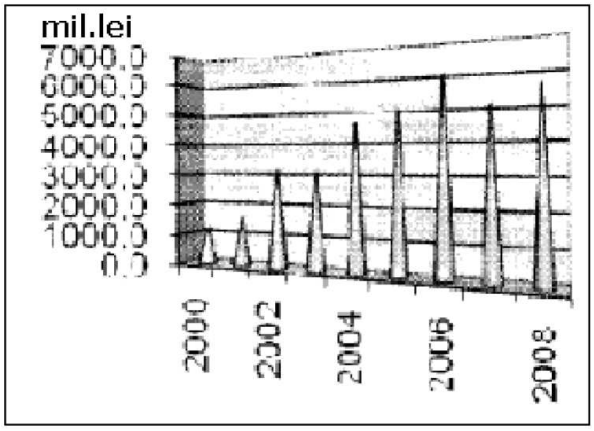
"Promoting investment projects in the renewable energy sector (wind, solar, biomass, geothermal, including municipal waste) and harmonizing the legal framework" (PNAER) is one of the directions for achieving the strategic objective in the energy sector, namely to ensure the energy security of the country.

Usually, such investments are characterized by: substantial financial costs,

the return on investment takes place over several years, there are risk elements and uncertainty about future flows of income and expenditure (Popescu, 2011).

In Romania's Energy Strategy for 2007-2020, an estimated of 1.8 billion is needed for investment in new electricity generation in the period 2007-2015, "so gross electricity consumption of renewable energy to be 33% in 2010 and 35% in 2015 from the gross national electricity ". In 2008, according to Eurostat, it was 20.4%, the values for 2009 are not specified, it remains to be seen whether Romania has managed to reach the target in 2010.

Figure 2. Investments in electricity, thermal energy, gas and water



Source: National Institute of Statistics

During the 2000-2008 period, the evolution of the investment in energy, including gas and water, was the one in figure 2, with the maximum value in 2006.

To achieve their PNAER goals, Romania would require investments worth 2.7 billion euros by 2015[5]. From what sources can these investments come? Romanian State and the European Union provide to investors, the following[6]:

- ERDF (European Regional Development Fund)
- EAFRD (European Agricultural Fund for Rural Development)
- Governmental Funds – Environmental Fund

Barriers to development investment projects in renewable energy

There are many barriers that are most often challenges to development investment projects in the energy sector, especially in development projects that focus on renewable energy. Therefore, we developed a grouping in a few categories that will be presented below.

5 http:/ www.windalliancegroup.corn/proyectos/eng/romania.pdf

6 http://www.ziuaenergiei.ro/2009/pdf/GlR.pdf

Administrative barriers

A study made on 27 European Union countries (including Romania), reveals that, there were a number of administrative barriers, meaning all types of difficulties encountered by stakeholders in the process of investment, difficulties that are related to working with people and public institutions. These barriers will be presented in an order made that shows that were they were mentioned most often. Among the administrative barriers are the following elements:

• Spatial planning failure

For most technologies used for obtaining energy from renewable sources are required considerable stretching sites, eg for wind turbines. Thus, in many places viable for exploitation of renewable sources a suitable location for the placement of plants cannot be determined.

• Nimby attitude

Nimby stands for "not in my back yard". Nimby attitude effect in this context can be translated as a reluctance to the project of general interest as social opposition, as a protest, usually against the rise of buildings near the house.

• Difficult procedures

They are actually referring to the long time needed to obtain the permits needed to develop, and to implement the investment projects in renewable energy.

• Too many authorities involved

Closely related to the one metioned above, this barrier refers to the excessive number of authorities involved in the licensing procedures.

• Local administration

The reasons for which the local government actions are seen as barriers may be: considering that such a project will have negative effects on tourism, local people disagree, the influence of power groups in the energy sector and more.

• Lack of experience

In most cases, those involved in the licensing procedures, do not have the necessary expertize on RES, delaying or refusing to grant permits.

• Heterogeneous application of the law

It was observed that often the same legal provisions are applied differently depending on the region, territorial administrative unit, etc. This is possible because the laws suffer of political influences and are made so as to leave room for interpretation.

• Unclear administrative framework

This includes corruption, conflicting legal provisions, lack of transparency.

• Governmental attitude

Governmental attitude refers to how the government is involved in the power system operation, the methods for intervention in the energy sector, through various actions and regulations.

Technological and technical barriers

This category of barriers relates to the degree of novelty of the technologies that are used depending on the type of renewable energy. Also, new technologies compete

with old technologies (UCS), shaping the first two barriers. Their presentation order is random.

- Lack economies of scale in the technology production in order to obtain the renewable energy

Economies of scale can lead to lower unit price of products, in the wind energy technology, solar or biomass. But as long as the demand for these technologies is low, then the production will be low, therefore the costs will remain high.

- Infrastructures

The investments in renewable energy require also the investment in infrastructure construction, which at least in the early years reflects the high costs of electricity supply from renewable sources exploited. Also, negative implications arise when the access to a power transmission line is difficult. Meanwhile, environmental aspects are taken into consideration, respectively the negative influence that the future technology may have on the environment.

Some authors (Beck & Martinot, 2004), include two barriers in the category of the market barriers, but they were included here, because they clearly refer to the technique and technology. Maybe a better manage would have been in a distinct category, which will relate to social barriers, because it targets the workforce that will operate with different technologies.

- Lack of technical skills

Technical skills are concerning primarily on those who work directly with the technology of producing energy from renewable sources; they will arrange the installation, operation, maintenance. These authorities targets the people who develop the project, the engineers, managers, architects and so on, because their absence will aggravate the decisions on technological characteristics correlated with the existing resources, needed for maintenance, identifying operating cost, etc.

- Lack of information on the new technologies

The technologies used in renewable energy are relatively new, there is a small number of people who knows information about them so they can understand how they function.

CONCLUSIONS

Renewable energy sources have a great potential in our country, and this is a motive on which investment projects can be developed to ensure a green energy production, necessary for a sustainable future.

Through this work, we tried to outline barriers that tend to limit the development of renewable energy, without claiming that we have given all. These are just some of the most common challenges when it comes to investment in RES projects. Grouping them into four groups, is an approach chosen by the authors, in the literature there are many approaches.

The barriers can be eliminated by various measures in the energy sector policies and more. Identifying and removing them is important, because many of renewable energy are obtained with low cost at a small scale.

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WHERE DOES ROMANIA STAND AT IMPLEMENTING ENVIRONMENTAL POLICY?

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Abstract

A progressive view upon environmental policy highlights the role of the state, which, together with other institutions (from the private or civil society areas), fights against the risks and disadvantages, such as inequality and poverty, both locally and regionally. In this context, it is undeniable that an important condition for reaching sustainable development objectives is the simultaneity of action across, within and between several dimensions. For this reason, states, regions and institutions need to come together and synchronise their objectives and actions according to commonly agreed priorities (Socol *et. al*, 2009). In other words, there is a stringent need to correlate economic policies with environmental ones, as well as with policy areas such as investments, labour force, education, health and research-development (R&D). Therefore, this paper will present a study-case upon climate change policies – how they can be defined, what are they typologies and what Romania's position among European Union's states is.

Keywords: environmental policy, sustainable development, climate change, Romania

Introduction

How can we define environmental policy? In the work of scientists, policies reflecting the concern for environment are mainly catalogued in two discourses: the one for sustainable development and the one for climate change. For example, within United Nations, there is a Commission for Sustainable Development and also a Convention on Climate Change (United Nations, 2011). Within the European approach, there is a Sustainable Development (SD) policy, as well as other general development policies (such as Europe 2020) and climate change initiatives representing constituent elements within them (European Commission, 2011)

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No matter the definition, ideally, sustainable development must simultaneously ensure a multitude of elements, such as economic development, social wellbeing and environmental protection. Golusin and Munitlak Ivanović (2009) present an interesting approach, stressing the importance of measuring the role of the institutional system for sustainable development, apart from the other three aspects usually evaluated.

A series of methodologies also include this fourth, very important component: the institutional or governmental element (it is, for example, included in the set of sustainable development indicators designed by the United Nations Sustainable Development Commission). It promotes societal needs and also helps implement sustainable development programmes.

Of course, inside these four main elements, a variety of themes, components, documents and indicators taken into consideration can be found. These will be explored in the next section, when analysing different academic and policy documents, as well as the status of implementation of environmental effectiveness.

This definition of SD will be accepted as the most valid and used for the research within this paper.

The typology of environmental policies and framework for the study

Traditionally, environmental policy was implemented only by applying taxes and the use of regulations; an approach that was essentially not effective in reaching its overarching scope (Bran, 2002). As a response, objectives such as environmental protection, education and conservation are often integrated together with the social and economic targets inside sustainable development initiatives, strategies and action-plans at a local, regional, national and international level.

Modern approaches are based on linking conservation or protection to development. Most of the countries have implemented this new view, especially under the pressure issued by the European Union or similar international bodies or conventions. In this respect, the EU has been described as "having the most progressive environmental policies of any state in the world although it is not a state" (Jordan, 1999: 1).

In this context, research on how the European Union influenced Romania's environmental policymaking evolution could bring to light important knowledge regarding the transition to cooperation and better regulation.

As stated by Peter Self (2000:189), the most important thing to acknowledge for the reform of capitalism is "a more effective state and a more active and egalitarian democracy". There is no right or wrong course of action, instead, policy decisions rely deeply on the amount of time and resources available, and sometimes the achievements cannot be easily allocated to the public, political or economic factors (Hague and Harrop, 2001;284).

Relating the matter of exploring the role of governments to environmental policy, we consider it is useful to identify the main typology of mechanisms used by the states to exercise power. Therefore, the table below summarises the main compliance mechanisms' typology, as reflected in the work of specialists.

Table 1. The typology of compliance mechanisms

Typology	Categories and their brief description
Etzioni	**Coercive means** (such as police and jails): "the weapons, installations and manpower that the military, police or similar agencies command" (Etzioni, 1961:87, 2001:38). This mechanism may be used to ensure compliance of all the individuals involved, but also to cover those who do not represent a majority.
	Utilitarian means or remunerative instruments (economic incentives generated by public expenditures or subsidies): imply manipulation upon the targeted population or market actors, so that the decision-maker persuades them to go in the direction set by the Government (Etzioni, 1961:87). *Remunerative power* is based on "control over material resources and rewards through allocation of salaries and wages, commissions and contributions, working conditions, "fringe benefits", services, and commodities. It is based on the control of instrumental relationship, activities, economic incentives and goals." (Sissaye, 2006:118)
	Normative means (appeal to moral values, moral education) (Etzioni, 1961:87) *Normative power* encompasses "the allocation of "symbolic rewards", "esteem and prestige symbols", and the use of rituals and norms to facilitate positive response." (Sisaye, 2006:116-117) This view relies on creating leaders, manipulating the mass-media and creating a sense of legitimacy.
Bemelmans-Videc *et al*.	**Economic means or "carrots"**: change people's behaviour when they consider that it worth to take the given advantages. Economic policy instruments are characterized "as involving the handing out or the taking away of material resources while the addressees are not obligated to take the measures involved." (Bemelmans-Videc *et al*. 1998:10, 30)
	Regulation or "sticks": are "measures taken by governmental units to influence people by means of formulated rules and directives which mandate receivers to act in accordance with what is ordered in these rules and directives." (Bemelmans-Videc *et al*. 1998:10, 30)
	Information or "sermons": similar to Etzioni's normative power; mainly refer to information and cultural implications. They concluded that by normative instruments, Etzioni also meant the "transfer of knowledge, moral suasion, exhortation, and other persuasive action as well as nonverbal symbolic performances." They "are regarded as modern forms of intervention, with an emphasis on prevention of wrong or stimulation of the right conduct by offering insights into consequences of behaviour"; they are defined as "attempts at influencing people through the transfer of knowledge, the communication of reasoned argument, and persuasion." (Bemelmans-Videc *et al*. 1998:30, 2003:11, 28-29)
Hill and Hupe	**Authority** – where rules are laid down in advance (Hill and Hupe, 2002; Hill, 2005:142)
	Transaction - where certain outputs are expected, often as specified in contracts (Hill and Hupe, 2002, Hill; 2005:142)
	Persuasion – where the essential mode of operation involves collaboration or what may be called co-production (Hill and Hupe; 2003, Hill, 2005:142)

As outlined in the table, the main categories of mechanisms employed are: regulation, economic means and information. In a more recent view, the European Environmental Protection Agency (EEA) uses an extended and more detailed framework to categorise policy mechanisms: economic, fiscal, regulatory, education, information, planning, research, voluntary negotiated agreements and other (EEA, 2011). This is the framework

that we will also use within the study of progress measurement in policy effectiveness. However, as a short methodological note, we consider that these 9 types are only a detailed vision of the three evidenced in academia and were developed to highlight policies that initially came in-between the 3 categories and were harder to define.

Romania's position for implemented climate change policies (Table 2.)

Romania is positioned on rank 22 from 26 member states, together with Slovakia. This is a very weak positioning, even in comparison with its neighbouring country Bulgaria. Moreover, most of the policies included in the database are well-established; therefore they should have been implemented so far.

Conclusions

Concerning climate change policies, EEA groups policies depending on their status of application: planned, adopted or implemented.

The EU country with the largest number of planned policies is Germany, followed by Ireland and Greece. Romania has only three planned policies, holding rank 15 from 23 countries. These relate to two actual documents: a greenhouse gas emissions reduction and an administrative capacity building plan.

In terms of adopted policy measures, the top three EU level countries are Estonia, Italia and Lithuania. Romania is ranked almost at the middle – on rank 14 from 22 countries. This is quite satisfactory news, although it was expected; since Romania elaborated quite a number of environmental policy documents, and also ratified and negotiated several international treaties.

Overall, for all three types of statuses, with a total of 15 policies, Romania is situated almost at the bottom line among European States. Its neighbouring country that acceded to the EU in the same time, Bulgaria, holds a total of 27 policies.

Other former communist states also do better. For example, Poland has a total of 64, ranking among best states, after Belgium and the UK. But this is also one of the old member-states. Comparatively, Slovakia, also one of the former communist block members, is situated below Romania.

Table 2. Implemented policy measures

Country	Measure type									
	Economic	Fiscal	Regulatory	Information	Education	Planning	Research	Voluntary	Other	Total
Austria	16.91	1.5	12.08	2.41	1.08	1	-			36
Belgium	13.29	8.68	15.9	19.28	11.7	10.97	3.44	7.2	5.8	97
Bulgaria	10.66	0.58	2.5	2.08	0.25	-	0.58	3	-	20
Cyprus	3	1	5	-	-	1.5	-	2	0.5	13
Czech Rep.	16.41	0.5	9.58	1.08	1.08	-	-	-	2.33	31
Denmark	12.83	11	17.5	5.33	-	-	1	1.33	-	49
Estonia	5.24	0.58	5.49	1.75	-	0.5	1	8.31	1	24
Finland	5.16	2	16	2.99	0.33	2	0.66	5.83	-	35
France	15	3.5	4.5	9.5	1	1	2	2	0.5	39
Germany	17	2	8	5	-	-	1	1.5	1.5	36
Greece	12.58	0.58	6.08	1.25	-	3.5	0.5	2	1.5	28
Hungary	21.5	1	8	0.5	0.5	7.5	1	-	-	40
Italy	6	0.5	9.5	0.83	0.33	-	-	0.83	-	18
Latvia	1	-	-	-	-	-	-	-	-	1
Lithuania	2.83	-	-	0.5	-	1.33	-	-	0.33	5
Luxembourg	3	2	2	-	-	-	-	-	-	7
Malta	10.5	-	2	0.75	1	0.25	0.5	1	-	16
Netherlands	5.03	4.19	5.86	1.16	0.5	-	2.03	5.2	-	25
Poland	19.33	1.83	18.83	2.5	2	1	3.5	1	4	54
Portugal	19.5	4	8.5	0.5	-	1	-	1.5	-	35
Romania	3	1	1	-	-	4	-	-	-	9
Slovakia	0.5	-	8.5	-	-	-	-	-	-	9
Slovenia	6.44	3.4	6.44	3.61	0.58	-	-	1.2	2	24
Spain	1.84	0.2	19.84	22.14	0.14	9.34	0.14	0.34	-	54
Sweden	11.3	8.83	14.83	-	1.5	-	-	2.5	-	39
UK	17.66	8.03	13	11.53	0.2	4.03	2.2	3.83	-	60
Total (EU-27)	257.51	66.9	220.93	94.69	22.19	48.92	19.55	50.57	19.46	804

*Ireland has no implemented policies

Source: processed after EEA (2011), http://www.eea.europa.eu/themes/climate/pam/output?any_word=&normal=SEARCH&id_status[]=1

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COMPARISONS BETWEEN NATIONAL RURAL DEVELOPMENT PROGRAMMES OF ROMANIA – BULGARIA

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Abstract

In this article is a brief analysis between the National Programmes for Rural Development of Romania and Bulgaria. In introduction are presented some aspects of rural development policy of the European Union, its importance, why is necessary such a common rural policy. The following is a brief statement of the rural development problems that exist in Romania, Bulgaria and then illustrated some similarities and differences between rural development programs of both countries. The article ends with some conclusions on this issue.

Keywords: rural development, Common Agricultural Policy, European funding, rural

INTRODUCTION

The European model of agriculture sector is based on a competitive, market oriented, performing also other public functions such as protecting the environment, providing more convenient residential settlements for the population in rural areas and the integration of agriculture with the environment and forestry. CAP moves its focus from direct subsidies to agriculture (Pillar I of the CAP) to the integrated development of rural economy and to protect the environment (pillar II of the CAP).[2]

More than 56% of the 27 Member States of the European Union (EU) live in rural areas, which cover 91% of European territory. This makes the rural development policy to be an area of vital importance. EU rural development policy aimed at solving the problems facing rural areas and their potential exploitation.

Each Member State may decide and implement rural development policy completely independent. But this approach would not work well in practice. Not all EU countries could afford the policy they need. Moreover, many of the issues addressed by rural development policy is not strictly limited to national territory or a particular region (eg, pollution knows no borders and the fight for environmental sustainability has become a

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European and international concern). Also, rural development policy relates to a series of policies developed at EU level. Therefore, the EU has a common rural development policy which, in a fairly large extent, is controlled by the Member States and regions. This policy is partly funded by the EU central budget and partly from national and regional budgets of the Member States.

The main rules governing the rural development policy for 2007-2013, and policy measures available to Member States and regions are covered by Regulation (EC) no. 1698/2005. Under this act, rural development policy for 2007-2013 focuses on three themes (known as „thematic axes"). These are:

- Improving the competitiveness of agriculture and forestry;
- Improving the environment and rural areas;
- Improving the quality of life in rural areas and encouraging diversification of rural economy.

For a balanced approach to policy, Member States and regions are required to allocate available funding for rural development based on three thematic axes. An additional requirement is that some of the funding should support projects based on experience gained through the Community Initiatives Leader. Rural development, „Leader approach" involves highly individualized projects developed and implemented by local partnerships to address specific local problems.

Before 2007, all Member States (or regions where powers are delegated to regional level) have established a rural development program, clearly stating which measures will be funded in 2007-2013.[3]

2. Rural Development in Romania

With a total of 238,000 km^2 and a population of over 21 million inhabitants Romania is as size the second new EU member state after Poland. From administrative point of view Romania is organized at NUTS 5 level, in 319 municipalities (out of 103 municipalities) which forms the common urban and 2851, which is rural (31 December 2005) according to Law 350/2001 on spatial planning and urban and Law 351/2001 on approving the National Plan for Territorial Planning. In turn communes are mostly made up of several villages (there are a total of 12,946 villages) who have administrative responsibilities. Towns and villages are grouped into counties (NUTS3 level) with administrative functions. The 42 counties are grouped into eight development regions (NUTS2). without administrative functions. Rural areas cover 87.1% of Romania in the country, comprising 44.9% of the population (July 1, 2010, as indicators of the National Institute of Statistics[4]), 9.63 million inhabitants in 2010.[5]

Having an agricultural area of 14,741.2 thousands hectares (or 61.8% of

3 ec.europa.eu/agriculture/rurdev/index_ro.htm

4 Currently Romania has a database containing relevant indicators of rural areas, as defined under national law.

5 Annual progress report on implementation of National Rural Development Programme in Romania in 2010, the Ministry of Agriculture and Rural Development, 2011

total land area) in 2005, Romania has significant agricultural resources in Central and Eastern Europe. Of the 4,256,152 farms 4,121,247 used an agricultural area of 13906.7 thousand hectares. The average agricultural area of farms in Romania is of 3.37 ha and is divided into approximately 3.73 parcels, which places it well below the average size of a European farm. Small farms are mainly represented by individual farms. Of the 4,121,247 working on individual holdings 65.45% (or 9,102,018.22 ha) of the usable agricultural area, while 18,263 farms operating with legal difference 34.55% (4,804,683.06 ha). Individual holdings on average 2.15 ha divided into 3.7 parcels, while farms with legal personality operating on average 269 ha divided into about 9 parcels.[6]

Romanian rural economy has as its dominant feature very high percentage of subsistence farms, producing mainly for own consumption, selling only a small market of the products obtained. In addition, subsistence farms are difficult to access other sources of income and therefore a significant welfare of the rural population depends greatly on the level of profitability of farms.[7]

3. Rural Development in Bulgaria

The Republic of Bulgaria is situated in the South-Eastern Europe and has a total area of 111,000 km^2. Bulgaria is divided into 6 planning regions (NUTS 2), 28 administrative regions (NUTS 3) and 264 municipalities (LAU 1). The national definition of rural areas defined as rural municipalities (LAU1), where population density is up to 150 inhabitants per km^2 and have a population of over 30,000 people. Under this definition, 80% of Bulgarian territory is classified as rural and where 41% of the population lives.

Structural adjustment in agriculture since 1989 and the Bulgarian government's lack of support led to various forms of land abandonment - to close or discontinue their use. Agricultural Census results of 2007 on agricultural structures shows that the number of farms in Bulgaria has continued to decline. During 2005 - 2007 has reduced the number of holdings (all types) and increased the average size of farms. Depending on the economic size of holdings, the group of small farms predominate of Bulgaria which have a size of up to four units economic size (more than 96% of the total number of holdings). The existence of a significant proportion of small farms is explained by: a significant portion of these holdings is operated as an activity generating additional income for pensioners and employees in other sectors of the economy and also some of the holdings are used by people forced to work in agriculture in the absence of other employment opportunities.

During 2003 - 2007, the total number of farms decreased by 26.4%, while the average size of farms increased by more than 42%. Is a substantial decrease in cooperative (41.4%), followed by civil associations and others (39.7%). Despite the

6 National Program for Rural Development of Romania 2007 - 2013 consolidated version July 2011, Ministry of Agriculture and Rural Development

7 Romanian Agriculture, Ministry of Agriculture and Rural Development, February 2010

predominance of small number of farmers, producers cultivează large scale during this period (2005) more than 60% of arable land, production and most agricultural products. Agriculture and rural residents are faced with structural problems in production: low productivity, product quality and difficulties of competition with imported products. Support is urgently needed to modernize the sector.[8]

4. Comparisons of rural development programs Romania - of Bulgaria

4.1. Title of rural development program in the two countries is the National Rural Development Programme 2007-2013 of Romaniarespectively the Rural Development Programme of the Republic of of Bulgaria 2007-2013. Each program is unique and covers the entire territory of each State.

4.2. Both in Romania and in Bulgaria whole country is classified as Objective „Convergence".[9]

4.3. The two programs have the same thematic axes which are laid down in Regulation (EC) no. 1698/2005. However, there are some differences in the measures will be financed.

In Romania, the National Rural Development Programme for the 2007-2013 programming period, are financed in a first stage 21 measures[10], followed in 2010 with 6 other measures and sub-measure.

In Bulgaria, Rural Development Program objectives are met through a number of 30 measures. Implementation of the program began with 23 measures that will be implemented over the period 2007-2013 (except the measure 143, sub-measure 2 to measure 431 and 611 of which were funded by the end of 2009). The other seven measures will be introduced in a subsequent period, after a change in the Rural Development Programme for the introduction of measures under Article 6 (c) of Commission Regulation no. 1974/2006.

Under Priority Axis 1, the main differences are found in the following measures: Measure 113 - Early retirement of farmers and farm workers (insert only in Romania after 2010), 125 - Improving and developing infrastructure related to the development and adaptation of agriculture and forestry (in Bulgaria this measure is implemented in a later stage), 124 - Cooperation for development of new products, processes and technologies in agriculture and food and 126 - Restoring agricultural production potential damaged by natural disasters and introducing appropriate prevention measures (are introduced only in Bulgaria since 2009).

In Axis 2 shows differences in the measure 221 - First afforestation of agricultural land (as adopted by Romania), 223 - First afforestation of non-

8 Mid-Term Review of Programme for Rural Development of Bulgaria, Period covered: 2007-2009, December 2010

9 Convergence objective refers mainly to those regions whose GDP per capita is less than 75% of the Community

10 Including Measures 511 Technical and 611 Complementary direct payments

agricultural land (in Romania is implemented in the second stage), 226 - Restoring forestry potential and introducing prevention actions (as they enter only in Bulgaria).

Under Axis 3, Bulgaria 2 measures are implemented more than in Romania, ie: measures 311 - Diversification of agricultural and non-321 - Basic services for rural economy and population.

In terms of Axis 4 Leader is not the difference in the programs. 4.4. Large differences appear in the budget for rural development. If the Romania has allocated an amount of EUR 8,022,504,745 and the total public contribution is 9,970,795,600 euros[11], for Bulgaria funds have a value of 2,609,098,596 euros and the total public contribution reaches 3,241,938,392 euros[12].

Table 1. Financial plan by axis (in EUR total period) - the initial allocation for Romania

Axis	Public contribution		
	Total public	EAFRD contribution rate (%)	EAFRD amount
Axis 1	3.967.311.581	80.00%	3.173.849.264
Axis 2	2.293.413.375	82.00%	1.880.598.967
Axis 3	2.473.739.880	80.00%	1.978.991.904
Axis 4	235.074.871	80.00%	188.059.896
Technical assistance	376.119.793	80.00%	300.895.834
Complements to Direct Payments	625.136.100	80.00%	500.108.880
TOTAL	**9.970.795.600**	**80.46%**	**8.022.504.745**

(*)Romania receives additional funds only for European Economic Recovery Plan
Source: National Rural Development Programme 2007 - 2013, consolidated version July 2011, Ministry of Agriculture and Rural Development

11 According to the initial allocation of National Rural Development Programme 2007-2013 Romania

12 According to the initial allocation for Rural Development Programme 2007-2013 of the Republic of Bulgaria

Table 2. Financial plan by axis (in EUR total period) - the initial allocation for Bulgaria

Axis	Public contribution		
	Total public	EAFRD contribution rate (%)	EAFRD amount
Axis 1	1 204 866 983	80.00%	963 893 586
Axis 2	777 394 110	82.00%	637 463 170
Axis 3	877 666 684	80.00%	702 133 347
Axis 4	76 988 306	80.00%	61 590 645
Technical assistance	123 181 289	80.00%	98 545 031
Complements to Direct Payments	181 841 021	80.00%	145 472 817
TOTAL	**3 241 938 392**	**80.48%**	**2 609 098 596**

Source: Rural Development Program of the Republic of Bulgaria 2007-2013, prsr.government.bg / index.php / en /

As shown by the data presented, Romania has allocated more funds than Bulgaria, respectively, a financing of over three times higher. But should be taken into account both area and population difference that exists between the 2 countries, and especially the area and employment in rural areas).

4.5. Both countries joined the European Union in 2007 and had before accession SAPARD program, which was meant to create the necessary implementation of a competitive agriculture and sustainable development of rural areas and promote the candidate taking the acquis Community's gradual adaptation to the principles of market mechanisms governing the Common Agricultural Policy. At the same time, gave the candidate SAPARD full responsibility for the management of investment projects, from the selection stage and to make payments to acquire experience in implementing EU standards and practices for proper management of post -membership.[13]

13 Final Report on the Implementation of SAPARD Programme in Romania, the Ministry of Agriculture and Rural Development, SAPARD Programme Managing Authority, June 2010

CONCLUSIONS

Romanian rural economy has its dominant feature a very high percentage of subsistence farms, producing mainly for own consumption, selling only a small market of the products obtained. Depending on the economic size of holdings in Bulgaria, dominated by small farms that group size to four units of economic size.

National Rural Development Programme Romania included 27 measures (a first step to start funding for 21 of them and after 2010 was launched the second phase which contains 6 measures), while in Bulgaria Rural Development program objectives shall be implemented through a series of 30 steps, beginning in 2007 with 23 measures, followed by 5 measures promoted in 2009 and continued by the other two measures in 2010. In most of the two countries have implemented the same measures with the following exceptions: Measure 113 - Early retirement of farmers and farm workers and 221 - First afforestation of agricultural land that is entered only by Romania and measures 124 - Cooperation for development of new products, processes and technologies in agriculture and food, 126 - Restoring agricultural production potential damaged by natural disasters and introducing appropriate prevention measures, 226 - Restoring forestry potential and introducing prevention measures, 311 - Diversification into non-agricultural and 321 - basic services for rural economy and population promoted by Bulgaria.

In 2007-2013, Romania will receive EU funds for rural development worth about 8 billion euros, while Bulgaria is allocated an amount of 2.6 billion euros. This difference is explained by the fact that in Romania, rural areas[14] is covering 207.300km^2 (87.1% of the country), employment in rural areas is 9.63 million inhabitants (44.9% of total), while in rural Bulgaria covers an area of 88.800 km^2 (80% of the country) and where there are 3.2 million inhabitants (41% of the population). The highest value of funds for rural development both in Romania and Bulgaria are granted for Axis 1 „Improving competitiveness of agriculture and forestry", followed in descending order of Axis 3 „Improving quality of life in rural areas and diversification of rural economy" Axis 2 „Improving the environment and the countryside" and the Leader Axis.

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THE NECESSITY OF ENSURING COMPETITIVENESS OF ROMANIAN WINES ON WORLD MARKET

Ion Şerban Dobronăuțeanu[1]

Abstract

European wines sector is in a structural crisis for a long time and their stakeholders: producers, EU governments and EU authorities agree that only by increasing the competitiveness, this agro-food product can re-become a success and a positive trend on international markets, according to the quality production's potential.

The Community financial support allocations for our country's wine sector, was stipulated by the Romanian's Accession Treaty to the European Union and was implemented by successive regulations for Common Organization of the Wine market R (CE) 1493/1999 and R (CE) 479/08 and included in „Single CMO Regulation" R (CE) 1234/2007 establishing a common organisation of agricultural markets, emphasizing on increasing productivity of Community wine.

This paper focuses on updated dynamics in terms of global wine market and measures implementation but also the Romanian producer's tendency and efforts to increase the competitiveness.

Keywords: competitiveness; consumption; common market organization; the wine market; financial support grant.

INTRODUCTION

The wine sector environment has changed profoundly in recent years and will continue to do so in the future. Liberalization and globalization have induced greater mobility of production factors, rapid relocation, fragmentation and higher specialization of activities regarding products quality and services. The agreements with the OCM and opening Chinese and Indian markets are important factors that will mark the next evolution of world trade in wine.

In addition, retention of national value becomes increasingly difficult due to the expansion of global value chains in an attempt to minimize costs and maximize profits. International competitiveness is therefore dynamic and the competitive advantages are

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more volatile and less durable.

The EU policy, has emphasized, since Regulation 1493/1999, the European wine competitiveness and has implemented measures to support the production of quality wines, reducing funding for various forms of support aimed to ensure producer's incomes, which led, mainly, to the decreasing of table wine production. Afterwards, the new Regulation for the Common Organization of Wine market R (EC) 479/2008 was approved, included in "single CMO" R (EC) 1234/2007 establishing a Common Organization of agricultural markets, which focuses even stronger on the measures support, in order to increase competitiveness through quality wine.

1. Evolution of world wine market

In recent decades there have been changes in areas under vines, production and consumption at regional and global levels. Thus, globally, the offer marked a decline as follows:

Table 1: The evolution of area under vines and world wine production

Year	Surface (ha)	Production (hl)
1985	9823000	333552
1999	7864000	283436
2010	7550000	263700

Source: OIV

At European Union level, in the last decade, there had been noticed significant quantity decreases in the Community wine sector, between years 1985-2009, the European wine production decreased from 78% to 68% share in world production.

There has been a long term reduction of demand in major markets in Europe, countries that actually provide a large share of world production but also consumption. Stopping the decline in consumption in these countries is the main objective of European producers, and therefore they have to "reinvent" the broad categories of wine consumers, especially young people.

Thus, between years 1992-2009, wine consumption / capita in France, Italy, Spain and Portugal fell on average by 20%, exception being Germany with constant consumption during this period. Wine demand was offset, in part, by countries with no tradition of drinking wine, where there was a continuous increase in demand.

In the worldwide context, wine sector developments are a consequence of changes in the consumer's behavior, raising living standards, strong growth of international trade etc.

A very important trend reported in the past two years, seemingly paradoxical in this difficult economic context, an attenuation of demand decrease in major European markets. This trend began to manifest in the second half of 2008 and continued until 2009. In 2010, wine consumption has remained stable compared with 2009, a total of 236.3 million hl. Except for Spain, where has been noticed a decrease, all traditional

European wine producing countries have stabilized wine consumption compared with 2009. We outline that these countries represent a large share in terms of world consumption, given consumption / person and significant population.

On a global level, the wine market is estimated to have been overcome economic crisis started in 2008. After a decrease in consumption by about 10%, international wine trade volume in 2010 recorded over 92 million hl, representing an increase of 6.7% compared to 2009. "For the first time in fifteen years, this recovery is seen more in European countries than in traditional exporting countries in the Southern Hemisphere and the United States," said Mr. Federico Castellucci, Director General OIV. It remains to see if the results of 2011 will confirm the growth trend of world consumption.

In terms of mergers and acquisitions among producing wine companies and their financial results, the big players in this field that state the "family" companies are more flexible and more effective than international firms, aimed mainly in short and medium term profit.

2. Evolution of Romanian wine market

In the past 20 years, the evolution of Romanian wine sector experienced the same downward trend, regarding areas under vines and consumption. The causes were multiple, but worth to mention are: poor economic performance of companies in the industry, strong consumer migration to beer (for reasons of price, usually of demand, lack of response to promote this product, etc.) exports decline especially on 1997-1998. This trend has changed significantly in recent years following privatization and Romanian investments during year 2000, accession of EU funds and those of national pre-accession and then the post-accession and foreign investment.

The first signs of economic crisis felt in Romania in early 2009 and the consequences were reflected in all economic sectors and thus on consumption. The decline in trading activity continued in 2011, the first semester general retail loss is 6% over the same period of 2010 and the drinks and tobacco fell by approximately 8%. The main wine consumer's tendency was to refocus on the cheaper wines, giving up, especially to medium level wines and buying those ones from economic category.

3. The measures taken by Romanian producers to increase competitiveness

a) Absorption of EU funds

Among the most important financing measures are restructuring and conversion of vineyards, which aims to increase the competitiveness of grapes growers, and also promoting on third country markets, measures given for information or promotion of community wines, to improve the competitiveness of wines with protected designation of origin or geographical indication or wines with an indication of the variety.

Table 2: National Support Program (in 1000 euros)

Nr. crt.	Measure	Fianciar year					TOTAL
		2009	2010	2011	2012	2013	
1.	Promotion on third countries	54,40	109,48	805,90	802,50	610,47	**2.382,75**
2.	Restructuring vineyards	30.381,10	37.414,27	40.952,64	40.777,50	41.139,53	**190.665,04**
2.1	*Plans underway*	11.311,60	4.134,31				**15.445,91**
3.	Harvest insurence	323,40	360,66	265,00	350,00	350,00	**1.649,06**
4.	Concentrated must	29,50	81,28	76,46	170,00		**357,24**
TOTAL		**42.100,00**	**42.100,00**	**42.100,00**	**42.100,00**	**42.100,00**	**210.500,00**

Source MADR

b) Measures of producers management

Amongst the decisions taken by producers we mention minimizing costs but also reducing the selling price of bottled wine, the adjustment range of products especially by launching new brands in the range economic, supply chain optimization, selection of marketing activities in order to obtain immediate positive financial results, increased exports.

With the need to provide a good table wine quality / price ratio and taking into consideration that 2010 was, in our country, a year with substantially low production of grapes, many producers have turned to imports of bulk wine from various European countries especially Spain. In table 3 we can see the wine imports increased at an annual rate of about 80% in 2010 and 2011. This wine is bottled as table wine or wine mixed or not with native one and labeled "wine produced in the EU."

Table 3

Indicators	Import Val. (1000 E)	Import Val. (1000 E)	Import Val. (1000 E)	Import quantity (1000 kg)	Import quantity (1000 kg)	Import quantity (1000 kg)
Country	Romania	Romania	Romania	Romania	Romania	Romania
Year	2009	2010	2011	2009	2010	2011
ExtraEur27	2478.65	2029.06		1770.7	1397.4	
IntraEur27	12335.05	18677.03		11693.4	21093.4	
TOTAL	**14813.7**	**20706.09**	**17336.150**	**13464.1**	**22490.8**	**34116.816**

Source: EUROSTAT years 2009-2010, INS January-May 2011

Export data show stagnation, but we should outline the superior value / liter of wine, comparing to wine import. Should also be noted that exports remain an important outlet for many producers and they make great efforts to increase sales in foreign markets: developing their own export departments, participate in fairs and trade missions, and conduct many activities of prospecting and tender. "The production of local wine needs more than one brand of national promotion, must be created a brand

by which international markets recognize the wine".[2]

Romanian producers participated in the international wine competitions, their portfolio shows a beautiful recognition of Romanian wines quality: the 2009 Romanian wines have won 59 medals in 2010 - 74 medals and the first half of 2011 were have won 56 medals in competitions abroad.[3]

4. Conclusion and proposals

Analyzing the structure of the wine on a global and national level and its socio-economic evolution context, we draw the following conclusions:

a) Nowadays, the demand / supply balance has improved greatly, the global wine stocks indicator is at the lowest level in decades.
b) The chronic decline of wine consumption / person in traditional European countries, countries that provide an important share in world consumption, has slowed down and the data for 2010 show a constant consumption compared to 2009.
c) The past few years period was marked by economic crisis hit, leading to lower consumption in many countries and consumer orientation, partly to cheaper wines. This situation is still present in Romania but in other countries has improved.
d) The effects of the crisis for producers were not only lower consumption, but also worsening of business environment, mainly in terms of opportunity to attract capital and possibility of allocating investment funds, development, research and marketing.
e) The wine export potential still remains important, export markets provide a growing share of total sales higher and higher and in 2010 the report shows that export volumes increased in most markets.
f) The measures provided by wine Common Market Organization identified as quality of supply, market orientation and promotion of wine in third countries as the most efficient ways.

To sum up, given the applied Community financing systems and their effects on the wine sector and also taking into consideration the most important trends in the wine market, we outline the following recommendations:

1. For the current situation of the Romanian wine growing sector, vineyards restructuring and conversion measure is a top priority. Bear in mind that in the new CAP, in order to raise the amounts given to our country, in this applying the measure to a greater number of hectares, an effective objective would be to apply the measure to

2 Livia *Mirescu Possibilities for improving the marketing of products at SC Domeniul Segarcea,* PhD thesis, Academy of Economic Studies , Bucharest

3 Producers and associations of wine producers sites

approximately 5-6000 ha / year.

2. Wine producer's orientation to the new markets: China, U.S. and Great Britain.

3. Only companies that will keep pace with changes taking place in the field of marketing will be able to adapt to the new economic and social environment. Implementation of modern marketing, courageous and effective, as applied in other beverages such as beer, spirits, low alcohol drinks - Alco pops or non-alcoholic beverages in so-called soft drinks and ready to drink

4. Entrepreneurs and managers must draw up plans for medium and long term business that will lead to consolidation and business development and to provide protection in case of any adverse factors such as increased business input costs, wine price stagnation, unfavorable agricultural years etc.

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DIFFCULTIES IN THE PROCESS OF INCORPORATION AND AFFIRMATION OF SMALL AND MEDIUM – SIZED ENTERPRISES IN RURAL AREAS

Gaman Virgil Laurentiu[1]

Abstract

In the beginning of the 80s, as a result of the intensification of the process of globalization of the national economies, on the plan of restructuring and improving the organizational framework of business unfolding, economic small and medium – sized organizations emerged and rapidly extended, universal economic phenomenon generically called the SME sector. This type of economic organizations grew rapidly in the economy of all contemporaneous countries, penetrating all economic activity sectors, soon becoming the leading sector of the economy of developed and developing countries. The objective process of incorporation and affirmation of the small and medium – sized enterprise sector unfolded in convergence with another economic process that manifested itself through the increase in the importance of transnational companies, which enhanced the world economy globalization.

The incorporation and consolidation of small and medium – sized enterprises, together with the affirmation of transnational corporations, are the result of multiple causes, but mainly economic.

The agricultural activity represents and will represent for a long time the main occupation of the rural population, being considered the central axis of the rural area. This dominant position of the agriculture in the national economy has deep roots in the history of the economic and social development of our country, which has reflected itself in the low level of social and economic development and economic efficiency.

In most areas, agriculture and forestry dominates the entire regional economy. The agriculture is outbalanced by industry only in Western, Central and Ilfov-Bucharest areas. As a consequence, the starting point in the evaluation of the economic potential of the agriculture is the financial factor, considered from the point of view of the type of ownership, the usage structure of the land and the quality of the soil.

Although our country possesses good conditions for the carrying out of agricultural activities, the production per inhabitant for the main agricultural products

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does not ensure the necessity of productive and non-productive consumption, the problem of food safety being far from being solved and because the agricultural reforms from the past years do not satisfy the stringent consumption needs, we are obligated to resort to a massive import of such products.

Within this general framework, special organizational and economic measures are needed in order to ensure a visible enhancement of the development of agriculture in general, and cattle breeding in particular. The significant increase in the animal production and the structure of the agricultural production represent a necessity for our country, for the efficient integration in the agricultural structure of the European Union and for the increase in the competitiveness of animal and agricultural products in general on the European and world market.

The efficient carrying out of agricultural activities, irrespective of the specific features of the sectors and components, is conditioned by the existence and quality of some agricultural services that appear in the productive flow of vegetable and animal production. At present, the use of such agricultural services, indispensable in the process of agricultural production, is inadequate.

The activities related to the mechanization of agricultural works, chemical treatment of surfaces, plant protection, sanitary – veterinary activity, etc., deeply affect the volume and quality of the agricultural activity. A part of such services is carried out by resorting to the economic agents from the source of the agricultural productions or directly by the agricultural units. The connected agricultural services carried out directly by the exploitations are extremely limited, having an insignificant importance within the total value of the agricultural production.

The mechanization of the agriculture represents an important component of the technical progress in agriculture that ensure a substantial increase in the productivity of labor, the decrease of the old methods specific to the traditional agriculture based on manual labor. By its positive effects on the increase in the volume of production, the improvement of the product quality, the increase in the economic performance, mechanization, together with other connected activities and production factors, such as irrigation, the use of high-quality biologic materials, etc. leads to the increase in the productive capacity of the labor force that carries out agricultural activities, which materializes itself in the production of a bigger amount of agricultural and agri-food products and in the providing of food for an increasing number of persons working in the other sectors of human activity. Under such conditions, the mechanization represents the material support that provides the possibility of training the persons working in agriculture and relocating them in other activities from the urban and rural environment.

But the increase in the productivity of labor in the agricultural field is conditioned by the increase in the degree of mechanization of all agricultural works, by the reaching of a certain level in the productivity of the agricultural work, which should allow the increase in the performance and competitive capacity of the agriculture and the development of internal and foreign market relations.

At present, in our country, the level of agricultural mechanical equipment is far from ensuring the carrying out of a large range of agricultural works during the optimal period of the year, provided for in the technologies of various animal species, which leads to significant harvest losses and affects the quality of products. This requires the equipment of the agricultural processes with tractors and cars because Romania is on one of the last places in Europe.

As a result of the enforcement of the provisions of Law no. 18/1991, the rural property extended constantly, becoming thus quasi-dominant in all the structures of the agricultural production, together with the diminishing of the public-private property. At the end of 2008, 91,5% of the agricultural surface was privately owned, the tillable areas – 95,8%, the pastures – 91,6%, grasslands – 97,9%, vineyards and vine nurseries – 96,5%. The used area is comprised of 6,728.6 thousand of ha, from which 6,309.3 thousand ha are grasslands, 25% of those being privately owned and the difference being public property. Although the restoration and the establishment of the property rights for the agricultural and forest fields has officially ended, there are still unresolved disputes.

As compared to the level of average yield per hectare obtained by the countries with a consolidated agriculture, including the European Union, the production is 2-3 times lower for almost all crops, emphasizing the subsistence level of the Romanian agriculture. For instance, in what concerns the wheat, in 2003 the medium production per ha was only of 1,429 kg, in 2007 – 1,541 kg and in 2008 – 3,403 kg, in 2007 Belgium had 7,418 kg per ha as average production, France – 6,250 kg, Germany – 7,110 kg, Ireland – 8,115 kg. In 2007 the sugar beet production of Romania reached 26,065 kg/ha, while Austria had 62,839 kg/ha, Switzerland had 74,338kg/ha, France had 84,403 kg/ha and Spain had 71,920 kg/ha. In potatoes production, in 2007, Romania spoke of 14,108 kg, Denmark – 39,456 kg, Switzerland – 41,723 kg, France 45,377 kg, Netherlands – 40,720 kg. These huge differences in the yield can only be explained by the high level of technologies and techniques which can be found in developed agriculture countries, by the quality of the human factor, by the agricultural surfaces, including by their behavior in what concerns the production and its capitalization.

By comparing these results, one can draw the following conclusion: the need to increase technical, political, technological and organizational efforts, to emancipate ecological beliefs and to adjust the human behavior in the agricultural exploitations of our country.

In the rural area, the agricultural activity will represent the central axis of human activities for a long time. Increasingly, besides such activity, many other non-agricultural activities occur in the rural area, which gives it a new social and economical dimension. Such activities have a beneficial impact over the life of rural communities ensuring additional income and absorbing the available agricultural staff.

Over 20 non-agricultural economic activities are carried out in the rural area, being performed by an important number of economic agents, most of them being family agricultural exploitations, whereas the share of legal persons is still reduced.

Speaking about individual economic agents, the main share goes to the commercial activities, followed by milk producers, then grapes, fruits and vegetables. The same thing happens in the field of legal persons, where trading economic agents hold the largest share, mainly as cooperative structures.

The orientation of the economic agents towards commercial activities can be explained by the low level of resources needed for their establishment, and also by the short period of return on investment, of profits as well, and finally by the less experience required for their management compared to other business activities. A small number of economic operators act in the field of crafts (crochet brides, handicraft), most of them focusing on individual agricultural exploitations, only few of them being legal persons.

SMEs in the rural area

Non-agricultural activities are carried out especially in small and medium-sized enterprises, considered as 'the engine of economical growth' and also of the decrease in social pressure over the rural areas. Between 1991 and 1994, the incorporation of SMEs grew rapidly for the entire national economy, decreasing towards 1996. After 2000, the revitalization of this sector intensifies.

In spite of all these, a thorough evaluation of SMEs' activity emphasizes a weak consolidation and development, not keeping up with the rest of the national economy's sectors, mainly in the rural area where less than 20% of the units are struggling.

Crafts and small handicraft industry

In the mountains we learn that mostly forest activities, pastoral, hunting and fishing activities were successful, as well as small industries and handicrafts. These represented for centuries the main occupations of the inhabitants of the Carpathians Curvature that have been passed down form generation to generation. Some of these crafts gained in time a cultural value, due to folkloric and ethnological traditions that characterize the Romanian rural area, becoming a small handicraft industry promoted through fairs organized on various occasions in many parts of the country and in Bucharest.

A series of crafts developed in the rural areas, especially in the field of constructions – bricks, tiles, terracotta, lime, timber, which are at present revitalized, although the necessary material resources does not cover the entire local plan. Generally speaking, the craft and handicraft activity is still facing a series of problems specific to the past years, such as: the lack of financial resources for the improvement of production activities, the lack of apprentices who should learn the traditions of the village. Due to the insufficient aid given to the craftsmen and artisans of the Romanian village, their activity stays off the capitalization of our culinary, folk and ethnographic traditions.

Tourism activity

It is the diversity of the different components of the physical and geographical environment who justifies the numerous and complex natural conditions proper for the enlargement of tourist activities. Romania's tourism activities are mainly placed in the mountains, on the Black Sea coast, in the Danube Delta, on the hills of Transylvania

and very few on the plains. The reasons for their low level of development are both objective and subjective.

The mountains offer the most significant tourism potential, based on their landscapes, flora and fauna. More than 3600 species of Romania's Gymnosperms and Angiosperms represent 40% of the total European flora, as well as some 3380 fauna species. Beside its economical and environmental protection functions, the vegetation has also a high tourism value, in terms of scientific, medical, leisure and nature landscape attributes. From this point of view, the coniferous forests and the circumscribed forests around villages offer the best framework for the development of the ecological tourism.

The fauna, through its hunting, aesthetic and scientific capitalisation, represents both an attraction and a solid support to practice tourism and especially the hunting one, by the residents and foreigners. There is a hunting and fishing fond in the mountains and not only, characterised through a big diversity of species – bear, deer, chamois, wild boar, mountain cock. It is to add also the forest areas from hills and plain, where roes, stags, wild boars live, as well as the magnificent Danube Delta that is birds' and fishes paradise.

On the territory of Romania there are some national areas of national interest, which through their content stimulate the scientific growth and instructive-educational actions, this way creating the support to practice scientific and ecologic tourism. In 2008 there were 77 scientific reservations with an area of 310,032 ha, 13 parks with an area of 315,857 ha, 230 natural monuments on an area of 96,228 ha, 661 ha of natural reservation on an area of 308,031 ha, 14 national parks on an area of 737,428 ha, 3 biosphere reservations on an area of 664,446 ha (the Danube Delta – 580,000 ha, Retezat – 38,047 ha, Rodna – 46,399 ha), 5 damp areas of international importance, 108 birds fauna special protective areas on an area of 2,992,798 ha.

No less important from the tourist point of view are the 40 main natural lakes (glacial lakes, volcanic crater lakes, dam lakes, river-sea side lakes, sea lakes, meadow lakes and those in the Danube Delta). Additionally, one can speak about the two main anthropic lakes for energetic purposes, as well as historical, religious, cultural, economic sites, which forms a stimulating ethnographic patrimony for the cultural and religious tourism.

Infrastructure coordinate

The potential of the infrastructure of the rural area, designed as a set of natural, organizational and information elements that ensure the connection between the various economic branches and sectors, represent the natural support of agricultural and non-agricultural activities and of the productive and unproductive service providers. Its level, structure and quality reflect the premises of the economic and social development of rural communities and of the ensuring of the natural and spiritual civilization in the rural environment, and the net quality of the rural population. The higher the level of such potential, the more attractive the rural areas.

The transport, telecommunication, electricity, water, gas infrastructure and the management of the waste, educational, health and cultural activities are extremely

important for the initiation and expansion of the rural tourism, generating new economic, social and cultural activities, jobs and wages.

At present, the general characteristic feature of the rural infrastructure is the existence of great discrepancies as compared to the infrastructure of the urban areas and of foreign countries, especially to the level of the infrastructure of the consolidated community countries.

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OPERATION AND EXPANSION OF ROMANIAN AGRICULTURE PRODUCERS GROUPS

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Abstract

In order to develop a model for development of Romanian agriculture is needed study in force and effect legal framework and its application on Romanian agriculture producer groups, to establish legal forms of association and cooperation between producers and processors on pathway product. To achieve this research were used documentation, comparative analysis, synthesis, statistical analysis. Processed data were used in the national legal framework, the National Rural Development Plan 2007-2013, Ministry of Agriculture and Rural Development.
Key words: rural development, producers groups, associations, cooperatives, agriculture

INTRODUCTION

In previous years, challenges of the Romanian agriculture were:

- lack of annual plans for implementation of agricultural policy in the field that is constantly updated and communicated to the needs of interest groups;
- unbalanced access in time and space of pre-accession funds that causes structural social and economic differences; in addition, there is an excessive bureaucracy of accessing European funds;
- non profitable mentality of farmers caused and emphasised by:
- - increased fragmentation parcelling of land (effect of reform);
- large sector of subsistence and semi-subsistence farms;
- weak manifestation of entrepreneurship in rural area;
- high number and value difference between commercial and individual farms.
- precarious existence of an infrastructure of roads, rail, public service, water

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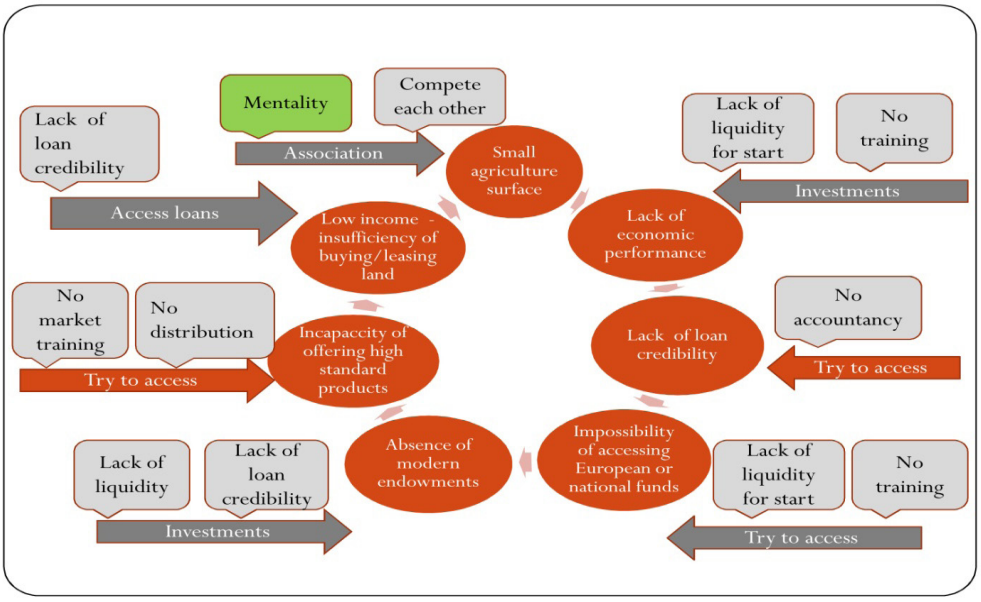
and sanitation, communication.

Therefore, the Romanian agriculture is now within a vicious circle (Ignat, R., 2011) and seems not to have any way out:

Figure 1 – The vicious circle of the Romanian farmer



Source: Ignat, R. 2011

Agro-food producers groups - Conceptual Issues

Therefore, association in agriculture seems to be the most suitable way out from this vicious circle. According to law in force, groups of producers may be:

- firms, according to Low no. 31/1990;
- firms and other forms of agricultural associations, according to Low no. 36/1991;
- associations and foundation according to Government Ordinance no. 26/1991;
- associations and foundations, according to Government Ordinance no. 26/2000 regarding associations and foundations;
- agricultural co-operatives, according to low of agricultural co-operative no. 566/2004;
- any other form of formal association, according to low.

Producer groups are established and operate to free initiative of the producers, based on the unity of interest and action of the group and shall include at least five members. The Romanian Ministry of Agriculture and Rural Development acknowledged 51 groups of agricultural and food producers, as form of integrated production. Six counties have shown, the MARD website, producer groups recognized by the Ministry, as required

by law - Bacau, Caras-Severin, Cluj, Gorj, Hunedoara, Mehedinti (http://www.madr.ro/pages/dezvoltare_rurala/grupurile-producatorilor-recunoscute-30.03.2011.pdf, accessed on 20th of June 2011)

A form of producers groups might be the Inter-Professional Organizations for Agro-food Products (OIPA), which are under the supervision of the Organizing Committee for Inter-Professional Organizations for Agro-food Products of the Ministry of Agriculture and Rural Development. The legal framework in force is represented by: GEO nr.103/2008 establishing inter-professional organizations for agricultural products (published in Official Gazette no. 641 din 09/08/2008), approved with amendments and additions; on 12th of March 2009, a document approved by Law 29 / 2009. The reason of interest for this theme is given by this comprehensive approach to product and product market

Legal framework for the organization and operation of Inter-Professional Organizations for Agro-food Products (OIPA)

The legal framework for the organization and operation of Inter-Professional Organizations for Agro-food Products (OIPA) is given by three important laws: Government Ordinance no. 55/30th of January 2000, Law no. 778/2001 that are further analysed.

Government Ordinance no. 55/30th of January 2000 on Inter-Professional Organizations for Agro-food Products (OIPA):

- the first in a series of acts that regulate the activity OIPA;
- the first establishment and operation of inter-professional organizations on agro-food products, emphasising the main objectives and activities and their rights and obligations.

The Government Ordinance no. 55/30 January 2000, defines the terms:

- the food products is a natural product of vegetable and animal origin, including bio and semi-manufactured products, processed and/or preserved, derived from natural;
- food product chain - the system of operational relationships linking producers, processors, transporters, storage, distributors, retailers and/or commodity exchanges that trade the same product for any use and/or its use;
- food product market - all relationships relating to the sale documents, including food supply and demand of a product, place of meeting between sellers and products' buyers.

Thus, Inter-Professional Organizations for Agro-food Products (OIPA) is:

- a private or public Romanian legal person of with professional aim, legal status of associations, non-profit;
- formed by professional organizations, non-profit association with legal personality, the chain of production, processing, transport, storage, distribution and marketing of agro-food products;
- each OIPA within an organization must be representative for its product chain, in terms of economic importance, the number of members.

Also, the Government Ordinance no. 55 defines OIPA's main activities:

- it proposes policy and public administration measures to improve the economic efficiency of the product chain;
- it views the draft regulations promoted by public authorities in agro-food;
- it formulates proposals for improving the activities of the product chain.

Law no. 778/2001 on Inter-Professional Organizations for Agro-food Products:
- proceeds the provisions of Government Ordinance no. 55;
- establishes the main objectives and activities and the rights and obligations of OIPA:
a) sustainable development of agricultural production by supporting private farmers to enhance the material and human resources in rural areas in order to increase the economic force of farmers and agricultural associations;
b) correlation of production and product's quality with market demand, increased production, marketing products and stimulation the production of biological products;
c) improving information on supply and demand;
d) development of the agricultural products business spirit and training specific to the market economy, by ensuring competitive selling prices;
e) promoting international agro-food products and external markets;
f) providing opportunities and equal rights for all members;
g) participation of farmers in developing strategies and programs of the sector;
h) protection of members' interests in their relations with other government bodies and public administration;
i) develop and promote programs and obtain financial support to members;
j) work with funding bodies in the country or abroad for borrowing and implementing programs to ensure sustainable and competitive development of farms;
k) collaboration with other state and civil bodies to common understanding of policy sale and purchase price with economic relations;
l) concern for promoting practices, production technologies, to ensure environmental protection;
m) providing consultancy, management and marketing, mainly in the association, in cooperation with the National Agency for Agricultural Consultancy under the Ministry of Agriculture, Food and Forestry.

Emergency Ordinance no. 103 of 03/09/2008 on the establishment of branch organizations for agricultural products keeps the definition of the objective of regulation and represents facilitation for incumbent obligations of Romania as a result of commitments towards European Union to take all measures necessary to facilitate agriculture's access to EU funds.

Its aims were:
- to facilitate implementation of the common agricultural policy and in particular the provisions relating to the establishment and recognition of interprofesional organizations that have an important role in the provision of consultancy and training services in order to increase capacity to absorb EU funds;
- to launch the measure 1.1.1. "Vocational training, information and diffusion of knowledge" and the measure 1.4.3. "Providing advisory and consultancy services for farmers" that were scheduled in order to create legal framework for recognition of

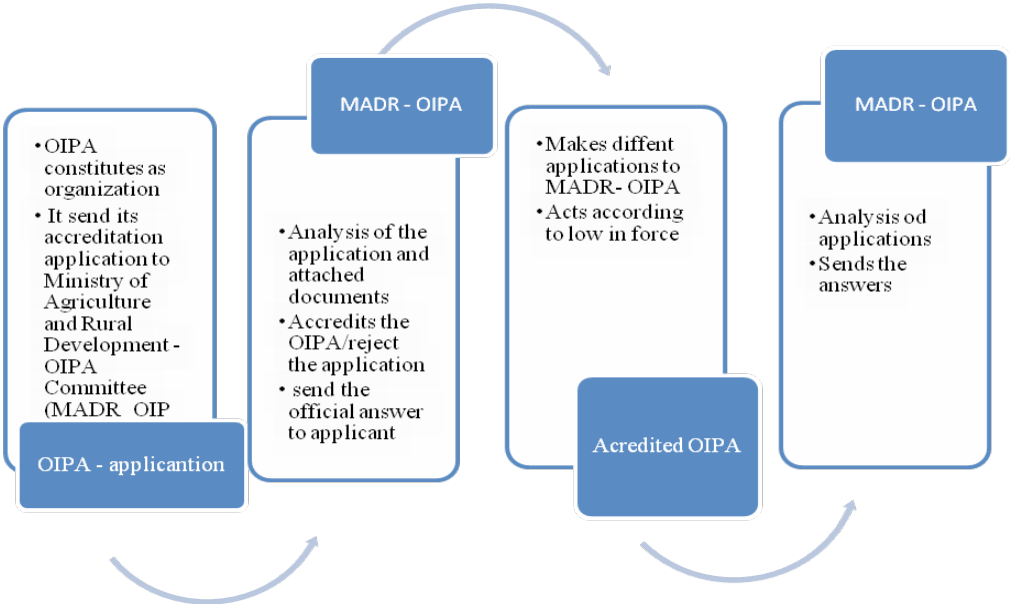
interprofesional organizations that may benefit of these measures;
- to reduce the risk of losing EU funds through the National Rural Development Programme (RDP) - to redefine terms and to introduce some new ones.

Today, there are five OIPAs registered by the Ministry for Agriculture and Rural Development:

- Sugar Interprofessional Organization from Romania
- Wine National Interprofessional Organization
- National Interprofessional Organization of Medicine and Flavoured Plants Associations
- Cereals and Derived Products Interprofessional Organization from Romania
- Poultry, Eggs and Proccessed Products Interprofessional Organization

Following all these aspects and the legal framework, we propose the further organization and operation scheme of OIPA:

Figure 1- Organization and operation scheme OIPA



According to Romanian legal framework, OIPA should contribute to:
1) smooth functioning of markets by promoting market oriented products in terms of quantity and quality;
2) ensuring the necessary transparency in the proper functioning of the of agricultural markets;
3) implementation of standard contracts compatible with Community rules;
4) contribution to the implementation of the decentralized system according to national and EU agricultural policies;
5) strengthening food security, particularly by ensuring the traceability of products, acting in the interests of users and consumers;

6) improving the supply and demand information system, concentrating and coordinating supply and marketing of producer members;
7) achieving increasing value of products, primarily through marketing and market research, aiming to promote their domestic and foreign products;
8) participation in professional organizations to develop strategies and states of development of the sector;
9)participation in research projects and studies on new production methods, processing, distribution and market developments;
10) development of methods and tools for improving product quality during production and processing stages;
11) promotion of integrated production practices and environmental technologies that protect the environment;
12) exploiting and protecting organic farming and designations of origin, offset labels and geographical indications;
13) providing consultancy and training services for professional organizations, their states and interests in their relations with government bodies and state administration and the coordination of amicable settlement of disagreements between professional organizations;
14) participation in relationships and cooperation with donor organizations in the country or abroad for borrowing and implementing programs to ensure the development of sustainable and competitive production units.

Quantification of objectives through National Rural development Programme's support on agricultural producer groups

National Rural Development Programme provides funding for producer groups through *Measure 142 - Setting up producers groups* that has as objective to increase the competitiveness of primary agriculture and forestry through the balanced development of relations between producers and processing and marketing sectors and adaptation of production in terms of quality and quantity to consumer demands.

Measure 142 - Setting up producers groups

Indicator	**Aim for 2007-2013**	**30/09/2010**
Total number of supported producer groups	1.108	8
of which for organic products	111	ND
Divided by:	ND	ND
Type of agricultural sector, in accordance with Decision (EC) no. 369/2003		
1. Vegetable sector	222	ND

Indicator	Aim for 2007-2013	30/09/2010
2. Livestock sector	664	ND
3. Mixt	222	0
Turnover of supported groups (mil. euro)	4.988	28
Number of semi-subsistence farms members of producer groups that get on the market	24.375	ND
Economic growth (mil. euro)	2.483	466,41
Labour productivity growth	Annual growth of 8%	ND

ND – no data

Source: Final Report for the Intermediate Evaluation of the National Rural Development Programme for the period 2008 -2010, Annex 9, pp 8, http://www.madr.ro/pages/page.php?self=03&sub=0302&tz=030211, accessed on 21st of June 2011

The proposed actions of this measure are:
— to adjusted to demands and market requirements;
— to provide joint marketing of products, including preparation for sale, centralization of sales and wholesale distribution of products;
— to add value obtained in joint production and to better economic manage of resources and results;
— to encourage producers groups, by supporting them for setting up and functioning and to increase revenue by improving technical and management capacity of their members.

Measure 121 - Modernization of agricultural holdings

Indicator	Aim for 2007-2013	30/09/2010
Number of supported holdings belonging to the members of associative forms	6.670	1.307
Number of supported associative forms	670	80

Source: Final Report for the Intermediate Evaluation of the National Rural Development Programme for the period 2008 -2010, Annex 9, pp 4, http://www.madr.ro/pages/page.php?self=03&sub=0302&tz=030211, accessed on 21st of June 2011

Funding of the producers groups is obtained through other measures, too, even these are not directly aims to this goal, but other complementary.

Measure 123 - Adding value to agricultural and forestry products

Indicator	Aim for 2007-2013	30/09/2010
Associative forms belonging	470	115

Source: Final Report for the Intermediate Evaluation of the National Rural Development Programme for the period 2008 -2010, Annex 9, pp 6, http://www.madr.ro/pages/page.php?self=03&sub=0302&tz=030211, accessed on 21st of June 2011

Conclusions

The Romanian legal framework for the organization and operation of agricultural producers groups is articulated with European requirements.

Agricultural producers groups may be one of the main measure to increase the agro-food sector competitiveness in Romania and, consequently, the legal framework should be well-timed provided.

Producers groups are funded directly for their formation through the National Rural Development Programmes - Measure 142, but also, implicitly, through other measures and their operation and expansion have a significant weight in public policy. Agricultural producers groups, as defined and discussed in this paper, may become one of the pillars of the Romanian rural and agricultural development.

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FINANCING RURAL AND AGRI-FOOD ECONOMY IN THE CONDITIONS OF WORLD CRISIS

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Abstract

The world economic crisis deprived of liquidities almost all economic sectors, among them also rural and agri-food economy. In these conditions, on the banking system, the state and the warranty funds devolves an essential role in financing rural and agri-food economy which must form the main engine of the national economy. The paper aims at presenting a few financing modalities in the next period which would revive rural and agri-food economy. These financing modalities are the result of cooperation in the financing field between the state, the banks and the warranty funds, in the process of revival of rural and agri-food economy and have at the basis the concepts of lasting crediting and lasting development.

Key words: lasting crediting, warranty funds, agricultural credit, agricultural production

1. Introduction

In the conditions in which the world economic crisis generated a lack of liquidities in all economic sectors and a blocking of the activities developed at the level of rural and agri-food economy, the attraction of European funds as well as the financing from grants or subventions become major acting directions both of Government and banking system. However the attraction of these funds must be used especially for the capitalization of rural and agri-food economy.

According to the concept of lasting crediting, financing rural and agri-food economy must aim at the capitalization of agricultural manufacturers, the increase of credits portfolios quality and environment protection (Ilie,2005).

The diminution of the existing regional unbalances with a focus on the stimulation of balanced development and revival of the under-privileged areas, as well as preventing the happening of new unbalances represent a major requirement of lasting

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development (Ciună, 2004). Unfortunately, these challenges are by far accomplishable so long as the agricultural credit continues to remain very poorly represented in the total of credits portfolio, there are no legislative mechanisms that could stimulate crediting in agriculture, and the costs of agricultural credits are non attractive for agricultural manufacturers.

2. The implication of warranty funds in the revival of rural and agri-food economy

The revival process of Romanian rural and agri-food economy cannot be conceived without the existence of the credits warranty funds. The legislation in force provides that the grant of credits be accomplished only after the constitution of solid warranties, the banks preferring the real estate ones. If the financing of rural and agri-food economy takes place only on the basis of the existence at a certain point of real estate assets, then a non normal dependency relation between credits and fixed capitals existing at a certain point would be created, with negative consequences on the development process of the entire economic – social life.

In order to accelerate the development process of rural and agri-food economy, the financial-banking institutions and the state have come to support the holders of fixed and circulating capitals by creating certain credits warranty funds aimed at taking over the financing risk where collateral warranties are not enough. This way, the increase process of fixed and circulating capitals can be accelerated, the newly created capitals being able to subsequently form the basis of credits granting. Next we will insist on the implication in the revival process of rural and agri-food economy of the Romanian Fund of Credits Warranty and of the Warranty Fund of Rural Credit.

The Romanian Fund of Credits Warranty functions as a commercial company on shares with 100% private Romanian capital and has as main objective the financing facilitation of viable business projects developed by private undertakers of Romania. The beneficiaries of warranties from this fund are the commercial companies that cumulatively fulfil the following conditions: they are Romanian legal persons; they have majority private capital (51%); they develop the activity in the field of production or services; they benefit from the recommendation of one of the partner banks of the fund for credit granting.

The warranty object is represented by credits for investments projects, credits for working capital, letters of bank warranty and leasing operations. Thus, the increase of capitals is encouraged under its two components (fixed and circulating capital) as well as the leasing operations that have a strong productive character. At the same time the financing of the capitalization process is encouraged by warranty letters. In order to facilitate the access to financing, the fund gives consultancy regarding the elaboration of the business plan and of the credits file, market research / opportunities for investments, alternative financing sources, business intermediations between Romanian and foreign companies. The fund warranty cannot exceed 70% of the nominal credit (interest excluded). The fund covers all geographical areas of the country, equally contributing

to the financing of all regional economies from our country.

In order to accelerate the financing process in agriculture, the Warranty Fund of Rural Credit was created, in the form of a company on shares, whose object of activity stated according to the site www.fgcr.ro is represented by the warranty of credits and of other financing instruments, which can be obtained by natural and legal persons – agricultural manufacturers and agri-food products processors, for the accomplishment of the agricultural production, stocking and processing of agricultural products and the accomplishment of investments objectives in these fields, as well as other financial instruments that the credit institutions give to the beneficiaries of programs with European financing for the assurance of the necessary financing to accomplish the projects provided in the National Program of Rural Development for the scheduled period 2007-2013.

The warranty beneficiaries can be: commercial companies formed according to the Law no. 31/1990, republished with subsequent modifications and completions; agricultural associations formed according to Law no. 36/1991 regarding agricultural companies and other forms of association in agriculture and according to Law of agricultural cooperation no. 566/2004; all categories of beneficiaries of the programs developed with the Agricultural European Fund for Rural Development and European Fund for Agricultural Warranty; natural persons authorized to develop economic activities, individual companies and family companies formed according to OUG no. 44/2008, who work areas of agricultural land in their ownership or rented based on a contract, they breed animals, obtain agricultural production, process, sale agricultural products or perform agricultural works; local councils and associations of local councils for the accomplishment of development works of rural infrastructure.

The fund gives warranties to commercial banks in case:

- of average and long term credits, destined to accomplish investments contracted by small and middle economic agents with private capital, who do not hold sufficient warranties and develop activities in the field of agricultural production;
- of letters of bank warranty, for the supply credits from external sources;
- of short term credit, complementary to the investment, serving the first manufacture cycle (rough materials, auxiliary materials, energy, fuels, wages, other expenses necessary to this cycle), to the payment of customs taxes and customs fees, VAT;
- of short term credits given to private manufacturers for the accomplishment of vegetal and animal production, respectively for the accomplishment of the expenses provided in the production technologies and expenses estimates elaborated for each culture and category of animals;
- of leasing operations developed by agricultural manufacturers and processors, in the capacity of users.

By the wide range of the warranty object, the fund can bring an important contribution in the capitalization process of Romanian agriculture, covering a great part of the necessities and priorities of increasing productive capitals in this branch of national economy.

It becomes desirable the creation of other warranty funds as well, which should take over exclusively risks generated by the financing of agri-food production destined to export. The support of export production (Ciună, 2001) is enforceable in as much as the foreign banks created warranty divisions for credits given to Romanian companies for imports of capitals from third countries. The main categories of export credits (Hoanță, 2001) which must be guaranteed are: refinancing credits of exports (Mihai and Mihai, 2002), credits for the financing of cashes from exports and credits in foreign currency granted to exporters.

3. The role of agricultural credit within the directed credits

The financing process of rural and agri-food economy must be treated with priority in the conditions in which this segment from the Romanian economy is at the present day under-credited.

The techniques which measure the impact of the credit directed on the economy were the target of critics which sustain that the classic studies on the credit effects frequently overbid the advantages of using the credit at the same time with the underestimation of costs for this type of programs.

In our opinion, in the conditions of world crisis, directed credits are extremely important, of them the most adequate for financing the rural and agri-food economy being the agricultural credit.

A law that produced benefic effects on the rural and agri-food sector was Law no. 150 from 14th April 2003 – the law of agricultural credit for production, modified by the Law no. 605/2003. According to law, the agricultural credit for production was intended as an economic-financial instrument of agricultural policy by means of which the current activities of agricultural production to be sustained, previously established by the Ministry of Agriculture.

In the spirit of the law, by current activities of agricultural productions are understood actions that aim:

- the foundation, maintenance and harvesting of agricultural cultures, as well as the maintenance and harvesting of plantations;
- the acquisition or production of chickens for meat and eggs, of pigs for fatten, of ovine, caprine, bovine and equine youth for fatten, as well of material for fishy population and bees families;
- the supply, food processing, the assurance of medicines and medical treatments for animals, of current expenses for the maintenance and functioning of shelters, equipments and related installations;
- the assurance of cultures and plantations against the damaging effects of the natural risk factors, as well as the assurance of the groups of animals against the damaging effects of the natural risk factors, diseases and accidents.

According to law, the beneficiaries of the facilities were:

- agricultural manufacturers, natural or legal persons, who exploit, in the conditions of the law, agricultural lands or groups of animals with the purpose of

obtaining agricultural production destined to sale;

- authorized natural and legal persons, who hold the technique and specialization in the performance of services in order to obtain agricultural production.

- the categories of intermediaries who acquire and process the agricultural production.

The beneficiaries who reimbursed the credits and paid the interests on the due terms provided in the loan agreements benefited from public funds according to the credit amount.

Unfortunately, some specialists from the Romanian Association of Banks are of the opinion that this law cannot be applied currently in Romania like it should be, because it does not offer comfort to commercial banks. They consider that banks would have a higher appetite for crediting agriculture if the subvention was given at the beginning of the agricultural campaign in the form of payment of the insurance premium, which can be subsequently placed as warranty in banks. The banks would be more interested if deposit certificates were used as warranty forms for farmers. Romania is an agricultural country with a high cereal potential and it is normal that these depositing certificates be used in banks. The existence of certain cereals quantities of a certain quality and of certain parameters can represent an important warranty for banks.

At the same time they are of the opinion that the functioning of this law is complicated in the conditions in which the farmer takes a credit, seeds, harvests, sells the production and hardly when he has these documents does he receive from the Agency of Payments and Intervention in Agriculture a much smaller subvention than the credit he reimbursed.

4. Conclusions

The more active implication of warranty funds in the financing process of rural and agri-food economy can be determined by the increase of the banking capitalization degree. With the increase of capitals, banks can increase the participations to these funds which will take over some of the risks in the financing process.

The directed credits can represent an extremely efficient modality for the development of rural and agri-food economy from Romania, on condition they can be used first of all, and secondly they represent a real support both for employers and for agricultural manufacturers.

The financing of the development of rural and agri-food economy must pursue three major coordinates: the capitalization of economic agents, the increase of credits portfolios quality and the environment protection. This is why we consider the development of lasting crediting concept desirable, introduced in the specialty literature in the year 2005.

Thus it will be possible to decrease the existing regional unbalances, with a focus on the stimulation of balanced development and revival of the under-privileged areas, as well as the prevention of new unbalances from happening. This would be a first step towards the fulfilment of the integration criteria in the structures of European

Union and of access to financial instruments of assistance for member countries, respectively structural and cohesion funds.

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THE COMMON AGRICULTURAL POLICY REFORM AND THE COMPETITIVNESS OF THE ROMANIAN AGRI-FOOD SECTOR

Achim Irimescu[1]

Summary

The CAP reform, aiming for the 2014 - 2020, basically envisages maintaining the competitiveness of the European agriculture, while applying higher environmental standards and better managing of the natural resources (water, soil and air).

The reform also aims at offering financial support, mainly, to the small and medium sized farms, introduces direct payments capping for the larger ones, and encourages farms to use low environmental impact technologies.

The CAP budget will be frozen at the level of 2013, and thus generating competitiveness problems for the European farmers which apply higher standards (environmental protection, animal welfare, etc.) than the farmers in third countries. Romanian producers will be between the most affected farmers within the EU ones, bearing in mind the direct support they receive as a result of the new requirements/ proposals.

Due to the direct payments gradual increase until 2016 (*phasing-in*), the funds allocated to Romania will increase a lot, by over 7 billion € as comparing with the present financial programming period (2007 – 2013). Nevertheless, the Romanian producers receiving only 203€/hectar, will remain well under the current EU average for direct payments of 270€/hectar. As a result, the competitiveness of the Romanian farmers will continue to be limited, compared to their colleagues from the majority of member states who receive substantial more direct payments.

Moreover, the capping will reduce the funding over a certain ceiling, thus affecting further the competitiveness of the most efficient Romanian producers.

Key words: Common Agricultural Policy (CAP), the multianual financial framework, CAP reform, CAP two pillars, direct payments capping, CAP greening, set aside.

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1 Achim Irimescu

INTRODUCTION

The competitiveness of the EU agricultural sector in the member states is mostly due to:

- the financial support level received by producers under Pillar I (direct payments), representing farmers' direct income. At EU level direct payments represent, in average, more than 50% of the farmers` income.
- market and the price support measures – have a limited contribution to the farmers' income, since they do not apply in an uniform manner, nor unconditionally.
- development of rural areas – covers mostly investment projects (infrastructure, modernization of farms and of the agri-food industry, etc.).

All these speak for the importance of the future CAP for the competitiveness of the Romanian agriculture.

The high production standards introduced by CAP (their implementation being the necessary condition for receiving the financial aid), are meant to justifying the EU common agricultural policy's legitimity (the EU financial support) at the internal level, for the European contributor, as well as at international one, within the World Trade Organization.

The CAP reform is decided based on two political decisions:

- the level of the agricultural budget;
- the CAP objectives after 2013.

In this respect the European Commission presents proposals which will be adopted as regulations after being negotiated by the Council of Minister and the European Parliament.

I. The CAP reform's main political lines

The main elements of the Decision on the multi-annual financial framework were presented in the Commission's Communication (4) of June 29th 2011 and stipulate the freezing of the budget allocated to CAP at the level of 2013, supplemented by the necessary funds for the direct payments *phasing in* for the new member states (including Romania).

The principal lines of the PAC Reform have been laid down in the Communication from the Commission to the European Parliament, the Council, the European Economic and Social Committee and the Committee of the Regions - *The CAP towards 2020: meeting the food, natural resources and territorial challenges of the future (5),* from 18 November 2010. The legislative proposal will be subsequently presented in October 2011.

The European Commission proposal includes some sensitive elements for preserving the competitiveness of the EU agriculture compared with the one of the third countries farmers; those proposals risk to affect more the Romanian farmers than the other European producers. They consist essentially of:

a) the proposal regarding the more equitable direct payments allocation among Member States – the minimum level is too low, and the amounts for the Member States reaching the highest level (of 450 €/hectare and more) are not affected;

b) the proposal of CAP "greening" – the granting of 30% of direct payments is conditioned by the compliance with some specific requirements aimed to reduce the impact of the agro-food production on the environment and on the natural resources;

c) the capping of the direct payments that exceed a certain level.

II. The impact of the CAP reform on the Romanian producers' competitiveness

a) The Decision for a more equitable direct payments allocation among the Member States

According to the European Commission proposal, the Member States that are under the European 270 € /hectare average, may receive 33% of the difference between their present level and the one representing the 90% of the European average.

Using the proposed algorithm it results that, practically, Romania cannot receive more than 203 €/hectare, which represents a mere increase of 10% compared with the present level of 183 €/hectare. It is worth noting that the 183 €/hectare represents the 100% level of that payment Romania is supposed to reach in 2016, without taking into consideration the direct payments increase following the CAP Reform proposal.

At a first glance, it would seem that Romania receives important additional funds for the 2014 – 2020 period, when the total amounts allocated for the direct payments will increase substantially, to approximately 13,2 billion € compared to the 6 billion € in the present financial planning period (2007 – 2013), i.e. by more than 7 billion €.

In reality, the respective surplus represents only the amount due to the *phasing – in* process, and thus ending the discrimination in the CAP implementation for the last 12 member states.

Therefore it is clear that Romania will continue to be among the Member States with the lowest direct payments.

The discrepancy will be even higher because the Commission proposal does not aim also the limitation of the maximum direct payments for certain Member Sates - for instance in Greece and Nederland the direct support exceeds 450 €/hectare, i.e. almost two and a half more than in Romania.

Moreover, the initial comparative advantages of the Romanian agriculture, i.e. the lower costs for agricultural land and labor force, where very much reduced during the last years and cannot compensate anymore the difference in the direct support compared with other Member States.

Affected by the important gap in direct payments, the Romanian agriculture will

not be able to reduce the competitive disadvantage as compare the majority of the EU Member States.

Certainly, it would be difficult to get, and even unproductive to ask, for the establishment of a flat rate payment at the EU level, because it could lead to radical decisions or re-nationalization of the CAP, and Romania would lose since it doesn't have the financial means to finance the agriculture at a level comparable to Germany for example.

Although there are differences among the Member States, regarding the cost of life and the purchasing power, it is preferable to identify an algorithm for a more equitable direct payments distribution among Member States, not allowing for a variation greater than 10 - 20% as compared to the European average.

Such a formula would allow for a variation up to 50% - which is however quite important - between the Member States placed at the lower level and those with maximal direct payments, but it is much more equitable than the option presently proposed by the European Commission, which raises the gap to more than 100%.

b) "Greening" the CAP

Letting aside the political declarations of the European leaders, it is clear that the introduction of the CAP "greening" aims at better justifying, at internal and international level, the keeping of direct support for the European agriculture. Thus bearing in mind the World Trade Organization is criticizing the EU for high support granted to agriculture, which is distorting the world agro-food markets and affects the agriculture of the least developed countries.

Following the CAP „greening" the farmers would receive 30% of the direct payments only if they comply with certain supplementary requirements regarding the:

- permanent pastures preservation;
- crop rotation and the diversification;
- ecological set aside/ecological focus area (*set aside*);
- green cover;
- Natura 2000;
- organic crop growing.

When the producers don't want to apply such requirements, they will be penalized by a 30% cutting of the direct payments.

As a result, the "greening" will raise serious competitiveness problems to the Romanian producers, who have already made important efforts to apply, after the accession to the EU, the high and costly European standards, which will become more complex in the future.

The measure also introduces red tape for the administration, taking into account the complexity of the procedures they have to perform in order to establish the payment entitlements and this means huge administrative costs.

In fact, the paying Agency will have to asses each file separately, to verify the compliance with one or more of the "greening" requirements for more than 1.1 million beneficiaries.

This will mean a significant increase of the bureaucratic burden, both for the administration and for the producers.

Therefore, due to the very high number of beneficiaries, the costs of the CAP "greening" in Romania will be the highest in the EU.

Concluding, the introduction of the new requirements, in addition to those already existing, which are anyway way ahead of those applied by the third countries, the CAP „greening" will affect even more the competitiveness of the European producers, but especially of the Romanian ones. The high standards already applied by explain in fact why the European agriculture is losing more and more ground, for a series of products, in the competition with the third countries producers, mainly from Brazil, Argentina, USA and China.

c)The direct payments capping

The European Commission proposal aims at the following capping levels:

- between 150.000 € and 200.000 € - a 20% reduction
- between 200.000 € and 250.000 € - a 40% reduction
- between 250.000 € and 300.000 - a 70% reduction
- more than 300.000 € - a 100% reduction.

Are excluded from the ceiling the amounts that are the object of the "greening", that is 30% of the direct payments.

In applying the capping there will be taken into account the hired labor force, but presently there are no details about the modality of implementing this.

It is certain that the capping will introduce supplementary bureaucracy for the administration and farmers.

The fund resulted after the capping remains within the Member State, but it is not clear how they should be used.

After some brief calculations it results that for a direct payment of about 203 €/ hectare, and tacking into consideration the "greening" component from the direct payments, there will be negatively affected all the Romanian farms having at least 1050 hectares. According to the data of the Romanian Paying and Intervention Agency for Agriculture it results that a number of more than 850 farms will be affected by the reduction of the direct payments.

The most affected will be the Romanian farms with surfaces of more than 1050 hectares, so the most competitive ones.

As an example, a farm with a surface of 10.000 hectares should receive, in the absence of the ceiling, an annual amount of 2.030.000 €. After applying the capping, it will receive, if it complies with the "greening" requirements, an amount of 609.000 €

(that is not affected by the capping). To this amount there should be added the amount resulted after the capping, i.e. 300.000 €.

Finally the 10.000 hectares farm will receive only 909.000 € instead of the 2.030.000 €, that is less than 50%.

This amount is huge and the Romanian producers, who usually have to face great variation in production and revenue from one year to another due to the climatic conditions, will be much more affected and much less competitive than their counterparts in the Western Europe.

Conclusions

The proposals for the new CAP reform not just don't allow for the performance increase of the Romanian agriculture as compared with the one in the other Member States, but even there is a high risk to maintain the existing gap between the competitiveness of the Romanian producers and their homologues from the EU.

In order to reduce the future CAP impact it is very important the European financial support allocated to Romania for the present multi - annual programming period; aiming at agriculture restructuring and modernization, to be better and integrally used. Therefore, the EU support for rural development would allow for the transformation of the Romanian agriculture into a competitive one on the internal and international market.

As I mentioned above, the direct support allocated to Romania during the next financial programming period, would not reduce the existing competitiveness gap between the Romanian and other European farmers. Moreover, the new provisions and requirements, introduced by CAP reform, will further increase the bureaucratic burden and will increase the production costs, affecting directly the Romanian producers' competitiveness'.

Therefore it is very important that the Romanian institutions responsible for the improvement of the agricultural competitiveness should identify the most adequate and efficient measures and instruments for reducing the gap.

On medium and long term, I consider that it is essential the administration cooperates with the Universities and research sector in order to develop viable and realist strategies for developing the Romanian agricultural structures and which should take into consideration the budgetary means and all the challenges of this sector, at European and international level.

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IMPORTANCE OF MILK PRODUCTION IN INCREASING OF COMPETETIVENESS OF SERBIAN AGRO-FOOD SECTOR[1]

Lana Nastić[2], Jonel Subić[3], Jovanka Ninković[4]

Abstract

Cattle production is the most present traditional branch of agriculture in Serbia, and special consideration was given to milk production as essential ingredient for the food security of the country. After World War II, since 1949 development of dairy industry in the former Yugoslavia began. From then on, in the field of milk production and processing many changes have occurred. However, due to accession to the European Union, in the following years this sector will go trough significant changes because of harmonization with strict standards laid down in EU member states. Adoption of regulations and the compliance with the standards in the field of agriculture, agro food industry will get better quality raw material that will increase its competitiveness.

The paper analyzes the current situation in milk production and standards that are needed to improve the quality of milk, with the aim of improving the competitiveness of milk production and the competitiveness of the food industry, which relies on this production.

Key words: milk production, competetiveness, agro-food sector

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Introduction

Milk production is one of the most important branches of livestock production in the Republic of Serbia. Significance of milk production is reflected through importance of milk and dairy products as one of the basic groups of food products in human nutrition, as well as important factor for food security of the state. Development of livestock production is important factor for the development of overall economy. Especially significant impact has on development of agro-food (processing) industry.

In Serbia there are over 280.000 farmers involved in milk production. In recent years total milk production has made significant decrease, so produced volume of milk was reduced for 6,12%. During 2009 were produced 1.488 million liters of milk, what represents a decrease for 97 million liters in compare to 2000, when were produced 1.585 million liters. Within production structure dominant share achieved cow's milk, with 99,3%, while sheep's milk had share of only 0,7% of total milk production.

On milk production affect a number of factors, as there are: natural conditions that have impact on yields; prices of crop products used for feeding of milking cows; prices of other inputs in production, prices of final products; subsidies; raised races; etc.

In last few years, State gave certain financial assets for development of milk production. However, gained results are still on unsatisfactory level, so it is necessary to continue with allocation of assets from the budget for these purposes, how production will be led to a satisfactory level (Table 1.).

Table 1. – Allocation of financial assets from agrarian budget for the measures in milk production (in million RSD)

Measures/year	2004.	2005.	2006.	2007.	2008.	2009.
Market measures	3.078	3.194	2.348	1.406	1.294	402
Structural measures	-	121	144.5	-	10,1	569

Source: National program for rural development for the period 2011-2013.

Structural measures include support for rising of dairy farms, purchase of equipment in the dairy industry (lacto freezers and milking machines), and the budgetary allocations for these purposes in 2009 compared to the previous year significantly increased.

In analyzed period cash outflows from the budget for market measures are in constant decrease (these measures imply premium for milk and export subsidies). Structural measures include financial support for dairy farms establishment and purchase of equipment needed in milk production (lacto-freezers and milking machines). Budgetary allocations for mentioned purposes in 2009, in compare to previous year were significantly increased.

Competitiveness of milk production is largely dependent on access to price-competitive and high quality inputs of feed, quality of dairy cattle and inputs related to hygiene in the production and processing.

Working material and method

As a data resources in paper are used statistical publications, regulations related to quality and hygiene of raw milk and data from individual agricultural husbandries.

In paper are used method of calculations of variable costs coverage, where contribution margine is gained after substracting of variable costs from production value.

Results and disscusion

In EU countries the average number of cows on farms involved in milk production ranges from 30 to 50 animals. Milk production in Serbia is mostly done on the farms of individual farmers which include small number of dairy cows. According to the Agricultural census in 2002, agricultural farms owned 87% of the total number of cows in the Republic of Serbia, of which 97.61% of agricultural holdings had from 1 to 5 dairy cows. After the year 2002, due to the policy of some dairies not to purchase milk from small farms, there was an increase in average farm size and total quantity of milk produced per farm.

End of 2010 and the beginning of the 2011 was an important period for the milk producers, namely in that time there was an increase in purchase prices of milk and an increase in premiums per liter of milk. To demonstrate the cost of production in the dairy sector, calculations of milk production, based on variable costs, was made (Table 2). Data for calculations were obtained from the individual farm which has Simmental cows. Key assumptions were: duration of lactation is 305 days, value of culled caw is 710.37 EUR/animal, life span of the cow is 8 years and 0.9 calves per cow per year.

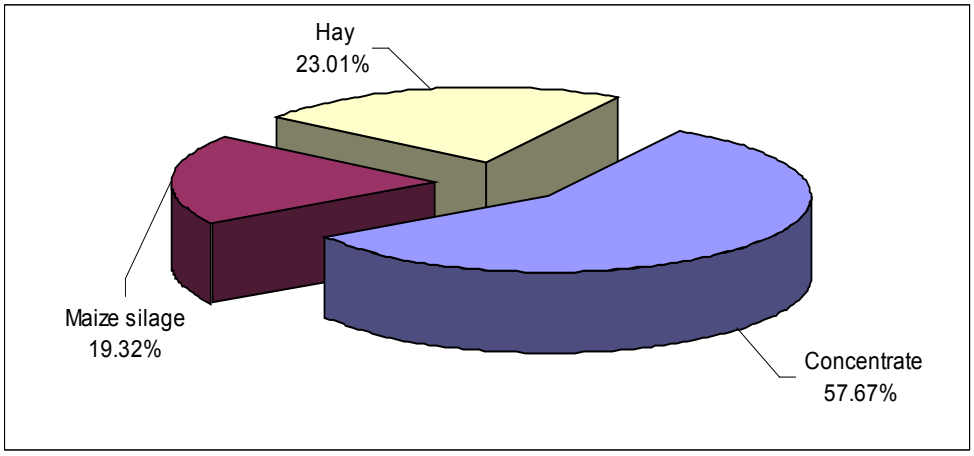
Table 2. Calculation based on variable costs in milk production

Description	Quantity	Unit	Price by unit	Total (RSD/ cattle)	Total (EUR/ cattle)	%
I Incomes (1.+2.+3.+4.+5.+6.)				**350,500.00**	**3,458.11**	**100.00**
1. Milk	6,000	lit	31.00	186,000.00	1,835.12	53.07
2. Calf (10 days old)	75	kg	300.00	22,500.00	221.99	6.42
3. Culled caw	600	kg	120.00	72,000.00	710.37	20.54
4. Manure	10	t	1,500.00	15,000.00	147.99	4.28
5. Premium for milk	6,000	lit	5.00	30,000.00	295.99	8.56

Description	Quantity	Unit	Price by unit	Total (RSD/ cattle)	Total (EUR/ cattle)	%
6. Regress for registered animal			25,000.00	25,000.00	246.65	7.13
II Variable costs (1+2+3+4)				**253,436.31**	**2,500.46**	**100.00**
1. Feed				118,944.45	1,173.53	46.93
2. Costs of operating machines				73,591.45	726.07	29.04
2. Veterinary services			7,285.00	7,285.00	71.87	2.87
3. Straw	1,095	kg	5.00	5,475.00	54.02	2.16
4. Other costs				48,140.42	474.96	18.99
III Margin to cover variable costs (I-II)				**97,063.69**	**957.65**	

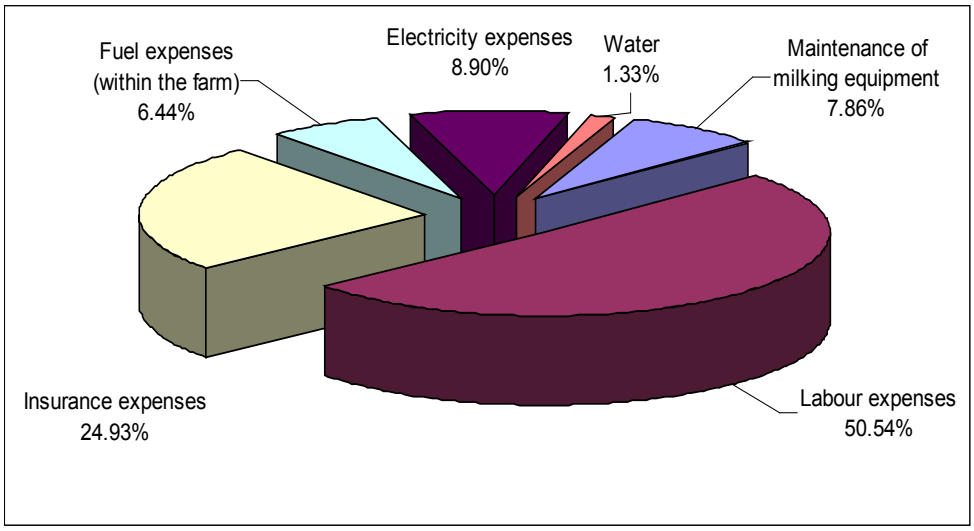
Competitiveness of milk production is largely dependent on access to price-competitive and high quality feed inputs and quality cattle. In the variable cost structure, the most significant are the costs of animal feed, whose share is 46.93%, than the costs of operating machines (29.4%) and other costs (18.99%), while the costs of veterinary services and straw are less than 3%. Graph 1 shows the structure of animal feed costs, as the most important item of variable costs.

Graph 1. Structure of feed expenses



In the structure of other costs (graph 2.) participate: labour expenses, insurance expenses, electrical energy expenses, maintenance of milking equipment, fuel expenses and water expenses.

Graph 2. Structure of other expenses



A number of dairies are buying milk on the territory of the Republic, of which one company has the share of 47.4% (Table 3.). Also, there are a large number of small family dairies dealing with buying and processing of milk which have a very small market share and in most cases only buy milk from the area in which they are located.

Table 3. Share of the milk purchase market of some dairies in Republic of Serbia

Dairy	Share of the milk purchase market
1.Danube food groups (5 dairies)	47.40 %
• Imlek, Impaz and Zemun	31.20 %
• Novosadska mlekara	8.20 %
• Mlekara Subotica	8.00 %
2.Mlekara Šabac	5.80 %
3.Mlekara Somboled	5.40 %
4.Mlekoprodukt Zrenjanin	3.90 %
5.Other	35.7 %

Source: National program for rural development for the period 2011-2013.

Competitiveness of milk production depends on the application of measures related to hygiene in the production and processing. In terms of quality of milk and dairy products, the Regulation on quality and other requirements for milk, dairy products, composite dairy products and starter cultures (Official Gazette of the FRY. 26, 2002.)

says that in Serbia, the upper limit of the total number of microorganisms / ml in cow's milk is 1,000.000 and the number of somatic cells is 400,000.

EU requirements regarding quality and hygiene of raw milk, says that raw milk must be tested for composition, total number of bacteria and somatic cells at least twice a month. Milk should not contain colostrum, antibiotics, added water, blood, any substance intentionally added and foreign bodies such as dust, straw and so on.

The amendment of Regulation (EC) no. 853/2004, no. 1662/2006 of 6 November 2006, states that the total number of microorganisms must be less than 100,000 ml/milk and somatic cells count can not exceed 400,000 ml/milk. In chemical terms content of dry matter without the fats above 8.5% and protein content above 2.8%.

Comparison of domestic raw milk legislation with EU legislation and the states in our surroundings, it can be seen that it is necessary to harmonize our regulations on hygienic quality of milk.

In practice it is difficult to fully comply with these regulations. Households in Serbia have a very small number of dairy cows and therefore low volume of production. For modern dairy farms to acquire modern milking systems and devices for cooling of milk after milking, which are one of the most important factors for milk hygiene, it is necessary to have significant financial resources that households with low volume of production can not obtain. Enlarging of production i.e. creation of family farms with 30-50 dairy cows, modeled by the dairy cattle farms in the EU, would allow the maintenance and development of family farms.

In order to comply with the regulations on quality and hygiene of raw milk, dairies in the EU have adopted the classification of milk by hygiene to stimulate producers to put a special emphasis on the treatment of raw milk after milking. Currently, only about 40% of milk is in the extra or the first class, which is allowed by EU rules, while other classes of milk would not be accepted to the dairies in the EU. In this way, the processing factories primarily dairies would get quality raw material for production of dairy products.

Conclusion

Based on analysis of the milk production variable costs, it can be seen that there was a positive margin of coverage on the basis of business data in 2011 year. Although in recent years, there is significant funding of the State in milk production, through market and structural measures, due to poor financial situation of agricultural producers, the total milk production declines in recent years. Consequently, more efforts are needed to improve the general situation in the industry and overall agricultural production. It is also necessary to increase the average size of farms, milk yield per cow, to improve the quality of raw milk in accordance with the standards that already exist in EU countries and so on.

By improvement of the quality of milk and production of the first class, plants from the food industry engaged in the processing of milk would receive quality raw material for processing and would increase competitiveness of production compared to neighboring countries.

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THE RURAL DEVELOPMENT POLICY OF THE EUROPEAN UNION FROM THE PERSPECTIVE OF ROMANIA'S INTEREST

Bogdan LUCOV[1]

Abstract

The rural development component of the Common Agricultural Policy has gained increased attention after the Commission developed the strategic document Agenda 2000, thus becoming the second pillar of the CAP. There are two major reasons for an approach in this direction: firstly, the percentage of agricultural land compared to the surface of the European Union is very high - about 90%; secondly, the primary objective of economic and social cohesion promoted by the European Union, whose achievement would be utopic without due attention to the harmonious development of rural areas.

The rural development policies are designed to improve the living standards of the rural population. The development of rural economy depends both on the communities' own efforts, and on the state institutions. Government intervention is required to multiply the local creative potential, not only by providing a good strategy, but also the necessary financial means. This requirement can be achieved in the context of the following four important dimensions of the policy: quality of life, creating employment opportunities, regional balance, the population's self-confidence.

The Common Agricultural Policy must be maintained by adapting it to the new common goals set by the European Commission, which, in one of its versions, proposes the reduction of allocations in the form of direct aid. Financing rural development should be seen in the context of the cohesion policy, which would relieve pressure on CAP reserved expenditure. In this respect, it is recommended to rethink the allocations for Pillar 2 and to find co-financing methods for Pillar 1.

In this context, Romania has to negotiate within the EU the new rural development program for the 2014-2020 period, starting from the concrete situation of Romanian villages, and taking into account the interests of residents and potential investors in rural areas.

Key words: rural development, European and national funds, living standards, policy options, European market, financial support

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INTRODUCTION

The general objectives of the Strategy for Sustainable Development of the European Union are: limiting the negative effects of climate change, as well as the environmental and social costs; the assurance that our transport system meets the society's economic, social and environmental needs, and that all efforts are being directed towards minimizing the toxic damage to the environment; improving resource management and avoiding the overexploitation of natural resources; promoting sustainable production and consumption patterns; improving protection against health threats; creating a society based on social inclusion by taking into account intra-and inter-generational solidarity; ensuring the security and quality of life of citizens as a precondition for maintaining individual well-being; promoting sustainable development and ensuring that EU policies, both internal and external ones, are compatible with sustainable development and its commitments.

On the medium and long term, achieving these strategic goals will provide big economic growth and, consequently, a substantial reduction of economic and social disparities between our country and other EU countries. The synthetic indicator which measures the real convergence process offers the suitable conditions for Romania's GDP per capital in 2013 to exceed the EU average at that time, to approach the EU average in 2020, and to be slightly higher than the European average in 2030.

The main action directions, detailed by sectors and time horizon:

- Linking the rational development objectives, including investment programs in inter-sartorial and regional profile, to the potential and capacity to sustain natural capital;
- Accelerated modernization of education and training, public health and social services, taking into account demographic trends and their impact on the labour market;
- Widespread use of the best available economic and environmental technologies in investment decisions and entrenchment of eco-efficiency in all production activities and services;
- Anticipating the effects of climate change and developing early action plans for crisis situations caused by natural or human phenomena;
- Ensuring food security and safety by exploiting Romania's comparative advantages, without compromising the requirements for maintaining soil fertility, biodiversity conservation and environmental protection;
- Identifying additional funding sources for large scale projects and programs, particularly in the fields of infrastructure, energy, environmental protection, food security, education, health and social services;
- Protection and enhancement of the national cultural and natural heritage; connection to European norms and standards concerning the quality of life.

In order to accomplish the objectives and measures drawn in the Strategy, the normative act establishes implementing, monitoring and reporting mechanisms at the level of public authorities, as well as the consultation of civil society and citizens throughout the process. Since 2009 it has started the process of comprehensive review

of programmatic documents, strategies and programs, sartorial and regional in order to make it consistent with principles and practices of sustainable development and the dynamic development of EU regulations.

1. EU rural development objectives for the period 2014-2020

In this period, the European Commission is in the development and foundation stage of the rural development objectives for the period 2014 - 2020, which has already undergone public consultation. The Commission considers that the following main objectives for rural development are:

- Objective 1. Sustainable food production
- Objective 2. Sustainable management of natural resources
- Objective 3. Balanced territorial development

Objective 1, as it is defined refers to the following important components:

- to contribute to farm incomes and to limit their variability (volatility of prices and income, and natural hazards are more pronounced than in other sectors, and farmers' income and profitability levels are below those in other sectors);
- to improve the competitiveness of the agricultural sector and strengthen its position in the food chain (because in comparison to other sectors of the food chain that are better organized and involve a greater bargaining power, the agricultural sector is fragmented). Also, the European farmers need to respect the high standards of environmental protection, food safety and quality and animal welfare;
- to compensate production difficulties in areas where there are specific natural disadvantages, since in these regions there is an increased risk of land abandonment.

Objective 2 covers the following important components:

- to guarantee sustainable production practices and ensure the provision of public goods that meet the environmental conditions since many of the public benefits generated by agriculture are not paid by the normal functioning of markets;
- to promote green growth through innovation, which requires the adoption of new technologies, development of new products, changing the production processes and supporting new consumers' expectations;
- to pursue actions to reduce climate change effects - as well as to allow agriculture to adapt to climate change.

Objective 3 covers the following important components:

- to help create jobs in rural areas and to maintain rural social component;
- to improve rural economy and to promote diversification, enabling thus local actors to express themselves to maximum potential;

- to allow structural diversity in agricultural systems, to improve conditions for small farms and local markets development, because in Europe the heterogeneous agricultural structures and the production systems contribute to the attractiveness and identity of rural areas.

The options considered by the European Commission to achieve the objectives are:

- Option 1 - Improved Status Quo;
- Option 2 - More balanced, better targeted and more lasting support;
- Option 3 - Elimination of the types of income support measures and market support.

The principles on which Option 1 is based are the following:

- With regard to direct payments, more equitable distribution of the aims of direct payments between member states (leaving unchanged the current system of direct payments).
- With regard to the market instrument it is aimed at the instruments' strengthening for risk management and rationalizing and simplifying the existing market instruments, where appropriate.
- With regard to rural development it is aimed at the orientation of the health overview in order to increase funding to meet the challenges of climate change, water resources, biodiversity and renewable energy and innovation.

The principles on which Option 2 is based are the following:

- With regard to direct payments it is aimed a more equitable distribution of direct payments between member states and a change in the way they are designed. Thus, direct payments would be made up of: a base rate that would serve as income support, an additional support required for specific public goods becoming "greener" with the help of simple agri-environmental actions, generalized, yearly and non-contractual, based on the supplementary costs of carrying out these actions, an additional payment to compensate for specific natural constraints, an optional coupled support component for certain sectors and regions. Another proposal is to introduce a new scheme for small farms, namely the introduction of capping the base rate, taking into account the contribution of large farms to employment in rural areas.
- With regard to the market instruments it is aimed the improvement and simplification of the existing market instruments, where appropriate.
- With regard to rural development it is primarily concerned with the adjustment and complementing of the existing instruments to align with EU priorities, with support focused on environment, climate change and / or restructuring and innovation as well as to strengthen regional / local initiatives. Secondly, the strengthening of the existing instruments for risk management and the introduction of an optional instrument for income stabilization compatible with WTO green box

to compensate for the loss of significant revenue. It could be provided a certain redistribution of funds between member states based on objective criteria.

The principles on which Option 2 is based are the following:

- Regarding direct payments, it is aimed at gradually giving up of direct payments in their current form and instead providing limited payments for environmental public goods and additional payments for compensation of specific natural constraints.
- Regarding the market instruments it is aimed at eventually eliminating all market measures except clauses applicable to market disturbances, which could be activated in case of severe crisis.
- Regarding the rural development measures the measures would mainly focus on issues related to climate change and environmental.

2. Romania's position on rural development policy

Since our country is a EU member with full rights, and taking into account that both agriculture and rural areas of our country have some peculiarities caused by objective and subjective conditions, Romania needs to establish realistic points of view for the Common Agricultural Policy in the period between 2014-2020. Thus, on direct payments, we consider that the following are worthy of consideration:

- to maintain the real value of agricultural support in the configuration of the two complementary pillars, it must enable and use the potential of the new member states and the attainment of convergence objectives;
- the support of active farmers will lead to reducing disparities between member states and a proper allocation of financial resources. In this respect, it is very important to define the farmer as "*active farmer*";
- Romania considers appropriate the openness shown by the Commission to support small-scale agriculture, by introducing a support system dedicated to small farms, contributing to strengthening the competitiveness and maintain the vitality of rural areas. In this regard we support the definition of new eligibility criteria easier to manage and easier to implement;
- Romania does not consider appropriate the Commission's proposal to introduce an upper limit (capping) of the level of direct payments allocated to large farms;
- EC Communication on the functioning of the food chain, the bargaining power of farmers, contractual relations, the need to restructure and strengthen the manufacturing sector, transparency and the functioning of markets for agricultural products, meets the existing problems in Romania.

As regards the rural developmental, things are more complicated, since the Romanian village is way behind the European village in terms of level of development.

In these circumstances we consider that the following points of view should be considered:

- Regarding the actions aimed at the revision of the CAP, Romania supports the importance of maintaining a consistent level of the budget allocated to Pillar II.
- For Romania, the growth of competitiveness, the sustainable management of natural resources and balanced territorial development are important. Financing must meet the specific needs of the member states, including through providing a greater flexibility.
- Romania welcomes the Commission initiative to create measure packages for the new programming period, by interconnecting the already existing ones, as a response to the needs of some areas or specific groups.
- Romania supports the inclusion of a package to support small farmers in order to avoid some phenomena present in Romania, as depopulation, abandonment of agricultural land and increase of their economic capacity in order to provide public goods.
- With regard to the risk management package, we support the continuation and development of financial engineering measures, through instruments to ensure access to loans, guarantees, share capital, etc., these representing essential aspects for increasing the competitiveness of agriculture sector, taking into account the particularities of this sector.

We believe that in order to implement measures consistent with achieving the envisaged objectives, the CAP budget (pillars I + II) for 2014-2020 must be consistent and remain at least at the current level. So, it is worthy of consideration the following:

- Pillar 1 budget, responsible for providing the direct income to farmers, for maintaining the agricultural production in the EU and for support to cope with excessive price volatility must provide:
- for the Direct Payment component: increasing the cap for the new Member States so that the direct payments to reflect a more equitable distribution between old and new Member States;
- for the market measures component: maintaining the current market intervention instruments to act as a safety net in crisis situations, as well as searching for new tools to preserve EU agriculture in a competitive level in relation to third-party countries; the continuation, after 2013, of the sectorial programs (wine, beekeeping, disadvantaged persons, etc.) with a great impact for Romania, as well as of the specific support granted under Art. 68 of the Regulation no.73/2009;
- Pillar 2 budget, responsible for rural development, should provide an allocation similar to the current one (current allocation key for Romania is 9.8%; it must be at least maintained).

The European Commission's position, given that the above aspects are not taken into account, can have a number of hotspots for Romania, of which the most important are:

- for Romania it is essential the level to be determined for direct payments.
- Introduction of a higher cap for allocation of direct payments to large individual farms.
- Introduction of multiple payments may involve complication of the direct payments current system, which contradicts the CAP simplification process.
- Introduction of a volunteer component - additional to LFA payments in pillar I; although the text does not specify from where the funds for those payments come, from discussions with the Commission it resulted that it is wanted their framing under the cap which the Member States have allocated for direct payments.
- Introduction of support for small farms, to avoid phenomena present in Romania, such as depopulation, abandonment of agricultural land and the increase of their economic capacity, in order to provide public goods and also, attracting young people to agriculture.
- Inclusion of the Water Framework Directive in eco-compliance, for achieving the wishes concerning the environmental improvement and the protection of human health.
- The possible redistribution of funds for rural development between Member States (under policy option 2) based on objective criteria. At this stage we have no detailed information on defining future objective criteria.

Conclusions

Rural development policies are designed to improve the living standards of rural population. The development of rural economy depends both on the own efforts of rural communities, and on that of state institutions. Government intervention is required to multiply the local creative potential, helping it not only with a good thought, but also with the necessary financial means. This requirement can be achieved in the context of the following four important dimensions of the policy: quality of life, employment generation, regional balance, self-confidence of the population.

Simplifying the CAP is one of the main priorities of the European Commission, which can have major implications for reducing administrative burdens on the farmers and at administration level. Also, currently, the public authorities (and not only) focus on taking a set of measures to help increase access to European funds for rural development.

In this context, we consider that the most important proposals to streamline the implementation process of rural development projects that help raise the living standards of rural residents through accessing the European funds for agriculture and rural development are the following:

- Strengthening the monitoring and evaluation procedures of EAFRD, through which the EU spending will be better controlled. Transparency in EU funds absorption, the national management and control system and auditing requirements are essential prerequisites for successful implementation of Cohesion Policy's objectives;
- Granting the local and regional support for increasing government and public services effectiveness for the development of new forms of cooperation between regions and between partners in a region in order to improve the activity.
- Continuing to promote and disseminate good practices in Member States should provide additional motivation for potential beneficiaries for accessing these funds and for closer cooperation between EU partners.
- For less developed rural areas, strengthening the capacity of absorption through all available tools as well as guidance of available resources to sectors with growth potential represent essential prerequisites to promote their sustainable development.
- The improvement of overall performance of enterprises in the processing and marketing of agricultural and forestry products will be achieved by developing new products and technologies and food safety standards, which will be directed mainly to comply with Community requirements in all stages of production, of processing and of products' distribution.
- The introduction of technical progress, of innovation through the production and use of renewable energy and investment in corporal assets of businesses. Thus, there will be introduced clean technologies that will ensure food quality and will have a small impact on the environment.
- The involvement of banks with more openness and supporting farmers in managing applications in exchange for CAP funds management.
- Creation by the European Commission of an appropriate institutional framework for the exchange of information and ideas, taken into account the experience of old Member States.

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POLICIES AND STRATEGIES ENVIRONMENTAL LEVEL OF NATIONAL ENTERPRISES

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Abstract

More and more enterprises (company) have become aware of the fact that they have to take into consideration dealing with the impacts of their activities on the environment. This is why the creation of an efficient and functional system for environmental management becomes a priority. Such a system would serve to minimize the impact upon the environment. In this paper I tried to identify steps to implement the environmental management system and In this paper I tried to identify steps to implement the environmental management system and I followed their application to one of the largest enterprises in our country - Chemical combines Azomures.

Key Words: *environmental strategies, competitiveness, environmental management, quality standards*

INTRODUCTION

The most important benefit of this system for environmental management is that it obliges the enterprise to approach systematically this ecological problem. The motivations for implementing this system are of strategic, economic, managerial and judicial sort.

The correct functioning of the system assures a better performance through the positive impact that it could have on several aspects:

- cut costs
- risk management
- enhance credibility
- increase competitiveness

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- business relations
- personnel motivation

We used as a method of research in this paper analyze quantitative and qualitative aspects of the environment and a comparative analysis of the law on environmental protection in EU and in our country.

THE SCOPES STANDARD ISO 14001

The 14001 ISO standard has the general official aim of maintenance of environmental protection, pollution prevention corroborated with socio-economic needs.

The specific aim of this standard is to offer organizations all the necessary elements for the creation of an efficient system, which can be integrated into the global management of the enterprise and which is able to permit the achievement of the ecologic and economic established objectives.

The standard establishes the requirements of the system, which would allow enterprises to formulate the politics and objectives of environment considering the legislative frame and the ecological aspects of their activities. This standard can be applied by any organization, regardless of type, size and of activities undertaken, not just industrial ones.

Environmental management, as any management, gets beyond the law bound and implements its spirit, the principles of environmental protection. These principles are orientated at the prevention of impacts on the environment or keeping them in legal limits.

Environmental management relies on the convergence of law requirements and the applicable settlements, as well as the requirements adopted by the organizations.

The implementation of a system for environmental management helps the organization to adapt better to European Community requirements.

Steps to implement the environmental management system

For the implementation of a system for environmental management in an organization, there have to be followed five stages:

1. The settlement of the environmental politics;
2. The planning of ecologic activities;
3. Implementation and operation;
4. Verification and revision;
5. Analyze conducted by the management.

Stage 1: The settlement of the environmental politics.

The environmental politics is defined by the organization's executives as a declaration, which has to underline the fact that the principles and intentions of the enterprise regarding the ecologic performance are identified, documented, implemented and communicated.

The environmental politics has two major functions:

- inside the organization: to determine the direction of development in the area environment protection;
- outside the organization: to bring out to the stakeholders the concern of the enterprise about environmental protection.

Case Study: Chemical combines Azomures

The environmental politics at the Chemical combines Azomures aims for harmonization of economic results with the ones in the area of environmental protection and orientation to the elimination of the sources of pollution. The adopted environmental politics pursues:

- the continuous evaluation and keeping under control of all environmental matters and consequences of "past pollution" and the improvement of ecologic performance;
- the optimization of specific consumptions of raw materials, utility materials and the minimization of the loss;
- the compliance with legislative applicable requirements referring to environmental protection, in accordance with European Union Directives;
- the communication of ecologic performance to the stakeholders;
- the involvement of employees for the carrying out of measures contained in Environmental Management Programs and Improvement of Ecologic Performance indexes.

For the objective achievement contained in the Investment Program financial resources and human capital have to be allocated. The objectives refer in main to:

1. The compliance with European environmental legislation requirements through:
   - creation of new fittings of membranous;
   - enlargement of cremation capacity for organic dreg chlorinated through the construction of a new incinerator.
2. Quality improvement of residual waters by respecting the limits enforced by law through:
   - the erection of local stations for worn-out waters treatment at the propenoxid fitting;
   - the modernization of biological station treatment for the integration effluents in foresee NTPA001 2002 in what regarding suspensions, the chemical consumption the biochemical and the oxygen;
3. Dealing with residues by obeying the law in this area and the capitalization residues, through:
   - the construction of an incinerator for solid residues;
   - the construction of an incinerator for liquid residues in the frame of the anhydride ftalica fitting;
   - the closure of the whether of organic dreg.

The improvement of the Quality-environment integrated system operation, as well as the continuous improvement and prevention of pollution represents for Azomures

Stage 2: The planning of ecologic activities.

The planning is one of the most important stages in the process of construction and implementation of a system for environmental management. Therefore the following have to be known:

- Aspects of environment;
- Legal provisions and other requirements;
- General and specific objectives;
- Environmental management Programs.

Stage 3: Implementation and operation

For an effective implementation of the system of environmental management it is recommended that the organization develops the funds and the mechanisms of necessary supports for the achievement of the environmental politics, objectives and its aims in this area. For the implementation of a system of environmental management it is necessary to define:

- the structure and the responsibility;
- the instruction, the awareness and the competence;
- the communication;
- the documentation for the system of environmental management;
- the control of documents;
- the operational control;
- the preparation for urgency situations and the capacity of answering.

Stage 4: Verification and revision

This is the key stage of a system of environmental management, which supervenes after the planning of the environment politics and its implementation. The aim is to ensure that the organization controls and, in case it is necessary, also revises the key elements of the system. It is recommended that the organization monitories and evaluates its ecologic performance. The measurement, monitoring and evaluation are the key-activities of a system of environmental management. In the absence of neither these activities it would be impossible to settle nor the unconformities neither the corrective activities and/or preventive necessary activities. Also, the audit of the system of environmental management would be deprived of basic elements in settling conclusions.

This stage involves:

- monitoring and measuring;
- unconformity, revision and prevention;
- registration;
- audit of the system of environmental management.

Stage 5: Analysis conducted by the management.

The organization has to perform continuous analysis and improvement of the system of environmental management, having as objective the improvement of global performance. This last stage is decisive for the assurance of a continuous improvement process, for the achievement of the settled ecologic performance. These analyses can

be made together with the analyses of the management quality system conducted by the management.

The implementation of such a system in compliance with ISO 14001 requires the involvement of all the organization's personnel, regardless of the hierarchical level or the position, and especially the creation of a dynamic process of continuous improvement and of environmental impact self evaluation.

Therefore, the implementation of such a system has internal benefits:

- Conformation to legislation;
- Systematic approach by the management; Efficaciousness - the identification of opportunities to reduce the consumptions of materials and energy, to reduce the amount of residues, to enhance the process' efficiency
- but also external benefits:
- Safety and acknowledgement from third parties;
- Transactions facilitation for which performance of the ecologic factors is a key element;
- Reduction of associate costs for audit;
- The ability of offering/ bid the contracts (protection or growth of shares on the market);
- Benefits from the increased efficiency of the use of funds;
- The enhanced ability of adaptation to change;
- Public image and favorable relations with the community etc.

THE EUROPEAN ENVIRONMENTAL MANAGEMENT AND AUDIT (EMAS)

In June 1993, the Union's Council adopted decision no. 1836/93, which permits voluntary participation of enterprises from the industrial sector in a system of environmental management and audit. This decision, has become effective April 1993 under the name EMAS. This approach based on voluntarism, is propped up on the expectations of many market actors and consumers. Once an enterprise decides to participate to EMAS, it has to obey all provisions contained in the decision.

This assures a plausible and strict approach of environmental management. Among EMAS objectives there is the ecologic performance improvement, compliance with legislation in this area publication of the measures undertaken in the area of environmental protection.

For the registration EMAS, an organization is due to respect the following conditions:

- to make at least an environmental analysis for its activities, products and services, and on the bases of these results, to implement an integrated system of environmental management, which responds to all requirements and especially respect the legislation from the environmental area. For organizations that already have a certified system of environmental management in accordance with the requirements recognized till date, do not need to make an environmental analyses at the moment they

implement EMAS, on condition the system contains the necessary information about identification and evaluation of the environment;

- to accomplish or to solicit the making of at least one environmental audit in accordance with the enforced requirements. This audit evaluates the organization's environmental performance;
- to prepare a report of environment in accordance to the elements required.

In April 2005, Germany had 2147 EMAS certified firms followed by Austria with only 251, Switzerland 184, Denmark 160, Spain 82, Great Britain 78, Norway 63, France 54, Finland 35, Italy 31, Holland 27, Belgium 9, Ireland 8, Greece 2, Luxemburg 2 and Portugal with just one firm.

CONCLUSIONS

There are many means of implementing a system of environmental management which can be applied depending on size, activity domain and danger represented against environment. These vary from internal, unique methods or granting prices to eco-aware enterprises, to the introduction of systems of management which are oriented to excellence in the area of environmental protection. These methods are not set aside for big or international companies; they can be applied also by medium sized companies, public institutions, services suppliers, even by workshops. EMAS, ISO 14001 or the environmental performance indexes, ISO 14031, are permissive methods for integrating environmental protection into the day-to-day life of an enterprise.

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GLOBAL FOOD CRISIS FROM CAUSES TO REMEDIES

Cristina NIȚESCU[1]

Abstract

The present paper makes a brief examination of the actual global food crisis which the humanity has to face. The work focuses on the some of the causes as well as factors which lead to the decline in growth of agricultural production with results in the increase of the prices for agricultural and food products. Nevertheless the food crisis is a very complex phenomenon and has its roots some decades ago when people would rather ignore it without thinking to the present serious consequences. Given the present circumstances, it is essential that besides effects to examine the structural causes of the growing food insecurity in order to understand what really lies behind the food price crisis. The paper explores the impact of some factors including the systemic decline in agricultural productivity due to less land improvements, less investment in irrigation systems and in water management, in fertilizers along with states' reduced regulatory role in agricultural policy. In the end the paper presents some measures which can help reduce the side effects of the actual food global crisis.

Key words: crisis, food, agriculture, measures, global.

Overview on the global food security through the perspective of the food price crisis

For the first time in the history of humanity the number of hungry people worldwide has exceeded 1 billion. According to the most recent estimates of the Food and Agriculture Organization (FAO), 1.02 people in the world suffer of malnutrition which means that every one of six people is chronically undernourished.

In the last couple of years the number of undernourished has increased dramatically and the world is further than never from fulfilling the 1st Millennium's Development Goal which is to reduce to half the percent of hungry people until 2015. In fact, worldwide is well-known and recognized that the individual right to food and nourishment has been permanently violated.

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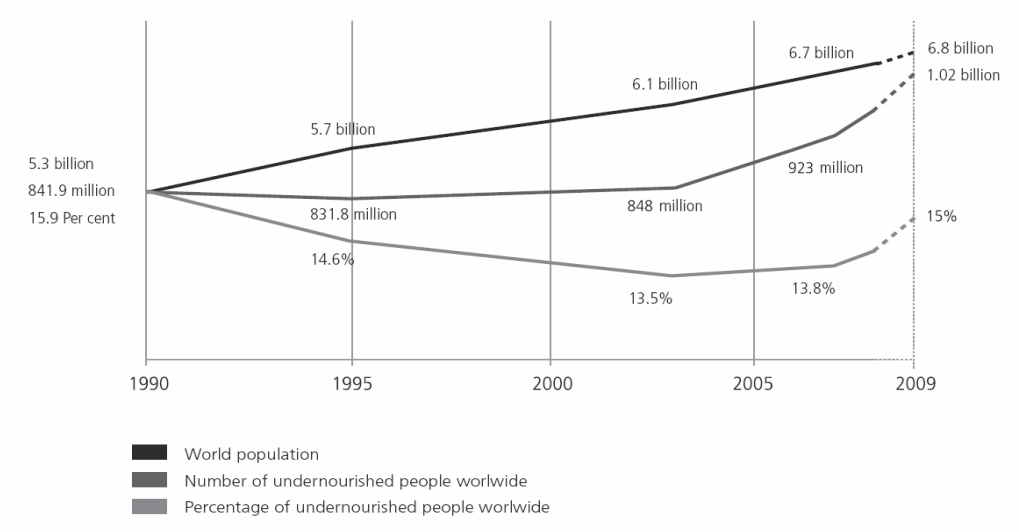


Source: FAO Report /2008-2017

For this reason an immediate intervention of the international community and national governments is required to counter the actual crisis and tale long term measures in order to sustainably ensure the food security. This serious problem of the humanity was put high on the public attention in 2008 and since then several international conferences have been held on the way to eradicate the hunger and finding solutions on solving the food crisis.

The United Nations General Secretary, Ban Ki-Moon, set up a High Level Task Force aimed at finding a common strategy to fight the food crisis considering that the number of the undernourished people is in continuous growing. Within this action the national governments and the intergovernmental organizations took the commitment to ensure the right to food of the 1.02 billion people suffering from hunger. Therefore, a common action is necessary under the direct coordination of United Nations (UN), the only democratic organization under which all the 192 developing and developed states are equally represented and can act commonly and in close cooperation with the Civil Society and NGOs. However, the food crisis in the last three years is only the tip of the iceberg. The alarming increase of the prices has after all awoken the world. Within a few months of 2009 the prices for corn, rice and wheat have exploded so that for many people these goods became difficult to purchase or even unaffordable. First who became victims of the price explosion of the food basic products were poor people in the developing countries as they spend a much larger percentage of their income on the staple food. Thus, according to an FAO Report in 2008, whereas average spending on basic food accounts for 10 to 20% of overall income in developed countries, it lies between 60 and 80% in the less developed countries – and much above this level for the poorest states. Therefore they have a very narrow margin of tolerance and no money as a buffer against the rapid price increase. After years of preaching the ever same paean

of praise to globalization and liberalization by the International Monetary Fund (IMF), the World Bank (WB) and governments, the developing countries had to learn finally that the export orientation of their agriculture and the consequent dependence on cheap imports may not be the means to achieve the food security after all. The import costs for the net food importing states have quadrupled since 2000, according to a 2008 FAO Report, making impossible for many of these countries to import the most basic staple foods.

The reasons for the price explosion are various but the effects on the poor states in Africa, Asia and Latin America were devastating. The consequences of food price increase were that people could not afford to buy basic food products such as wheat and corn and riots erupted in the streets of Mexico City, Haiti and in other 40 countries in Africa and Asia affected by poverty. The riots resulted in overthrown of some governments and grocery stores plundered. Even though food prices have little declined again on the world market in 2008 the situation is far from being improved. The prices remained not only highly volatile but also high on local markets.

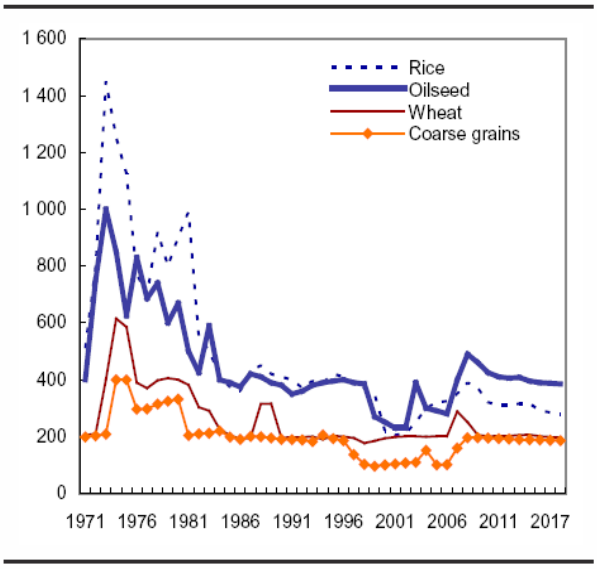
The neglect of agriculture in the last decades

Over the last half century, investment into agriculture - both by national governments and international donors - has been steadily declining. In combination with high export subsidies (dumping) by rich countries, forced market liberalization including tariff cuts, privatization and immense pressure by the Bretton-Woods Institutions, this has led to an increasing export-orientation in developing countries. Since developing countries were supposed to earn foreign exchange in order to pay off their debts, thus setting export-orientation as a priority over food security, domestic agricultural production was neglected.

As a result the export-oriented sectors – the largest in many developing countries and often hailed as the universal remedy for economic growth and poverty reduction – were hit hardest and reduced imports by developed countries resulted in large scale job losses with serious social consequences. The latest global trends show food prices finally stabilizing and declining after months of sharp increases. The crisis is, however, far from over. While the prices of major cereals have fallen from their peaks earlier in 2008, they still remain high compared to previous years, making it difficult for many people in developing countries to afford purchasing them. Forecasts of FAO, Organization for Economic Cooperation and Development (OECD) and the United States Department of Agriculture (USDA) project that the recent increases in food prices were not a temporary phenomenon, and suggest that prices for most food crops are likely to remain well above 2004 levels through 2015 (World Bank, 2008). The FAO Food Price Index was still 28% higher in October 2008 compared to October 2006. Also a FAO Report in 2008 estimated that with prices for seeds and fertilizers (and other inputs) doubling since 2006, poor farmers were not able to increase production. Richer farmers, particularly those in developed countries who could afford these higher input costs, have been able to expand planting. As a result, cereal production in

developed countries may have risen by at least 10% in 2008, whereas the increase in developing countries may not even exceed one per cent.

Chart 1 – World food commodity prices, 1971 – 2017 ***(US dollars per ton)***

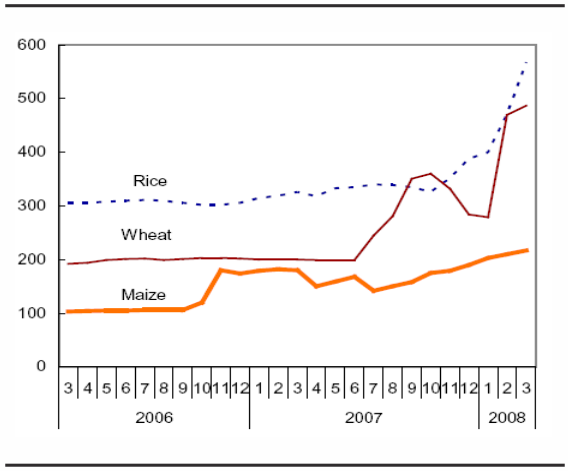


Source: OCED – FAO Agricultural Outlook 2008 - 2017

Chart 1 above shows clearly how volatile the food products price was over the last few decades. The diagram shows that in 1980, 1983, 1988 and 1996, prices rose over the previous year, as prices trended slightly downward between 1980 and 2002. Prices began to increase steadily after 2001, and by 2004, reached their mid-80s' level. In early 2006, commodity food prices began to increase rapidly. It is very interesting to see that the actual price increase, which is much more profound and long lasting that the specialists estimated, contrasts noticeably with the 1980s and 1990s when most of the commodity prices were rather on a downward trend. In real terms, however, the prices of many commodities, recorded at the end of 2007, were more decreased than the ones between 1960 -1970. Consequently, the actual food crisis is rather the result, among other reasons, of a rapid price increase over a short period of time. The actual situation emphasizes once more, if necessary, the increased vulnerability of the poor farmers in front of the abrupt changes of the market as the small farmers in the developing countries increasingly rely on the market to sustain and develop their own farms.

Chart 2, below, shows how sharply increased with over 60%, between 2006 and 2008, the basic agricultural products price. This price volatility seriously disturbed the agricultural production as well as the agri-food products market in the poor and developing countries. Under these circumstances the agriculture mostly relied on imports rather than on domestic production.

Chart 2 – Trends in international food prices on basic cereals2006 – 2008 *(US dollars per ton)*



Source: FAO - Crop Prospects and Food Situation, 2008- 2017

Overview on the causes of the food crisis

Several causes are to be considered responsible for the actual food crisis. Increase of the energy and fuel price with direct consequences on the price of the fertilizers, the agriculture and food products. Thus, according to some estimates of the World Bank in 2008 the growth of the fuel price worldwide lead to an increase with about 18% of the agri-food products price. Using of bio-fuels in agriculture sector is another cause of the food price increase. The exact extent to which the increased usage of cereals and edible oils for bio-fuel production has led to an increase in food prices is disputed, but most international organizations including the WB, the International Food Policy Research Institute consider it one of the main reasons for the food price increase.

The decrease of the national food reserve also represents a source of exacerbation of the global food crisis. Due to continuous pressure by the International Monetary Fund, World Bank and World Trade Organization (WTO) for market deregulation, developing countries' governments have neglected or privatized local or national food reserves and increasingly relied on international trade and increased imports to replace the food shortages. According to the FAO estimates reserves reached in 2007/08 a (25 year-) low of 18.7% of utilization.

The extreme meteorological conditions of flood and drought also represent an important factor of growth the food product price as the agriculture production in the poor and the developing countries strongly relies on the meteorological conditions.

The decrease in production growth has also been impacted by resource scarcity issues such as climate change, water depletion and massif deforestation. Droughts, floods and freezing water due to climate change have also reduced and are expected to continue adversely impact on agricultural production and food security in developing country unless appropriate measures are soon considered to be taken. Thus, several factors contributed to the gradual slowing of agriculture production growth. These include the reduced state intervention in the agricultural sectors of developing countries; reduced public support and overall investment in agriculture sector along with a decline in research and development by governmental and international institutions.

Besides the above mentioned factors other issues should be considered such as land degradation and constant reducing of the agricultural land along with a poor management of the worldwide and regional water resources with visible medium and long term results on the agricultural production and consequently on the food price and security.

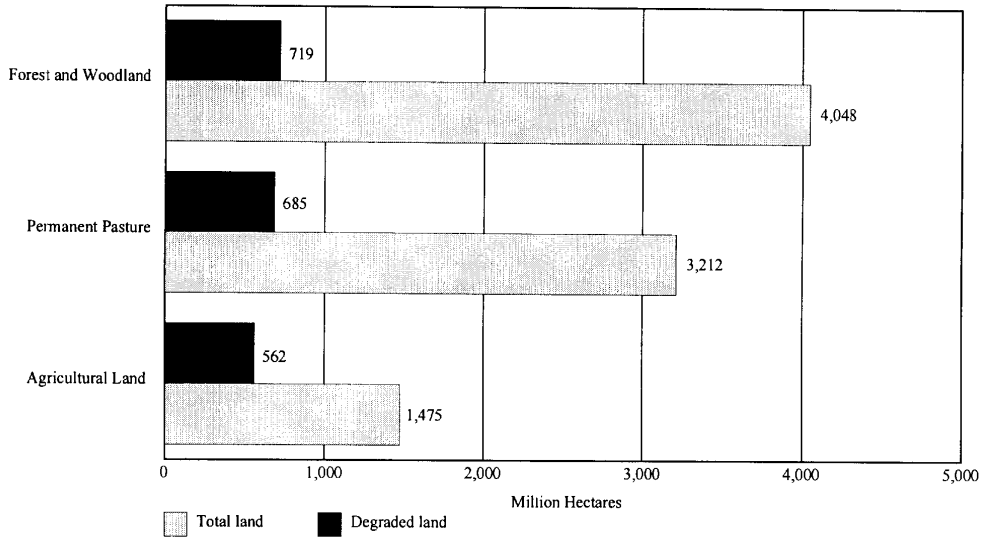
In terms of land management the International Food Policy Research Institute (IFPRI) started in 1994 an initiative for "A 2020 Vision for Food, Agriculture and the Environment" aimed to make an evaluation regarding the actual conditions and trends in food production, consumption and distribution and to facilitate an international consensus on the directions that policy should take over the next 25 years. Thus, following causes of land degradation as well as land management techniques were identified and included in the following table:

Component	Degradation	Soil improvement methods
Physical land management	Crusting Compaction Sealing Wind erosion Water erosion Deforestation	Soil conservation barriers (live, inert) Re-vegetation of the denuded lands Soil de-compaction Breaking up of rivers' basins Cover-crops Soil deposition Improved furrow methods
Soil water management	Impended drainage Water logging Reduced water holding capacity Reduced infiltration Soil salinization	Irrigation Water harvesting Field drainage Drainage of water logged areas Filter strips

Component	Degradation	Soil improvement methods
Soil nutrient and organic matter management	Soil alkalinization Acidification Nutrient leaching Removal of organic matter Burning of vegetative residues Nutrient depletion	Fertilization Composting Green manuring Animal manuring Drainage of saline alkaline soils Liming of acid soils
Soil biology management	Over application of chemical fertilizers Industrial contamination	Introducing of natural fertilizers Treatment with nitrogen-fixing microorganisms
Vegetation management	Decline of vegetation cover Decline of biodiversity Decline in species composition Decline in availability of valued species	Improve of vegetative cover Increase of species biodiversity Improve of species composition Improve of availability of valued species

The scale of land degradation is continuously growing. In the past decade scientists initiated systematic attempts to assess the nature and extent of the agricultural land degradation at regional and global scale and to explore its effects on food supply. The most important studies on land degradation have been done through the Global Land Assessment of Degradation (GLASOD). Thus it was estimates that of 8.7 billion hectares of agricultural land, pasture and forest, nearly 2 billion hectares (22.5%) have been degraded since mid-century. About 3.5% of the total has been degraded so severely that it is irreversible except through costly engineering measures, if at all. If this trend continues 1.4% to 2.8% of the total agricultural, pasture and forestland will have been globally lost until 2020. The most important on-farm degradation effects of land degradation are the declining potential yields. The threat of degradation may also be reflected in the necessity to use a higher level of inputs in order to maintain the yields. Serious degradation sometimes results in temporary or permanent abandonment of some plots. In other cases degradation determines farmers to convert the land to lower value uses for example cropland converted to grazing land or grazing lands permanently converted to shrubs or forests. The chart below shows a global evolution of the land degradation estimated since 1990 until 2020.

Chart 3 – A global perspective of land degradation by type of land use 1990 - 2020



Source: GLASOD land use perspective study over 1990 – 2020

Considering the above mentioned forecast increased research and technology development for land improvements are needed. A solution for this issue would be the growth of soil productivity and increase of the cultivated area at global level combined with a better distribution of the food resource among the states. Unfortunately some food overproduction situations were recorded when food products were simply dumped for high price keeping rather than being distributed to poor countries. Priority areas in terms of technical research include among other methods soil fertility improvement through the use of technologies such as green manuring; control of soil erosion and biological degradation by land forestation; improved irrigation techniques or rehabilitation of the existing irrigation systems and implementation of improved agro-forestry systems. Promotion of such land improvements, particularly in the "hot spots", should represent a regional and local development policy priority. Governments, NGOs and farmer associations can promote land investments through several mechanisms. Thus extension policy and farmer organizations can play an important role as well as development of regional specific government/EU supported programs for agriculture and rural development which include land arrangement and soil treatment works.

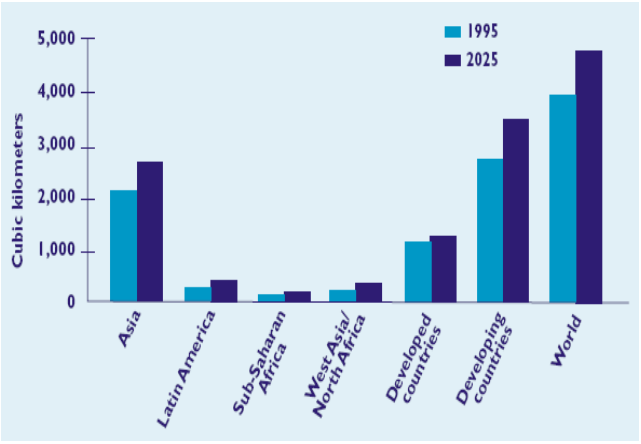
Some remedies for the food crisis

Besides land improvement issues another main factor limiting the food production is the water.

Will there be enough water to grow food for the almost 8 billion people expected to populate the Earth by 2025, is the question of the specialists? About, 250 million hectares are irrigated worldwide today which is nearly five times more than at the beginning of

the 20th century. It's a fact that irrigation has helped boost agricultural production and stabilize the food production and prices. However, growth of population and income will increase the demand for irrigation water in order to meet food production requirements. Water development is a key element for the food security, people's existence, industrial development and environmental sustainability in the entire world. According to an IMPACT-WATER study, drawn up in 2002, in 1995 the world withdrew 3,906 cubic kilometers (km^3) of water for these purposes. Also excessive diversion of water flows and overdraft of groundwater have already caused environmental problems in many regions around the world. By 2025 it is estimated that water withdrawal for most uses (domestic, industrial and living) will increase by at least 50%. This will significantly limit the irrigation water resource which will result in food production constraining. Nevertheless, where the benefits worth the costs many governments will construct dams and water reservoirs to sustain the irrigation demands.

Chart 3 – Total water withdrawal by region, 1995 and 2025



Source: International Food Policy Research Institute - Global Water Outlook to 2025

Water scarcity will get much worse in the future if policy and investment commitments from national governments and international organizations and development banks fail to act. Failure to adopt water saving strategies, improvement technologies and policy reforms could increase the water demand globally faster than estimated. However, some broad strategies were identified which can address to present and future water crisis:

1. Investments in infrastructure to increase the supply water for irrigation, domestic and industrial purposes;
2. Conserve water and improve the efficiency of water use in the existing systems through sustainable reforms in water management and policy sectors;
3. Improve crop productivity per unit of water and land through integrated water management and agricultural research and common efforts of the national

governments, including crop breeding and water management for rain fed agriculture.

Also, large scale improvements in river basins can lead to better management of water sources for domestic, industrial, living and agriculture sectors. River basin efficiency depends on improvements both in water saving technologies and in the international and regional institutions. Industrial water recycling such as recycling of cooling water, can be a major source of water saving in many countries. Also, improvement in the irrigation sector can be made at the technical, managerial and institutional levels. Managerial improvements should include, among others, the adoption of demand-based irrigation systems and improved equipment maintenance. Special care must be taken in designing a water pricing system for agriculture as direct price increase is a pressure factor to the farmers as water plays such an important role in the production costs. However, international community plays an essential role in promoting, planning and supporting research measures aimed to help states which are vulnerable in front of the actual and future food crisis. Moreover public investment, co-financing and training programs along with supportive policy strategies and policy instruments can help agriculture sector to provide enough food in the future necessary to go through this serious impending food crisis.

The European Commission (EC), representing the 27 European Union (EU) Member States, passed a regulation pledging an additional one billion Euro (about $1.4 billion) to fight hunger and counter the crisis (2008b). The money, promised in December 2008, is to be paid into the newly created *Rapid Response Food Facility* (RRFF) and supposed to be spent over the next three years. 91% of the resources are to finance country-level projects, 6% for regional projects, 1.3% ($18 million!) are to be put aside as reserve and 2% ($28 million!) for administration. Almost half of the funds ($550 million) are to be channeled through international organizations to support the food crisis effects.

Strategy of improvement the agriculture sector

Investment into agriculture has been steadily declining over the past 30 years. Due to the growing perception that agriculture was unprofitable against the backdrop of low commodity prices, developing countries were pushed to open their markets and realize food security through low-cost imports, rather than investing in their own farmers like industrialized nations. Through the liberalization of commodity markets, food items became subject to extreme price volatility and privatization led to the abolition of state institutions like marketing boards, which supported smallholder-farmers. Combined with declining public spending and the absence of private investments (other than investments in agribusiness and large-scale plantations by multinational corporations) the lack of support for agriculture was fatal.

Therefore the international actors and the programmes they set up against the food crisis, this chapter analyses the actions and measures undertaken by international institutions and programmes by topics:

- Promotion of and Investment into Agriculture;
- Food Aid and Food Assistance;
- Social Safety Nets and Social Protection Programmes;
- Macro-Economic Policies, International Trade and Budget Support.

Despite the recognition of the importance to support smallholder farmer and some good proposals on how to increase their productivity and market access, the international organizations have to focus on boosting production rather than empowering these farmers and ending their marginalization. Therefore, the measures regarding the decrease of the food crisis effects should focus on productivity-enhancing safety nets, the rehabilitation of rural and agricultural infrastructure, the removal of artificial constraints of domestic trade, measures to reduce post-harvest crop losses and improve village level stocks and better animal health services in order to reach that goal. In order to sustain smallholder farmer food production growth in the long run, it suggests improving the enabling policy framework in order to stimulate public/ private investment in agriculture and to ensure secure access to and better management of natural resources (including land, water and biodiversity). Furthermore, investment in agricultural research is to be increased, sustained access to competitive, transparent and private-sector led markets are to be ensured, and the development of producer organizations should be supported. Also, strengthen of smallholders' and other food chain actors' access to financial and risk management instruments are necessary.

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THE SUSTAINABLE DEVELOPMENT INDICATORS FOR THE ENERGY SECTOR

MARGINA OLEG[1], POPA IRINA[2]

Abstract

In Romania are used all the sources of energy offered by the nature to sustain the energy sector. The increasing need of energy along with the growth of the population creates a difficulty in responding to the big quantity that is required. The proportions in which the energy sources compose the electricity production are different, the composition includes in majority fossil fuels used as prime matter for energy production and less, different on countries and growing in the recent period, the renewable sources. The evaluation of the sector is very important and relevant for choosing the future sources of energy. Hence comes the need of strengthen the indicators system. For Romania the energy sector is at the beginning of its reorientation but there is seen a possibility for sustainable energy production and consumption in the future of the Romanian sector because of the European restrictions and their guidance.

Keywords: indicators, sustainable development, energy sector, renewable energy

INTRODUCTION

Every country must give a great importance to providing the best life conditions for its population, the utilities being one of the main aspects of the society's requirements. Our country's energy sector is one that is well developed, from the point of view of its local resources and imports of energy resources used for the production of electricity and of its consumption by the production and industrial users.

Romania has developed power lines across the urban and rural localities and there are many large energy consumer companies, which have here the mother-company or subsidiaries of multinational companies. In the same time, must be mentioned the small consumers, their provision with electricity being mandatory in every area of the

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country. This construction of the energy sector is the one that must take the measures for the implementation of the renewable energy sources in order to improve it from every perspective.

TYPES OF ENERGY

Being given the need and importance of the use of energy, there must be taken into consideration very carefully the sources, types and effects of energy.

The energy sector can be analyzed from many points of view:

- Type of energy sources (conventional and renewable energy);
- Type of energy resources (fossil fuels, solar energy, wind energy, hydro-energy, geothermal energy, tidal energy, wave energy, biomass, nuclear energy);
- The indicators that show their evolution (quantitative and qualitative indicators, that present the resources along a period of time);
- The energy production and consumption (that refer to the population needs and the impact of using energy on the environment).

The energy sector classification is divided in terms of energy sources in two categories, according to their sustainable character:

- The conventional energy sources are those that have a limited character in time, their use being equal with their total consumption and having mainly a bad impact over the natural factors;

- The renewable energy sources are the ones that have the capacity to be used at all times, their provision being continuous and in the same time their use has no or just small negative effects on the environment.

The first category refers to energy production as it was done until now, using fossil fuels, with their advantages and disadvantages of their use that have led to technological progress and its support. The production of households served to enhancing the life conditions and support the research to increase this comfort home and at work, or in the movement of people, for tourism- sightseeing or relaxing.

This energy consumption in this highly developed process of energy production has led to the depletion of resources stocks, demanding in time a change for this sector.

The second type involves the activity of shifting the energy production to energy sources that have not a limited quantity or are not close to disappear in the next period and which support programs focused on the care for the natural components, which are being destroyed in some areas or are ongoing destruction as an impact of the use of energy. Using this energy sources offers the possibility for restoration the natural capital factors by intervening with environmental measures that are meant to bring balance in this sector.

Within these energy sources are included the non-renewable and renewable resources, taking into account the duration of the use of resources, through the consumption growth caused by the demand from this economic domain.

Regarding the resources for supplying energy the first category, the main

conventional sources are the following:

- The coals, of several types, also inferior and superior sorts, which are extracted from quarries and processed being used some established technologies;

- The oil and derived products, their operating being considered a touchy subject, taking into account the accidents that have happened with some oil stations by over-exploiting along their history;

- The natural gas and their derivatives, the operation has also been shown delicate sometimes, because it has generated some accidental explosions.

These resources are used for automotive engines and as fossil fuels for the energy consumption in households or the heating in thermal plants, their many roles putting them on the first position in the current energy production, at which can be added their accessibility and small prices.

The second category includes several energy resources, which are presented in the global energy strategies according to the below classification [1]:

- The solar energy that is based on the heat energy from sunlight, being dependent by the number of sunny days per year in every area.

This type of energy has a great potential, but is a little used resource. For this energy type can be used the photovoltaic panels for the capture of the sun rays and the photovoltaic cells, being a good practice for every building. But, in the same time, these items are expensive, and although this fact, the interest in its use is increasing;

- The wind energy is based on the movement of the air, the windy areas being the ones that will beneficiate from this type of energy.

To capture its energy are used the wind turbines, the most common example being the windmills. The big disadvantages about it are the variable wind intensity and that it needs another source of electricity;

- The hydro-power energy is the one of falling or flowing water, being the most used type of renewable energy in our country.

For its production are used the hydro plants, based on the natural waterfalls, that are already there or the construction of dams and reservoirs;

- The geothermal energy that is the energy from the interior of the Earth.

For providing this sort of energy can be used plants, but in only in little occasions despite of its advantages;

- The tidal energy is given by the continuous movement of the oceans: the advancement and withdrawal caused by the gravitational attraction of the moon.

To capture it there is used the hydro-electric power.

- The wave energy is generated by the wind impacting the surface of the water.

The global potential is very high, but is used only where the waves are regular.

- The biomass energy is generated by renewable organic materials such as plant and animal organisms, and their waste products.

In this case the potential is very high and its use is an organic process;

- The nuclear energy is the one based on the atom force.

To capture the nuclear power, the process asks that the fusion take place, after which the fissions occur. It is an expected high potential but there are high costs and

some risks at these plants, a nuclear accident being one of the worst things that could happen for the humanity.

The renewable types of energy can give us and to the future generations' sustainable and continuous energy and a secure life, as is presented in the sustainable development principles [2].

THE SUSTAINABLE DEVELOPMENT ENERGY INDICATORS

The indicators that describe the energy sector are part of many date bases and plus, there were established some new ones that can be monitored for this purpose (figure 1). Their importance is to observe the lacks in the good management process for this economic area and this methods used have proven to give results in time.

The sustainable energy sector development is based on the principles of this phenomenon that can be observed by studying the energy sector and indicators of the sustainable development [3].

The indicators that describe the energy sector are part of the statistical database, including the following:

- Fuel energy resources;
- Imports of energy and energy resources;
- Dependence on imports;
- Primary energy production;
- Electricity production;
- Energy consumption.

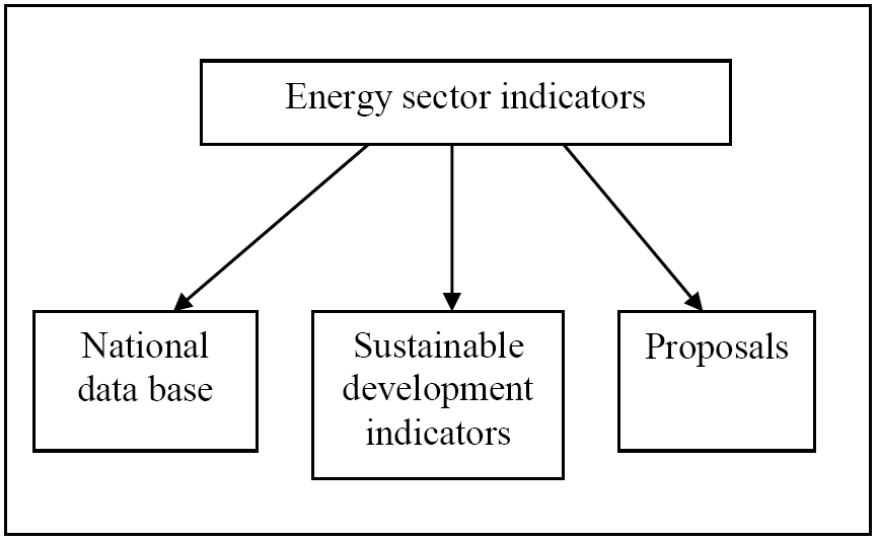
A part of them or some obtained through the aggregation of other indicators are monitored as indicators of the sustainable energy sector:

- Gross energy consumption;
- Final energy consumption;
- Energy intensity of economy;
- The share of renewable energy;
- Combination heat energy and electricity as a percentage of total Electricity;
- Income from fees for use of energy;
- Energy intensity of carbon dioxide in energy consumption.

The number of indicators also can be bigger to study the effects of their actions or of the lack of them in the energy sector. The conclusions are important and can influence the future actions, the future strategies and the plans and programs that are at the base of these documents.

Therefore, in the best scenario regarding the energy sector, there must be recorded high values of the energy resources and electricity production along with small dependence on imports and not exaggerated energy consumption, but in the same time the share of renewable energy should be bigger with every period of time taken into consideration. This way, the energy sector will be an independent and self-sufficient one, but also sustainable by not putting at risk the environment and the next generations.

Figure 1. Indicators of the energy sector



Source: processing of the author

These three categories are all of a great importance, the first two ones are already part of many studies and the third one is a category that is the subject of this research in terms of naming and can become of interest in studying them and use the statistical data in the future period.

PROPOSALS FOR INDICATORS OF THE SUSTAINABLE DEVELOPMENT OF THE ENERGY SECTOR

The proposals for sustainable energy indicators aim the environmental elements, the improvement of energy efficiency and the renewable energy through projects including the European Union funds [4]. The levels taken into consideration include the international, European and national ones (table 1).

In the same time, the proposal is treating the data sources, namely the statistics of different levels which already present these data and just need to be included in the sustainable indicators database or suggests other indicators that can be calculated and included in the named database.

The indicators refer to:

- financial allocation, at national level and at the level of the companies, in terms of:
  - funds, that are about the financial aid absorbed in every area;
  - profits, for showing the financial results that can be obtained through the sustainable approaches;
  - costs, that are about the expenses involved in reaching the goals for the sustainable development.

- the projects made by the local administration and by the companies for the implementation of the renewable energy.

Table 1. Proposed indicators of the sustainable energy sector

Indicators	Measure unit	Data source
Energy economy by using renewable energy sources	million tons oil equivalent	national or international statistics
The growth of rate of the share of the renewable energy in the total of the used energy	percent	national or international statistics
The value of funds for energy projects	euro	European or international statistics
The share of European funds in the funds for renewable energy projects	euro	European or international statistics
National funding for renewable energy projects	euro/ lei	European or national statistics
The share of renewable energy costs out of total	percent	European or national statistics
Number of renewable energy projects	number	national statistics on the private sector
Reinvested profit in renewable energy	euro/ lei	national statistics on the private sector

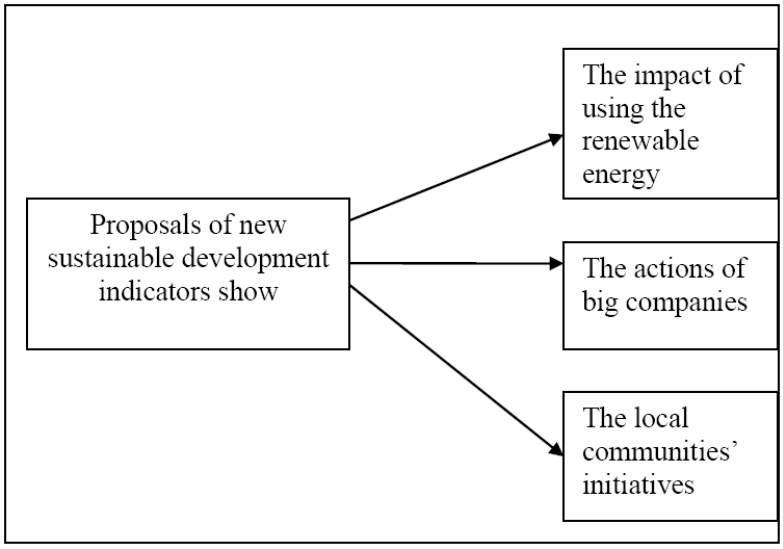
Source: Popa, I. (2011) *Dezvoltarea durabilã – suport decizional în politica energeticã,* Şcoala Doctorală, ASE, Bucharest

The indicators are intended to complement the existing ones and to detail the analysis at the sector level, which is very important for the general sustainability. Also, they are the basis for boosting the reorientation measures to the sector of the renewable energy by highlighting their advantages and their promotion.

The purpose of these indicators is to define some aspects (figure 2) in terms of:

- defining the impact of the renewable energy on consumption and production in this sector;
- the actions taken by the big consumers and polluters companies in all the economic sectors;
- the initiatives of all the small companies and of the population that are taken part of the reconsideration of the energy sector and of its reorientation to the renewable sources as a majority for the energy production.

Figure 2. The use of the proposed indicators



Source: processing of the author

Funding is a big problem and Romania must succeed in attracting structural funds in order to sustain these actions. Although there can be some administrative problems, assuming the sustainable desiderates is a great responsibility and can have the best results only if it has the best resources at its disposal.

The indicators of sustainable database are very important and we can see it in the actions of the European Union and so therefore in the case of our country this kind of efforts and proposals are well received and necessary.

Controlling the impact of using energy and of its production is important due to the decrease of the quantity of the energy resources and the pollution that are negative and strong effects of using fossil fuels.

CONCLUSIONS

The study of the indicators of the sustainable development in the energy sector is a task that has to lead to the sector assessment so it can be realized the improvement of its state and the economy in general.

The presence of a high number of indicators can ensure a detailed analysis that can generate solutions and appropriated measures. Those methods are applied using the resources that are very important and are always accessible, having the best results for the present but also for the future generations and for satisfying the needs of the consumers without having a bad impact on the environmental factors.

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MODEL OF DEVELOPMENT IN THE SOUTH MUNTENIA REGION

Partal Cristina[1], Popa Andreea[2]

Abstract

The sustainable development is a recent concept that appeared from the need to fight the issues of prejudicing the sustainability. This approach is very important to ensure a continuous good life style for all the generations in all the sectors and to help the consumers to be satisfied from all the productive sectors they appeal to for the daily life. This can be achieved by efforts of several parts, such as implementation and support of the regional development. The efforts that can be done in the regional level are expected to give rapid and important results in order to change and maintain the way the economy works in the way of a sustainable growing economy. This paper treats the South Muntenia region by proposing a model of regional development which refers to the development directives and the way to succeed in this area.

Keywords: regional development, sustainable development, model of sustainable development, South-Muntenia Region

INTRODUCTION

The sustainable development is a powerful concept that must be manifested and assumed in the whole world, so the chances of the continuity in the best conditions of the mankind and nature could be very good. Because of the problems that generated the need for its appearance the required efforts must be made in all the sectors of the activity and at all the administrative levels (local, regional, national and international).

The regional development is important because its principles regard the equity of the all the regions in the country, but also because of fulfilling the requirements of the sustainable development, because the efforts made at the level of each region can lead to the national development.

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1. THEORETICAL CONCEPTS OF THE SUSTAINABLE DEVELOPMENT

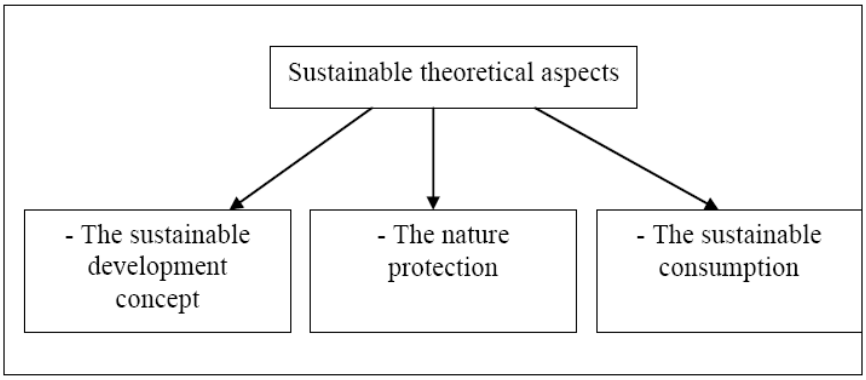
The sustainable theoretical concepts treat the definition of the newest approach in terms of economy and ecology and its effect on consumption, nature and their relation (figure 1).

In 1972 at the Stockholm Conference on the environment was brought up for the first time the sustainable development term. As a definition, the Prime Minister of Norway Gro Harlem Brundtland, in 1987, described the concept as "development that meets the present needs without compromising the ability of future generations to meet their own needs"[1].

An important part of the economical-social- environmental triple approach is formed from the principles that help to achieving the protection of nature and its conversation.

Another concept is the one of sustainable consumption [2] that refers to using resources as many as nature can offer and restore in the future.

Figure 1. Sustainable theoretical aspects



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These concepts are important in terms of states equity and the same rights for the population form this period and for the ones that will follow us. They support their rights for a future good life.

2. A MODEL OF SUSTAINABLE DEVELOPMENT OF THE SOUTH MUNTENIA REGION

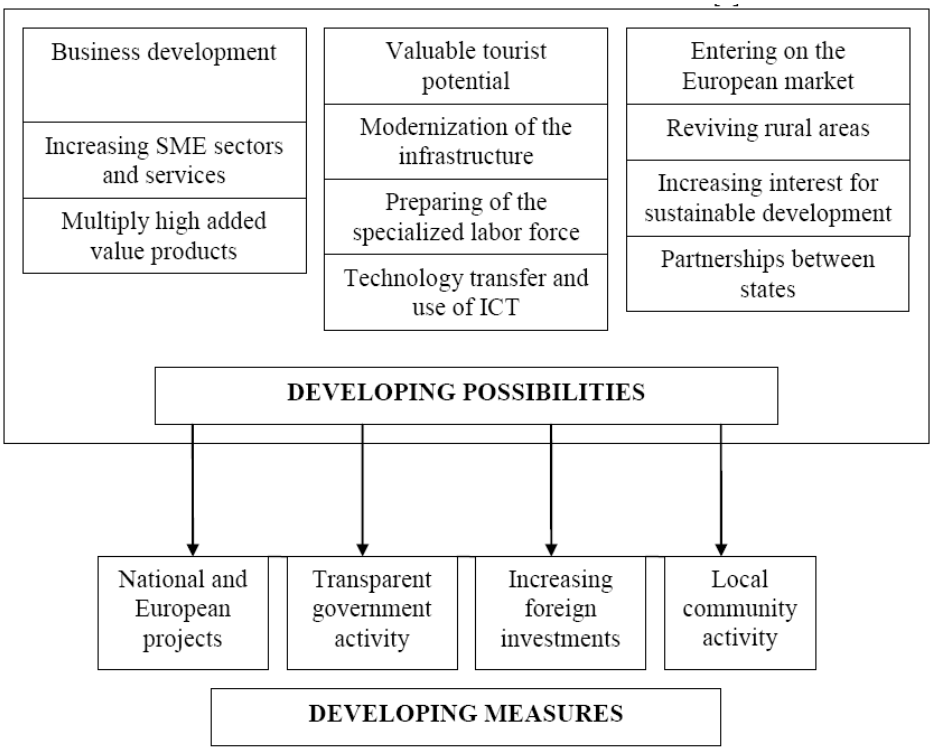
The sustainable development can start from a regional development, which treats economic, social and ecological aspects, to ensure the welfare of the participants in this process and the attainment of regional and national objectives, regarding including the region in a state that is part of the European Community [3].

The model has two parts, referring to what can be done and what is needed to be done for achieving the established objectives. The model refers to the domains in which

there can be made projects of development and how to use the needed economical instruments.

Hence the need to create a regional development model (figure 2), to start from the development possibilities and to realise them through the applied measures [4].

Figure 2. The scheme of development in the South Muntenia region



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The fact that the sustainable development can be achieved by using the regional development means that the second term needs the compliance of the sustainability desiderata, which is a territorial approach of the sustainable development [5].

The efforts made in the part which supports the development possibilities, which is formed of development measures that are of a great general impact leading to developing the regional and sector level.

2.1 Development possibilities

The South Muntenia region has many development possibilities, which are those listed below, according to the SWOT analysis in the "Regional Development Plan 2007-2013" made by the Regional Development Agency of South-Muntenia.

Thus, for short, the most important possibilities that can support the regional development in South Muntenia region of Romania are the following:

- Business development with initiatives that are feasible and of a great expected impact;
- Increasing SME's (small and medium enterprises) sectors and services for the good working of the economy and for creating jobs;
- Multiply high added value products that contribute to the components of the economy indicators;
- Valuable tourist potential, where it deserves attention the sustainable tourism [6];
- Modernization of the infrastructure that sustains other aspects such as tourism;
- Preparing of the specialized labour force, that treats social dimension approach from the viewpoint of education, informing and specializing;
- Technology transfer and use of ICT (the technology of information and communication), which refers to the adaptation to the requirements of a world in motion and the only appropriate use of technology has a positive impact on the environment [7];
- Entering on the European market with a competitive offer and quality services;
- Reviving rural areas for the welfare of the local economy and very important for the communities;
- Increasing the interest for sustainable development, according to which are aimed the economical objectives along with those of the natural environment;
- Partnerships between States, which argues how European Union supports liberalization of markets and the transfer of funds between countries.

They are sustained through new ways of implementation and of valuing these possibilities.

2.2 Development measures

After the first part, there are also presented in the scheme the possibilities correspond some measures to be valued. There are very important and after naming the useful objectives this is the next phase.

The development measures are:

- National and European projects- funded and using their guidance for their implementation;
- Transparent government activity- the actions of the government must be accessible and made for the best interest of the local communities;
- Increasing foreign investments- the initiatives must be well structured for being adequate to the demands of the European funding organisation;
- Local community activity- every community must join the efforts for the development of their regions.

These measures or instruments are often used for development and it is very important for the decision factors to be accessible at the level and in the region that can be developed.

To illustrate them that are nominated the measures most powerful that can be applied in valuing these possibilities:

- Business development – it is realized by entrepreneurship development projects, which can be made through the flow of investments from local and regional level and the national policy which to support the domain;

- Increasing SME sectors and services- by multiplying the investment in these enterprises and the tertiary sector to which is given now more interest and involving funding for small businesses;

- Multiply high added value products at this level is high- at this level it is the need to meet this objective by investing in research and development, technology, exploitation of local resources;

- Valuable tourist potential- here there can be applied all measures said, because government support is needed, the funds involved in projects to support the sector and the local community activity for projects involving education about environmental protection and ecological tourism;

- Modernization of the infrastructure -this is a necessary and important goal and it is made by distributing funds for projects that meet the needs ensuring, which increases the rural and urban attractiveness that refers to the tourism appearance and accessibility;

- Preparing of the specialized labour force- these training programs are needed in all industries to adapt to new needs of employers, such as those related to new branches of labour processes: renewable energy production, sustainable tourism, being necessary investments and training projects;

- Transfer of technology and use of ICT- this field refers to the global computerization and introduction of these elements in all fields of labour, requiring serious investment projects and, from national or foreign sources that can lead to upgrading communication and data transfer;

- Entering on the European market- the European Union wants to create a common market and dropping the borders, the access of our countries and of the products specific to the regions being possible thanks to the government support and investments;

- Revival of the rural areas- is made through projects and investments, which to address infrastructure, accommodation and food services properly, promoting the area, care objectives;

- Increasing interest for sustainable development- this concept that must be popularized aims educate and make responsible the people and companies and it is realized through investments in education projects;

- Partnerships between the States- another element that is based on the fact that our country is part of several international organizations and attracts investment projects and partners for common goals.

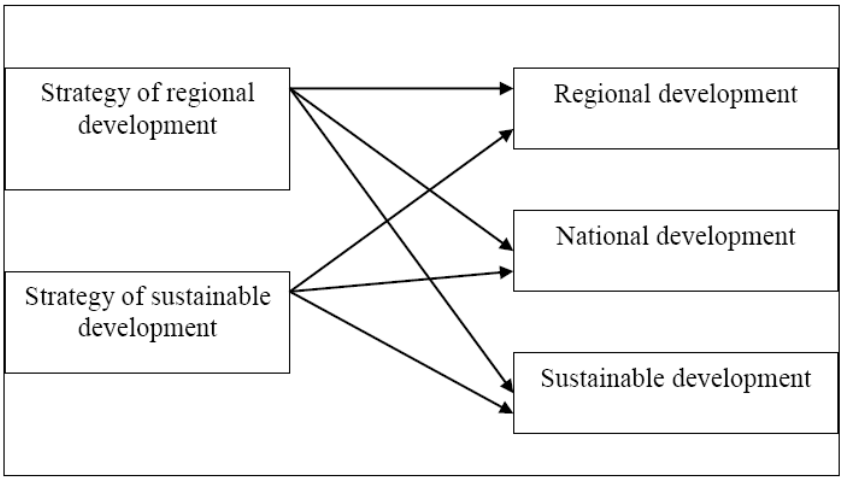
These measures lead over time to the development of structures and a way of life for people which to ensure satisfaction regional and sustainable development desiderata.

Having resolved these two parts of the model all that can be done is to implement all the projects that will bring the development of the area and to find a way to keep this trend of growing.

The process of development is difficult and can not be started many times and than to be stopped because of the attracted resources that will not be available for insolvable companies that manage the regional development.

Starting, continuing and finishing the strategy of regional development emphasizing the areas that are suited in terms of an increasing indicators' need and of the need of reaching a good life style for the population and its maintenance in the next and far future time (figure 3).

Figure 3. The impact of the development strategies



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The importance of development is big in terms of sustainable development: in the economy, society and environmental aspects, for every aspect and for all and their synergic impact at the regional development and at the national level as well.

CONCLUSIONS

The regional development and sustainable development theories represent two concepts that need much support, at regional and local level. The projects that aim these objectives (that are in the same time economical, social and ecological) are as well very important being the base for real results.

A good point to achieve their objectives are the regional development models, which as an example, for the South Muntenia region has many positive elements, such as development possibilities and convenient applicable measures used in the present and in the future.

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ANALYSIS OF THE DEGREE OF ACCESS TO THE EUROPEAN AGRICULTURAL FUND FOR RURAL DEVELOPMENT IN ROMANIA

PĂUN Georgeta[1]

Abstract

Although the mechanisms necessary to adapt the current Common Agricultural Policy, Romania has achieved targets for increasing labor productivity, while increasing market competitiveness and transformation of current structures viable operating structure as the foundation for integration into the common market. These steps can not be bypassed. As the old Member States have long exceeded those steps and it is not possible the unitary development at European level through the maintenance of important differences, the new Member States should be supported to speed up reforms. As a result, the Romanian agriculture, although it will evolve at a European level and in the future will have features related to the nature of climatic and human resources which furthers the quality of products, diversified. This specific development is the expression of diversity of Member States to ensure their national identity. Support the European integration process fosters diversity of each Member State market competitiveness of food products.

Keywords: grants, rural development, degree of access, the National Rural Development Programme 2007-2013, European Agricultural Fund for Rural Development.

INTRODUCTION

European Union with 27 Member States has the strategic directions of agriculture and rural integration with the environment for sustainable development to cope with economic risks and uncertainties, ecological, social and sanitary. New global challenges for market instability and food crisis have emerged under the impact of climate change, degradation of natural resources and soaring energy prices. The effects has generated the income inequality and the rising food prices. Following these disturbances, the European Union and the Member States adjust their development strategies from some provisions aimed at increasing food production on sustainable

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paths, protecting natural resources and European agriculture more competitive on the world market.

Romania is on track in terms of community development in agriculture has not yet expected progress in adapting its basic structures to the market competitive, although the national economy is growing since 2000. To overcome this situation, limiting economic expansion and exploitation of agricultural potential, measures must be accelerated in sense of modernization and organization of agriculture in sustainable use of renewable and non-renewable resources for food security and economic balance.

Overview of the European Agricultural Fund for Rural Development

European Agricultural Fund for Rural Development (EAFRD) is a post-accession European fund, established to support the economic and social areas of the territory of the European Communities, to strengthen the structures of agricultural production, diversification of methods of land management and employment work, which finances rural development measures and aid for farmers, especially in regions with developmental delays.

EAFRD is accessed based on two key documents: the National Rural Development Programme 2007-2013 (RDP) and National Strategic Plan for Rural Development.

National Rural Development Programme 2007 - 2013 designed, was approved by the Rural Development Committee of the European Commission, on February 20, 2008.

General objectives of the RDP were determined according to the EAFRD on economic and social development of rural land, diversification of methods of management and employment land were identified and specific strategic objectives in each axis as follows:

- Axis 1 aims at increasing the competitiveness of agrifood and forestry sectors in Romania. Goal: Increase the competitiveness of the agri-food and forestry;
- Axis 2 aims to maintain and improve the rural environment by promoting the sustainable management of agricultural areas and of the forest. Goal: Improving the

environment and the countryside;

- Axis 3 aims at encouraging diversification of rural economy and improving quality of life in rural areas. Goal: Encourage the diversification of rural economy and improving the quality of life in rural areas;

- Axis 4 aims at improving local governance and promote the endogenous potential of rural areas. Goal: Starting and operating local development initiatives.

Implementation status of the rural development measures financed by the EAFRD

Implementation status of the measures by the EAFRD on 31/12/2010, broken down by each axis / measure in part, as follows:

- ✓ Axis 1: Improving competitiveness of agriculture and forestry
- ➢ Measure 112 "Setting up of young farmers"

By the end of 2010 were held four sessions for submission of projects under this measure, during which 6572 projects were submitted for a total of 136,720.066 requested eligible thousand euros. Of the 6572 projects submitted were selected following the Selection Committee meeting of 4567, out of which 3075 projects were contracted, with a total volume of investments 64724.599 thousand Euro and with a value of eligible reimbursable 64705.035 thousand euros, which have made payments amounting to some 35333.616 thousands Euro, 28266.893 thousands Euro representing EAFRD contribution.

- ➢ Measure 121 "Modernization of agricultural holdings"

By the end of 2010 were held 7 sessions for submission of projects under this measure, during which 5545 projects were submitted for a total eligible amount requested of 2121050.948 thousand euros. Of the 5545 projects submitted were selected following the Selection Committee meeting of 1845, out of which 1641 projects were contracted, with a total investment volume of 1,409,449.063 thousands EUR and value of eligible reimbursable 603,063.248 thousand euros for which payments were made 228,120.552 thousands Euro, 182,496.442 thousands Euro representing EAFRD contribution.

ro si cu o valoare eligibilă nerambursabilă de 507.884,270 mii Euro.

- ➢ Measure 123 «Adding value to agricultural and forestry»

In measure 123 were applied three aid schemes, namely:

• State aid scheme - XS 13 / 2008 to stimulate SMEs that process agricultural products in order to obtain food, other than those listed in Annex I to the EC Treaty as well as those engaged in processing agricultural products to obtain and use renewable energy sources and biofuels;

• State aid scheme - XS 28 / 2008 to stimulate small enterprises in the primary processing of wood and non-wood forest products.

• State aid scheme - N578/2009 to stimulate regional development through investments for agricultural and forestry product processing to obtain non-agricultural products.

By the end of 2010 were held 20 sessions for submission of projects under this measure, during which 1504 were eligible projects with a total requested 1290685.243 thousand euros. Of the 1504 projects submitted were selected 928 projects of the Selection

Committee meeting, of which 688 projects were contracted, with a total investment volume of 1,366,302.036 thousand EUR and a 507,884.270 thousand euro representing EAFRD contribution..

Out of 1504 projects submitted:

• 913 projects were submitted to measure 123, of which 556 projects were selected and 375 contracted projects with a total investment volume of 1,004,731.701 thousand EUR and a value of 370,195.118 thousand Euro grant eligible;
• 247 projects were submitted to the State aid scheme - XS 13 / 2008, of which 215 projects were selected and 179 contracted projects with a total investment volume of 214,529.817 thousands Euro and value of eligible reimbursable 78403.931 thousand Euro;

• 177 projects were submitted to the State aid scheme - XS 28 / 2008, of which 157 projects were selected and 134 contracted projects with a total investment volume of 147,040.518 thousands Euro and value of eligible reimbursable 59285.221 thousand euros.

• 129 projects were submitted on schedule N578/2009 - Agricultural.
• 38 projects were submitted on schedule N578/2009 - forest products.
By the end of 2010, payments made were 118,923.770 thousand Euro, representing EAFRD contribution 95139.016 thousand euros.

- Measure 125 «Improving and developing infrastructure related to development and adaptation of agriculture and forestry»

By the end of 2010 it held a session for submission of projects under this measure, during which 870 projects were submitted for a requested eligible amount of 922,896.844 thousand euros. Of the 870 projects submitted were selected 141 projects of the Selection Committee meeting, of which 135 projects were contracted, with a total investment volume of Euro 193,079.151 thousands and value of eligible reimbursable 154,915.111 thousand euros, for which no payment was made.

- Measure 141 «Support for semi-subsistence farms»

By the end of 2010 were held three sessions for submission of projects under this measure, during which 36 416 were submitted for projects with a total of 273,120.000 requested eligible thousand euros. Of the 36 416 projects submitted were selected following the Selection Committee meeting 18 408 projects, of which 16,521 were incurred for grant eligible projects with a value of 123,907.500 thousand euros, which have made payments of approximately 24,321, 251 000 Euro, the EAFRD contribution representing 19457.001 thousand euros.

- Measure 142 «Setting up producer groups»

By the end of 2010 were submitted 17 projects with a total of 2501.655 thousand Euro eligible required. Of the 17 projects submitted, 15 projects were declared eligible, which were contracted 14 projects with a value of 2215.137 thousand Euro grant eligible

for payments that were made about 214 808 thousand euros, EAFRD contribution representing 171,846 thousand euros.

Also under this measure have been contracted (transferred) 3 grant eligible projects with a value of 30.318 thousand euros, projects were underway to measure 3.2 «Setting up producer groups» under the SAPARD Programme.

- ✓ Axis 2: Improving the environment and the countryside

- ➢ Measure 211 "Support for disadvantaged mountain areas"

By the end of 2010 payments made were 144,974 thousand euros from the applications for areas declared by farmers.

- ➢ Measure 212 - Support for disadvantaged areas - other than mountain

By the end of 2010 payments made were 78.809 thousand euros from the applications and areas declared by farmers.

- ➢ Measure 214 "Agri-environment"

By the end of 2010 payments made were 326,322 thousand euros from the applications for areas declared by farmers.

- ✓ Axis 3: Quality of life in rural areas and diversification of rural economy

- ➢ Measure 312 "Support for the creation and development of micro-enterprises"

Until 31.12.2010, 5 sessions were held for submission of projects under this measure, during which 3980 projects were submitted for a total requested eligible of 543,860.936 thousand euros. Of the 3980 projects submitted were selected following the Selection Committee meeting of 1382, out of which 1338 were contracted projects with a total investment volume of 356,369.285 thousand Euro and 196,624.192 thousand euro eligible grant euro, for which payments made were 41502.819 thousand euros, representing EAFRD contribution 33202.256 thousand euros.

- ➢ Measure 313 "Encouragement of tourism activities"

Until 31.12.2010, 5 sessions were held for submission of projects under this measure, during which 1400 were eligible projects with a total claimed of 238,967.726 thousands Euro. Of the 1400 projects submitted were selected 634 projects of the Selection Committee meeting, of which 582 projects were contracted, with a total investment volume of 264,117.156 thousand Euro and a value of 102,530.681 thousand Euro grant eligible for which payments were 6808.855 thousand euros, representing EAFRD contribution 5447.084 thousand euros.

- ➢ Measure 322 "Village renewal and development, improving basic services for rural economy and population and implementation of rural heritage"

By the end of 2010 were held five sessions for submission of projects under this measure, during which 3039 projects were submitted for a total eligible amount requested

7429244.322 thousand euros. Of the 3039 projects submitted were selected from 611 projects of the Selection Committee meeting, of which 611 projects were contracted, with a total investment volume of 1,922,619.288 thousands EUR and value of eligible reimbursable 1542873.735 thousand euros for which payments were 155,284.178 thousand euros, the EAFRD contribution representing 124,227.343 thousands Euro.

- ✓ Axis 4: LEADER

➢ Measure submeasure 431-431.1 "Building public-private partnerships"

By the end of 2010, Phase 1 'awareness of local actors on the LEADER approach "were held 16 sessions of 5 days (per lot), a total of 64 training sessions for Phase 2" representatives formation potential groups "and they held four sessions of 12 days (per lot), a total of 16 training sessions, and Phase 3 "financial support for preparation of files for selection GAL" was held a session for submission of projects under this sub-measures on during which 112 projects were submitted for a total of 4920.162 thousand Euro eligible required. Of the 112 projects submitted were selected from the Selection Committee meeting 111 and 104 contracted projects with a value of 4340.341 thousand Euro grant eligible. By the end of 2010, as the 431.1 phases 1, 2 and 3, payments made were 4779.016 thousand euros, representing EAFRD contribution 3823.212 thousand euros.

- ✓ Measure 511 "Technical Assistance"

By the end of 2010, following the procurement process, at APDRP ended 21 contracts with a value of 10687.728 eligible thousand euros and ended September at MARD or contracts with a value of 1116.391 thousand eligible euro and Framework Agreement for National Rural Development Network in the amount of 29,487,028.03 euros. Under this measure, the period, have made payments amounting to 5187.859 thousand euros, of which direct payment is Euro thousands 2361.504 and 2826.355 thousand Euro payments related to contracts are signed.

Analysis of the degree of acces of the rural development measures financed by the EAFRD

On March 11, 2011, measures 112, 121, 123 (including state aid scheme), 125, 312, 313, 322, 141, 142, 431.1, 511, guarantee schemes, 221, 211, 212, 214 , 611 of the National Rural Development Programme, 59 469 projects were submitted for 12.966.147.829,27 Euro. Among them were selected 30,733 projects public 4.040.143.244,76 euros, of which 27,691 were contracted public contracts with a value of 3.651.405.029,82 Euro and 4,262,807 that were made installment payment value Euro 1.871.583.160,91 public.

Of the total allocations RDP 2007 - 2013 (including additional allocations from the European Economic Recovery Plan) in the amount of 6,953,014,326 euros (not including measures area payments for which there are stages of evaluation, selection and contracting), the use of allocations representing the value of public contracts related

to the allocation of RDP, was 52.52%.

Of the total allocations RDP 2007 - 2013 (including additional allocations from the European Economic Recovery Plan) 9,675,397,030 Euro worth of accessing RDP level, representing the public value of payments relative to the allocation of RDP, was 19.35%.

Conclusions

Romania has considerable EU funds, however, is dependent on accessing their internal resources and many projects eligibility. From this point of view of European farmers are more favorable than poorly organized and Romanian farmers not benefiting from economic and institutional structures functional Access to European funds is limited by the state of Romanian agriculture, some provisions of the agreement negotiated by the high demands of EU rules on cross compliance and the difficulties of organization and institutional.

Romania must meet specific objectives related to agricultural policy agricultural economy and state characteristics of rural communities. Specify these priorities in a national strategy and long term programs, particularly on natural resource protection, scientific research and modernization of animal husbandry are the basis to achieve the objectives set in line with the Community strategic guidelines to reduce and eliminate disparities and guarantee to the old Member States.

The low level of funding in 2007-2008, annual gradual allocation of direct payments in a long time, and delays in payment of farmers, are impediments to accelerating the process of adaptation to European structures.

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PRESENTATION OF THE COMMON AGRICULTURAL POLICY (CAP) - HISTORY AND ESTIMATES POST 2013 –

PĂUN Mihaela-Cristina[1]

Abstract

Common Agricultural Policy (CAP) is one of the first common policies adopted by the European Union. Its genesis was a reaction to food problems that followed the Second World War, and measures were adopted in the European Economic Community (EEC). The term "common policy" fairly reflects one of the defining features of the CAP, namely that, for about 90% of agricultural products, the decision not remain with the Member States but the European Union. CAP is not only one of the first common policies, but also among the most important. In its present form, agricultural policy is built around two pillars: the first - and original - is the common market organizations, common measures include regulating the operation of integrated markets for agricultural products, and the second, which has gained widespread in the last decade is that of rural development and includes structural measures targeting the harmonious development of rural areas, in some aspects: social, business diversity, quality products, protect the environment.

Keywords: Agriculture, Common Agricultural Policy (CAP), grants, reform of the CAP, future the CAP post-2013.

INTRODUCTION

Agriculture which was the expected implementation of a common early stage of European construction. Farmers were at the time of signing the Treaty of Rome 25% of the population. Besides belonging to the same area of civilization, where agriculture and peasants formed the basis of European culture building, the main feature was the diversity of Europe's agricultural and mining structures, management methods and policies. From another perspective, Western Europe still not able to overcome, despite U.S. support provided by the Marshall Plan and efforts to coordinate development policies in the OECD, economic retardation and imbalances caused by years of war.

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European agriculture, even the most modern (M. Kingdom, Netherlands, Denmark), were still less mechanized, using small amounts of fertilizer and plant protection products was ignored role. Small family farms, non-specialized, not only could provide a subsistence income for self-consumption agriculture, far from providing food needs and to cope with foreign competition, especially coming from the U.S. Common Agricultural Policy (CAP) was intended to be, in this context, the solution to achieve the three objectives: economic - promoting technical progress and optimal allocation of resources, increased production, social - fair standard of living for farmers, reasonable prices for consumers, and political - to ensure food security. Common Agricultural Policy Community is exclusively reserved. Its aim is to ensure reasonable prices for consumers and fair incomes for farmers, in particular through the creation of the common agricultural market and the principle of single prices, financial solidarity and Community preference. CAP is one of the most important Union policies (agricultural expenditure accounts for 45% of the Community budget).

Overview of the Common Agricultural Policy

Agriculture was still the beginning, one of the key sectors of the European Community, which is why the European Economic Community initiated a Common Agricultural Policy (CAP) in 1962 specifically to increase yields and ensure a standard of living fiermierilor comparable with the other social categories. It also aimed to stabilize markets and ensure continuous supply of European consumers and affordable.

CAP importance is reflected by several distinct features:

- when launching the CAP, had mitigated the shock of a high rate of labor out of agriculture. Agriculture lobby remains strong today, making agricultural policy is a sensitive chapter;

- CAP is an integrationist policy par excellence, to a greater extent even than the internal market, where harmonized standards have replaced only about 10% share of national ones. In the CAP national agricultural policies have been replaced, for most agricultural products (90%), common regulations for the operation of markets and marketing;

- CAP is a policy of financial resources consuming. CAP consumes complex system of subsidies and other financial incentives, about half of the common budget.

CAP is based on three independent principles. The first principle refers to „market prices" unique, which means that agricultural products can circulate freely throughout the EU, applying the same system of prices. The second principle concerns the „Community preference", that EU products are preferred to those outside the Union, to which European consumers must pay an additional fee. The third principle „financial solidarity" concern that all EU Member States and contributes to the Community budget, while all Member States are entitled to benefit from measures financed under the CAP.

CAP objectives are:
- Agricultural efficiency;
- Fair standard of living for farmers;
- Stabilize agricultural markets;
- Ensuring supply;
- Reasonable prices for consumers.

To achieve the objectives of CAP are used the following instruments: prices, income policy, subsidizing certain costs, external trade policy incentives and protection.

CAP reform

Moments of forming and CAP reform:

- 1957 - Treaty of Rome establishing the objectives of the CAP (agricultural productivity, a fair standard of living for farmers, stabilize markets, ensure the supply of food, reasonable prices for consumers)

- 1958 - Conference in Stresa on the policy framework

- 1962 - Take the first Common Market Organisation (set of technical provisions governing the functioning of the common market for each product)

- 1964 - Understanding the level of grain prices

- 1966 - "Luxembourg compromise" on a unanimous vote, (Since that time, any member could block any decision by the Council of Ministers. For the effect was that the CAP reforms has slowed down, because any state agricultural interests to block debate in therefore the proposals for reform have become moderately timorous)

- 1968 - 'Mansholt Plan' for structural reform of the agricultural sector

- 1973 - First expansion: Denmark, Ireland, United Kingdom (the latter country became the main critic of the CAP)

- 1984 - introduction of production quotas on milk

- 1988 - Introduction of "budgetary stabilizers" of the CAP expenditure

- 1992 - MacSharry reform: reducing intervention prices and the introduction of certain direct compensation payments

- 1994 - Completion of the Uruguay Round: the reduction of agricultural protectionism

-1999 - Agenda 2000: the introduction of Pillar II to support rural development. He tried straightening attention to rural development. Thus, the CAP has been divided into two pillars: Pillar I - oriented agriculture as an economic branch - direct payments and market interventions (traditional CAP) Pillar II - aimed at rural development (modernization of villages and agriculture, development of alternative economic sectors of agriculture, protect the environment and the countryside).

- 2003 - Fischler reform: the introduction of single farm payments, decoupled. During the second term's Fischler, in 2003, another reform was adopted, considered by many analysts as the most radical in the history of CAP. The main element of this reform was the introduction of single farm payments, irrespective of the production. In

addition, two new instruments were introduced that anticipates future developments of the CAP:

1) "cross-compliance" - to receive the subsidies, farmers must meet certain environmental standards and animal welfare.

2) "modulation" (transfer of funds from Pillar I - Pillar II subsidies to rural development by reducing subsidies to large farms. In other words, very large farms receive less money than would be worked by surface and additional funds are moved to rural development.

- 2008 - "Health Check" review progress Fischler reform

On 20 November 2008, EU agriculture ministers reached political agreement on the Health Check of the Common Agricultural Policy. Among a series of measures include the elimination of arable set-aside and gradually increase milk quotas until their abolition in 2015, and market transformation intervention into a genuine safety net. Ministers also agreed an increase in modulation, whereby direct payments to farmers are reduced and the money transferred to the Rural Development Fund. This will allow a better response to new challenges and opportunities faced by European agriculture, including climate change, the need for good water management, biodiversity and green energy production. Member States will also have the opportunity to assist dairy farmers in sensitive regions so as to adapt to new market situation.

Future of the CAP post 2013

European Commission Communication: "The CAP towards 2020: how to respond to future challenges regarding food, natural resources and land use" is proposing three ways:

- Status Quo improved: continue gradual reform process to adjust inequalities between Member States (balance of direct payments);
- Support more balanced, better targeted and more lasting: a substantial and timely reform with more focused targets diverse needs of farmers and aims to support environmentally friendly farming;
- Reform of the CAP significant (elimination of income support policy and market support pillar I practically, political philosophy maintaining Pillar II) targeted support particularly to environmental issues and climate change.

Romania Position:

- Maintain the value of real support for agriculture in the two complementary pillars configuration, and recovery potential should allow the new Member States and convergence goals;
- Support active farmers will lead to reducing disparities between Member States and the correct allocation of financial resources;
- Supporting small-scale agriculture, by introducing a support system dedicated to small farms, contributing to strengthening the competitiveness and maintain the vitality of rural areas;

- A fairly direct payment per hectare compared to the other Member States, which is a real support farmers' income and ensure the possibility of developing the competitiveness and sustainability of rural;
- Simplification of the regulatory framework of the CAP, including cross-compliance standards, to reduce administrative burden and ease the economic activity of European farmer;
- Maintaining a budget at least as consistent for rural development and the key criteria for allocating current EAFRD in the Union;
- Supporting innovation, use of environmentally friendly agricultural methods, and alternative energy resources in rural areas to increase efficiency, productivity and resilience of agriculture to climate change;
- Development of rural areas by continuing to support the modernization of infrastructure and non-agricultural services to improve living conditions;
- Diversification of actions supported under the Leader axis and increased financial support;
- Operation of the food chain, the bargaining power of farmers, contractual relations, the need to restructure and strengthen the production sector, transparency and the functioning of markets for agricultural products;
- Maintaining a consistent level of Pillar II budget;
- Increase competitiveness, sustainable management of natural resources and balanced spatial development;
- Creation of the new programming period packages, by interconnecting the existing response to the needs of specific areas or groups;
- With regard to risk management package, the continuation and development of financial engineering measures, insurance instruments, access to credit, guarantees, equity, etc., which are essential to increase competitiveness of agriculture;
- Pillar II of CAP coherence with other EU policies and development of a Community Strategic ERDF, ESF, Cohesion Fund, EAFRD and EFF.

CONCLUSIONS

CAP has long represented the most important success in the integration process of the European Community.

At least until the 80s of last century, the common agricultural success and example of solidarity that have driven European integration offered at all levels - economic, social, institutional and policy .

Agriculture will continue to occupy an important place in future development of Europe, not only in ensuring food security, conservation and appreciation of the countryside, but also to face new challenges such as climate change, while providing a fair standard of living for farmers. But agriculture has to adapt.

As the CAP has proven to be able to turn in recent years, there is a need to make decisions about future needs and the role of agriculture and rural development

vision 2020 and trigger public investment and innovative efforts to provide a thriving rural economy.

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INTEGRATION OF ROMANIAN AGROFOOD SYSTEM INTO THE EUROPEAN UNION

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Abstract

Romanian accessing to European Union does not automatically represent it's integration. The integration of agro food system in the European Union involves a series of issues, first should agricultural economy integrate into the national economy and second, the agro food sector should integrate into the EU structures. After 4 years of accessing to EU, Romanian agriculture still faces a series of problems, mainly regarding the average yields per hectare. In the paper it is presented a comparative analysis regarding the cereal production for Romania vs. France and the main conclusion is even if the Romanian cereal producers has half of the cost of the France producers, he still receives 3 times less of the price per hectare.
Key-words: European integration, agro food system, rural development

INTRODUCTION

EU accession does not automatic represent EU integration, integration is a process more complex and lengthy involving two aspects: economic integration and political integration. Economic integration represents, in essence, elimination of barriers between economies, following the reduction or elimination of economic frontiers of the public role of territorial borders with neighboring European Union members.

European economic integration refers to both market integration and the integration of economic policy. Market integration is the essence of economic integration because it indicates that the activities of market actors in different regions or Member States are connected to supply and demand requirements throughout the Union. Usually, this will materialize in a cross-border movement of goods, services and capital. The importance of economic integration is the increasing competition between operators in member countries, leading to lower prices for similar goods and services, greater choice and improved product quality.

Every country is facing problems in the balanced economic development of the

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territory, regardless its economical and social degree of development, prompted by a number of objective and subjective factors that determine unequal development of the economy.[2]

The integration process is the essence of achieving a modern agricultural development Romania. This is accomplished in the transition period in two areas: integrating agricultural economy in the national economy, the integration of agro-food sector in the EU structures. Integration of agricultural economy in the national economy takes place in the market organization, through the formation and operation of agro-food chains and increasing economic efficiency in order to ensure food self-sufficiency of the population.

Although it has a high agricultural potential, Romanian agriculture is not competitive with that of Western European countries. The most important issue is to increase agricultural competitiveness because Romanian agriculture could satisfy the needs for our population and much more.

For Romania, agriculture is one of the most important resources for economic development, is objectively necessary before integration into the European Union to ensure food self-sufficiency and the development of agriculture can take place only through an approach for the whole agro food.

Analysis of agro-food system requires knowledge not only of activities and sectors (agents), but the links between them. Is necessary to study the agro-food system as the amount of chains[3].

Only given this approach, the Romanian agriculture will compete with the other European countries and could integrate in its system. The construction of agro-food sector in the current European Union was based on the regulations and the functioning of market mechanisms. To complement our agriculture in the national economy, but also to achieve an integrated economy in the European Union requires a highly professional in the correct concept of integrating domestic and foreign agro-food.

It takes into account the current level of development of agro-food sector, which is rudimentary and the process of organization, and the fact that agricultural policy during the transition period may not be identical to that stabilized the country economically is a minimum requirement for the efficient approximation of the European Union.

Along with agricultural policy, rural development is the second pillar of sustainable and integrated development plans to:

- a comprehensive program to promote rural development in all areas of the country: mountains, hills and plains in a rural development concept for economic and social integration of the Romanian village;

2 Istudor Nicolae, Petrescu Irina Elena, Dobronauteanu Ionut, Lucov Bogdan, Opportunities for increasing the acces degree of structural funds for regional development in Romania, 2010, Quality Magazine, vol. II, no. 118

3 Ion Raluca Andreea – Performanta economică a sistemului agroalimentar românesc, Editura Ceres, Bucuresti 2005.

- Providing a favorable environment for attracting foreign capital in favorable conditions, in order to support investment programs and development of agricultural production in Romania.

The main objective of agricultural development on medium and short term is to increase quantity and quality of agricultural production, to ensure food security of the population with food products in sufficient quantities and in accordance with environmental protection and improvement.

Comparative analysis of natural potential use in Romania vs France

Utilization of natural potential in Romania is estimated, according to ASAS experts for 0.39 (obtained as the ratio between the average grain production, standard 2770 kg / ha in 2009 and ecological potential of Romania, considered by D. Teaci in 1981 to 7000-7100 kg / ha).

The production cost for cereals in Romania and France

Table nr. 1

Specification	Unit	France	Romania	Romania/Franta %
Fertilizers	Euro/ha	160	49	30,6
Pesticides	Euro/ha	110	18	16,4
Irigation	Euro/ha	140	22	15,2
Energy	Euro/ha	125	102	81,2
Seeds	Euro/ha	62	67	108,1
TOTAL	Euro/ha	1427	717	50,3
Cereal production	Kg/ha	6850	2770	40,4

Source: Alexandri Cecilia, Securitatea alimentară în România, 2011

The analysis of input costs for cereal production, it notes that Romania has half the average cost per hectare of that of France, and the average production is 2770 kg / ha, which represents only 40% of the average production of 6850 kg / ha obtained in France. By category of expenditure, Romania meets higher seed costs because in most of these are imported from leading companies abroad. The opposite is spending fertilizers and pesticides, which is only 30% and 16.4% in comparison with France, which are much less used that generates an average production per hectare than smaller. Also, destruction of irrigation system, old park of cars and farm machinery and fuel consumption generates much higher discrepancies for average yields between the two countries.

The producer price of cereals in Romania and France

Table no. 2

Country	Price/tone Euro	Average yields Tone/ha	Price/ha Euro/ha
France	136,1	6,850	932,285
Romania	108,55	2,770	300,71

Source: Author's calculation from data from the National Institute of Statistics and Romanian National Bank

The data provided by the Statistical Yearbook of Romania, in 2009 shows the average price per kilogram of grain production was 0.46 lei, which is 1274.2 lei / ha and divided with 4.2373 lei/euro (representing the exchange rate from the National Bank of Romania for the year 2009) results 300.71 Euro / ha. Thus, even if the Romanian producer has had half of the cots per hectare comparing the French producer, the revenues are 3 times smaller. The causes of these differences are mainly represented by the yield per hectare, which is 2.4 times higher in France and, the selling price which is with 24 Euro / ton higher in France.

In adverse market condition, in generally it observes that the Romanian agro-food producers have established as main objective to achieve the sold volumes meaning maintaining the quantities of products even if this quantities have achieved lower unit values.[4]

CONCLUSIONS

Given that Romania is a member of the European Union since 1 January 2007, some issues raise regarding the capacity of Romanian farms to be competitive. In this sense, there is pressure on them in the direction of streamlining processes and reducing production costs and in meeting quality standards imposed by the European Union.

Once with de accessing moment of Romania to the European Union, the Romanian village development is sustained by the European Community through The National Programme for Rural Development 2007-2013. This represents a programme for the development of Romanian rural area and it is complementary with operational programmes financed by structural funds.[5]

Economic integration of Romania into the EU internal market requires the integration in the European market and macroeconomic policy coherence, especially at the microeconomic level. In Romania the structural imbalances in the agricultural sector are high, requiring more complicated corrections. These imbalances mostly

4 Dobronuteanu Ion Serban (2010) - Sprijinul financiar acordat României pentru organizarea comuna de piata – vin în perioada 2007-2010, ASE Publishing

5 Istudor Nicolae, Niculescu Gabriel, Lucov Bogdan (2011) – Analysis of accesing European funds for agriculture and rural development in EU member states,

targeting the following issues:
1. Excessive fragmentation of agricultural property is one of the main drawbacks. Currently Romania oriented budget funds both to commercial farms and by the small size (2 million ha).
2. Another structural problem is the large number of agricultural farms and semi-subsistence subsistence. Romanian authorities have to undertake a restructuring scheme of semi-subsistence on principles of efficiency.
3. Another problem is the large share of Romanian agriculture in total employment of farmers and the large number of elderly farmers.

Since Romania has significant amounts for rural development for the period 2007-2013, accessing these funds proves essential to increase competitiveness of agriculture and alignment to standards set by the European Union.

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CURRENT STAGE OF HOMOLOGATION OF THE FIRST ROMANIAN RABBIT BREED – TRANSYLVANIAN GIANT RABBIT

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Abstract

The paper presents the current state of the homologation process of the first Romanian rabbit breed. Animal production very often takes into account aspects such as conservation of national genetic resources, but also an improved productivity. These two issues are the main reasons for creating the first rabbit breed in Romania: Transylvanian Giant Rabbit Breed. We point out here our latest scientific achievements – accomplished during 2011.

Key words: Transylvanian Giant Rabbit, homologation, breed, genetic improvement.

1. Introduction.

Rabbit rearing could represents an answer that agriculture needs in the context of fragmented land, aging population, lack of financial resources for investments and the need to provide a source of quality meat protein. In Romania, domestic rabbit

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has the potential to become one of the most exploited species for meat production. At the same time, the domestic rabbit is one of the animal species that could found a productive niche in the suburban agriculture of Romania (Petrescu-Mag et al. 2011 b, c). Economic efficiency of production of rabbit meat is high. Rabbit meat production for self-consumption or for sale is a solution both for the protein needs of families in rural and peri-urban areas, and for increasing their incomes. It is also a solution for providing large quantities of a healthier type of meat (compared to others now preponderantly consumed) by developing businesses for rabbit breeding and meat production, either in intensive system, or traditional, or even organic (Petrescu 2011).

The average meat consumption per capita in Romania decreased from 50.2 kg in 1989 to 44.8 kg in 2001, then the trend reversed and by 2005 reached 63.3 kg; this was lower than EU average – 96 kg (D12-4 Fourth 6-monthly report), and than other EU countries: Bulgaria – 45, Hungary – 80, France, Germany – 88, Italy - 92 (http://chartsbin.com/view/bhy). In 2009, the average meat and meat products reached 67.5 kg/capita (http://statistici.insse.ro/shop/). As the trend in meat consumption is now an increasing one (see Table 1, Figure 1) and the need for healthier type of meat is also rising, the rabbit meat is an appealing option.

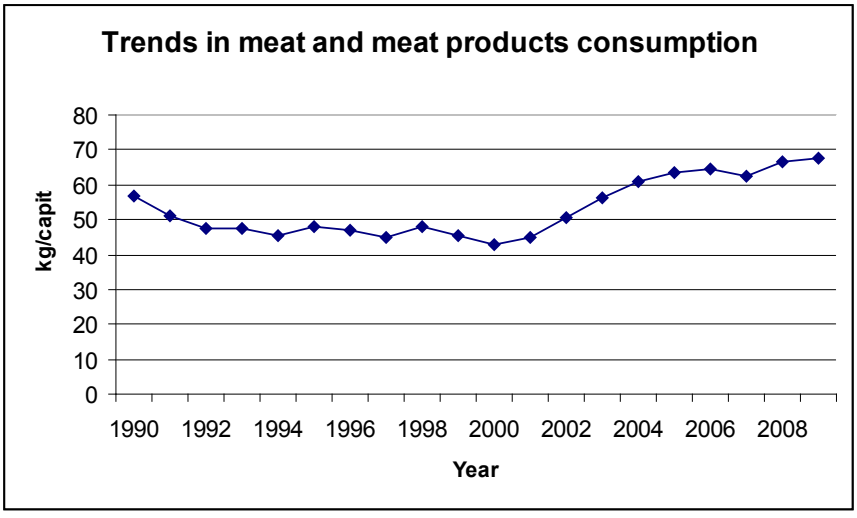
Table 1: Meat and meat products consumption in Romania during 1990-2009

1990	1991	1992	1993	1994	1995	1996	1997	1998	1999
56.9	50.9	47.5	47.7	45.5	47.8	47.2	45.1	48	45.2

2000	2001	2002	2003	2004	2005	2006	2007	2008	2009
42.9	44.8	50.7	56.3	61	63.3	64.7	62.7	66.6	67.5

(Source: Data from INSSE)

Figure 1: Trends in meat and meat products consumption in Romania during 1990-2009



(Source: Own elaboration, Data from INSSE)

Animal production very often takes into account aspects such as conservation of national genetic resources, but also a better and better productivity. These two issues are the main reasons for creating the first rabbit breed in Romania: Transylvanian Giant Rabbit Breed (Petrescu-Mag et al 2011, b). We are also working to another local rabbit breed: Cluj Rabbit Breed (Botha et al 2011). The two new breeds are still being statistically analyzed for homologation.

2. First Romanian rabbit breed

In 2009, it was published for the first time our intention to create a first Romanian rabbit breed based on Transylvanian rustic genes (Petrescu-Mag et al 2009). At the beginning of this year (2011), the members of homologation team published the standard proposal for Transylvanian Giant Rabbit to be used as a judgment standard in exhibitions (before the breed homologation). We followed the general rules presented by European Association of Poultry Pigeon and Rabbit Breeders (2003) and fit them to the specific characteristics of our breed in formation, Transylvanian Giant. For example, regarding *admission in competition/exhibition*: animals which are exclusively suitable for breeding and are healthy will be admitted; regarding c*onditions of exclusion:* castrates, hermaphrodites and rabbits without testes are to be excluded from evaluation, animals which are obviously sick or infested with insects of any kind are to be immediately removed from the show management or by instruction by the judge; regarding *points distribution*: 1. Type and the body shape -20 points, 2. Weight-10 points, 3. Fur-20 points, 4. Head and ears -15 points, 5. Color- 15 points, 6. Markings-15 points, 7. Condition- 5 points (Petrescu-Mag et al 2011, a).

Transylvanian Giant rabbit (Fig. 1) has been created as described in Petrescu-Mag et al (2009), using mostly the native Romanian population (extremely heterogenic, but rustic and hardy) and also: Californian breed (for body constitution and growth rate), Giant Papillon (for size and background black color) and Agouti German Giant (for body size). After a complex breeding program (see Petrescu-Mag et al 2009) resulted a relatively uniform population from almost all phenotypic points of view (Fig.2): Himalaya color pattern (white, pointed black pattern; red or pink eyed), black background color, medium sized and thick ears, average weight of 6 kg (at adult stage; see the growth dinamics in Table 2), 6-8 kits in a litter (6-8 pui la o fatare), good lactation, very good tolerance to pasteurellosis (due to artificial selection made for that trait). However, there were obtained also several individuals weighing under 5.5 kg, value which was considered the inferior limit of weight of Transylvanian Giant at adult age. Thus, we considered appropriate a correction of body size and weight, and we appealed to the infusion with Giant White (during 2010-2011). This infusion with Giant White in Transylvanian Giant population diluted the pointed black trait in the next generation, resulting many agouti-Himalaya and agouti-Himalaya-like individuals (Petrescu-Mag et al 2011, b). A second step will be necessary during 2011 to correct the color trait of the population. This stage is ongoing and it will be completed at the end of 2011. In this respect, we have mated heterozygous males (c^hc) with heterozygous females (c^hc) as regards the Himalaya locus.

Figure 2: Transylvanian Giant rabbit, 2010.

(Source: Bioflux, Cluj-Napoca, original picture)

Table 2: Average growth dinamics of Transylvanian Giant in evidence from 2010

Age (months)	1	2	3	4	5	6	7
Weight (kg)	0.6	1.5	2.6	3.7	4.6	5.5	6.0

We estimate the new rabbit breed will be ready for homologation in less than one year, but the process of homologation will take several years. The first level is the homologation in Romania, evaluated and monitored by ANARZ (Bucharest), that is the authority that approves the new data for homologation of biological creations (breeds, lines and hybrids of animals and birds). A tour of exhibitions abroad will follow in view to prepare the international homologation. Homologation of a breed means not only working on genetic improvement of a population but also a good management, economic studies and a wide legislation survey (Petrescu-Mag et al 2011 b, c).

CONCLUSIONS

Within the homologation process, the next steps will be the submission of breed homologation documentation at ANARZ, the presentation of the breed at the Rabbit National Championship of December 2011 and at the Cuniculture European Championship in 2012. When the homologation process will be completed and successful, the new breed – the Transylvanian Giant rabbit – will represent an important achievement and it will bring not only notoriety on this Romanian breed and rabbit breeders, but also economical, social and environmental benefits.

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EXPORT OF FRUITS AND FRUIT PRODUCTS FROM REPUBLIC OF SERBIA – STATE AND POSSIBILITIES FOR DEVELOPMENT[1]

PUŠKARIĆ ANTON[2], BEKIĆ BOJANA[3], BORIS KUZMAN[4]

Abstract: Main goal of research was to analyse present trends and structure of fresh fruits export and export of fruit products from Republic of Serbia. Research results indicate that fresh fruits and fruit products represent significant export products. Authors say that export of these products represent important potential of the country and to be used well, larger investments in production are important as well as application of marketing concept of business. In observed period, positive foreign trade balance of total export of fresh fruits and products based on fruit processing was accomplished.
In the paper authors indicate at importance of CEFTA application on further development of export of mentioned products from Republic of Serbia. Beside mentioned, it is indicated at importance of Agreement on stabilisation and accession with EU for intensification of fresh fruit export and export of fruit products as well as importance of larger participation of products of higher processing phase in export, which enables favorable export structure and higer level of competitiveness.

Key words*: fresh fruits, fruit products, export*

1. INTRODUCTION

Production and processing of fruits have great importance for economy of Republic of Serbia. Trough fruits, basis for diversification in production of large number of

1 Paper is a part of research at the Project no. 46006 "Sustainable agriculture and rural development in the function of accomplishment of strategic objectives of the Republic of Serbia in the Danube region" which is financed by the Ministry of science and technological development of Republic of Serbia and the Project no. 179028 "Rural labor market and rural economy of Serbia – diversification of income and decrease of poverty", financed by the Ministry of Science and Technological Development of Republic of Serbia

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products is being provided. Fruit production stimulates employment and development of commodity production in agricuture. It enables accomplishment of large production value on a relatively small area. This production connects influence of natural resources and technical-technological achievements in creation of gross domestic product, which enables that fruit becomes significant factor of regional development. Products included in group of products fresh fruits and products based on fruits have significant participation in total export of agro food products of Republic of Serbia.

2. MATERIAL AND METHODS

Main research goal is to give an overview of basic export characteristics of fresh fruits and fruit products from Republic of Serbia for period 2006-2008. Besides that, exchange with Bosnia and Herzegovina was particularly analyzed, because it represents important foreign trade partner from the aspect of fruit and fruit products trade as well as from the aspect of total trade of agro food products. Research was based on available data, using „Desk research" method. Source of data is publication "Foreign trade statistics" of Republical Statistical Office - Belgrade, for selected years. Standard statistical-mathematical methods were applied, and the most significant things were presented trough tables and graphs.

3. RESULTS AND DISCUSSION

3.1. Export of fruits and fruit products from Republic of Serbia

In observed three years period, export of fresh fruits and fruit products from Repubic of Serbia was 336 million US dollars. Export had a growth tendency, which was confirmed by increment of value in 2008 for 52%, in compare to the first year of observed period. Export was divided in three groups of products which differed, among other, by the rate of processing in compare to primary product. The largest participation in export, almost 2/3 had group of fruits and products (this group does not include juices). Then, there were products within group of fresh and dried fruits, as well as products from the group of juices (*table 1*).

Table 1. Fruit export from Republic of Serbia, by groups of products (2006-2008), 000$

	Average value (000 $)	Structure total= 100%
Fresh or dried fruits	64.822	19,3
Fruits and products (except juices)	227.840	67,8
Juices	43.213	12,9
Total	**335.876**	**100,0**

Source: Calculation based on data of Republical Statistical Office, Belgrade

Certain products had dominant position in export. The largest value was achieved thanks to raspberry export and associated products (blackberry, mulberry, blackcurrant

and gooseberry) according to standard international trade classification. Export of mentioned products was averagely 166 million US dollars annually. In compare to the first year of observed period, export of these products in 2008 was increased for 65%. Importance of raspberry, blackberry and similar products for export is large, which is indicated by the data that mentioned products participated in total export of fruits and fruit products with 49,5%. It is noticed the increment of export of fresh berries. In compare to 2006, in the last year of observed period the export of mentioned fruit was increased for 115%, as well as export of fresh stone fruits, which was increased from 9,0 to 24,4 million US dollars. Also, significant export growth was noticed in the case of jams and similar products, from 2,3 to 8,4 million US dollars in observed period.

If we observe export of fruits and fruit products from the aspect of the destination, we can notice that certain countries dominate. The largest export value was at the market of Germany. Export of fruits and fruit products in this country was 81 million US dollars, which represents almost quarter of total export of fruits and fruit products from Republic of Serbia *(table 2)*. In compare to the first year of observed period, in 2008, export of fruits and fruit products in mentioned country was increased for 64%. One of the reasons of high participation of German market in realization of export of fresh and minimally processed fruits, in compare to products based on fruits, was that imported raw material was processed in products of higher processing phase which gives higher value and therefore re-export.

Table 2. Export of fruits and fruit products from Republic of Serbia, by countries (2006-2008), 000$

Country	Average value (000$)	Interval of variation		Structure total= 100%
		Min	Max	
Germany	80.564	57.957	95.187	24,0
France	45.005	30.158	57.388	13,4
Austria	44.682	34.313	51.163	13,3
Russian Federation	27.626	14.187	38.337	8,2
Belgium	17.426	12.714	21.865	5,2
Total	**335.876**	**251.930**	**383.250**	**100,0**

Source: Foreign trade statistics, Republical statistical office, Belgrade

Next to Germany, significant importers of fruits and fruit products are France and Austria which in total export participate with 13,4, i.e. 13,3%. In mentioned countries (Germany, France, Austria) annualy is exported over half (50,7%) of total value of fruits and fruit products which are sell at international market. Besides the fact that France and Austria have important share in total export of fruits and fruit products from Republic of Serbia, value of products which are dedicated to these markets is growing. In compare to the first year of observed period, value of export to France was increased for 90% in 2008. It is important to mention the Russian Federation as a market which is perspective from the aspect of selling of fruits and fruit products from Republic of Serbia. In obeserved three years period, value of export of fruits and fruit products in

the last year was larger for 170% in compare to value achieved in 2006.

If we analyse factors which impact and can impact the increment of fruit and fruit products export from Serbia, it is necessary to first identify and define those factors. 1) Serbia does not have Regional strategy of development, which should clearly define regions which have comparative advantages for production of certain agro food products. 2) Serbia does not have balances of more important agro food products. 3) Serbia is poor country and its export incentives are very modest. 4) In Serbia there is no serious specialisation, organisation and cooperation in agriculture. 5) Serbian export companies do not have very important influence on international marketing mix, they are unorganized and they are not relatively specialized for leading of active politics of direction of international businesses. 6) Realization of Agreement on stabilization and accession, in which are clearly defined concessions of EU toward products from Serbia and concessions of Serbia for products from EU.[5]

Signing of an Agreement on autonomous trade measures represents the possibility for development of agriculture in Serbia, and therefore fruit production, trough intensification of export at the market of EU (In year 2000 European Council brought the decision that asymmetrical trade liberalisation precedes the Contracts on stabilisation and accession with countries of Western Balkan)[6]. Agreement considers posibility of preferential export from Serbia at EU market of about 85% of agricultural products with predominanty domestic origin (export without quantitative limitations, customs and equivalent effect measures). Fruit products belong to agricultural products within this percent, while export of certain agricultural products (baby beef, sugar and wine) is defined by tariff quotes. In this way we can expect intensificaation of export from Republic of Serbia and growth concurency of domestic fruits and products based on fruits at international market.

It is important to mention that fruits and fruit products from Republic of Serbia can be competitive by quality and price. Competitive by quality in export are[7]: fresh raspberry, frozen raspberry (rolend, griz, blok and original), frozen raspberry (blok and konfitura), cherries rolend withouth stone, cherry juice, fresh strawberries, strawberries provissionaly preserved, fresh apples, dried apples, concentrated apple juice, fresh apricot, preserved peach, fresh and dried plums. Competitive by price in export are: fresh raspberry, frozen raspberry (griz blok, original and other), raspberry (frozen, blok and other), fresh cherries, preserved and frozen rolend and blok withouth stone, apples, peaches, apricots, plums, melons, cherries and other fruits temporarily preserved, fruit jams, fruit puree and fruit paste, plum marmelade, apple juice, cherry juice, grape juice etc.

5 Vlahović, B., Cvijanović, D., Milić, D. (2008): Proizvodnja i izvoz voća iz Srbije, XIII kongres voćara i vinogradara Srbije, Novi Sad.

6 Council Regulation (EC) No 2007/2000 of 18. September 2000; Council Regualtion (EC) No 2563/2000 of 20 November 2000.

7 Popović, Vesna, Katić, B. (2007): Uvozna zaštita i podrška izvozu poljoprivrede Srbije u procesu pristupanja STO i EU, Institut za ekonomiku poljoprivrede, Beograd.

In the structure of fruits and fruit products export from Republic of Serbia, dominant position have domestic primary products or minimaly processed products. Countries which have developed market and larger purchasing power of the population, are characterized by the need for highly improved products, while sale of primary products i.e. products of lower processing phase is somewhat difficult.

To increase export of fruits from Republic of Serbia it is necessary to[8]:

Dinamize growth of production – it is necessary to stimulate production of fruits and fruit products trough adequate economic measures, which is necessary precondition of export.

Redefine agrarian politics – it is important that agrarian politics become oriented toward export. To considers suitable price politics, land politics, tax system and import-export protection,

Stabilize primary production – instability in production is transfered to area of foreign trade exchange. It is necessary to create stabile export surpluses which will satisfy the needs of foreign byers regarding quantity and quality,

Change production structure – to try to have more products of higher processing phase in export, which makes export more profitable,

Maintain and improve quality of fruits for export – this is important because at the international market there are very sharp criteria regarding quality of products,

Make segmentation of foreign market – it is necessary to create those segments which are of especial importance for fruit export, especialy products based on fruits. It is necessary to adjust products to selected market segment (regarding quality, packaging etc.),

Create recognizable "trade mark" - "Made in", that is "Product of" which will guarantee high quality of products, which will make it knownable by foreign consumers,

Stimulate export – since export is largely determined by economy-sistems solutions and measures of economic politics, the assistance of the country is necessary which will facilitate overcoming of created barriers in international trade,

Export organicaly produced fruits – world trend of organic production of agro food products, with goal of receiving healthy safe food, it is necessary to use it for the purpose of export of these plants,

Harmonize standards and regulations with standards and regulations of countries importers – this considers implementation of system of safety and quality of agro food products (GlobalGAP, ISO, HACCP)

Marketing approach to export – this approach to export considers research of foreign market and production of such products which will satisfy the needs of foreign consumers (regarding quality, assortmant, package size, package designe etc.), i.e. it considers leading of politics which will result in optimal combining of all elements of marketing mix, product, price, promotion, distribution, to satisfy foreign market and accomplish wanted profit.

8 Modified by Vlahović B. (2003): Tržište poljoprivredno prehrambenih proizvoda, specijalni deo-knjiga II, Novi Sad.

CONCLUSIONS

In observed period export of fruits and fruit products was averagely 336 million US dollars annualy and it had growth tendency. The most significant export products were raspberries and accompanied products which, in total export of fruits and fruit products from Republic of Serbia, participate with 49,5%. Countries which are foreign trade partners of the largest importance are: Germany, France and Austria. Over half of total export of fruits and fruit products are being sold at those markets (50,7%).

From the aspect of export of fruits and fruit products, EU countries represent important foreign trade partner of Republic of Serbia. For the purpose of export growth on the market of European Union the most important activity should be permanent improvement of products quality. Export structure is unfavorable because the largest share have raw materials or products of lower procesing phase. Production of agro food products in Republic of Serbia must be directed toward needs and demands of consumers in EU. Besides EU countries, CEFTA countries are also important for export of products. It can be expected that intensive application of CEFTA agreement will enable larger concurency of fruits and fruit products and that it will positively influence at growth of foreign trade exchange with countries signatories.

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SUSTAINABLE DEVELOPMENT PROJECTS – MANAGEMENT AND INVOLVEMENT IN THE EUROPEAN UNION

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Abstract

Project management can be perceived as a science as and art or a technique, which cover a particular purpose. With Romania's return to market economy has been increasingly felt the need to achieve real projects, to achieve more structured and to justify requests for change, for improvement or financing something existing or proposed to establish. Sustainable development is a very complex concept, which started with concerns over the environment, the idea being enhanced over time with an economic and social dimension. Although initially meant to be a solution to ecological crisis caused by intense exploitation of resources and environmental degradation continues, today the concept is expanded of quality of life in its complexity, both in economic and social appearance. Structural Funds address sustainable development as horizontal aspects, is trying awareness on environmental protection.

Key words: project management, sustainable development, operational programs, horizontal aspects

INTRODUCTION

Project management is a combination of steps and techniques for allocation to time and budget that work. By clearly defining the responsibilities of each activity by the concentration of resources by clear objectives and by providing a structure of communication within and outside the organization boundaries, the process of project management can help the project manager to achieve more goals and less frustration.

The program can represent a local, national or international strategy, it transpose into reality through projects and usually still over several years. Project management is a complex area, engaged in theoretical and practical knowledge in various areas:

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general management, statistics and probability theory, justice, economy, policy and ethics, IT.

Project management therefore involves the integrated approach to management of the following types: time management, cost management, quality management, human resource management, communication management, risk management, project management integration refers both to the draft strategy in the program or institution that launched him, and aim to integrate the project in carrying out the mission of the institution, the integration project with the aim of its objectives (Bodea et al., 2000).

The Project - the key tool in project management

Explanatory Dictionary of Romanian language defines the word project as "*plan or intention to undertake something, to organize, to do a thing"*, while Oxford English Dictionary defines it as "***individual or collective action that is carefully planned and built for achieve a specific objective***". Often, however, the projects means for some people just a request for funding, particularly from an external source, possibly non-reimbursable. This is the first mistake in understanding project management and many times they are rejected from the outset. Therefore, it is essential that persons involved in a project to know very well what are the objectives and goals of the project and how it could contribute to achieving the objectives of the program that is part of the project.

Projects exist in all sorts of typical business activities such as information systems, construction, marketing, industrial research, environmental protection.

Main tasks of project management include:

- ❖ setting goals, sharing the work on subprojects and activities clearly defined
- ❖ sequential tracking them through schemes / diagrams, a graph of time, a budget
- ❖ team coordination, reporting and ongoing communication.

The common element of most projects is that they want to achieve a certain goal, with everything new, which is normally indicated by the name of the project. This objective differs from a project activity / work routine repetitive nature, which is only part of the project. Most activities can be run several times, while the projects are carried out only once (if done well).

To be useful to understanding the project is conceived as an instrument of change, whereas after the successful project will have an impact on the people by changing the way of life or by changing the environment. The project is an instrument of change, while unique. A project has a beginning and an end defined. To go from the beginning to the end of the project must meet a series of steps or phases. Projects using resources allocated to their particular performance (human resources, materials, time and money). Human resources are based on a number of qualities, specialization / qualifications and personal skills. The final results involve identifiable targets, quality and performance specified in the project. The project has a purpose. The goal depends on the size of the project it determines how many resources, how long and how big the final project is. To achieve the objectives proposed the projects follow a boarding

planned, organized. To conduct a project it need a leader - Project Manager (leads a team of people – the manager team project).

A project consists of one current activity with a set start and end, time, resources and budget limit the activities, in order to achieve a defined objective. The objectives of a project should integrate the objectives of the organization that carried out and only after they have been clearly defined, to readjust and to the satisfaction of the program that is part of the project and not vice versa (from the institution of which we are part, we know better the resources available, the problems we have and the possibilities of resolving them) (Calanter and Calin, 2010).

Basic objectives can be classified into three broad categories: specific objectives, cost, period. Depending on the specific objectives of the proposed projects can be classified into three major groups:

- *Investment projects*: the renovation of a university, building a new headquarters
- *Research & Development projects*: the development of new technologies, developing a software setting morbidity in a county
- *Projects for the organization*: the introduction of new forms of organization, the introduction of a new distribution system (Wolfgang, 2007).

For a project have the desired result, the following requirements are needed from everyone involved:

- common understanding of the problem solved for all participants in the project;
- clarify the positions involved and clearly defined project basis, the basic premise for the project (defined project objectives, the strategy is being developed, the planning tools and steps required);
- access to information and ensuring information quality and time to those who use them in making decisions or carrying out activities;
- standardized information flow is usually the organization, contributing largely on the acceptance or rejection of the project by employees of the organization;
- a realistic assessment at the beginning of the project on resources and techniques available to the organization.

To analyze a project it is useful to consider any project that has the same basic structure and will pass through the same phase / separate processes (one has its own life cycle). To be completed successfully, each of them requires different skills, qualities and activities (Mocanu and Schuster, 2001).

The five phases / processes of a basic project are: initiation; planning / design / organization; implementation /construction; monitoring / review; end / entry into service.

Sustainable development - concept, principles and objectives

The concept of sustainable development designates all forms and methods of socio-economic development, not only on the short or medium term, but long-term and whose foundation is primarily to ensure a balance between these systems and socio-economic elements of natural capital.

The most known definition of sustainable development is certainly the time

of the World Commission on Environment and Development (WCED) report "Our Common Future", also known as the Brundtland Report: "Sustainable development is development which aims to meet present needs without compromising the ability of future generations to meet their own needs " (Dobrescu and Albu, 2005). Sustainable development is carried out based on the principles that a major characteristic: concern for equity and fairness between countries and between generations; long-term vision on the process of development; systemic thinking, the interconnection between economy, society and environment.

For this purpose, identified four key objectives:

- Environmental protection measures that allow decoupling economic growth from negative environmental impacts;
- Equity and social cohesion, respecting fundamental rights, cultural diversity, equal opportunities and combating discrimination of any kind;
- Economic prosperity by promoting knowledge, innovation and competitiveness to ensure high living standards and jobs plentiful and well paid;
- Fulfilling the EU's international responsibilities through the promotion of democratic institutions in the service of peace, security and freedom and the principles and practices of sustainable development worldwide.

Sustainable Development Strategy of the EU - general objectives

- limiting climate change, the costs and negative effects for society and the environment,
- providing a transport system that can meet the needs of economic, social and environmental society, minimizing undesirable impact on their
- promote patterns of sustainable production and consumption,
- improve management and avoid overexploitation of natural resources, recognizing the value of ecosystem services,
- promoting good public health in an equitable and improve protection against health threats, promoting social inclusion by taking into account solidarity between and within generations, ensuring security and enhancing the quality of life of citizens as a precondition for maintaining the welfare of individual
- active promotion of sustainable development on a large scale to ensure consistency between internal and external policies of the EU and the Union's international commitments on sustainable development.

The Romanian Government, through the Ministry of Environment and Sustainable Development, performed the project developing the National Strategy for Sustainable Development (NSSD) according to EU requirements in collaboration with United Nations for Sustainable Development.

Ministry of Environment and Sustainable Development is the national institution that deals such as developing and implementing the National Strategy for Sustainable Development (NSSD). This project is conducted under the Memorandum of Understanding between the Government of Romania and the United Nations in

Romania, signed between the two institutions on 28 August 2007 and approved by Government Decision no. 1216 / 2007.

National Strategy for Sustainable Development, the strategic document of national importance, proposes a vision of sustainable development of Romania in the next two decades.

Structural funds - definition, role, programs. Structural funds are post-accession funds supplied by the European Union, whose purpose is to assist Member States. They are supported investments in education, research, agriculture, infrastructure, development of SME's and measures for rural development. Priority objectives of the Structural Funds for 2007-2013 are:

1. Convergence Objective: promote development and structural adjustments of regions experiencing significant delays in development.

2. The objective of regional competitiveness and employment: supporting regions that are not eligible for Convergence objective.

3. European territorial cooperation objective: supporting the regions, counties and areas transnational.

Structural Funds can be obtained in Romania by the Operational Programs presented in table nr.1.

Table nr.1 Operational programs

Program	Acro-nym	Budget in 2011 (euro)	Goal
National Rural Development Program	NRDP	1.357.854.634	increasing the competitiveness of agro-food sector and forestry, improve the environment and the countryside, improving the quality of life in rural areas, diversification of rural economy, starting and operation of local development initiatives
SOP Increase of Economic Competitiveness	SOP IEC	528.395.407	increasing productivity Romanian enterprises to reduce disparities in productivity compared to average EU level
Regional Operational Program	ROP	556.767.943	to support sustainable economic, social, territorially balanced and sustainable Regions Romania poles by focusing on urban growth, improving the infrastructure and business environment
SOP Human Resources Development	SOP HRD	595.593.519	developing human capital and increase competitiveness, by linking education and lifelong learning, labor market
SOP Environment	SOP ENV	761.146.030	the protection and improvement of environmental quality and standards of life in Romania, aiming to comply with the acquis for the environment

Program	Acro-nym	Budget in 2011 (euro)	Goal
SOP for Development of Administrative Capacity	SOPDAC	29.865.828	the creation of a public administration more efficient and effective socio-economic benefit of Romanian society
Operational Program for Fisheries	OPF	39.257.052	the development of fisheries sector competitive, modern and dynamic activities based on sustainable fishing and aquaculture, which takes into account issues of environmental protection, social development and economic welfare
SOP - Transport	SOPT	983.487.517	to promote a sustainable transport system in Romania, which will facilitate the safe transport, fast and efficient people and goods at the appropriate level of services to European standards
Operational Programme Technical Assistance	OPTA	34.460.571	ensuring the necessary support and coordination to help implement and effective absorption, efficiency and transparency of the structural instruments in Romania

Note: SOP – sectoral operational program

The package contains the information's, in general: Program Guide (Guide applicant); funding application form; Forms documents, which may differ depending on the funding and financing: the budget of the project (sometimes included into the application for funding), matrix logic of the project, model business plan accepted by the funding model; CV accepted for project team members, maximum permissible levels of expenditures diurnal model contract to be concluded between the finance and organization of the winning tender for projects, the ad launch of the program of financing, etc..

Sustainable development - horizontal main issue in completing the application for funding. The projects financed by Structural Funds will be developed and implemented in view of the EU strategy on sustainable development. Project activities will follow the principles of sustainable development throughout the various stages of implementation, to ensure environmental protection, resources and biodiversity. In this context, the projects can provide training for the development of environmental management and environmental technology. The overall objective of promoting sustainable development is to make people better prepared to meet the challenges of present and future and to act responsibly towards future generations. To this effect, the initiatives taken into account will have all the fundamental areas of learning, namely learning to know, to act together to innovate and to self and society.

Sustainable development can be defined simply as a better quality of life for everyone, both now and for future generations. Sustainable development means economic development balanced and equitable, high levels of employment, social cohesion and inclusion and a high level of environmental protection and responsible use of natural resources, a policy that generates a coherent political system open, transparent and justifiable; cooperation international effective in promoting global sustainable development (Gothenburg strategy, 2001).

Minimum measures that must be met by applicants in completing applications for funding grants. Treaty on European Union provides for the integration of sustainable development into all European policies, so that they contribute to an integrated manner to achieve the objectives of economic, social and environmental. New Strategy for Sustainable Development of the EU (2006) is, along with the Lisbon Strategy for growth and jobs, contribute to a more prosperous, cleaner and fairer.

To comply with EU legislation, the EU Member States should address the concept of sustainable development in all projects and programs financed from structural funds to help achieve balanced European economies, sustainable and innovative.

The projects integrating sustainable development in early stages of life have added value for both organizations promoter and for target groups and become examples of good practice in the field. The importance of this topic should be recognized in development projects, among policy makers and throughout project implementation.

Development projects must address all three dimensions of sustainable development, environmental, economic and social (Calin and Calanter, 2010):

- The environmental dimension of sustainable consumption and production, conservation and management of natural resources, climate change and clean energy.
- The economic dimension refers to the socio-economic development (economic prosperity) and sustainable transport.
- The social dimension concerns social inclusion, demographic change and public health.

It is expected that following the implementation of environmental projects, economic and social activities with financial support should be distinguishable / visible. One aspect is necessarily included in the project, depending on the specifics of a module / course / seminar or a conference, aimed at awareness of the importance of the concept of sustainable development.

In the spirit of those listed, we recommend that applicants in preparing applications for funding to address the concept of sustainable development having regard to the following aspects: appropriate measures at the level of project management (ex: the rational use of resources by choosing an appropriate logistics, the use of experience in the development and implementation of projects promoting the sustainable development, etc.); inclusion in the draft of measures to raise awareness on sustainable development (ex: inserting a special message on the course materials and electronic correspondence, to draw attention to environmental problems and called for its protection, the materials logos /slogans provided posters visible in the place of project activities, etc.).

Need for sustainable development in project implementation. Sustainable development is a concept of timeliness and met in all projects implemented in EU funds. An impact of this is found in change of traditional mentality, a change in attitude. The idea of this horizontal emphasis will increase confidence in modernization, by: increased competitiveness of all economic sectors; improve the environment and the disadvantaged; improve quality of life; diversify the rural economy; starting and operation of local development initiatives; facilitating transformation and upgrading; facilitating transition management and labor to ensure an adequate standard of living of the social and economic; developing sustainable management; reducing negative environmental impacts and reducing climate change; and reduce the risks of producing natural disasters affecting the population.

CONCLUSIONS

In this article, we tried to present the subject of scienctific project management, need absorption the grant funds and horizontal aspects of sustainable development, which in the last year of access has proven to be one of the reasons why until now have been spent very little money from EU funds and, therefore, very few projects eligible and viable. In essence, the article argues from a comparative perspective for long deep gaps in the system that was designed before accessing such funding.

Of special interest is very full awareness on the lack of project management culture and horizontal aspects of culture - sustainable development, equality, the operational planning of Brussels can not replace any, or the liquid itself. In the future it is proposed to study better these concepts in development and needed to change traditional thinking.

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STRUCTURAL AND QUALITATIVE CHANGES IN ROMANIA'S AGRIFOOD FOREIGN TRADE FACING POST-ACCESION COMPETITIVENESS

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Abstract

Within the double context of the disproportions created by the world crisis affecting the economies and of the competitiveness challenges subsequent the EU accession, the paper presents evolution and effects upon the external performances of Romania's agri-food sector and its commercial flows structure. The assessments, including the intra-Community agri-food trade, highlighted the existing opportunities of the products with expressed export potential and the areas affected by the net imports, by commodity groups aggregated on sections of the C.N.. The calculation of trade relative unit value indices provided the bases for appraisal of the quality of Romanian agricultural trade flows, resulting empiric evidences upon the level of integration of the agricultural trade flows and changes in their terms of trade, on the groups of products of chapters of the C.N..

Key words: agri-food trade, competitiveness, post-accession, unit value indices.

INTRODUCTION

Within the double context of disproportions created by the world crisis affecting the economies and of recent integration into the Common Market, the paper investigates Romania's agricultural foreign trade evolution within the years subsequent EU accession and presents structural and qualitative effects upon the of agricultural exchanged products and the evolution of their terms of trade. Since the importance of the EU has continuously increased, the assessments included the intra-Community agri-food trade flows.

The paper investigated the post-accession trends of Romania's agri-food trade that revealed performance or deficiencies facing external competitiveness, including sensitive areas of the Romanian agri-food sector which can be particularly exposed

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to the global crisis. The appraisal on intra-Community agri-food trade highlighted the existing opportunities of the products with expressed export potential and the areas affected by the net imports.

The calculation of the relative unit value indices provided the bases for assessment of the qualitative changes in the agricultural trade flows and the vertical or horizontal integration of the traded products. Export and import indices can be used for the estimation of the terms of trade of a given country, representing a critical variable in many economic models.

MATERIALS AND METHODS

The analyses was based on EUROSTAT trade statistics database concerning Romania's agricultural trade flows in the period 2007-2010. The assessments of the agri-food trade unit value indices have been made on products aggregated by sections of the Combined Nomenclature (C.N.).

The quality of exports is evaluated in relation to imports, by the range of the relative unit values within the classification thresholds of +/-15% [1]. In this way, when the unit value indices are lower than 0.85 the products are considered as having low quality, while when these are higher than 1.15 the products are considered of high quality, traded at higher average prices. Similarly, when the unit value index ranges from 0.85 to 1.15, it is considered that the products are horizontally integrated (homogenous); the products are vertically differentiated when the unit values of the trade flows do not fall into the +/- 15% margin.

Terms of trade are defined as ratio of export prices to import prices, and the results, revealing growth or decline, indicate an improvement or deterioration of the terms of trade for the analyzed country/sector/group of commodities.

RESULTS AND DISCUTIONS

(I) Post-EU Accession Evolutions of the Romania's Agri-food Trade.

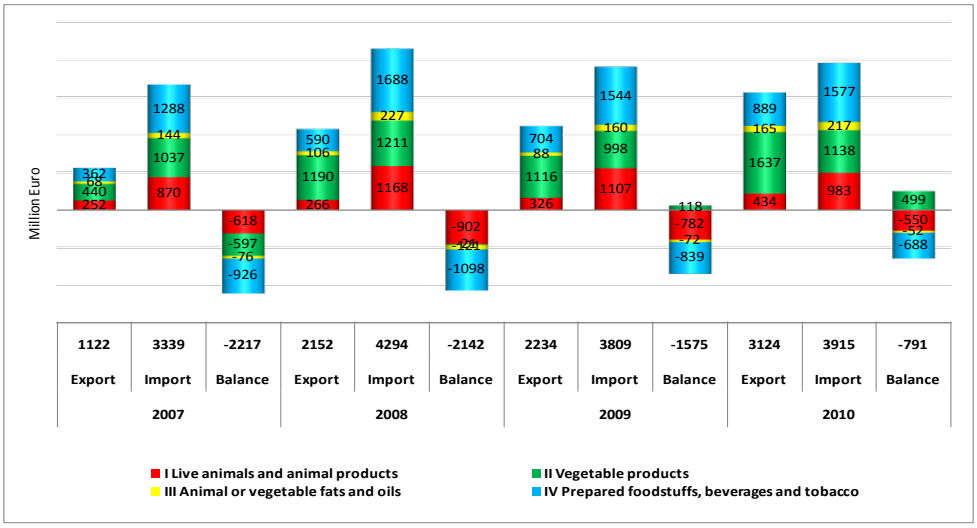
Under the influence of the internal and external developments in the domestic economy the period subsequent the EU accession has been reflected in the country's foreign trade by an intensification of both import and export flows, yet Romania remaining a net agri-food importer since 1990. As a general feature, the annual variation of trade over the last year before the accession showed a greater increase of imports than exports, the increase in European products competition as a result of the first enlargement to the central and east European countries, but also a trade creation effect on the common internal market [2].

The total agricultural trade experienced a growth compared to 2006, i.e. it doubled from 4.4 to 6.4 billion Euro in 2008 and reached 7 billion Euro in 2010. As well, the importance of agri-food exports in GDP in the agricultural sector increased from 15.6 % in 2007 to 24.5% in 2008 and 30.7% in 2009. At the same time, a continuous increase of agri-food opening to the foreign markets was noticed after 2006, significantly larger

compared to the evolution of indicators obtained at national level. Romania is highly dependent on the agri-food foreign markets, estimated at 83% for the year 2009, this indicator reflecting the low potential compared to the foreign competitiveness [3].

The annual exports significantly increased, accounting for 1.122 billion Euro in 2007 and almost doubled afterwards, reaching 2.2 in 2009 and grew to 3,1 billion in 2010 (Graph 1). Imports boosted from 3.3 billion Euro in 2007, up by 37% compared to 2006, to a historical record value of 4.3 billion Euro in 2008. A slight decrease followed, and in 2010 the value of imports reached 3.9 billion Euro.

Graph 1. Evolution of Romania's agri-food trade flows and balance structure



Source: author's processing of EUROSTAT trade data base

As a consequence, the balance of trade drastically deteriorated, Romania's agri-food trade balance drastically deteriorated, reaching a significant deficit of over 2 billion euro in 2007 has been experienced a certain contraction trend, in 2010 respectively, accounting -791 million Euro.

The trade deficit was mainly due to the products included in section IV- Prepared foodstuffs, beverages and tobacco (46% of the trade balance) - whose exports totaled 704 million Euro while their imports 1.5 billion Euro, and in section I - Live animals and animal products (43% of the balance), accounting for 326 million Euro exports and 1.1 billion Euro imports.

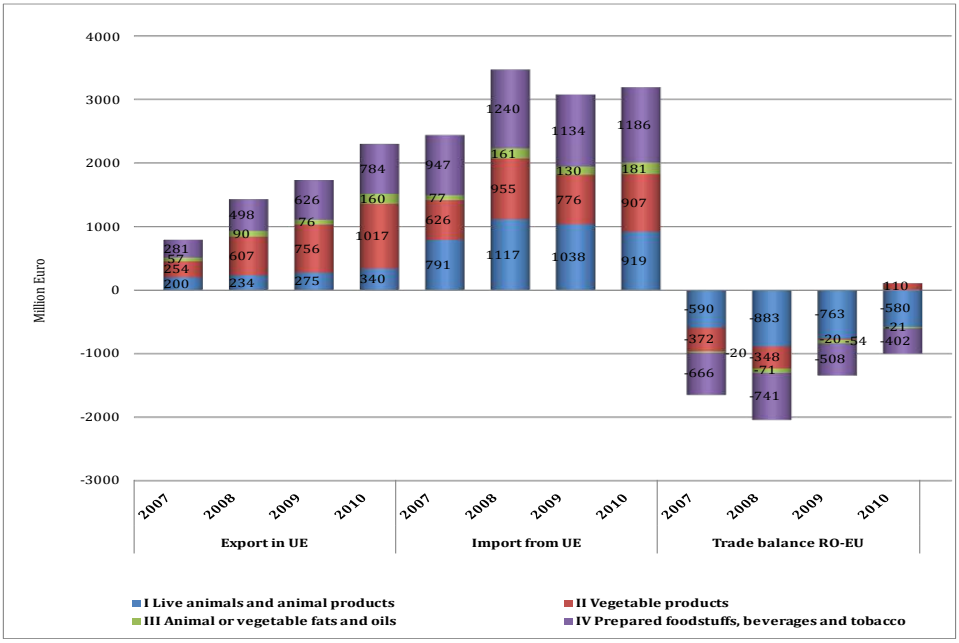
Except for the year 2009 when a net export of vegetable products was registered, the agri-food trade balance was negative for all the remaining chapters of the C.N.. The Vegetable products shared half of exports, and worth 1.1 billion Euro, and 26% of imports, totaling 300 million Euro. The traded products in section III - Animal or vegetable fats and oils, also deficient, maintained a 4% share in trade flows and balance.

EU has been the main trading partner for over a decade; in the post-accession period, EU countries represented 71-74% of food export destinations of Romania; at the same

time, the import share continually raised, from 55% in 2006, to 73% in 2007 and up to 83% in 2010.

Romania's main agricultural products traded with the EU countries in 2010 covered a 41% share in intermediate and 39% in final exported products, respectively, in imports the final products prevailed, with a 60% share; while to third countries the commodities had the major share, of 56%. Since 2007, the country's relations within the EU region had an ascendant importance, whereas the imports absorbed by Romania from third countries' had a market share decrease, i.e. from 45% in 2006 to 18% in 2010.

Graph 2. Evolution and structure of Romania's agri-food trade with EU



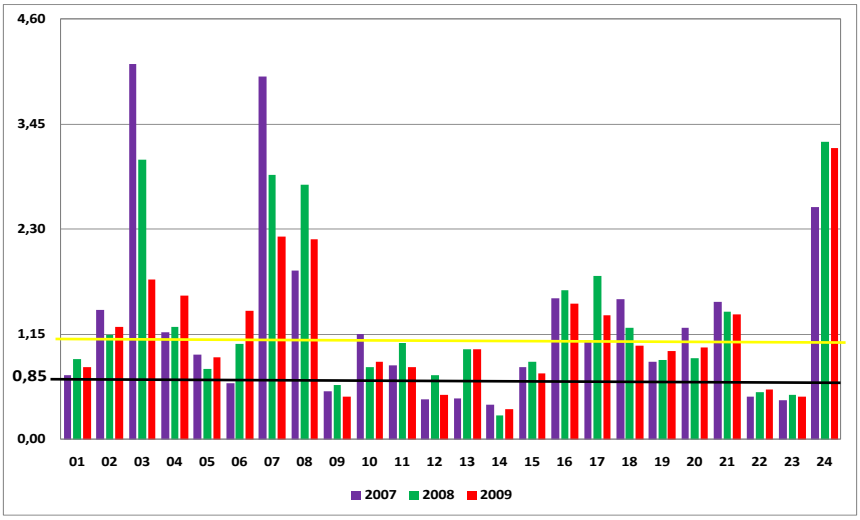
Source: author's processing of EUROSTAT trade data base

The trade balance in the relationship with the EU fluctuated, the deficit halved, from -1.6 bil. Euro in 2007 to –0.9 bil. Euro in 2010; the categories of products remained insufficient in most of the sections of the C.N., except for vegetable products in 2010 due to a favorable harvest (Graph 2). Net exports to the EU member countries have been achieved in 2009 only by products belonging to the following groups: 01 - live animals, where exports have remained on average to 136 mill. Euros, but imports gained a rate of growth of 248% in 2009 compared with 2007, from accounting for 47 to 117 mil. Euro; 10 – cereals, whose exports totaled a value of 361 mil. Euro, while imports of 228 mill. Euro; 12 - oil seeds, whose exports increased almost 4 times, registering 317 million euro, while imports 70% larger, of 105 million Euro; 24 - tobacco and substitutes, tripled their exports, worth of 348 mill. Euro, while imports of 126 mill. Euro.

(II) Changes in Romania's agri-food terms of trade and quality of the traded products, by the relative unit value index

The agri-food products which low average values of exports found in 2009, indicating a low quality, as shown in Graph 3, are those included under the following sections: 01- Live animals; 09 - Coffee, tea, mate and spices; 10 - Cereals; 11 - Products of the milling industry, malt, starch; 12 - Oleaginous seeds and fruits, medicinal or industrial plants, straw and forage; 14 - Plaiting materials and other products of vegetable origin; 15 - Animal or vegetable fats and oils; 22 - Beverages, spirits and vinegar; 23 - Residues and waste from food industries.

Graph 3. Evolution of unit value indices in Romania's agricultural trade



Source: author's calculations based on EUROSTAT trade data base

Products vertically integrated, revealing high-quality exports and specialization level, accounted for 32% of Romania's agri-food exports; aggregated by chapters of C.N., they are: 02 - meat and edible offal; 03 - fish and crustaceans; 04 - milk and dairy products, birds' eggs, natural honey; 06-live plants and flower products; 07 - edible vegetables, roots and tubers; 08 - edible fruits; 16 - preparations of meat and fish; 17 - sugar and sugar confectionery; 21 - miscellaneous edible preparations; 24 - tobacco.

Products with horizontal trade integration, had a low share in exports in 2009, of 5%; they are included in the chapters: 05 - other products of animal origin; 13 - gums, resins and other vegetable saps and extracts; 18 - cocoa and cocoa preparations; 19 - preparations of cereals, flour, starch; pastry; 20 - preparations of vegetables, fruit.

An improvement of the terms of trade in the last period of analysis on the groups of products including: meat, milk and dairy produce, other products of animal origin, live plants and flower products, cereals, other products of vegetable origin, preparations of cereals, fruit or vegetables and beverages, spirits and vinegar.

CONCLUSIONS

The results underline a decrease of domestic performance in the face of growing external competitiveness, with a strong impact both on the food industry that needs to reshape the strategies for going on the market and on the agricultural sector, where changes imposed by the adoption of CAP have increased the pressures on farmers to face the market developments.

The assessments indicate a trade disadvantage compared to the EU products, dependence on imports of processed products and of animal origin, the low competitiveness of the processing sector being the main disadvantage in obtaining higher revenue from exports.

The influences on food markets can be reflected by temporized import flows, narrowed supply ranges, but also by the reduction of the agri-food trade deficit, however through less competitive exports rather than on the basis of imports.

Evaluation of the quality of international trade is an useful instrument to support the policy decisions concerning the restoration and development of the sector; applied on foodstuffs it might have the purpose to promote the products with export potential and those returning extra benefits from international markets, focusing on products with high value added.

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THE ITALIAN AGRI-FOOD SYSTEM BETWEEN COMPETITIVENESS AND TERRITORIAL SUSTAINABILITY: THE CASE OF CAMPANIA REGION

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Abstract

Actually the agri-food system is very different than in previous decades for the major change in the competitive environment in which Italian companies must be confronted. In the face of threats to the sustainability of Italian agri-food system, resulting from increased competition, there are considerable opportunities for development especially in relation to the positive perception of agri-food products "made in Italy". In light of these considerations, this paper highlights the strategic role of the territorial sustainability in the development of the agri-food system of Campania region. The work is part of the research project "In.be.sa" conducted by the University of Naples "Parthenope".

Kew-words: Italian agri-food system, competitiveness, territorial sustainability, chains and territorial identity.

The competitiveness of the agri-food system in Italy and Campania region

The Italian agri-food system is a very articulate reality. Based on 2009 data, it was showed that the economic value of the sector is estimated at 246 billion euros that represent 16.2% of GDP. This data is the summary of the results of the individual components of the agri-food system, in detail: agricultural value-added amounted to 25.1 billion, agricultural intermediate consumption 22.4 billion, agribusiness investment 16.6 billion, food industry value-added 25,7 billion, food service value-added 38.9 billion, and value of sales and distribution amounted to 98.8 billion (Inea, 2010a).

Currently, the competitiveness of Italian agri-food system on the international markets show signs of difficulty. Over the last years, the rate of export growth has slowed while the evolution of terms of trade (the price difference between foreign sales and

purchases) poses many products in an uncompetitive position. However, there are some competitive sectors: wine, fresh fruit, pasta, olive oil, cheeses, canned vegetables, baked goods, meats and sausages, fruit juices and rice, that over the last decade have demonstrated the ability to maintain their competitive capabilities (Inea, 2010b). Overall, the historical competitors France and Germany have been able to do better than us, while new countries face on world markets. Among the most fearsome competitors set out Spain but also Belgium, as well as China for fruits and vegetables and Australia for alcoholic beverages. 79% of our export of food products is directed toward 12 countries, with Germany in the first place, followed by France, United States and Spain.

The competitiveness of Italian food is influenced by several factors. Among these we must first consider the excessive atomization of farms, which poses considerable difficulties in relation to the downstream sector and in terms of competitiveness of Italian products on the international scene. Relative to the company size it represents a strength: the ability of the system to be able to "suffer" in the adverse conjuncture phases, while it constitutes a point of weakness: the limited economies of scale and the too high operating costs. Another factor affecting the competitiveness is the market volatility that during the last years puts Italian and UE farmers in front of a scenario completely new and more uncertain than in the past, in which the variables to be taken as reference are numerous: the oil price, biofuel, climate change, demographic factors, creation of the food stocks, etc. These uncertainties affect the degree of risk that weighs on Italian companies (National Strategic Plan, 2006).

Among the factors that are able to positively affect the competitiveness of Italian agri-food products there is definitely the positive perception of the "made in Italy".

It is well known, Italy is a country rich in quality products and this is reflected by the high number of products that have received the EU PDO and PGI recognition. In other terms, it can be said that a key determinant of competitiveness of the Italian agri-food sector is related to the close relationship between agriculture and culture/traditions and, more generally, territorial identity that constitute a distinctive element of the Italian agri-food system.

Within the Italian agri-food system Campania region is of particular interest.

In fact, in 2008, there was a significant increase of Campania region position on foreign markets.

The data of Federalimentare on exports in 2009, recognized Campania region as leader in the production and sales of agri-food excellence products. In difficult times of economic crisis, the products of Campania were unable to find new space on the foreign markets. This is also thanks to the policies for the sector's internationalization and the growth of very high quality production (such as olive oil). The agri-food sector in Campania region has distinctive elements based on a broad basket of products, many

of whom object of protection with national or EU label recognition. Campania region is distinguished from other regions of the South, for the presence of over 28 products including DOC, DOCG and IGT, 6 PDO and 5 PGI, to which must be added more than 300 traditional products of the different territorial realities.

Campania region agri-food sector and territorial sustainability

The search for competitiveness on the international markets is a goal often diverging from the pursuit of a development model that can be considered sustainable for the companies that operate in agri-food sector and the territorial systems suited to this sector.

Territoriality can become a competitive strategy (Belletti *et al.*, 2003) by synergistic valorization of all the endogenous elements that exist in a territorial context. In any territorial system are combined the different dimensions of sustainability: economic, social and environmental[1].

Consequently, the agri-food sector is set up just like one of the sectors that best captures the relationship with the territory and transforms it into an opportunity of development, leveraging on its own specific resources, on the immobile factors, considered as such, not only because incorporated in specific places, but also because "fungible", that it means hardly to find elsewhere with the same characteristics.

In addition to large-scale productions, Italian agri-food system and especially Campania region agri-food system has always been able to maintain the so-called quality food products, products obtained with traditional production processes or strongly connected to the identity of the territory. In particular, the typical products are intended as components of the territory identity, the result of its productive, natural and cultural resources, capable of evoking a sense of belonging to the land. The territory becomes a fundamental element of typicity attributing to the product a value of differentiation linked to organoleptic qualities, to delimited geographical origin or traditional processing techniques (Annunziata, 2006). The identity of a territory and the set of all intan-

1 The economic dimension of sustainability of territorial development can be defined as the ability to generate revenue, profit and employment in a template that is able to produce and maintain locally added value, to enhances and increases the resources of the territory, and also to do not produce a depletion in terms of quality and quantity of itself. The social dimension of sustainability of territorial development can be defined as the ability to ensure well-being and growth opportunities equitably distributed in society, in a template that is able to enhance the culture and to provide adequate tools for the social requalification of the territory regarding problems like marginalization, social disadvantage and education. The environmental dimension of sustainability of territorial development can be defined as the ability to enhance the environment as a "distinctive element", ensuring the protection and the renewal of natural resources and heritage (Scarpato, 2010).

gible elements that it transfers to local production, especially the agri-food one, are configured, then, as central elements of a territorial competitive strategy.

In light of the above considerations, numerous ideas for reflection emerge concerning the role that the preservation of territorial identity can play in developing sustainable competitive strategies of the Campania region, representing precisely the strategic leverage on which to focus. The recognition and affirmation of the role of quality products allow us to see, in fact, still unexpressed potentiality that could be valued as part of promotional policies of the territory and rural tourism, in cooperation with local authorities, representing a further factor of development and success for companies of the sector and the entire regional territory.

The main agri-food chains in Campania region and the territorial identity

Campania is recognized as a region with a strong commitment for agri-food sector; there are numerous, in fact, the production divisions representative of regional agriculture. All this led to the creation of a world-renowned food and wine heritage. In light of these considerations, in this paper were considered some of the chains that have a strong relationship with the territory, highlighting its structural characteristics, market trends and potentialities for future development.

A very important chain for the regional economy and the agri-food system of Campania region is the dairy sector.

In fact, in 2009 the turnover of the dairy sector has represented the 30% of the total regional agri-food turnover. This important result is related, principally, with the sales of cheeses that have obtained the recognition of protected origin, and in particular, it depends on the sales of "Mozzarella di Bufala Campana". The deep-rooted presence of breeding and transformation systems represents a key element for the success of the dairy sector in this region. In Campania region, in fact, operate more than 13.000 zootechnic farms and they have at least 5 head. Currently, the dairies, that operate in Campania region, regularly registered at the Chamber of Commerce, are about 934.

"Mozzarella di Bufala Campana" PDO is a leading product at national level for quantity produced and sales: in fact, considering the Italian PDO cheeses, it represents the fourth product for volume production and, with € 500 million, the third product for consumer sales (Qualivita, 2010).

The annual production of "Mozzarella di Bufala Campana" PDO is about of 33.000 tonnes, with an average increase that has been consistent over the last decade. The sales are in total around EUR 500 million, with an annual increase of 5% in exports. The percentage of "mozzarella" sold abroad represents 18% of the total Italian cheese. The consumption has a positive trend with an annual increase of approximately 10%.

Another sector in which the Campania region, over recent years, has aimed to enhance its specificity, is the wine production chain. In this area, Campania region can boast origins since Roman times; the culture of the vine has spread throughout the region and is localized in very different environmental contexts concerning the soil and climate characteristics and the varieties cultivated (Boccia, 2007).

The Campania area planted to wine grapes, as results from the inventory of 2010, amounted to 29,836 hectares, of which declared to produce DOCG/DOC about 5,800 hectares; the remaining area is for table and geographical indication wines. On this surface there were produced almost 1.9 million hectoliters of wine with a positive growth of 2% over the previous year (Baccaglio, 2011). The quality regional production can count on 30 registered denominations, consisting of 17 DOC, 3 DOCG, 9 IGT and 1 regional Campania IGT. Compared to the total wine production, DOC/DOCG are 16% and IGT only 11,1%. The remaining percent is table wine. In general, the Istat data 2010 shows that the wine economy of Campania region has decreased by 2% for viticulture and by 5% for wine production in value. Wine production represents a key element to achieve the development of the territory, in fact, it is considered as a catalyst for local development, encouraging the development of economic activities relating to transformation, tourism and provision of public goods like landscape.

A chain that has importance, not so much for economy, but for presidium and protection of the territory, is the olive chain. In fact, 90% of that olive cultivated areas in Campania are hilly, often those at highest risk of landslides.

Campania region boasts over 80,000 companies and 73,392 hectares of olive cultivated areas and, with an incidence of 5.9% of the national quota, it is placed at 6th rank of regions that devote agricultural land to this type of activity, with a decrease of one percentage point over the past decade (Campania Region Data - 2010). Olive chain of Campania region has very different characteristics depending on the cultivated areas, providing a very rich and diverse heritage. In all the main olive cultivated areas, in fact, there are native varieties of high quality and strong typicity, which, if properly exploited, can contribute to the achievement of quality olive cultivation. The olive productions of region Campania are very high quality productions; in fact, there have been recognized 5 DOP; although, in the last years, following the blockage of public subsidies for certification, many companies have preferred to continue to follow the directions of the specification, but without making the certification, because the certification fails to offer a relevant premium price, so the companies recognize it only as an expense and not as a qualification of the production.

Over recent years, the economic results were not very positive but, given the specificity of olive cultivation, there is not predicted a high risk of dropping out of activities, but rather it is suggested that these companies will continue to produce, at least for their own consumption, because of the strong desire to preserve family traditions, environment and local identities.

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PROSPECTS FOR DEVELOP THE PRODUCTION OF BIOFUELS IN THE EUROPEAN UNION AND ROMANIA

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Abstract

The development of biofuels contribute to increasing energy security of states and improve balance of payments by reducing oil imports. . Extending benefits of biofuels production should be evaluated carefully since their costs are not small and can irreversibly affect the welfare of rural communities and regions, especially with reference to environmental costs (reduction of areas covered by forests, adverse effects on soil, water reserves, biodiversity etc.)..

The production of biofuels in our country is at the beginning, but Romania has great potential for growing energy crops and biofuels.

Key words : biofuels, bioenergy, fuel farm, fuel oil, gas emissions.

INTRODUCTION

Biofuels industry witnessed a large grow today in many states.

The increased demand for raw materials used to produce fuel will have a significant impact on agricultural markets in the next decade.

Bioenergy market development has taken place in economic and political context generated by some of the obligations assumed by European countries on compliance with the Kyoto Protocol, for reducing emissions of greenhouse gases, and on the other hand, the explosion of oil prices which occurred in recent years.

European Union countries have begun to consider and evaluate methods and scenarios for diversification for supply sources and security of energy supply in the medium and long trmen.

On the biofuels market, the EU is a major player alongside the United States, Brazil and China.

EU strategy aims to assess the impact related to biofuels production and use

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of biofuels from several perspectives: research, environment, agriculture, economic conditions, legislation and institutions. The purpose of this strategy is to diversify energy supply and reducing greenhouse gas emissions from transport.

Following the development of production and the widest possible use of agricultural fuels have appeared a number of implications thereof:

- In recent years climate changes that occurred have their origin in increasing greenhouse gas concentrations in the atmosphere. These climate changes that are just starting, will affect people's lives due to the reduction of agricultural production and jeopardizing the terms of food security and the areas most affected are those in southern Europe and from the European Arctic Ocean.
- Production of biofuels, given that petroleum fuel market recorded dramatic increases in oil prices could provide insight into the diversification of energy sources (it is known that global oil reserves that can be operated in reasonable economic conditions are decrease over the next 30-40 years is estimated to be exhausted).
- Development productieie of biofuels will help diversify the specific activities of rural economy involving the growth of the rural population and increasing the income.
- Search for solutions on the problem of producing fuel for transport and reducing emissions of greenhouse gases is correlated with lower unemployment in rural areas and increase the competitiveness of certain agricultural products, stimulating research in order to increase creativity and technological innovation.

In the next decade, the increased demand for biofuel raw material to obtain will have a significant impact on agricultural markets. Thus, in the next 3-4 years the rapid growth of production of biofuels will change the price relationships in various agricultural goods.

Vegetable oil prices also increase, compared to prices for oilseeds and protein flour because greater share of oil value is derived from plant oil content compared with flour protein content. In oilseeds, canola with oil content of 40%, it becomes more profitable than soybeans in some areas, soybean oil having a content of 18%.

Protein feed prices will drop as compared to the price of plant materials used as an energy source (corn).

Prices for poultry and pork prices increased compared with beef because cattle can more effectively use the results as a cerearele co-product from ethanol plants.

For developing countries, increased production of biofuels may trigger an increase in jobs involving and revenue growth

Thus, in Brazil, bioethanol industry and increased production of sugar beet increased number of jobs to over 700 000 in agriculture and manufacturing.

Increasing energy costs spurred governments to encourage the production of substitutes for oil with production from renewable crops (Brazil uses sugarcane to produce ethanol using it widely in vehicles, and the EU has used rapeseed oil to produce biodiesel).

In Romania, a few companies showed interest in biofuels, both in refineries and investing in agricultural production related to energy crops.

Thus, in Calarasi county have been invested 47 million euros in a processing company that has an annual capacity of 100,000 tons and that should provide 30% of the requirements of biofuels in Romania. A German company Man, intends to invest approx. 180 millions euros in a refinery and an agricultural center of Sibiu. Three other oil producers, respectively Argus Constanta, Ultex Tandarei, TEC Brazi are about to build capacity for biofuels. Since the investment required is quite large, this represents a major break for local investors, although Romania has great potential for growing energy crops.

The legal framework for the production / consumption of biofuels are the responsibility of the Romanian Agency for Energy Conservation, Ministry of Economy and Commerce. It adopted nr.1535 Decision of 18 December 2003 on the approval of the use of renewable energy. This bill highlights the importance of renewable energy because it provides guarantees on increasing energy supply based on diversification of energy sources and reducing imports Energy, sustainable development and environmental protection by default. Romania adopted a regulation stipulations of the European Union, but has not established care national framework to stimulate initiative in this area, regulations, taxation or mandatory legal regulations.

Romanian energy strategy should ensure the reducing dependence on imported energy resources. Their growth is estimated approx. 40% by 2015 approx. 60-70%.

Biofuel production is also an opportunity for rural development. An estimated number of people working in this area could increase by 5 percent.

Objectives of the strategy on biofuel production in Romania are similar to the European Union obhectives. These are:

- Diversification of energy resources and reduce import dependence;
- Reducing CO2 emissions. Fuels with bio diesel reduces CO2 emissions by 90% and SO2 emissions by 98%;
- Creating new jobs in rural areas;
- Oil pricing;
- Establish measures and policies on the use of biomass in transport, energy production and heating;
- Policies to replace diesel engines with ethanol;
- Correlation of sectoral policies: energy - agriculture - environment - development rural development, establish the level of subsidies, regulation rational surfaces for growing energy crops and the rights and terms of use of GM products;
- Stimulating the acquisition of vehicles that use biofuels in urban transport;
- Establishment of structural funds that could be used for biofuel development and regional development projects proposed for inclusion in the Sectoral Operational Programmes;
- Establishing the scope and forms of aid granted by the state to support the development of energy crops.

Energy crops have spread in recent years, replacing other arable crops. EU directives and climatic conditions o have changed the cultivation structure of Romanian agriculture. This can lead to an increase in agricultural prices that have a negative impact on livestock sector.

Of energy crops grown, corn is the most cultivated crop, followed by sunflower, soaia and rape. Rape culture signified increased in recent years, marked in Table 1.

Table 1. The total area cultivated with the main energy crops in the period 2005-2008

Year	2005		2006		2007		2008	
Total area cultivated th. ha	8467,9		7884,0		7777,2		7798,1	
	th. ha	%	th ha	%	th ha	%	th ha	%
Corn	2628.5	31.04	2520,1	31.96	2524,7	32.46	2441,5	31.30
Sunflower	971.0	11.46	991,4	12.57	835,9	10.74	813,9	10.43
Rape	87.8	1.03	110,1	1.39	364,9	4.69	365,0	4.68
Soy	143.1	1.68	190,8	2.42	133,2	1.71	49,9	0.63
Sugar Beet	25.2	0.29	39,8	0.50	28,7	0.36	20,4	0.26

Source: Anuarele Satistice, I.N.S.

Table 2. The main energy crops, crop production in 2005-2008

Year	2005	2006	2007	2008
Average yield	kg/ha	kg/ha	kg/ha	kg/ha
Corn	3952	3565	1526	3215
Sunflower	1381	1540	654	1437
Rape	1681	1590	991	1844
Soy	2186	1807	1021	1817
Sugar Beet	28932	28942	26065	34564

Source: Anuarele Satistice, I.N.S.

In terms of crop production in these cultures is a significant increase from year to year depending on climatic conditions of those years (Table no. 2). Currently, there are many farmers who grow rape for both domestic consumption, and especially for export.

There are large companies that export canola for oil extraction used as biofuel. Targets provided for the future are that 5% of energy for the transport sector to come from bio energy.

The strategy for development of renewable sources in Romania, it is shown that energy produced from agricultural resources for 2010 to be around 46 million tons, in 2020 around to 94 million tons, arriving in 2030 to a potential of 142 million tons.

Agriculture is an economic sector with an impact on nutrition, industry, energy and health. Given this, it relies most heavily on advances in natural sciences and biotechnology.

The need for increased fuel prices will lead and increased grain and Romanian agriculture, considering the climate and soil conditions extremely favorable, could focus more on growing energy crops.

It can be concluded as a result of those presented, that the development of biofuel production contributes to increased energy security of countries in all over the world and improve the balance of payments by reducing the oil imports.

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INTEGRATED PLATFORM FOR TRANSFERRING KNOWLEDGE AND SKILLS IN AGRO-FOOD SECTOR IN ROMANIA

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Abstract

This paper aims at presenting the integrated platform for transferring knowledge and skills in agro-food sector, as a tool for facilitating information exchange between stakeholders: businesses, centres of research, educational and research in the food and agro-business sector, centres of business incubation in the food sector, clusters of SMEs, technology transfer centres. The methodology consists of a web application, whose features are detailed. Main results of research show that the platform generates savings of time and financial resources through a simplified procedure and provides opportunities for documentation and collaboration correlated to the real needs of users.

Key words: collaborative space, unique integrated platform, knowledge community, SPID application, workflow

INTRODUCTION

This article presents, in summary, the final results achieved in the project POL-EX-AGRA - Pole of excellence in agro-food sector, results materialized in a web application, SPID™, in fact a tool for interactive, flexible, which is part national and European policy to support knowledge-based society and economy.

POL-EX-AGRA project gathered in the period 2008-2011 a total of five partners in the sectors of agro-food research and development, economic education and agricultural private sector in Romania, who have collaborated to complete

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the collaborative platform. Attracting as many players in the field, to quickly and competitively interact in a shared and dissemination oriented virtual space, in the global performance of key knowledge and skills available, helps to improve knowledge management system by identification and full valuation of existing knowledge and skills in this key sector of the economy.

Material and method

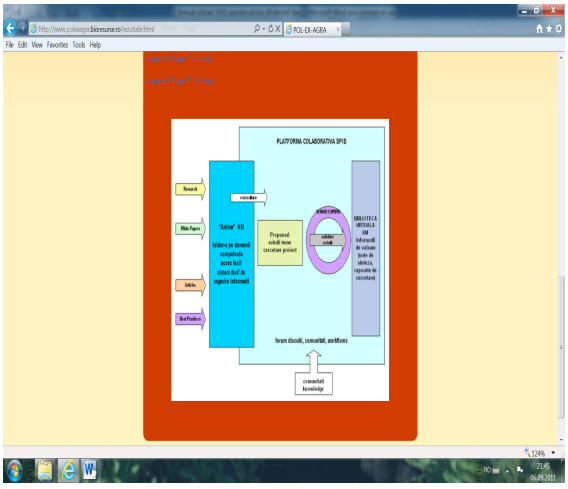
Collaborative Platform is an instrument interactive, intuitive, flexible, and easy to use by all community members involved in the process of creating and managing contextual intangible values.

The platform has broad applicability for actors interested in the economy, such as businesses, including core research, educational and research and development institutions in the food and agribusiness sector, business incubation centres in agro-food sector, clusters of SMEs , technology transfer centres etc.

SPID application

SPID™ is a web-based application developed through collaboration of project partners; it is an interactive technical support, allowing users to structure control and effectively manage all the resources involved in execution of projects and processes in their organizations to improve overall performance.

Fig. 1- Collaborative platform SPID™



The main functions of SPID™ system are:

- document management and utilization of information;
- continuous processes' improvement and change management;
- skills management;

- management of performance (dashboards and information-decision circuit).

SPID™ has two components:

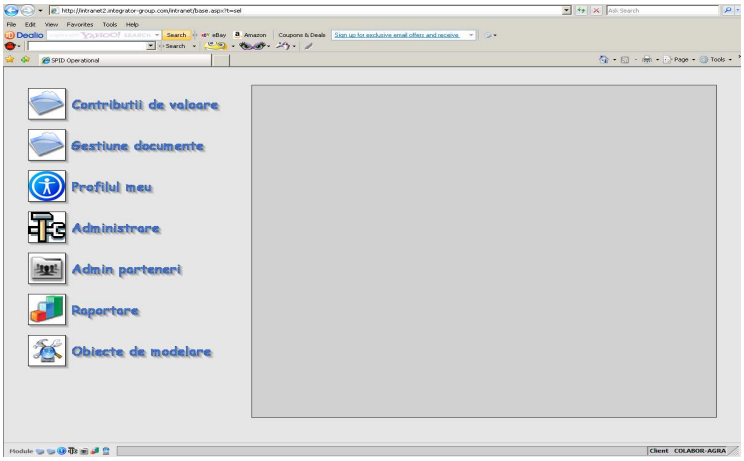
- OPERATIONAL SPID – Collaborative platform: document management, working flows management, continuous processes' improvement, skills management, information-decision circuit)
- STRATEGIC SPID for Organisation Analysis and Strategic Dashboards.

OPERATIONAL SPID is a web-based application, whose main features allow a more efficient management of information, documents and processes within an organization. Platform SPID is a very useful tool in managing complex projects, allowing both consultants and experts team of clients to accomplish their missions successfully, including:

- Transfer of skills;
- Reorganizing processes to cope with an integrated environment;
- Full documentation of processes and systems so as to help reduce maintenance costs etc.

For accessing OPERATIONAL SPID system one should enter the server address of browser: http://intranet.integrator-group.com/

Fig. 2 – Screen of functionalities OPERATIONAL SPID



SPID system allows sending and tracking documents on preset workflows - routes / predefined destinations of documents, according to internal procedures and quality system, mentioning the actors involved the type of action (information, approval) and deadlines.

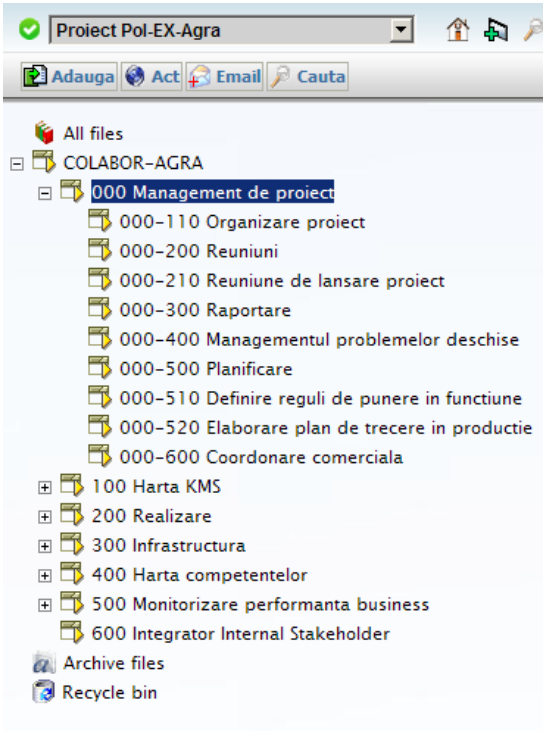
By setting these default workflows and routes compliance between internal communication and collaboration and the quality system is supported and errors of communication and collaboration due to human factor are reduced as much as possible.

Workflows can be several types:

- editing;
- information (the user is informed about a new document or allocation of tasks);
- approval (by this workflow, the user is informed of the document, and by accepting it, we can see whether or not he is aware; also, a document can be submitted for approval by a supervisor and he may approve or reject the document);
- negotiation (with this workflow the value of a document can be negotiated and recorded).

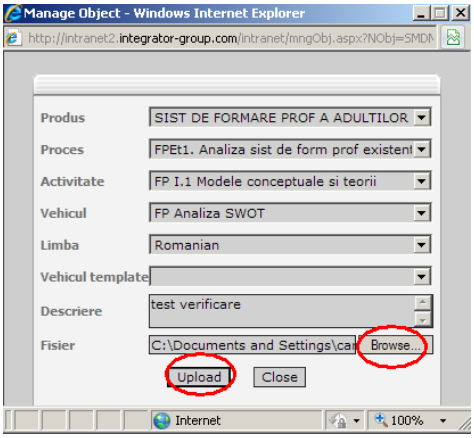
The structure of projects and processes is defined considering the specific demands of each company.

Fig. 3 – Folders structure of POL-EX-AGRA project



To load a new document in the system, the cursor should be positioned on the folder one wish to load. Clicking on this icon, a window appears that allows selection of document attributes (product, process, activity vehicle, the language, template document - if such a template is available), the field describing the document and which can be filled in, and search, loading and out of the window buttons.

Fig. 4 – Window for loading the attributes of a new document in the system

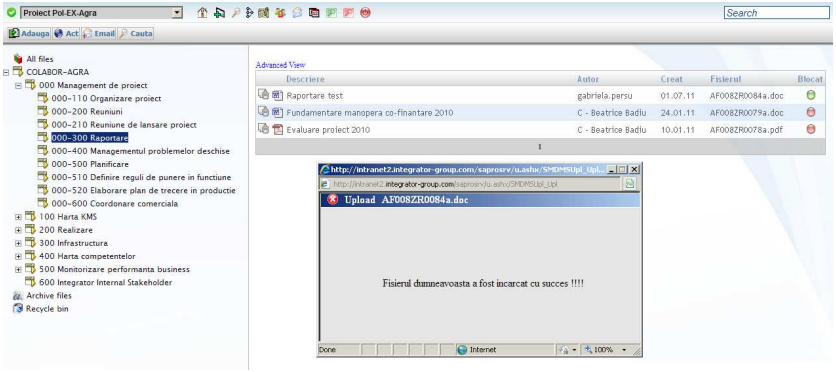


After selecting attributes (product, process, activity, vehicle, and language) two options for loading the document in the system are available:

- using a template (standard document). In this case, after completing the description, the load button is pressed;
- without using a template (other documents), in this case, select the location of the document to be loaded using the search button, then press the upload button.

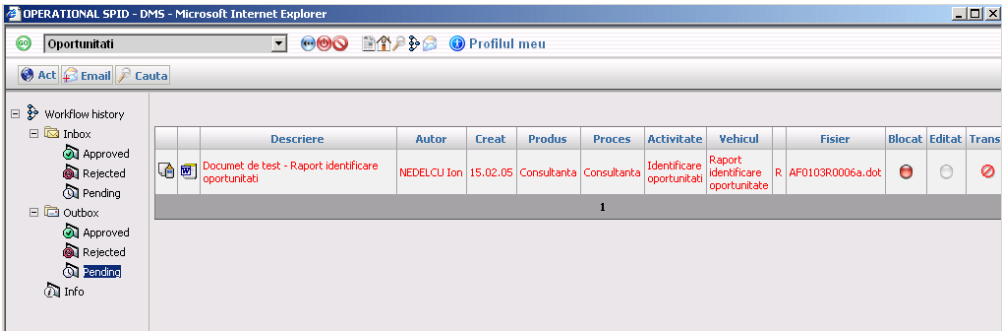
After loading control (upload) the folder list of documents is updated and the loaded new document will appear first. The system completes automatically the document attributes in the loading window.

Fig. 5 – End of loading a new document in the system



To access historical information on uploaded documents within workflows accessible to a person or have the recipient, one should click on the icon located on the top bar. This provides access to a new window.

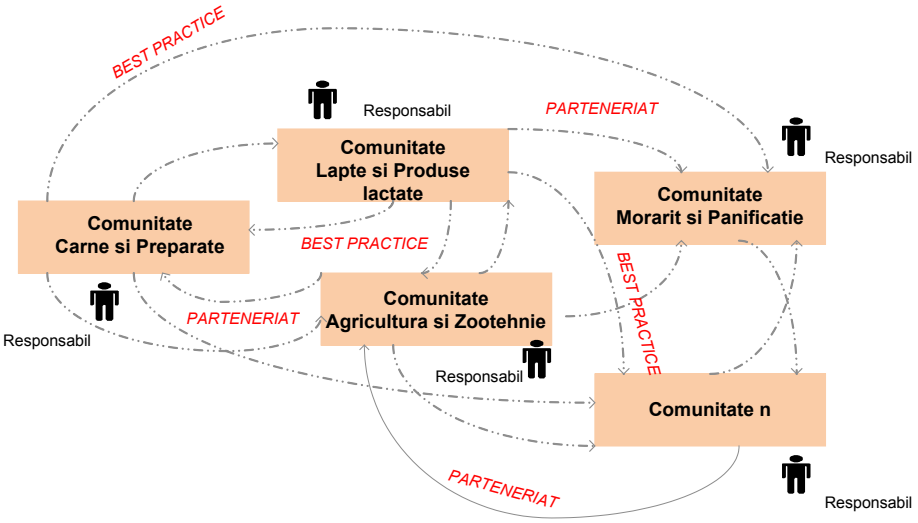
Fig. 6 – Accessing information history related to uploaded documents



Information is classified in categories: Inbox and Outbox. Each category contains the list of approved, rejected and pending files.

Creating a collaborative contextual platform of management is a response to the need for simplification and flexibility to quickly and organized access to a wide range of documentary resources - information of vital interest to those involved in the development of agro-food sector in Romania

Fig. 7 – Adding value to information to the community level through an active partnership



CONCLUSIONS

Increasing performance in the context of collaborative work stimulates the creative process by facilitating unlimited and organized access to innovation products already existing (modular structure of the platform allows any user to belong to one or more communities).

Single integrated platform generates savings of time and financial resources through a simplified procedure; it offers possibilities for documentation and collaboration in correlation to the real needs of users (users can easily identify the information that solves the best specific problems in context, and can work interactively to enhance the research process).

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Session II

Economy of Knowledge Transfer in Agro-food Sector and Rural Economy

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SOCIO-ECONOMIC DEVELOPMENT OF THE EU COUNTRIES

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Abstract

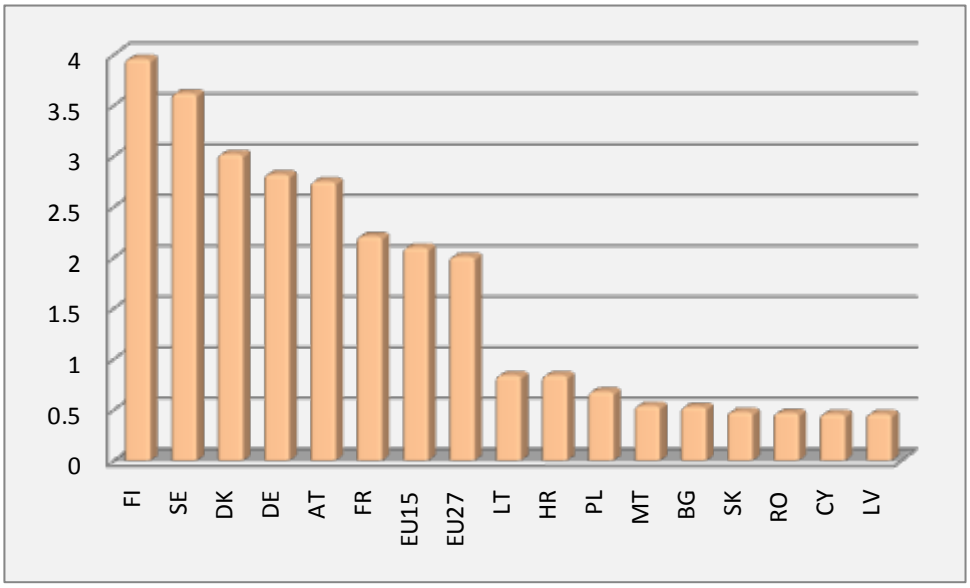
European Union's concern over reducing socio-economic development gaps between member states has been translated into implemention of the following strategies: „Lisabon Strategy" and „Europe 2020 Strategy". The article presents the evolution and the analysis of several chosen indicators, as to reflect the socio-economic development status: life expectancy, development and research gross domestic expenditure, number of persons per household.

Key words: development, gap, needs, socio-economic

Lisbon strategy proposed as main action pillar, for its mission of improving the competitiveness of the EU member states, the pillar called „Inovation and development". Here we are at 10 years after the Lisbon Strategy release, the European Commission begins the new strategic program Europe 2020 with „Innovation Union" as the main strategic pillar of action for the next 10 years. The leaning over this domain isn't random, through this, the European Commission chalenging this need in order to improve the main conditions and the financing acces for research and development, as to assure that innovative actions would be transformed in product/services, with additional value added and extension of the labour market.

The most frequent indicator for measuring the innovation and development of a country is represented by the gross domestic expenditure with research and development, as % per GDP. By the of 2009, there have been member states that were leaning over this domain, domain that has a long term direct impact into the socio-economic development of a country. In example, Finland, Sweden and Denmark are spending over 3% of GDP for research and development, while EU 27 average is approx 2% of the GDP. On the opposite, there are member states into whose budget allocation, research and development does not seem to appear as a priority. Latvia, Cyprus, Romania, Slovakia, Bulgaria or Macedonia are spending 0.5% of the GDP for research and development.

Chart no. 1 – Gross domestic expenditure with research and development (%of GDP)

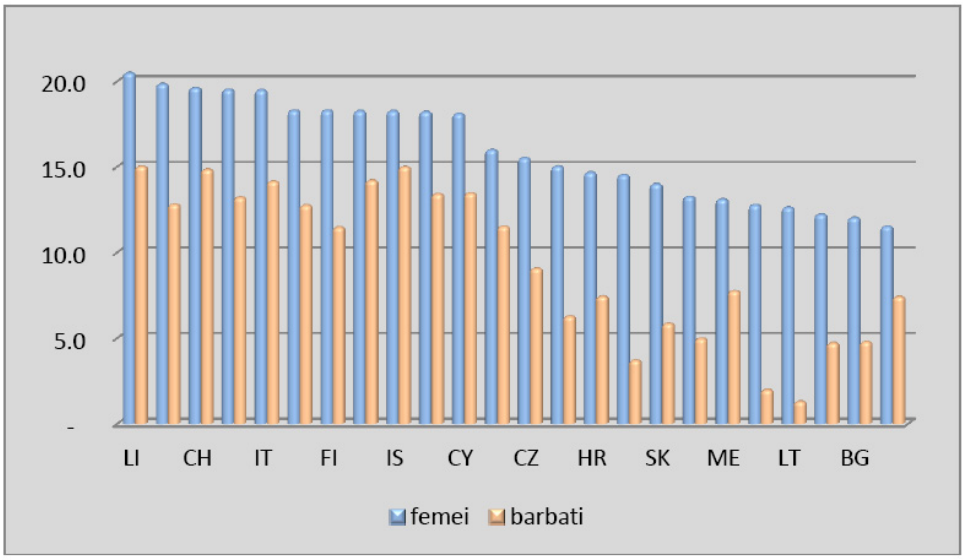


Source: Eurostat

The average life expectancy at birth has major differencies between member states, but between gender. Thereby, as per year end 2009, the countries with the highest life expectancy were Lichtenstein (85.5 years for women and 80 years for men), France (84.8 years for women and 77.8 years for men), while countries as Romania, Bulgaria, Macedonia have an average life expectancy of 77 years. Furtherrmore, for men only, the countries with the lowest life expectancy are Lithuania, Latvia and Estonia, with average life expectancy between 60 and 80 years.

The regional disparities are completed, as present in the above mentioned paragraph, by the disparities by gender, regarding life expectancy. So, the EU 27 averege life expectancy is up to 9% higher for women than to men. There are countries in which this disparity is even higher: Sweden, Norway or Switzerland.

Chart no. 2 – 2009 life expectancy at birth(after 65 years old)

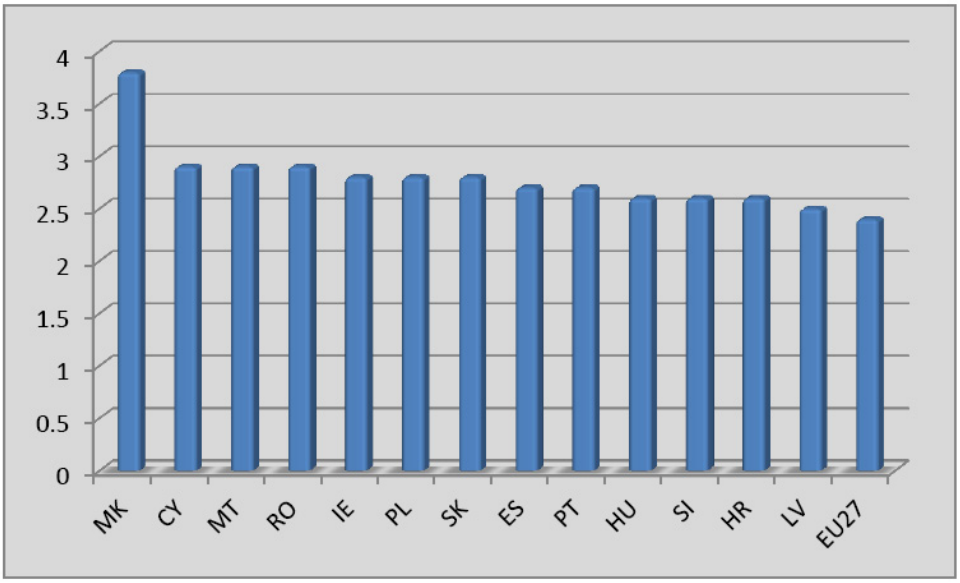


Source: Eurostat

Regarding, the number of persons per household, indicator with large implications in measuring the education and wellness degree of the population, we can observe that the EU 27 medium is 2.4 persons per household. The countries with the highest number of persons per household are present in Chart no. 3 and although we should have expected that the number would be greater in ‚young' member states, there are countries that invalidate this logic. Thus, Spain, Portugal, Irland are countries where this indicator is situated between 2.5 and 2.8 persons per household.

Furthermore, in member states with larger number of persons per household, the real estate sector is expected to develop faster than the countires below the EU 27 medium, only if others economical sectors would develop in a healthy manner.

Chart no. 3 – Number of persons per household (2009)



Source: Eurostat

Abraham Maslow, a humanistic psyhologistic known for discovering the needs pyramid, classified the needs as following:

- physiological needs, essential to survival needs;
- safety needs, needs to feel protected from any threats in life;
- love and belonging needs represented by the need for family friendly;
- self-esteem needs, each person needing to respect herself;
- the needs of self accomplishment, need to self-improvement[1].

Maslow explained his concept based by saying that human beings are motivated of several unsatisfied needs and of that needs situated on the inferior levels of the pyramid must be satisfied before the ones on the superior levels. These human beings are attracted not only by mechanical forces, but for stimuli, habbits or unknown impluses. These needs have in common the fact that are instinctive and are different through their intensity, being more stronger than the first ones. These principle needs are the pyramid's base and as higher in the pyramid, the importance and their primordiality is lower[2].

1 http://ro.wikipedia.org/wiki/Abraham_Maslow accesat in 12 Martie 2011

2 http://www.leadershipcenter.ro/piramida-lui-maslow.html accesat in 12 Martie 2011

CONCLUSIONS

The RD gross domestic expenditure, calculated as % from GDP, highlights a different approach between member states. Practically, the 3% objective as per Europe 2020 Strategy can be the main driver of the innovation and of value added in economy, in member states that neglected this sector.

The average life expectancy registers high differences, as per member states , but as per gender (life expectancy for women is up to 9% higher than for men).

Regarding the number of persons per household, we can observe a high eterogenity as per EU member states. Thus, the real estate sector potential in countries high rated through this indicator, can be capitalized and obatined economical growth.

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DEMO-OCCUPATIONAL IMBALANCES IN ROMANIAN RURAL AREA – CENTER REGION[1]

Lorena CHIȚEA[2]

Abstract

Human resources are the main factor of development, regardless of the environment to which we relate – urban or rural. But, problems appear especially in rural communities, where the population faces a series of demographic, social and cultural problems - demographic decline, a low level of occupational diversification, reduced opportunities for recreation and literacy.

Key words: human resources, social inequalities, territorial disparities.

INTRODUCTION

The main restrictive factors for the development of Romanian rural communities are: poor diversification of economic activities, almost exclusive dependence on agriculture, poor social infrastructure, difficult access to transport network etc.

All this leads to a very low standard of living – difficulties in capitalization of agricultural products, almost nonexistent technical – utility endowment, and, in the end, to the increase of demographic and occupational decline phenomenon.

The present study focuses on identifying the demographic and employment disparities in the rural area from the Center Region. The data used for capturing these dimensions has been of statistical nature.

For the demographic characterization of the Romanian rural area the following indicators will be used:

- number of inhabitants in rural areas;
- birth rate, mortality, respectively the natural increase in rural areas;
- share of rural population by age group;

1 Contract no. 92072/01.10.2008 Socio-economic models for inequalities attenuation from the rural areas in regional profile (MESAIR) – Program no. 4 ”Partnerships in priority domains”

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- share of rural population by the completed educational level.

For the human resources characterization of the Romanian rural area the following indicators will be used:

- active population (number of active population, active population structure, activity rate, dependency rate, maintenance rate);
- employment (employment number, employment structure, employment rate);
- unemployment (unemployment number, unemployment rate);
- inactive population (the rate of economic dependency, the rate of maintenance).

RESULTS OF RESEARCH

With a rural population of 1.024 thousands persons, registered at 1st of July 2009, accounting for 10,62% of Romania's population, the Center Region falls on the 6 place among the 8 development regions of Romania.

The rural population represents 40,57% of the total population of the Center Region, the counties that have predominat rural population (of the total population) beeing Harghita (56,3%) and Covasna (50,0%); the counties that have the smallest share of rural population, within total population, are Braşov (26,3%) and Sibiu (33,0%).

The Center Region confronts with an accelerated process of population aging (low birth rate – 11,8%, high mortality 13,0‰) which generates a negative natural increase - 1,2‰. From this point of view, there are some important differences between the components counties of the Center Region – the lowest natural increase is found in Alba county (-6,5‰) and among the counties with the highest natural increase there are Braşov (+2,6‰) şi Sibiu (1,8‰) counties.

In terms of the rural population's participation at the economic activity, in 2009, the following situation was present:

- the total rural population was 1.024 thousands persons, out of which:
    - rural active population - 397 thousands persons, which represents 8,92% of the total rural active population of the country;
        - employment - 354 thousands persons, which represents 8,41% of the total rural employment of the country;
        - unemployment - 43 thousands persons, which represents 18,07% of the rural unemployment of the country;
    - rural inactive population - 627 thousands persons, which represents 12,06% of the inactive population of the country.

Table 1: Rural population's participation at the economic activity, during 2000-2009, Center Region (thousands persons)

	2000	2003	2006	2009
Rural population	1044	1042	1016	1024
Active population	507	415	401	397
Employment	491	399	361	354
ILO unemployment	16	16	40	43
Inactive population	537	627	615	627

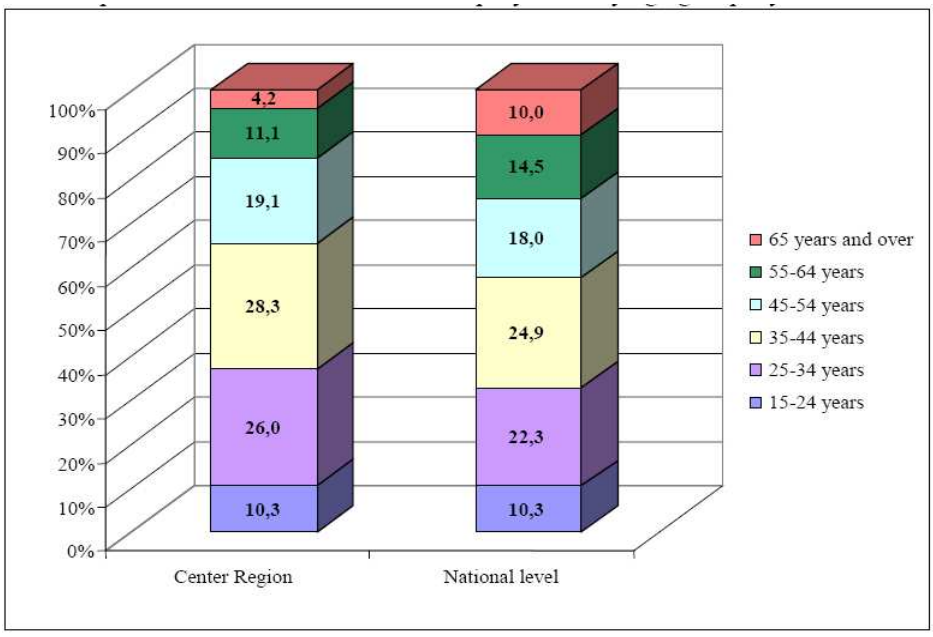
Source: Romania's Statistical Yearbook 2010, NIS

The rural population, during 2000-2009 period, had a slightly decreasing trend (-1,92%), but the main problem was the important decrease of the active population (-21,70%) while the inactive population gained ground (+16,76%).

The structure of rural employment, by age groups, reveals the following situation for the Center Region:

- the age group that has the largest share within employment is 25-34 years (total rural: 26,5%, agriculture 18,3%, industry 32,6%, services 30,8%);
- the next age group that concentrate a large part of rural employment is 35-44 years (total rural: 26,0%, agriculture 22,5%, industry 28,6%, services 27,7%);
- next follows the age groups 45-54 years (20,5% - total rural); 15-24 years (11,1% - total rural), 55-64 years (10,9% - total rural) şi 65 years and over (5,0% - total rural).

Graphics 1: The structure of rural employment, by age groups, year 2009



Source: Romania's Statistical Yearbook 2010, NIS

During the 2003-2009 period, the structure of rural employment, by professional status[3] has been subject to some changes, at the level of the Center Region:

- *Employee* is the main category present in the Romanian rural area, in terms of professional status. The number of employees has risen both at numeric level and as share within the total rural employment – from 192 thousands persons in 2003 to 208 thousands persons in 2009, respectively from 48,1% to 58,8%. The share of rural employees from the Center Region (58,8%) is higher than the national level one (38,1%). A rise of the number of rural employees is registered also at national level, from 1.489,7 thousands persons in 2003 to 1.604 thousands persons in 2009, respectively from 32,7% to 38,1%.

Table 2: The structure of rural employment, by professional status, from the Center Region, during 2003-2009 period

	2003		2006		2007		2009	
	Thou. Pers.	%	Thou. Pers.	%	Thou. Pers.	%	Thou. Pers.	%
Total	399	100	361	100	371	100	354	100,0
Employee	192	48,1	203	56,2	209	56,4	208	58,8
Employers	3	0,8	*	*	*	*	*	*
Self-employed	147	36,8	101	28	112	30,1	103	29,1
Unpaid family worker	56	14	52	14,4	45	12	39	11,0
Other unspecified	1	0,3	5	1,4	5	1,5	4	1,1

Source: Romania's Statistical Yearbook 2010, NIS

* The data calculated by extension are not reliable because of the low number of observed cases (NSI observation)

- *Self-employed* represents the second largest category, in terms of professional status, but in this case, there was been a decrease at the level of the Center Region – from 147 thousands persons in 2003 to 103 thousands persons in 2009, respectively from 36,8% to 29,1%. The share of the self-employed, at the level of the rural areas from the Center Region, is 29,1% while the national level one is 36,0%.
- *Unpaid family worker* represents another important category, in terms of professional status, but counts for only 11,0% of the total rural employment from the Center Region, while the national level share is of 25,1%.

The age groups that concentrate a large share of the rural employment, in terms of professional status, in the Center Region, are:

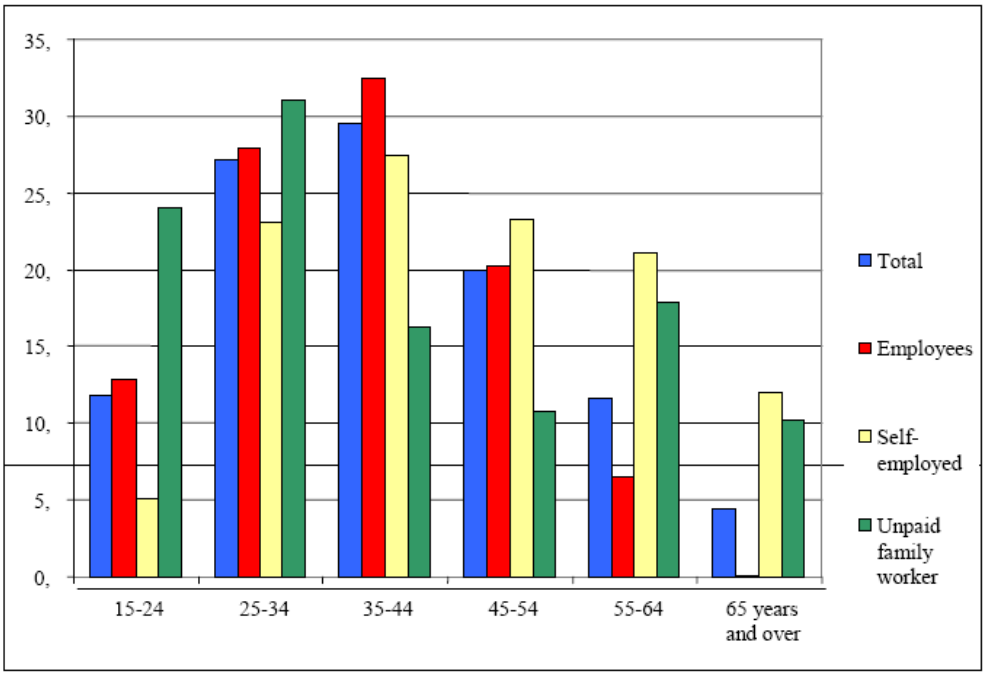
- Age group 25-34 years which concentrates a large number of unpaid

3 For the Employers category, the statistical data is not fully complete in regards to their number.

workers – 31,0%, employees – 29,9% and self-employed workers – 23,1%;

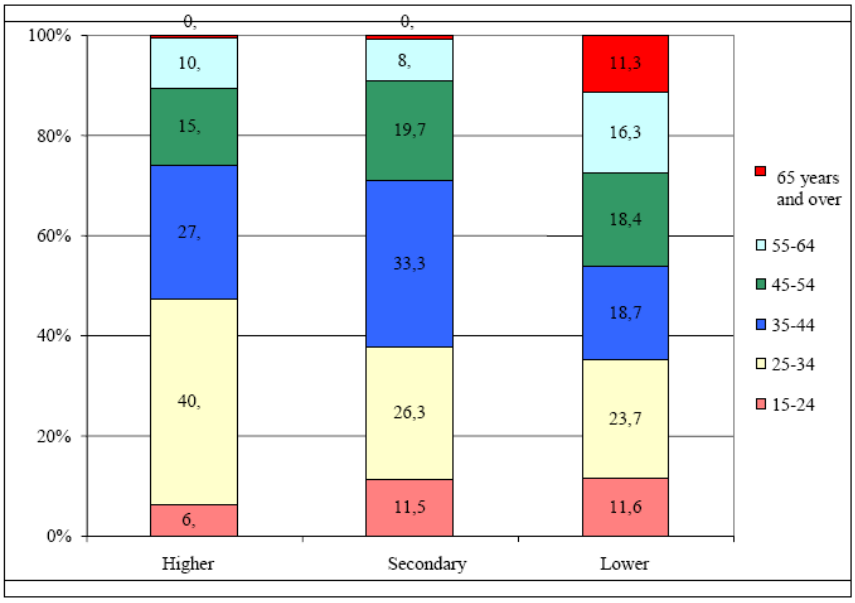
- Age group 35-44 years which concentrates a large number of employees – 32,5% and self-employed workers – 27,4%;
- Age group 15-24 years which concentrates a large number of unpaid family workers – 24,0%.

Graphics 2: The share of rural employment, by professional status and age groups, Center Region, year 2009



Source: Romania's Statistical Yearbook 2010, NIS

Graphics 3: The share of rural employment, by educational level and age groups, Center Region, year 2009



Source: Romania's Statistical Yearbook 2010, NIS

In terms of the training level, rural employment from the Center region, in comparison with the national rural employment, has a higher educational level: *Higher education* - 4,2% of the rural employment in the Center Region, versus 3,2% at national rural level; *Secondary school* - 63,0% of the rural employment in the Center Region, versus 51,3% at national rural level; *Lower education* - 32,8% of the rural employment in the Center Region, versus 45,5% at national rural level.

If we take into consideration those that have lower educational level, the share of the rural employment – that graduated the primary educational cycle or has no education at all – represents 7.9% in the Center Region, versus 11.21% at national rural level, which constitutes an advantage over the other development regions from Romania.

If we consider also the age of the rural employment by the training level we can observe that most of those who have higher educational level fall under the 25-34 years (36,0%) category and those who graduated secondary school under the 35-44 years (31,9%) category, which roughly is also true at national rural level.

CONCLUSIONS

The level of regional competitiveness has fallen below the national average, which generates consequences over the standard of living of the region's population that has fewer resources in comparison with the national average and it's subjected to the risk of a reducing standard of living by reference to the population of other development regions.

This situation is determined, mainly, by the demo – occupational imbalances with which the region is confronted and that lead to the contraction of the active population's volume and to the accelerated rising of the depending population's volume. Phenomena like the accelerated aging, the fast diminishing of the active's population contingents and the exponential growth of the depending population's share – composed mainly of people over 65 years – make that the value of economic production made by the region's population is distributed for supporting its hole demographic body.

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TERRITORIAL DISPARITIES CAUSED BY THE CURRENT SITUATION OF THE TECHNICAL INFRASTRUCTURE IN RURAL AREAS - CENTRAL REGION[1]

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Abstract

At European level, the arrangement of the territory is defined as "a spatial expression of the economic, social, cultural and ecologic policies of all societies" ("European Charter of the arrangement of the territory" - 1983). In Romania, the arrangement of the territory and urbanism activities are regulated by the Law 350/2001 regarding the arrangement of the territory and urbanism, with the afterwards changes, which sets the following objectives for the arrangement of the territory: social and economic balanced development of the regions and areas, in compliance with their specificity, improvement of the quality of life for people and human collectivities, responsible management of the natural resources and environmental protection, rational use of the territory.

Key words: arrangement of the territory, regional disparities, rural development

INTRODUCTION

The inequalities generated by the endowment of the territory from the Romanian rural communities lead to regional disparities regarding the economic, social and cultural development.

The indicators taken into consideration for the analysis of the endowment of the territory (housing comfort, technical – utilities infrastructure), of the rural areas of the Center Region, are: living area per inhabitant (square meters); the quantity of drinkable water distributed to the consumers for domestic use per inhabitant (cubic meters); the simple length of the drinkable water distribution network (km); the simple length of the

1 Contract no. 92072/01.10.2008 Socio-economic models for inequalities attenuation from the rural areas in regional profile (MESAIR) – Program no. 4 "Partnerships in priority domains"

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sewerage network (km); the simple length of the natural gas distribution network (km).

The available statistical data at the level of the Romanian rural communities where used for the calculation of some indicators afferent to the 5 relevant criteria (endowment of the territory, demographic and social dimension, social infrastructure, economic dimension, investments) for building a matrix that can describe the present status of the rural socio-economic inequalities.

The calculated indicators where subjected to the cluster type analysis which represent a set of techniques that allow the construction of relative homogenous groups – clusters, depending of the considered variables.

RESULTS OF RESEARCH

The Cluster 1 is the best equipped one regarding the endowment of the territory (habitation comfort, infrastructure) of the 3 clusters, the counties that are detaching being Braşov (Bran, Şinca, Harman, Cristian, Sânpetru communes), Sibiu (Şelimbăr, Cristian communes) and Mureş (Riciu, Sântana de Mureş, Ceuaşu de Mureş, Sânpaul, Band, Albeşti communes).

In terms of the living area per inhabitant, in the Center Region, the mean value is 16,39 sm/inhab. being greater than the national mean value of 15,87 sm/inhab. The mean value of Cluster 1 and 3 is higher than the national mean value.

There are no noticeable differences regarding the mean living area per inhabitant, neither between clusters or counties: - the lowest value is the one from Cluster 3 – 15,12 sm/inhab., and the highest is the one from Cluster 1 – 18,06 sm/inhab.; - the lowest value is the one from Covasna county 15,60 sm/inhab., and the highest is the one Sibiu county - 17,10 sm/inhab.

Table 1: Centralization of indicators regarding the endowment of the territory – Center Region

	Total	Cluster 1	Cluster 2	Cluster 3
Living area per inhabitant sm (stable population at 1st of July)	16,39	18,06	16,01	15,12
Quantity of drinkable water distributed to the consumers for domestic use cm/ inhab.	20,37	49,47	10,45	10,29
Simple length of the drinkable water distribution network - km	9,39	17,04	7,23	5,16
Simple length of the sewerage network - km	1,81	6,02	0,46	0,05
Simple length of the natural gas distribution network -km.	12,01	13,63	12,90	6,31

Source: Romania's Statistical Yearbook 2008, NIS

There are some bigger inequalities between communes in terms of living space, even if the mean value at county or Cluster level is acceptable in comparison with the national mean. Thus:

- The communes with the lowest level of housing comfort are: Bunila (Braşov) – 7,58 sm/inhab., Augustin (Braşov) – 8,01 sm/inhab., Poiana Vadului (Alba) – 8,47 sm/inhab., Lemnia (Covasna) – 9,32 sm/inhab., Apata (Braşov) – 9,82 sm/inhab.,
- The communes with the highest level of housing comfort are Corunca (Mureş) – 45,85 sm/inhab., Fundata (Braşov) – 37,03 sm/inhab., Bereni (Mureş) – 36,64 sm/inhab., Mereni (Covasna) – 34,59 sm/inhab., Bruiu (Sibiu) – 27,81 sm/inhab.

Table 2: Living area per inhabitant (sm/inhab) – Center Region

County/Cluster	Cluster 1	Cluster 2	Cluster 3	Total
Alba	15,04	16,34	16,24	16,07
Braşov	18,25	16,55	14,50	16,91
Covasna	20,96	14,36	15,80	15,60
Harghita	18,38	16,24	14,63	16,71
Mureş	19,52	15,42	15,32	16,08
Sibiu	17,53	17,90	13,91	17,10
Total	18,06	16,01	15,12	16,39
National mean	17,44	16,48	14,40	15,87

Source: Romania's Statistical Yearbook 2008, NIS

Regarding the distribution of drinkable water utility, for the Center Region, even if **the mean length of the drinkable water network** is lower than the national mean, **the mean quantity of water distributed to consumers** is higher than the national mean.

The Cluster 1 detaches from the rest, both in terms of length of the network and of mean quantity of water per inhabitant. There is a large discrepancy between the Cluster 1 and the others, but even in the case of Cluster 1, there are big differences between the components counties, especially in the case of the length of the drinkable water network.

Table 3: The quantity of drinkable water distributed to consumers for domestic use per inhabitant (cm/inhab.) – Center Region

County/Cluster	Cluster 1	Cluster 2	Cluster 3	Total
Alba	11,05	6,82	7,16	7,70
Braşov	99,46	12,92	32,37	54,43
Covasna	16,11	14,41	8,15	13,57
Harghita	31,90	17,30	14,68	21,51
Mureş	14,18	5,48	4,48	6,75
Sibiu	77,00	13,57	0,00	32,81

County/Cluster	Cluster 1	Cluster 2	Cluster 3	Total
Total	49,47	10,45	10,29	20,37
National mean	33,48	14,58	5,08	14,77

Source: Romania's Statistical Yearbook 2008, NIS

The Braşov and Sibiu counties rank best in terms of the drinkable water distribution, the lowest ranking counties being Alba and Covasna.
The communes that protrude, in terms of: - The length of the drinkable water network, are: Bran (Braşov) – 68 km, Târlungeni (Braşov) – 65 km, Lupeni (Harghita) – 59,10 km, Şelimbăr (Sibiu) – 58,90 km, Şinca (Braşov) – 45,00 km; - The quantity of drinkable water consumed, are: Hoghiz (Braşov) – 343,55 cm/inhab., Şelimbăr (Sibiu) – 80,01 cm/inhab., Cristian (Sibiu) – 61,25 cm/inhab., Târlungeni (Braşov) 56,56 cm/inhab., Feldioara (Braşov) – 56,27 cm/inhab.
The number of communes that have no drinkable water distribution network is 123, out of which: 26,83% in Sibiu county; 21,14% in Mureş county; 20,33% in Alba county; 12,19% in Harghita county, 11,38% in Covasna county and 8,13% in Braşov county.

Table 4: The simple length of the drinkable water distribution network (km) – Center Region

County/Cluster	Cluster 1	Cluster 2	Cluster 3	Total
Alba	9,71	5,96	4,79	6,50
Braşov	27,19	7,86	8,04	16,35
Covasna	3,88	7,64	3,40	6,34
Harghita	21,26	9,58	9,26	13,17
Mureş	11,06	8,37	5,70	8,37
Sibiu	15,67	2,81	0,00	6,70
Total	17,04	7,23	5,16	9,39
National mean	19,78	11,45	4,94	10,63

Source: Romania's Statistical Yearbook 2008, NIS

Table 5: The simple length of the sewerage network (km) – Center Region

County/Cluster	Cluster 1	Cluster 2	Cluster 3	Total
Alba	1,92	0,03	0,05	0,40
Braşov	4,52	0,00	0,14	2,01
Covasna	0,12	0,90	0,10	0,64
Harghita	12,87	1,32	0,07	4,76
Mureş	6,42	0,43	0,00	1,34
Sibiu	5,49	0,00	0,00	1,87
Total	6,02	0,46	0,05	1,81
National mean	2,85	0,27	0,19	0,77

Source: Romania's Statistical Yearbook 2008, NSI

The Center Region ranks also well, in terms of the sewerage utility, compared to the national mean. The communes from the Cluster 1 benefit from a sewerage network with a length of 6,02 km, detaching from the rest of the clusters, where the length of the network varies from 0,4 km, in Cluster 2, to only 0,05 km in Cluster 3.

The communes with the longest sewerage network are: Şelimbar (Sibiu) – 50,60 km, Joseni (Harghita) – 37,90 km, Remetea (Harghita) – 35,00 km, Santa de Mureş (Mureş) – 29,30 km, Horman (Braşov) – 26,20 km.

Despite this, there is still a large number of communes (269), in the Center Region, that have no sewerage network, out of which: 23,79% in Mureş county, 22,30% in Alba county, 17,10% in Sibiu county, 14,50% in Braşov county, 12,64% in Harghita county and 9,67% in Covasna county.

The Center Region also detaches from the national mean, in terms of the natural gas distribution, both at global and cluster levels. There are some smaller differences between clusters, in terms of the mean length of the network.

Table 6: The simple length of the natural gas pipeline distribution (km) Center Region

County/Cluster	Cluster 1	Cluster 2	Cluster 3	Total
Alba	10,12	9,30	3,31	8,48
Braşov	17,36	8,96	6,03	12,08
Covasna	1,08	2,27	0,00	1,70
Harghita	7,53	3,42	4,90	4,88
Mureş	24,59	26,79	11,46	23,90
Sibiu	12,94	12,03	7,68	11,60
Total	13,63	12,90	6,31	12,01
National mean	9,69	5,26	0,81	4,44

Source: Romania's Statistical Yearbook 2008, NIS

Between the components counties, there are some important differences; the county that detaches from the others, in terms of the length of natural gas distribution network, is Mureş county – 23,90 km of network, followed by Braşov county, with 12,08 km and Sibiu, with 11,60 km; the lowest ranking county, from this point of view, is Covasna, with only 1,7 km of network.

The communes that benefit from the longest natural gas distribution network are situated in Mureş county (Band 77,20 km, Acatari 63,00 km, Riciu 60,70 km, Ceuaşu de Câmpie 60,10 km, Gorneşti 58,20 km, Valea Largă 58,20 km, Sânpetru de Câmpie 56,20 km communes).

The number of communes without a natural gas distribution network, from the Center Region, reaches 169 localities, out of which 45 are in Alba county, 39 in Harghita county, 32 communes in Covasna county, 19 in Braşov and Mureş counties and 15 in Sibiu county.

CONCLUSIONS

The Center Region, in terms of technical – utilities infrastructure, ranks better than the national mean value, at all the analyzed indicators levels.

In terms of territory endowment, there are 61 communes in the Center Region that have no drinkable water distribution network, sewerage network or natural gas distribution network, out of which: in Alba county – 22 communes (36,07%); in Covasna county – 10 communes (16,39%); in Harghita and Sibiu counties – 9 communes in each (14,75% each county); in Mureş county – 6 communes (9,84%) and Braşov county – 5 communes (8,20%).

The communes that rank high, in terms of technical – utilities infrastructure are: *Şelimbăr* (Sibiu county) – 58,90 km length of drinkable water distribution network, 50,60 km length of sewerage network, 33,20 km length of natural gas distribution network, *Sântana de Mureş* (Mureş county) – 35 km length of drinkable water distribution network, 29,30 km length of sewerage network, 32,10 km length of natural gas distribution network, *Frumoasa* (Harghita county) – 28 km length of drinkable water distribution network, 25 km length of sewerage network, 28,90 km length of natural gas distribution network, *Albeşti* (Mureş county) – 24,90 km length of drinkable water distribution network, 18 km length of sewerage network, 38,30km length of natural gas distribution network, *Harman* (Braşov county) – 16,60 km length of drinkable water distribution network, 26,20 km length of sewerage network, 37,70 km length of natural gas distribution network.

There are also communes that rank good, in terms of drinkable water distribution network and natural gas network, but very low in terms of sewerage network, for example: *Bran* (Braşov county) – 68 km length of drinkable water distribution network, 45,60 km length of natural gas distribution network, 0 km length of sewerage network, *Riciu (*Mureş county) – 35 km length of drinkable water distribution network, 60,70 km length of natural gas distribution network – 2 km length of sewerage network, *Ceuaşu de Câmpie* (Mureş county) – 30,40 km length of drinkable water distribution network, 60,10 km length of natural gas distribution network – 0,30 km length of sewerage network, *Sâncraiu de Mureş* (Mureş county) – 41,60 km length of drinkable water distribution network, 39,30 km length of natural gas distribution network – 8,8 km length of sewerage network, *Sânpaul* (Mureş county) – 43,40 km length of drinkable water distribution network, 39,50 km length of natural gas distribution network, 0 km length of sewerage network, *Şinca* (Braşov county) – 45 km length of drinkable water distribution network, 31,10 km length of natural gas distribution network – 6 km length of sewerage network.

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AGRICULTURAL PUBLIC PROPERTY UNDER THE IMPACT OF POSTCOMMUNIST REFORMATORY PROCESSES

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Abstract

As a result of de-collectivization and privatization, including the development of new holdings, based on private property, the dimension of types and shapes of property suffered some changes, as well as their evolvement in agricultural development. Nowadays, in the Romanian agriculture there are holdings based on private or mainly private property and holdings based on public or mainly public property.
The defining cause of the current structural situation is represented by the evolution of public and private property relationship, during the post-communist period, evolution based on a confusing and incomplete legal framework, initially represented by the law of the land and its many related laws, which negatively influenced the formation and consolidation of new agricultural structures based on private property. The purpose of this study is to analyze the evolution of the relationship between public and private property in the post-communist period.
Key words: public property; private property; land fund; farm land.

INTRODUCTION

As a result of de-collectivization and privatization, including the development of new holdings, based on private property, the dimension of types and shapes of property suffered some changes, as well as their evolvement in agricultural development. Nowadays, in the Romanian agriculture there are holdings based on private or mainly private property and holdings based on public or mainly public property.

The defining cause of the current structural situation is represented by the evolution of public and private property relationship, during the post-communist period, evolution based on a confusing and incomplete legal framework, initially represented by the law of the land and its many related laws, which negatively influenced the formation and consolidation of new agricultural structures based on private property. The purpose of this study is to analyze the evolution of the relationship between public and private property in the post-communist period.

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Public property. Main characteristics. Content and dimension

Public property represents the property right that belongs to the state or to a administrative unit on assets which by their nature or by law, are of public interest or use, provided that they are gained on ways provided by law.

State-owned lands that remained after the restitution claims were satisfied, fall into two distinct categories: (Chelaru, 2005) – the public domain and the private domain of the state.

Public domain refers to public property which expresses ownership - possession, provision, use - on goods which by their nature, are designed to meet utility or public interest[2].

Private sector is composed of assets (other than the ones of public domain) against which is exercised the right of state private property and their management is assigned to companies, providers of public utilities and local administrative units.

The Agency for the State's Domains (ADS) is the specialized agency conducting the privatization of agricultural companies (formed in accordance with Law no. 15/1990) and the lease of the agricultural land, public or private property, to be managed by these companies. ADS was founded by Law no. 268/2001, as an institution of public interest, of financial and commercial nature, under the subordination of the Ministry of Agriculture and Rural Development. Currently, the ADS has under administration 340439,36 ha, of which: 172753,87 ha public domain, and 167685,49 in the private domain of the state.

The main attributions of the Agency are:

- Exercises, in behalf of the state, the prerogatives of agricultural land ownership, belonging to the private domain of the state;
- The management and effective exploitation of state assets, whose mandated owner it is, as well as privatization of the companies mentioned in art. 1 and 2 of Law 268/2001;
- The management of agricultural land belonging to the state public and private domains, in the service of national societies, research and agricultural production institutes and of agricultural and forestry education units;
- The leasing or renting of agricultural land belonging to public or private domain of the state, in the service of national companies, research and agricultural production institutes and of agricultural and forestry education units;
- The merging of agricultural lands, on behalf o the state, from public or private domains of the state, regarding their leasing or renting, in order to develop family type holdings.

In 2000, ADS has taken over in its heritage a land area of 1,463,556 ha, of which:

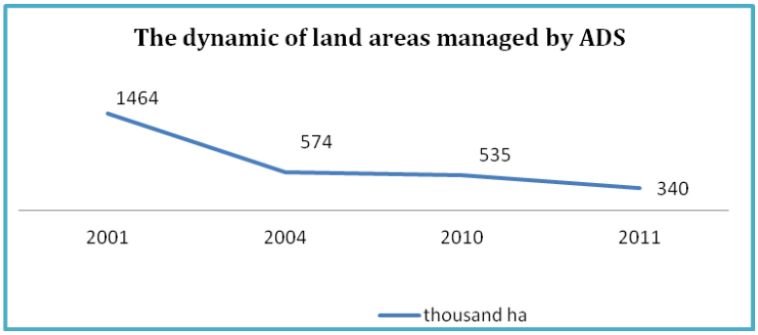
- 1.325.995 ha agricultural land, structured as follows: 1.077.780 ha arable land,

2 Law no. 213/1998 on public property and its legal status. M.O. nr.448/24 mart.1998, art. 1,2 and 3

128.957 ha pasture, 28.886 ha hay field, 42.732 ha vineyard, 47.640 orchard;
- 40.000 ha water surface;
- 97.561 ha non-agricultural land.

The evolution of lands managed by ADS, since its establishment, until 2011, is shown in the following chart.

Fig. 1



Source: Agency of the State Domains, www.domeniilestatului.ro, accessed 25.08.201

After the inventory, ADS had to hand over some of the agricultural land to the local commissions, regarding the reconstruction of property rights to the entitled persons, according to Law No.1/2000, and some forest lands to the National Forest, for the same purpose. Thus, the ADS handed over an area of 675 thousand ha to the local committees (town halls) for the restoration of property rights, while for another surface of 105.5 thousand ha is in litigation with various local committees.

One of the priority objectives of the Agency was the leasing of agricultural land from the private domain of the state. As a temporary solution to ensure the efficient exploitation of the agricultural land surfaces until the concession, ADS signed lease or joint venture contracts with various individuals or legal persons.

The dynamics of the relationship between public property and private property

The total, or near total, reduction of control and, respectively, of state property on its assets, and especially on the agricultural land, was the key issue of the agrarian policy concerning the reforming of the agriculture private domain, after the transition to free market economy.

The main change, concordant with the transition to a market economy, consists in the extension of private property and the restriction of the public and private property of the state, which constitutes the content of the private and, respectively, public sectors from agriculture.

Private property has become dominant, regarding both the input and the output achieved. Currently, the private property represents over 95% from agricultural area of the country and 96% of the arable one.

Table 1 - The evolution of the relationship between public and private property

	Total agricultural area (thousand ha)	Of which: private[3]		Of which: public	
		Thousand ha	%	Thousand ha	%
1991	14798,3	10324,8	69	4473,5	31
1993	14793,1	10336,4	70	4456,7	30
1995	14797,2	10693,9	73	4103,3	27
1997	14794,0	10430,7	71	4363,3	29
1999	14730,7	11432,6	78	3298,1	22
2001	14852,3	14310,0	96	542,3	4
2003	14717,4	14156,0	96	561,4	4
2005	14741,2	14087,1	96	654,1	4
2007	14709,3	13998,9	95	710,4	5

Source: Statistic Yearbook of Romania 2009, own calculations

Between 1991-2000, the public property/private property report developed under Law 18/1991, when the following phenomena can be distinctly noticed:

- Private property has two defining segments:

a) Peasant households from the non - cooperative areas, holding a share of about 8% of the country's surface

b) agricultural cooperatives of production that had in use about 62% of the country's surface.

Summed up, the two lead to a total rate of about 70%, as confirmed by the official statistical data (table 1).

- The state property had two sources of constitution:

a) first, of public nature, consisting of land belonging to the agricultural research, main irrigation canals, to some central government institutes, as well as lands occupied by pastures and grazing lands.

b) the second source consists in land occupied by former IAS, about 1.6 million ha. This last category of land, took, in the next period, in accordance with Law 1 / 2000, the road of privatization - to former owners or was assigned by lease to major industrial farms. The last category entered in the management of the Agency of State Domains.

Together, the two sources of state property lead to 30% of the total agricultural area of the country. Along with the application of Law 1 / 2000, a second category of defining mutations regarding the public property / private property report arises. Related to these mutations, we make the following comment: private property rises from 70% to 95%, matter which supports a thorough analysis, because the data, as they appear in official documents, in our opinion, doesn't have the appropriate legislative support.

3 Includes: private property of the state, of teritorial-administrative units, of legal and natural persons.

Public property, at the threshold of 1997, in a synthetic approach, had the following structure:

Total, of which:	4,4 mil. ha
Communal pastures and meadows	2,2 mil.ha
Former IAS lands	1,6 mil. ha
Lands for agricultural research, main irrigation canals and others	0,6 mil. ha

The communal pastures, of about 2.2 million ha, represented the category of usage that was legally framed, at the moment of their constitutions, after the agrarian reform of 1921, as public domain of local interest. Such a legal qualification protects this category of use of any interference on the regime of property or use.

At the moment of communal pastures establishment, the legislator from that time (1921) considered appropriate to introduce them, from the juridical point of view, as category of usage belonging to the domain of local interest, with the desire of, as we mentioned above, protecting them from any interference, but also from the desire of putting them to the benefit of the entire rural communities, as a form of support from the public power, for the peasant households, with the intention of increasing the livestock, referring especially to large and small herbivores.

Also on communal pastures property regime, we mention that during the communist period, they were framed on state property and not on the cooperative one, which gave it a high degree of protection, in what property rights are concerned but also over the manner in which they were to be used.

A third important moment was in 1991, when according to the land law, the land occupied by communal pastures was recognized as public domain of local interest, with all the advantages deriving from this over the property regime.

CONCLUSIONS

In 2001, when the communal pastures, in statistical terms, were removed from public property and passed as private property, that moment became scientifically inexplicable and unsustainable by law, which in terms of agrarian policy, may be counterproductive, in time.

It is counterproductive, because it leaves the public or private decision over the property regime interferes, as well as over their usage manner, which over time weakens the supporting basis of peasant households' production, with reference to the livestock sector.

Currently, the public property regime still maintains more than 300 000 hectares, lands to which law assigns scientific research, scholar farms, or agricultural lands belonging to other public institutions of national interest.

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PROTECTED GEOGRAPHICAL INDICATION FOR AGRICULTURAL PRODUCTS AND FOODSTUFFS – OBJECT OF INTELLECTUAL PROPERTY RIGHT

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Abstract

In this paper are presented in a synthesis the most important legal aspects regarding the protected geographical indication of the agricultural products or foodstuffs. Also, I emphasized that in the category of intellectual property rights, the right of geographical indications is also found, by which the name of a certain geographical territory is protected, which is used for describing a certain product originating in the respective area. Finally, we point out that the concerns of Romanian farmers' or farmers' groups', habilitated authorities and institutions for the protection of geographical indications for agricultural products and foodstuffs are mitigated.

Key words: protected geographical indication, intellectual property, traditional agricultural products and foodstuffs

INTRODUCTION

Both at EU and national level, four descriptions attesting the quality of agricultural products and foodstuffs are defined, namely *organic farming, indication of the protected geographical name (protected geographical indication), protected appellation of origin and the specificity certificate.*

The protected geographical indication (PGI) is used for describing a certain agricultural or product and foodstuff and can be the name of a region, a locality, a specific place or a country. To receive the PGI status, the agricultural product or foodstuff has to simultaneously meet the following conditions:

- It must originate in the respective region, locality, specific place or country;
- It must possess a specific quality, a reputation or other characteristics attributable to its geographical origin;
- The raw materials used may also come from outside the defined geographical area;

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- At least one of the stages in the production, processing or preparation process must take place in the defined geographical area. Certain operations of the production process, such as packaging, freezing, storage, etc. may also take place outside the defined geographical area (Council Regulation (EC) No 510/2006).

In the category of *intellectual property rights, the right of geographical indications is also found,* by which the name of a certain geographical territory is protected, which is used for describing a certain product originating in the respective area, which is produced, processed or prepared in the respective area and has a specific quality, a reputation or other characteristics attributable to the respective area (Roş, V. & all, 2003).

1. PROTECTED GEOGRAPHICAL INDICATION – GENERAL APPROACH

In the year 2008, The European Commission transmitted to the European Parliament, to the Council and European Economic and Social Committee, the Communication no. 465 of 16.07.2008 on the Strategy of industrial property rights (eur-lex.europa.eu, 2011) to ensure Europe has a high quality industrial property rights system in the years to come. EU needs intellectual property rights to protect its policy in the quality and innovation field so as to remain competitive in the world economy and to fight against counterfeit and piracy.

It should be specified that protection registration and acquisition applies to designations and not the products *per se.* The protection provided by the geographical indications has in view to prevent the abuse of the designation that might mislead consumers with regard to the origin of agricultural products and their quality or characteristics.

The registered designations are protected against:

- any commercial use of a registered name that might permit the exploitation of its reputation (e.g. *Salam de Sibiu – Sibiu salami*);
- abusive use, counterfeit or origin evocation;
- any false or misleading indication with regard to the origin, nature or essential qualities of the product;
- any other practice susceptible to mislead the consumer with regard to the true origin of the product (Council Regulation (EC) No 510/2006).

In Romania, there are two registered products with protected geographical indication, namely C*ârnații de Pleşcoi (Pleşcoi sausages)* and *Magiun de prune Topoloveni (Topoloveni plum marmalade);* only the latter received Protected Geographical Indication certification from the European Commission (The European Commission granted on 8 April 2011 " Topoloveni plum marmelade" first certification a geographical indication for a Romanian traditional product).

Thus, we can say that the Romanian farmers' or farmers' groups' concerns for the protection of geographical indications for agricultural products and foodstuffs are almost non-existing, in the conditions when France has 102 registered products with protected geographical indication, Italy has 83 registered products, Spain has 74 registered products, Germany has 48 registered products, Great Britain has 19

registered products, Poland 13 registered products, Hungary 4 registered products (ec. europa.eu, 2011).

Out of the EU Member States, only Bulgaria has no product with EU certification.

2. LEGAL AND INSTITUTIONAL FRAMEWORK

The legislation in the field of geographical indications is represented at Community level and, also at national level by the following laws:

Council Regulation (EC) No 510/2006, *on the protection of geographical indications and designations of origin for agricultural products and foodstuffs.*

The Regulation contains norms referring to the protection of designations of origin and of geographical indications for the agricultural products and foodstuffs for human consumption specified in: *Annex I to the Treaty Establishing the European Community* (live animals, meat and edible offal's, milk and dairy products; poultry eggs; natural honey, vegetables, plants, food roots and tubers, grains, bakery products; malt; starches; gluten; vegetable preparations, vegetables, fruit and other plants or parts of plants, wine from fresh grapes; must from fresh grapes stopped from fermentation, cider, pear wine, hydromel and other fermented drinks, etc.); *Annex 1 to the present regulation* (beers, beverages made from plant extracts, bakery products, pastry, confectionery, biscuits, natural gums and resins, mustard paste, pasta), *Annex II to the present regulation* (hay, essential oils, cork, cochineal, flowers and ornamental plants, wool, wicker, scutched flax).

A certain agricultural product or foodstuff, in order to get the protected geographical indication (PGI) status, must fulfill a series of conditions, which are included in the product specification. The specification sheet includes the following items: name of agricultural product or foodstuff, description of the agricultural product or foodstuff, geographical area delimitation, evidence that the agricultural product or foodstuff originates in the delimited geographical area, description of the method used in obtaining the agricultural product or foodstuff, elements that should justify: the link between the quality or characteristics of the agricultural product or foodstuff and the geographical environment, name and address of authorities or bodies that check up the application of dispositions from the specification sheet, any specific labeling rule of the respective agricultural product or foodstuff, the eventual requirements that must be applied in conformity with the EU or national dispositions.

The registration application can be submitted by a group only for the agricultural products or foodstuffs that it produces or obtains. Group means any association of producers or operators interested in the same agricultural product or foodstuff, regardless of the form or legal componency of the group.

Each Member State investigates by adequate means whether the application is justified and if the applicant meets the conditions of the present regulation.

In the case when the requirements specified in the present regulation are complied with, the Member State adopts a favorable decision and forwards the documents to the Commission in order to get a final decision. The Commission examines within

maximum 12 months, by adequate means, whether the received application is justified and whether it meets the conditions of the present regulation.

In the case when the Commission considers that the conditions specified in the regulation are met, this publishes the single document in the *Official Journal of the European Union* and sends the specification sheet for publication.

Within six months from the date of publication in the *Official Journal of the European Union* any Member State or third country may object to the proposed registration by submitting a duly substantiated declaration to the Commission.

In the case when no admissible objection is received, the Commission shall register the name and the registration will be published in the *Official Journal of the European Union.*

In the case when the Commission considers that the conditions from the specification sheet are no longer fulfilled for a certain agricultural product or foodstuff that has a protected designation of origin, this initiates the procedure to annul the registration, which is also published in the *Official Journal of the European Union.*

Law no. 84 of April 15, 1998, *on trademarks and geographical indication*.

The law establishes the rights of trademarks and geographical indications, which are recognized and defended on Romania's territory. According to the provisions of the law:

- The geographical indication represents the name serving to identify a product originating in a country, region or locality of a state, in the cases when a quality, reputation or other determined characteristics can be essentially attributed to this geographic origin;
- The register of geographical indications represents the collection of data, administered by the State Office for Inventions and Trademarks (SOIT), which comprises the geographical indications registered in Romania, as well as all the inscribed data referring to these registrations, regardless of the support on which these data are kept;

The geographical indications of products are protected by their registration at SOIT and can be used only by the entities that produce or sell the products for which these indications were registered.

The list of geographical indications the protection of which is registered in Romania will be registered at SOIT in the Register of geographical indications and published in the Official Industrial Property Bulletin. The producers' associations who develop a production activity in the geographic area can apply for the registration of a geographical indication for the products specified in the application.

The protection period of the geographical indications starts from the date of application at SOIT and is unlimited. The right of geographical indication use is granted to the applicant for a ten-year period, with the possibility of unlimited renewal, if the conditions in which this right was acquired are maintained.

The entities authorized to use a geographical indication for certain products have the right to use it in the commercial circuit, applied only to these products, in accompanying documents, advertisements, prospects, and can apply the registered

geographical indication specification. The right to use a geographical indication cannot be object to any transmission.

Decision no. 828 of July 25, 2007 *on the establishment of the System of protection of geographical indications and designations of origin for agricultural products and foodstuffs.*

The decision defines the following terms in use: national logo, certification of agricultural products or foodstuffs, private inspection and certification body, specification sheet, registration application, single document, objection declaration procedure at national level, the register of the designations of origin and protected geographical indications.

The normative act establishes the authorities in charge with checking up the documentation for obtaining the protected geographical indication for an agricultural product or foodstuff and with the control of labeling and use of the national or Community logo on the market.

At the same time, it regulates the checking up of the specification sheet (by private inspection and certification bodies for the agricultural product or foodstuff), the checking up of the documentation for the registration and acquisition of a protected geographical indication for an agricultural product or foodstuff (by the Ministry of Agriculture and Rural Development) and the control of labeling and use of the national and Community logo (by the National Authority for Consumers' Protection).

The institutions and bodies in charge with the acquisition of the geographical indication for an agricultural product or foodstuff, at national level, are the following:

- Private inspection and certification bodies for the agricultural products or foodstuffs – S.C. Certind S.A., Romcontrol S.A., Larex Cert – which have attributions in the control of the specification sheet;
- The Ministry of Agriculture and Rural Development that checks up the documentation for the registration and acquisition of a protected geographical indication for an agricultural product or foodstuff;
- The National Authority for Consumers' Protection – with attributions in checking up the labelling and use of the national and Community logo;
- The State Office for Inventions and Trademarks – for trademark registration and acquiring protection on Romania's territory. SOIT is the specialized body of the central public administration, as unique authority that ensures the protection of trademarks and geographical indications on Romania's territory.

3. CONCLUSIONS

Only one Romanian quality foodstuff product obtained protection at European level and at the same time promotion in the EU Member States, providing consumers with the guarantee that the product is authentic, traditional and it fulfils the EU safety, hygiene, labeling, health control and nutritional information criteria.

It is necessary and opportune for the traditional Romanian products to be protected and registered, out of the following reasons:

- A protected geographical indications system for the Romanian agricultural products and foodstuffs, similar to that from the European Union Member States, will permit the Romanian producers to apply for the registration and protection of geographical indications in the European Union as well;
- It will foster the establishment of producers' groups, which process, produce or prepare the same type of product, to sell it under the same protected designation both on the domestic and European markets, thus also encouraging production diversification;
- It can bring significant benefits both for the rural economy and for the national economy, mainly in the less-favored areas, by increasing farmers' incomes and by creating jobs for the rural population in the respective areas;
- Consumers must be clearly informed about the origin of products, their specific characteristics, based on the geographical areas, about the traditional production methods, thus having the possibility to make the best choice;
- It will ensure a fair competition between the producers of products with these designations and will increase the credibility of products for the consumers.

At present, there are 2493 traditional agricultural products and foodstuffs that are certified according to the current legislation and published by the Ministry of Agriculture and Rural Development. (madr, 2011) Many of these traditional certified products, through the conjugated efforts of farmers and habilitated authorities and institutions, could become products with protected geographical indication status.

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THE CRISIS OF EFFICIENCY IN RESOURCE ALLOCATION IN ROMANIA'S AGRICULTURE

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Abstract

The present paper highlights the peripheral position of Romanian farmers' position in the European context. It reveals the causes of efficiency crisis that derives from the ownership structures, competition environment situation, the deficiencies of the institutional environment and the inconsistencies of the agricultural policies.

Key words: agrarian crisis, causes, solutions

1. General background

By the potential provided by the natural resources, mainly by land, Romania can be considered as being among the great agricultural powers of the European continent [7, 10, 15, 16, 17]. Yet the past and present realities of our country's agriculture are far from confirming this hypothesis [5, 6, 11]. In the last quarter of the century agricultural production followed a sinuous trajectory under the background of modest average yields [2, 13, 15]. In these conditions, with regard to the obtained yields and productivity of resource utilization, the Romanian farmers' performance has been on a peripheral position in the European context. With a gross agricultural output of 1328.1 euro/ha in Romania compared to 2131.9 euro/ha the EU-27 average, the gap disadvantaging the Romanian farmers is 1:1.6. However, if we consider the gross agricultural output per agricultural worker, i.e. 6762.1 euro in Romania, versus 32180.7 euro the EU-27 average, the ratio disadvantaging the Romanian farmers is even higher, i.e. 1:4.8. A similar situation appears if we consider the performance indicators calculated on the basis of gross value added (GVA). In this case, the gap between Romania and the EU-27 average is 1:1.4 for the indicator GVA/ha and 1:4.1 for GVA/agricultural worker[2].
The low efficiency in the utilization of our country's agricultural potential has a deep negative impact that is manifested at different levels, among which the situation of the agri-food trade balance and supplying the population and processing industries with agri-food products, Romania's farmers competitiveness on the domestic and world

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2 Calculations based on Eurostat 2009 data, Table 2.0.1.2 (Ciffres clés de l'agriculture).

markets, the Romanian farmers' incomes, etc. [8, 9, 12].

Continuing an undesired tradition, unfortunately with no interruptions, that began in the 1990s, in the last period (except for 2009, when the effects of the world economic-financial crisis were strongly manifested) we experienced an increase of Romania's agri-food trade deficit. In the year 2009, this deficit reached 1508 mil. Euro, accounting for more than 98% versus the agri-food exports. It is a significant fact that the coverage of imports by exports is not larger than 50% in the conditions when the trade balance deficit practically exceeded the level of exports (except for the year 2009)[3].

The social consequence of the Romania farmers' modest technical and economic performance is represented by the generalized poverty situation of this category of population. By the low level of monthly average incomes per person, the farmers are in a more difficult situation than the pensioners, who are a well-known less favoured social category in Romania[4].

2. Constraints and blockages to performance

The modest performance of the Romanian farmers has its origin in a whole set of causes. Some of these originate in the remote historical past, while others, with the same negative impact, from the modality in which the systemic and structural reforms were conceived and promoted after 1989.

After 1989, in Romania's agriculture, a dual structure of ownership and land operation modality was established and consolidated: on one hand a large number of small peasant household farms and on the other hand a relatively low number of large-sized farms, organized on the private firm principle [14].

The defining characteristic of the sector of individual agricultural holdings is represented by the excessive fragmentation of the landed property. The high land fragmentation in Romania represents a main competitiveness handicap, which is materialized into the level of average yields, production costs, transaction costs as well as into the low saving possibilities and development possibilities implicitly, based upon the own resources of the individual agricultural holdings in our country. The high land fragmentation, and as a result the low average yields of individual agricultural holdings leads to a chronic under utilization of resources and to a limitation of the saving possibilities, of the development potential and of the viability of this category of agricultural holdings.

After almost 20 years from the beginning of the process of promoting the systemic and structural reforms in the agri-food sector, an underdeveloped competition environment is maintained, strongly unbalanced to the detriment of farmers. As a result, we consider that in the agri-food and rural economy sector in Romania, the specific markets can represent a real support to farmers' competitiveness. The efficient operation of the lever function of farmers' competitiveness is hampered by a set of factors and/or conditions that characterize the present markets. Among these, the following stand out by the negative impact they generate: persistence of obturated communication channels

3 See Romania's Statistical Yearbook 2010, NIS, Bucharest, Table 18.4.

4 Idem, Table 7, Table 8 and Table 17.

between supply and demand; strong disequilibrium between the demand and supply carriers with regard to the competition potential; deficiencies in the market function to remove the non-competitive and non-viable farmers from agriculture in an open economy; the credit market is practically blocked; the agricultural sector has poor links with the foreign markets in the field of exports [3].

In the agricultural sector, the institutional environment features a set of characteristics that drastically limit, and in certain cases even block its functionality and implicitly its contribution to the efficient operation of economic activities. Among the characteristics of the present institutional environment, with regard to the negative impact they generate, the following are worth mentioning: the institutional environment volatility; persistence of non-functional mechanisms and organizations for imposing the Law; maintaining an underdeveloped competition environment, strongly distorted to the detriment of farmers; an unreliable and often deviant behaviour of the economic operators; limitation of farmers' ownership rights, as a consequence of the dominating position of the demand carriers on the agricultural markets; high transaction costs [4].

Among the constraints to Romanian farmers' performance, we can also mention the inconsistency of agricultural policies [1]. In this respect, it is worth mentioning that the main directions of the agricultural policies have constantly changed with the electoral cycles. The structural policy, the price and tariff policy, the financial support and even the strategic vision were significantly different from one government to another [1]. The only constant throughout all these years was the productivist focus of agricultural policies rather than focusing on competitiveness. Unfortunately, this orientation was not followed by the expected results.

It is not difficult to notice that the existence and perpetuation of the Romanian farmers' performance deficit are mainly determined both by structural causes deriving from the present configuration of the agrarian structure and from the persistence of an underdeveloped and deformed competition environment that does not favour the farmers, which add to the institutional crisis and conjunctural causes that largely originate from the errors and inconsistencies of the agricultural policies.

3. Possible ways of action

The failure of agricultural policies in promoting the structural adjustment of Romania's agriculture and at the same time in agricultural growth, which add to the potential risks of Romania's accession to the European Union, plead for the need to focus the governmental action management in the next period on the efficiency of resource allocation and on the increase of farmers' competition capacity implicitly.

In the direction of the above-mentioned issues, we shall next suggest a few possible options with regard to the agricultural and rural development policy orientation:

3.1. Intensification of individual farm consolidation and increase of its competition potential

Reaching the general goal represented by the consolidation of individual farms is directly conditioned by reaching several interdependent objectives, among which the

following should be mentioned:

- Acceleration of the land and operation capital concentration increase into viable economic units into an open economy;
- Facilitation of the labour surplus release from agricultural activities on the individual farms;
- Intensification of peasant (subsistence and semi-subsistence) farms integration into the marketing chains.

The intensification of the peasant farms participation to the trade relations – as one of the main coordinates of farm consolidation in our country – is conditioned by the existence of certain factors and conditions meant to provide economic rationality to the efforts and risks implied by this process. In this respect, certain specific measures are needed at present to the benefit of small farmers, namely:

- Gradual diminution and removal of market entry barriers
  Possible solutions: supply organization by increasing capital concentration: horizontal concentration (farm size increase); vertical concentration; development of farmers' operative information system with regard to the situation of different commodity markets and possible partners; development of market infrastructure: transport, storage, financial services.
- Diminution of market risks

Possible solutions: creation of a system for farmers' incomes insurance on cooperative bases in the initial stage by the state's participation with financial resources; training the farmers and their representatives in the elaboration and management of contracts; development of mechanisms and consolidation of institutions meant to control the respect of contracts and settling out the disputes; involvement of producers' groups in the creation of firms for agricultural commodity marketing and commercialization; consolidation of farmers' negotiation capacity.

A significant contribution would be brought by: the development of rural marketing cooperation as well as the consolidation producers' organizations as a modality to lower the transaction costs; development of a market information system with regard to the market situation and possible partners (as a modality to diminish the information asymmetry).

- Development of stock markets for the agricultural commodities.

3.2. Increased focus on the competition environment creation and development

The analysis and evaluation of constraints and blockages existing on the rural markets in our country suggest the following priority directions of action: supply organization; demand demonopolization; unblocking the connections between the carriers of demand and supply; institutional crisis attenuation in the field.

3.3. Consolidation of institutional environment

The attenuation and gradual removal of the strong deficiencies in the institutional environment need the following prioritary directions of action: development and consolidation of the competition environment, as a premise of the diminution of

opportunist behaviour manifestation possibilities in the relations between the economic operators; increasing the role and functionality of economic contracts and at the same time, of the mechanisms guaranteeing the respect of their provisions; consolidation of ownership rights.

3.4. Increasing the capacity of Romanian farmers' adaptation to the evolutions of the environment in which they operate

In the present situation of Romania's agriculture and of the new world development trends, the creation and consolidation of the necessary premises for the gradual shift of Romania's agriculture to a new type of economic growth based upon the principles and requirements of the information society and of the knowledge and innovation-based economy is imposed as one of the agricultural policy priorities. We consider that the first steps that could be adopted on the short term would be the following:

- Creation of the legal and institutional framework, as well as providing the necessary financial support for the creation of competitiveness poles;
- Ensuring the necessary conditions (laws, organizations, resources) for the creation of strategic information management system (of "intelligence économique" type in France or business intelligence in Great Britain, USA) in the rural economy sector.

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THE SUBSISTENCE AND SEMI-SUBSISTENCE FARMS IN ROMANIAN AGRICULTURE

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Abstract

For the integration process, agriculture is considered a sensible sector due to its importance for candidate countries and due to its agrarian potential that these countries bring along the already existing one in the European Union.

The performance in agriculture has descreased and has become more and more instable. This is the result of a dual and "old" structure of the agrarian exploitations, the lack of markets that could support the restructuring and modernization of the agrarian sector and of the alimentary industry that has not yet closed the cycle of restructuring and modernization.

Key words: agrarian exploitation, subsistence and semi-subsistence farms, agriculture, performance

The integration in the European Union was a significant economic and political objective of Romania at the end of the XX-th century. Romania started the European integration process by signing an association agreement. In February 1993, Romania signed the European Union Association Agreement that entered into force in February 1995, and in June 1995 it signed the adhesion request. Until the ratification by all member states of the association agreement in 1995, the trading aspects of the Association Agreement were immediately implemented based on an interim agreement, and in 2007 Romania adhered to EU.

For the integration process, agriculture is considered a sensible sector (both by EU and by candidate countries) due to its importance for candidate countries and due to its agrarian potential that these countries bring along the already existing one in the European Union.

For Romania, agriculture is obviously a very sensible sector for the EU integration due to the share and role that the agriculture has for the national economy. The contribution of the agriculture to GDP creation is situated at approximately 20% in the

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last seven years. Approximately 3,6 millions of inhabitants that work in the agriculture represent over 36% from the active population. Romanian agriculture is not very productive, and thus 36% from the population brings 21% from the GDP, while in EU 5,6% from the population brings 2,5% from the GDP. Agriculture dominates the rural economy, and the economic diversification within the Romanian rural environment is almost inexistent.

Romania has a big development potential (total area of 238 thousand square meters and a population of over 21 million inhabitants) that is not used. Romania occupies 6% from the total EU area and 4% from the EU population. The investments and competitivity in Romania still need to be improved in order to accelerate the economic increase and to ensure the convergence of incomes with those from EU.

The rural areas have a great development potential and they also have a vital social role. According to the definition from the national legislation, the rural areas in Romania cover 87,1% from the area of the country, that is 45,1% from the population (according to the indexes given by the National Institute of Statistics at the 1st of July 2005) which is 9,7 million inhabitants. The average population density in rural areas has remained constant during the years (approximately 45,1 inhabitants/ sq. km). The OECD definition for the rurality notion leads to slightly different numbers, but it enables the comparisons on international plan. Although similar from the point of view of distribution within the territory, the Romanian population has a more distinctive level of rurality. The share of the rural population in Romania reflects its big incidence compared to other EU countries, where rural settlements are less populated and at a more reduced scale compared to the urban settlements. Many of these rural communities contribute, in a small amount, to the economic increase, but they keep their social structure and their traditional way of life.

Restructuring the agriculture and reviving the rural economy may be important intitiators for development. The contribution of agriculture to GDP was always high. The gross value added (GVA) of agriculture represented 12,1% from the GDP and 13,6% from the total GVA *(INS, 2009)*. Nevertheless, it remains low taking into consideration the not used resources. The population involved in agriculture and forestry, for example, has a big share (32%), reflecting the unemployment and reduced productivity of work. Restructuring agriculture will have a special impact on the rural economy, in general, considering that agriculture continues to be the most important activity in the rural area and an important source of income for households.

Restructuring activities at the level of farms and increasing capital for trading farms will inevitably lead to the use of small level of workforce in order to increase performance and competitivity. The experience of other agrarian systems, from member states or other countries, is an important proof to this.

The active population represents 46,3% from the total inhabitants from the rural area and may contribute to the support of the economic increase in the rural areas, if there will be taken adequate means of stimuation.

Agriculture has an important role for ensuring income, by means of self employment,

while the diverisifcation of rural activities remains an issue that must be solved.

The number of work places in the rural non-agrarian sector has diminished between the period of 2000-2009. This decline is explained by the decrease or restructuring of rural non-agrarian sectors, the increase of migration outside the rural area for the active population and small middle incomes in rural area that generate few and few diversification opportunities. The diverisification of activities in the rural area remains a problem to be solved; only 457.000 rural inhabitants (10% from the total of the workplaces in the rural area) used to work in the hand-made sector.

With an agrarian area of 14.741,2 thousand hectares (or 61,8% from the total area of the country), in 2009 Romania had important agrarian resources within the Central and East Europe. Although significant areas from the used agrarian area are classified as under-privileged areas, the pedological conditions are very favourable for agrarian production activities in the south and west regions of the country. Most of agrarian area is arable (63,9%) and big shares also occupy the grazing lands and meadows (22,8%, respectively 10,2%). The vineyards and orchards, including nurseries, represent the rest of 1,5% and 1,4% from the arable area of the country.

The lands being in the public property of the state presently have a share of only 0,5% from the total arable area (367,2 thousand hectares), 0,7% from the total area of grazing lands (231,2 thousand hectares) and 0,2% from the total area of meadows (32,4 thousand hectares) (*INS, 2010*).

The distribution of agrarian exploitations has a distinctive dual character. In 2009, from the total of 4.256.152 exploitations, 4.121.247 used an agrarian area of 13.906,7 thousand hectares. The average agrarian area of an agrarian exploitation in Romania is of 3,37 ha and it is divided in approximately 3,73 parcels, which puts it way under the average size of an European farm. This low average hides the disparity between the agrarian exploitations regarding their size, and it is noticed a bipolar or dual distribution.

Small farms are mainly represented by individual exploitations. Out of the 4.121.247, the individual exploitations work 65,45% (or 9.102.018,22 ha) from SAU, while 18.263 exploitations with legal entity exploit the difference of 34,55% (4.804.683,06 ha). Individual exploitations have about 2,15 ha, divided in 3,7 parcels, while the exploitations with legal entity exploit about 269 ha, divided in 9 parcels. The majority of exploitations with legal entity are big farms: 43% of them exploit more than 50 ha, while only 30% exploit under 5 ha (*INS – The Statistical Annual of Romania, 2010).* Most of the agrarian area of the exploitations with legal entity belongs to the public administration, mostly to municipalities and villages (44,2%). The rest is divided between trading companies with private owned capital (35,81%), private agrarian units (15,44%), trading companies with state-owned capital (1,25%), co-operatives (0,08%) and other types (3,2%) (*INS – The Statistical Annual of Romania, 2009).*

Family owned businesses and authorized individuals represent a particular type of exploitations, without legal entity. Nevertheless, they are included in the Trade Registry. There are registered 3.863 family owned businesses and 9.935 authorized individuals. The majority of those in the second category cultivate cereals (1.449), other cultivate or

improve the biogenetics of vegetables, other make horticulture and obtain greenhouse products (743), fruits (235), raise animals for milk (498), raise ovines, caprines and horses (368), pigs (68) and poultry (109), while the rest are providers of agrarian services *(The National Trade Register – 2009)*.

The process of the privatization of agrarian lands has generated the appearance of two main structural disadvantages for the Romanian agriculture: (1) big land area and many small exploitations, (2) big land area in the property of too many agriculturalists that are close to or have exceeded the retirement age, especially within smaller exploitations.

Almost half of the total area and from the total number of animals are in subsistence exploitations. For the objectives of the programming period, the susbsistence exploitations are defined as being smaller than 2 UDE (economic size unit). This category is larger than the definition given by Eurostat (that includes only units smaller than 1 UDE). The subsistence exploitations cover 45% from SAU of Romania, representing 91% from the total number of farms. Most of these units do not have legal entity although there are few exceptions. Regarding area, most of them are classified within the farms of 0-5 ha, having on average 1,63 ha.

Most of these susbsistence exploitations are not even considered farms. The preliminary condition in order to be registered in the Farms Register and to benefit from the payments in the 1st Pile is to work at least 1 ha of land, made of parcels that are not smaller than 0,3 ha. However, from the total of the agrarian exploitations, only 1.237.358 (29%) were registered at the 1st of June 2009 and they were using an area of 9.705.502 ha (70%) from the total SAU for agriculture. The other approximately 3 million exploitations are classified within subsistence category.

Subsistence exploitations generally diminish the performance of the agrarian sector. Both lands and workforce are used under their economic potential. The rate between the workforce and unit of area is of 63,43 annual work units/ 100 ha, which highlights the lack of competitivity, determined by excessive agrarian workforce. Moreover, the subsistence exploitations lack capital and professional knowledge, which results in very small incomes following the performed activity. As a consequence, the agriculturalists from the subsistence exploitations do not have the motivation or the capacity to observe the European standards, including those referring to the quality of the environment, welfare of animals and alimentary safety. The last aspect is especially important for the zootechnical sector, considering the fact that the animals get sick during these small exploitations and the impact can be seen at the level of the competitivity of the whole sector.

The category of semi-subsistence farms suggests the need for well-directed interventions. As it exists a great number of small farms in Romania (subsistence and semi-subsistence farms) for which there are no real possibilities for restructuring, the number of farms taken as support in order to transform them in trading farms will only include semi-subsistence farms between 2 and 8 UDE (approximately 350 thousand exploitations).

CONCLUSION

In order to become viable and competitive trading units, the semi-subsistence units must face several provocations or unfavourable conditions on the market. Public interventions have a main role in order to facilitate this transformation and the restructuring process within Romanian agriculture. Firstly, transactions on financial market should improve so that the semi-subsistence exploitations could be consolidated and take over lands from the category of semi-subsistence farms, either by rent, purchase or other forms, such as the association of farmers. Secondly, the technical and consultancy services will have an important role for the improvement of the capacity of intermediate farms in order for them to become competitive and to administer the transformation process. Thirdly, the semi-subsistence exploitations must better integrate into the market by means of channels of commercialization. Another major role will be played by the association activities.

The issue regarding performance will be analyzed from the point of view of the exploitation structures and the agrarian production, but also from high and low sectors of agriculture, the system of providing inputs, the financing system, the capitalization system, the informing and consultancy services. The recent history of member states proves the slow rhythm of the evolution of agrarian exploitation structures even in countries where the financial market is active and the credit is very developed. Actually, the actions on agrarian structures were and they still are one of PAC foundations. The process of improving the agrarian structures in Romania is still blocked by the lack of credit and insurance institutions and also by the inexistence of a policy regarding agrarian structures.

The disadvantages, from the point of view of non-performant structures, are obvious not only in relation with EU member states. It may happen that the advantage existing for certain agrarian products in Romania, resulted from the small cost of factors (land and workforce), could be completely cancelled by the costs of the production fragmented structures and by the big costs owed to the structures from high and low sectors of agriculture. Agriculture has become a very sophisticated industry in the last two decades in the west of Europe. The European farmer is very well financed, qualified, informed and organized in groups of producers that confer him a strong position from which he can negotiate in the market. This position enables him to be the price taker while his peer in Romania is rudimentarily equipped, decapitalized, poorly informed and not so much experienced in order to operate in a virtual competitive market with very high quality standards.

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SOCIOECONOMIC INEQUALITIES IN THE RURAL AREA. REGIONAL ANALYSIS

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Abstract

The complexity and extent of inequality, the existing interdependencies between different aspects of individuals' life and their impact on human development, in general, is one of the most controversial aspects of economic and social discourse, globally and locally in recent years. In this context, the present study aimed at assessing the socio-economic inequalities in the Bucharest – Ilfov Region, inequalities that take many facets. This objective was achieved using a set of dimensions and indicators describing the condition and extent of rural inequality.

Key words: *socio-economic inequality, rural area, development region*

INTRODUCTION

The complexity and extent of inequality, the existing interdependencies between different aspects of life of individuals and their impact on human development, in general, is one of the most controversial aspects of economic and social discourse, globally and locally, in recent years. Summarizing the conclusions of this type of speech, the specialists of World Bank and United Nations Development Program make a distinction between two categories of inequality issues: a) economic issue (income distribution, the extent of poverty, occupational status, etc..); b) non-economic issue (health, life expectancy, education, malnutrition, ethnicity, region of residence, etc.).

Through the proposed objective, the paper focuses on understanding and evaluating the social and economic inequalities in the Bucharest – Ilfov Region, inequalities that takes many facets. Their complexity and their effect on individual and human development, in general, require further contextual study. As the models to reduce inequalities must respond to the type of deep social and economic implications and to be tailored to the specificity of rural actors, at risk of being on the lower level of the social hierarchy.

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MATERIALS AND METHODS

The analysis of socio-economic inequalities in Bucharest-Ilfov Region was based on a set of dimensions and indicators describing the condition and extent of rural inequality. Each dimension comprises a number of indicators calculated at the commune level, based on available statistical data for 2008. The presence or absence of indicators was subject to both their characterization power of a phenomenon and the existence of statistical records.

The selected dimensions for the typology of rural areas were the following: *equipment endowment* - provides information on housing and technical infrastructure in rural area; *social and demographic dimension* - provides information on social and demographic local prospects; *social infrastructure* - provides information on educational and health infrastructures and their adjustment to the community needs; *economic dimension* - provides information on the opportunities for access to a paid job and the degree of dependence of rural population on agriculture and social transfers; *investment*s – reveal the future development potential of the rural communities.

For the typology of rural areas by the inequality level, the aggregate theoretical model was based on a cluster analysis. The proposed method permitted the classification of objects into homogeneous clusters, according to a given set of variables.

RESULTS AND DISCUSSIONS

The spatial amplitude of the social and economic inequality process in the Region Bucharest-Ilfov is generated by the content of the main dimensions studied:

Equipment endowment quantified by the following indicators:

- *living area per capita*: the variation of the indicator is very broad indicating different housing conditions, from 10.69 sq.m per capita in the Stefanestii to 44.38 sq.m / capita in Corbeanca. Urban comfort is specific to rural areas situated in the immediate or medium-range influence of Bucharest. The phenomenon of "holiday houses" coupled with the change of residence from urban to rural areas has a strong social vision for rural localities of Ilfov County: the average living space per capita is 21.89 sqm.
- *quantity of drinking water supplied to domestic consumers*, is one of the most illustrative indicators of economic inequality, with deep implications in the area of social inequality; there is a broad range of micro-regions where this indicator recorded zero value (Berceni Cernica Chiajna Ciolpani Ciorogârla, Clinceni, Corbeanca, Dascălu, Domneşti, Dragomireşti Vale, Găneasa, Glina, Grădiştea, Gruiu, Jilava, Moara Vlăsiei, Nuci, Petrăchioaia, Ştefanestii de Jos, Tunari, etc.) and areas where the value is low, ranging from 4.00 c.m. per capita to 79.43 c.m. per capita. On the average the amount of distributed water is 12.16 c.m. per capita.
- *length of drinking water network* is, on the average, 8.15 km; 55.0% of municipalities have no kilometer of distribution network for household water. The commune

Periş has the longest drinking water network compared to other communes in Ilfov county - 68.53 km, while Copăceni recorded the lowest length, only 10.40 km.

- *length of sewerage network* - on the average, the sewerage system has a length of 3.4 km; 61.0% of communes have no sewerage network; the longest sewerage network is in Chiajna - 25 km and the lowest is in 0.20 Ştefăneştii de Jos – 0.20 km.
- *length of natural gas supply network* - on the average, the natural gas distribution network is 28.6 km; Snagov has the longest network of 137 km while Dragomireşti Vale only 10 km natural gas distribution network.

There are striking economic and social inequalities generated by the rural infrastructure: there are communes that have a minimum influence of the urban comfort of Bucharest determined especially by the processes of change of residence and development of holiday homes.

The social and demographic dimension generates inequalities in the rural areas of Ilfov County; in its turn, the nature and size of this dimension are the consequences of socioeconomic inequalities specific to rural areas. The analyzed indicators were:

- *natural growth of population* - with positive values,ranging from 0.33 ‰ (Domneşti) to 6.79 ‰ (Mogoşoaia); the negative values range from -0.15 ‰ (Afumaţi) to -11.03 ‰ (Copăceni). In both cases the values indicate the demographic erosion of rural regeneration.
- *rate of divorces* - allows, according to the values recorded, the setting of rural family cohesion; while the values are very low, the oscillation ranges from 0.21 ‰ (Stefanestii de Sus) to 2.62 ‰ (1 Decembrie). It can be concluded that there is a high degree of intra-family cohesion which can alleviate rural inequalities to a very limited extent.
- *rate of change of domicile* - an indicator of rural "social fluidity" recorded moderate values, with limits between 11.78 ‰ (Periş) and 65.59 ‰ (Corbeanca); the only exception is the Stefanestii de Jos, with 120.94 ‰.
- *rate of change of residence* - an indicator of "openness" of rural communities has been positive between 0.29 ‰ (Periş) and 24.83 ‰ (Cernica); negative values range between - 0.79 ‰ (Berceni) and - 2.0 ‰ (1 Decembrie). Out of total number of communes from Ilfov county, 84% represents communes with high residential attraction.
- *external migration balance* - only 26% of the communes in Ilfov county have a negative balance of external migration; the oscillation range was between - 0.12 ‰ (Brăneşti) and - 0.47 ‰ (Dragomireşti Vale). The positive values ranged from 0.15 ‰ (1 December) to 0.55 ‰ (Jilava).

As determinative factor of social and economic inequalities, the demographic and social dimension stands out especially by the values taken by the "natural increase of population".

The social infrastructure is the most visible consequence of rural economic and social inequalities. Thus:

- *number of students per teacher* is relatively small; there is an improvement in the quality of education in rural areas as a direct consequence of reducing the number of students per a teacher; the value of this indicator is fluctuating from 8.2 students / teacher (Periş) to 32.8 students / teacher (Chiajna).
- *number of PC/1000 inhabitants* represents the degree of modernity in the process of communication and information; its values describe a process of early-modern information and knowledge in rural areas: the indicator values range from 2.09 ‰ (Mogosoaia) to 20.53 ‰ (Snagov).
- healthcare is poor - the values of the indicator *"number of inhabitants per physician"* range from 304 inhabitants per physician (Jilava) and 2618 inhabitants per physician (Dărăşti).

The economic dimension describes the amplitude of economic inequalities. Indicators reveal a poor use of occupational diversification, leading to strong dependence on agriculture. The low modernity level of labour relations induces and maintains weak contractual relationships.

- the values of the indicator *"number of employees/1000 inhabitants*" range from 595.5‰ (Chiajna) to 37.9 ‰ (Vidra), depending on local rural economy and employment structures. Out of total communes, about 10% have a share of employees in total population of over 50% (Chiajna, Clinceni, Tunari); 39% of the communes have under 100 employees per 1,000 inhabitants, which indicates a very large discrepancies map of inequalities.
- agricultural character of rural economies is defined by the high *share of arable land in total agricultural land;* the indicator mainly describes the economic situation for grain-oriented activities; its values range from 100% (Dobroieşti) to 86.6% (Grădiştea). The share of vineyards and orchards in total agricultural area ranks from zero in the commune Dobroieşti to 5.2% in the commune Domneşti. These features may induce a matrix of rural inequalities and underdevelopment.
- *economic diversification* is at a low level; measured indirectly by tourism activity indicators, it was found that 67% of localities have not any value of the indicator "number of tourist beds / accommodation unit " and 80% of them have no value for the indicator "number of overnights in accommodation units / beds".

The investments size described the economic and social inequalities. In Ilfov county it was found that there is a phenomenon of relatively high investments: the value of indicator *"number of finished dwellings/1000 existing dwellings"* ranges from 3.7 ‰ (Vidra) to 111.7 ‰ (Domneşti). The proximity to Bucharest distorts the value of endogenous investment efforts. We can distinguish several municipalities that have been attractive to investors: Domneşti, Berceni, Clinceni and Corbeanca. The main factors explaining the real estate boom were: proximity to the city (many Bucharest residents chose to build a second home or permanent home outside the city), the low

price of land purchased and investments in infrastructure. These communes comprised 29.9% of total new dwellings constructed.

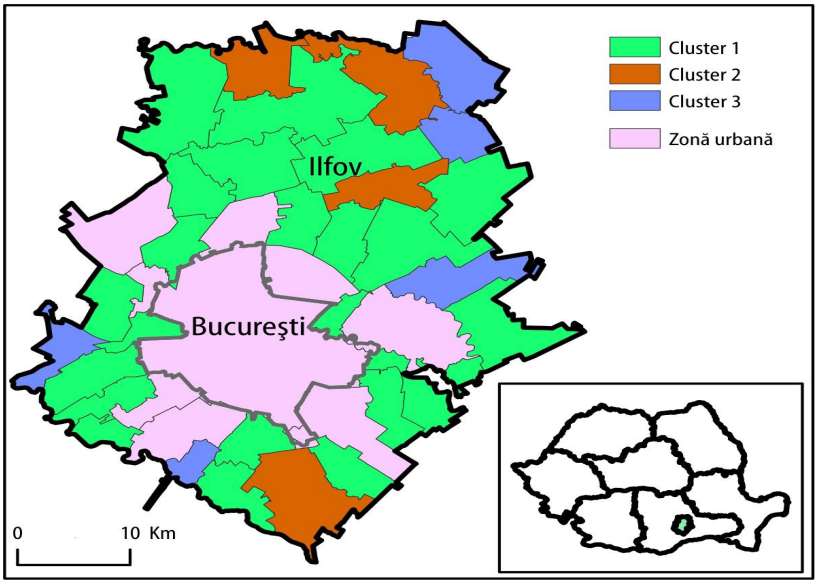
CONCLUSIONS

The results of cluster analysis and data series on rural economic and social inequalities led to the partitioning of the communes in the Bucharest – Ilfov Region into three clusters. These categories can be interpreted as combining the localities according to the cumulative intensity factors describing the event and / or socio-economic condition. Thus, we distinguish between:

- rural communities characterized by a lower level of rural socio-economic inequalities (cluster I) - 71%;
- rural communities characterized by a medium level of socio-economic inequalities (cluster II) - 16%;
- rural communities characterized by a higher level of rural socio-economic inequalities (cluster III) - 13%.

The typology of rural areas in the Region Bucharest-Ilfov by the degree of social and economic inequality allowed a hierarchy of rural areas. Thus, the most vulnerable rural micro-regions were identified. This hierarchy may serve to choosing the areas that need support interventions to reduce perpetuation of inequalities and their effects.

Figure 1. Typology of rural areas depending on socioeconomic inequalities - Bucharest-Ilfov Region



The mitigation of socio-economic inequalities and reducing regional disparities based on local opportunities by maximizing local factors that can ensure equal opportunities in both rural socio-economic actors, both endogenous and community development. The mitigation of socio-economic inequalities and reducing regional disparities should ensure equal opportunities for rural actors.

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INFORMATION VALUE

Mircea Gheorghiță[1]

Summary

The paper intends to discuss the problem related to the knowledge transfer costs from the perspective of the economic actors as potential beneficiaries of this process. The approach uses the model for determining an optimal offer in uncertain circumstances related to the selling price and emphasizes the information value that a manger acquires in order to ease the decisional process regarding the offer level. In this context, the information value represents the total amount that the manager is willing to pay in order to get the perfect information regarding the output selling price, as a result of the difference between two levels of the average wealth utility (with and without knowledge transfer).

Key words: uncertainty, risk, information, knowledge, knowledge transfer, information value.

INTRODUCTION

In our times, the need for information and the process of acquiring it are overwhelming due to the multiple changes on various levels of society. Many authors [1, 5, 6, 7] consider the actual period as an" information era". Strict sense, the information value is related to the content, to the usable characteristics of the information. If we discuss the scientific information, we observe that the standardization, the formalization and the continuous shaping of the content transform the information into knowledge in order to ensure a better, more correct usage. As long as the information, the scientific culture is shaping itself, its content is shared (mostly free) among the members of the respective community. After the end of the shaping process, the content gets its specific form of expression it becomes transferable towards another domains and it is usable. Have the beneficiaries of this content (the users) to pay for the counter value of the work that made possible the receiving of the knowledge they received and used? This paper looks at the information value from this perspective, considering also the fact that the new

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concept of "knowledge based economy "[6, 7] essentially means the evolution from the mainly resource based economy towards the mainly knowledge based economy. Knowledge becomes more and more an economic good, it has its own market, with the respective actors and rules that have to be studied and observed.

OFFER MODEL IN UNCERTAIN CONDITIONS

Any production process encompasses a certain period of time between the startup moment when inputs are accepted and the final moment when outputs are issued. If the production process is well managed (the relation between inputs and outputs being well known) and if the inputs are bought and paid for before usage, the decision maker may estimate with a certain accuracy level not only the output level but also the costs related to obtaining it. Moreover, if the respective market is a concurrently one [4], the decision maker will know that the production counter value will be received at market level prices. If we admit the lack of technological uncertainty then the planned output level equals the sold output level. The technological uncertainty appears when the two levels are not equal anymore and the production becomes a random variable. Due to the technological lag the decision maker feels the uncertainty regarding the output. The risk sources are multiple, obviously. Some of them are to be found at the request level on the respective output market. Such a risk source is the price level that is to be obtained for the produced output. Not exactly knowing this price, the decision maker estimates based on experience, optimism inclination or even more rigorous methods the possible price levels and the achieving probability related to each level. The output price is a random variable and the decision maker is able to build the probability distribution for this specific random variable. In order to ease the presentation, we assume that the output price is a simple random variable, Bernoulli type – having only two possible values p_1, p_2 respectively having the probabilities $\rho, (1-\rho)$ respectively. Let us consider the case of a company whose manager (decision maker) is interested in establishing the offer optimal level (for the output) in uncertain price conditions. The decision maker sets the offer level so that the company's wealth, fortune is as big as possible. Shall we note by *B* the wealth, this is a random variable when the output price is random. We can consider the accounting net company assets (the assets value minus the debts towards third parties) as being the company's wealth. With the following notations:

- *y*, output level;
- B_0, initial company's wealth;
- *CV(y)*, variable production cost;
- *CF*, fixed costs;

at the end of the production process, the company's wealth will be either, $B_1 = B_0 + p_1 y - CV(y) - CF$ if the price is p_1, or $B_2 = B_0 + p_2 y - CV(y) - CF$, if the price is p_2. The company's wealth is a

random variable having the distribution: $B = \begin{pmatrix} B_1 & B_2 \\ \rho & 1-\rho \end{pmatrix}$.

If the decision criteria in uncertain conditions used by the manager are the maximization of the mathematical hope of the wealth utility then the decided offer level is y, so that the average utility of the company's wealth shall be at maximum level. The decision model will be:

$$\underset{y}{Max}\, E(U(B))$$

whereas $E(U(B)) = \rho U(B_1) + (1-\rho)U(B_2)$ is the mathematical hope of the wealth and $U(B)$ is the utility function of the wealth [2,8,9].

Under well-defined conditions [2] on the utility function the solution of the decision model involves solving the I level optimality condition - equation:

$$\rho[p_1 - c_m(y)]U'(B_1) + (1-\rho)[p_2 - c_m(y)]U'(B_2) = 0$$

whereas $c_m(y)$ is the marginal cost (the derivative of the total cost as proportion in the output). It is shown [2,3] that the riskofob decision maker confronted with the uncertainty regarding the output price chooses an offer level (y^*) so that:

- the marginal cost exceeds p_1 (unfavorable price level), but is inferior to p_2 (optimistic situation regarding the possible price level), meaning $p_1 < c_m(y^*) < p_2$;
- the marginal cost equals the average possible price plus a negative factor reflecting the risk aversion of the decision maker:

$c_m(y) = E(p) + \frac{\text{cov}(p, U')}{E(U')}$, where $E(p) = \rho p_1 + (1-\rho)p_2$ the average price and the second term are negative because the two random variables – the price and the marginal utility of the wealth vary in opposite directions: when price is up the marginal utility is down and their co-variance is negative.

INFORMATION VALUE

Due to the technological lag, the manager has to decide upon the offer level before knowing the realization of the random variable – price. One possible way out from this uncomfortable situation is to buy the services of an individual or institution able to inform him on the future price level. As a natural course of action we are now facing the problem related to the maximum amount that the manager is willing to spend in

order to get the information on price or, otherwise said what the budget is for the knowledge transfer. In our analysis further down we will limit ourselves to the "perfect information" situation and we will assume that the manager is fully confident in his information source.

Considering the previous context, when soliciting the information on price, the manager knows that he will receive either the answer p_1, or p_2. Even if he does not know which price will be announced until consulting the expert, the manager may anticipate the optimal reaction to each of the two values. He may as well associate to the two possible predictions, the respective probabilities ρ , $(1-\rho)$ respectively because in perfect information conditions we have an absolute correlation between prediction and realization.

Should the manager anticipate the announce to be p_1, then he will decide the output y_1 by solving the model: $\underset{y_1}{Max}U(B)=\underset{y_1}{Max}U\left[B_0+p_1y_1-CV(y_1)-CF\right]$.

The optimal solution y_1^*, will lead to a wealth level of $B_1^*=B_0+p_1y_1^*-CV(y_1^*)-CF$

Should the manager anticipate the announce to be p_2 then he will decide the output y_2 by solving the model:

$$\underset{y_2}{Max}U(B)=\underset{y_2}{Max}U\left[B_0+p_2y_2-CV(y_2)-CF\right]$$

The optimal solution y_2^*, will lead to a wealth level of $B_2^*=B_0+p_2y_2^*-CV(y_2^*)-CF$

The call for the "informant" allows the manager to make his decision upon the offer level as if he would act on certainly conditions. The possibility of being informed changed the decision making process. With no information, the offer would be uniquely determined (y^*) , whereas by acquiring information the decision on offer level is (y_1^*) or (y_2^*), as per the informant announcement. Still, before acquiring information, the manager finds himself in uncertain conditions and evaluates the economic status of the company in terms of mathematical hope of the wealth utility. By noting $E(U(B,I))$ the mathematical hope of the wealth under the knowledge transfer we have: $E(U(B,I))=\rho U(B_1^*)+(1-\rho)U(B_2^*)$.

If the knowledge transfer is missing, the optimal decision (y^*) leads to a wealth hope of:

$$E(U(B))=\rho U\left[B_0+p_1y^*-CV(y^*)-CF\right]+(1-\rho)U\left[B_0+p_2y^*-CV(y^*)-CF\right]$$

Since for the doubtless price p_1, the optimal decision is (y_1^*) and not (y^*), we have $B_1^*\rangle B_0+p_1y^*-CV(y^*)-CF$. Idem, when p_2 is certain, the optimal decision is

(y_2^*) and not (y^*), which leads to $B_2^* \rangle B_0 + p_2 y^* - CV(y^*) - CF$.

The immediate consequence is that: $E(U(B,I)) \rangle E(U(B))$, which means that the wealth mathematical hope is bigger in the situation of the knowledge transfer then in the situation lacking it. The difference between the two levels of the average wealth utility (with and without knowledge transfer) represents the information value. By noting V the information value we can determine it as a solution to the equation:

$$\rho U(B_1^* - V) + (1-\rho) U(B_2^* - V) = E(U(B))$$

The information value, V, represents the maximum amount that the manager is willing to pay in order to receive perfect information regarding the selling price for the produced output. If the "informant" sells his knowledge for a price inferior as compared to V, the manager will buy the information; otherwise he will not be using the informant services.

CONCLUSIONS

The notion of "information value" previously discussed connects itself to the notion of production flexibility. In certain conditions, the production flexibility means the possibility of perfect substitution between various possible production processes. In uncertain conditions, the flexibility relates to the possibility of immediate and perfect adjustment of the offer level to the realization of the random variable – price. A perfect flexible technology would bring the same service to the company as perfect information. In this circumstances, the amount V could be invested in the development of an instantaneous adjustment of the production process.

Although the notions of information value and flexibility are interesting as concepts, in real conditions is difficult to assert the information a priori or to have access to a perfect flexible technology. This is why the market mechanisms that help the decision makers in uncertain conditions developed. "At term" markets [2, 4] for different agricultural or industrial products are such institutions useful to the riscofob decision makers.

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ECONOMICS. A BIO-ECONOMIC APPROACH

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Abstract

Recently, a series of heterodox economic trends (bioeconomics, ecological economics, behavioral economics, neuroeconomics, etc) have become more and more present in economics (even more, due to the coming and the development of the unprecedented economic crisis).

Moreover, the revival of the evolutionist economic science from the last two decades has brought a significant contribution to the theoretical development and an important interdisciplinary and/or crossdisciplinary import.

The bioeconomic approach becomes necessary due to the worldwide ecological crisis which closely affects almost all the sectors of our industrial civilization.

Having the work of Nicolae Georgescu-Roegen, the father of the bioeconomic science, as guidelines, we consider that the Romanian economic science should focus more on the study of the oportunities offered by this new direction.

Key words: bioeconomics, entropy, sustainable growth

1. An evolutionary perspective of economics

The evolutionary perspective of economics aphas been approached by an increasingly large number of economists in recent years [3].

As the **forerunners** of the idea of evolutionary economics, we can mention *Marshall* with his most frequently quoted aphorism 'The Mecca of the economist is rather the economic biology then the dynamics of economics' and *Veblen* with his question 'Why economics is not an evolutonary science?'.

The evolutionary thinking in economics provides us with a variety of

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3 Jinaru, A. (2010), Finanţarea inovării în economia globală bazată pe cunoaştere, Teză de doctorat, ASE Bucureşti.

perspectives and in this respect, *Hodgson* identifies six main groups of authors[4]:

- the works of some economists such as *Smith, Marx and Marshall* are occasionally mentioned as 'evolutionary' by its very nature;
- Schumpeter's followers describe their work as being all of 'ecological economics';
- *the Austrian school* is often presented as 'evolutionary' and it i decisively influenced by the works of *Menger, von Mises* and *Hayek;*
- *the Institutionalists* in the tradition of *Veblen* and *Commons* describe their approach as being of 'evolutionary economics', considering in general that the terms 'evolutionary' and 'institutional' are almost synonymous;
- *the evolutionary game theory*, developed in the mathematics of economics having as precursors *Maynard-Smith* and *Axelrod*;
- *The work developed by Santa Fe Institute* in the U.S., targeting applications in economics using the models and the tools of the complexity science.

2. Bioeconomics or the bioeconomics science

Given that the economy, the economic activity is influenced decisively, in addition to intentionality and human behavior and biophysical background, the economic science should not remain confined in a rational reductionist reconstruction as the economic theory from the main trend is in general. A broader approach requires bridges to other disciplines (history, philosophy, politics, sociology, psychology, science, etc.), and heterodox approaches as well[5].

Bioeconomics is the science that seeks practical, genuine reconciliation between the Western economic culture as modern economic science, and the biology, the science of life.

So, the bioeconomics is the discipline that originated in the synthesis of biology and the science / theory of economics and which aims to integrate 'the *empirical culture' specific to biology* and 'the *formal culture and / or the literary' specific to the science / theory of economics*. Basically it overpasses the sectoral approaches of the sciences of the environmental-economic interface, and natural resource economics or environmental economics, environmental or economic theory[6].

From a pragmatic point of view, bioeconomics is the science that aims to determine the threshold of economic activity (the wider approach is socio-economic) to the biophysical (biophysical system) substrate (background) on which it can be used effectively and efficiently without destroying the conditions for its regeneration, or, in other words, the threshold of sustainability.

The bio-economic activity has as model the biophysical processes of nature, such as the evolution, co-evolution and cooperation, natural selection, conservation,

4 Hodgson, G. (1999), *Evolution and Institutions*, Massachusetts: Edward Elgar Publishing.

5 Jinaru – idem.

6 Jinaru – idem.

regeneration and recycling. Considering this approach, the *bioeconomic activity is not only the re-production, exchange, consumption, but also change, transformation (qualitative) and innovation*.

3. The main bioeconomic trends

The relationship between the economic science and biological science (between economics and biology) has evolved and has become increasingly more complex over a century and a half.

The economy itself, in its biophysical aspect, i.e. the process of production, distribution and disposal of natural resources, is no exception, the thermodynamics and the evolutionism allows us to isolate living being from the environment today. Therefore, we are witnessing a co-evolution, by the mutual interaction of the biological evolution and the changes in the planetary environment.

The international economic development, accelerated by the growth of the population, the consumption of resources and developments in technology are the focus of an unprecedented crisis faced this time, amid the growing techniques' illusion that neglect or contradict the second principle of thermodynamics - entropy[7].

The dialogue, interactions and the interdisciplinary transfers have diversified throughout history, along with the sophistication of the tools and methods of scientific research, from a simple inspiring metaphor (biological organics in response to the physical mechanics), the biological analogy, by analogical reasoning, to model and / or the explanatory mechanism (the universal Darwinism).

While reviewing the trends, we can say that through **Nicolae Georgescu-Roegen** the **bioeconomic** trend arises, whose promoter is the current focal point of converging and bio-synthesis of various aspects present in a lesser extent from various authors and integrated in his bioeconomic theory (in our opinion still unrivaled theory, but also through a bioeconomic programme which has never been applied). This trend has been an inspiration for other trends of this type which occurred in the last decades.

Thus, such a current is the biophysical economics - which is based on a conceptual model that sees the economy connected and supported by a flow of energy, raw materials and ecosystem services. Practically, the biophysics economics connects the economic theory to the biophysics of reality; the perspective is of a thermodynamic approach of the economy and focus on the production of goods and services. Among the most important authors we can mention *Ayres, Cleveland, Costanza, Gowdy and Mayumi or Hall and Klitgaard* [8].

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7 Popescu, G.; Filimon, R. (2009), *Nicholas Georgescu-Roegen, Epistemologia evoluționistă*. Săgeata timpului, Ed. Risoprint, Cluj, Napoca, p. 237.

8 see Ayres, R. (1978), Resources, Environment, and Economics: Applications of the Materials/ Energy Balance Principle. Wiley-Interscience, New York; Cleveland, C.J. (1987. Cleveland, C.J. (1987), Biophysical economics: Historical perspective and current research trends. Ecological Modelling, 38. Gowdy, J.; Mayumi, K., Bioeconomics and Sustainability: Essays in Honor of Nicholas Georgescu-Roegen,. Edward Elgar Publishing, Cheltenham, England..Hall, C.; Kent, A.K. (2006), The Need For A New, Biophysical-Based Paradigm in Economics For The Second Half Of The Age Of Oil, International Journal of Transdisciplinary Research Vol. 1, No. 1.

The Ecological Economics - is another trend occurred in the early 1980s following the pioneering work of *Roegen, Boulding, Constanza and Daly* and outlines the interdependence and the co-evolution of the human economies and the natural ecosystems in time and space; the green economy aims to base the economic thought and practice in the physical reality, especially to the laws of thermodynamics and the savvy of the biological systems and promoting sustainable economic development / sustainability as well.

The **bionomics** trend - defines the economy as an evolving self-organized ecosystem, as a way to bring the economy (the technosphere) in harmony with the ecosystem (biosphere).

Finally, the trend given by **the evolutionary (artificial) economic games** - whose starting point is in *Smith's* work, the concept of 'evolutionary stable strategy' and 'evolutionary game theory' is introduced. By applying the mathematical theory of games in biological contexts, unlike the classic theory of games, the focus is here on the dynamics of changing the strategy and not necessarily on the properties of the equilibrium strategy[9]. The evolutionary game theory by its interdisciplinary developments in recent years, provides a conceptual basis for analyzing the choice in the presence of strategic interaction. Beyond a more appropriate modeling of the interactions between the agents, the evolutionary game theory helps to redefine the concept of economic rationality.

4. *Nicolae Georgescu-Roegen* – the father of the bioeconomics

Nicolae Georgescu-Roegen is one of the few great economists of the world which is recognized both for its fundamental contribution to the mainstream of the economic analysis, and especially for his pioneering contribution, the founding father, the initiator of a new vision, a new approach, a new economic paradigm, namely the bio- economic science [10].

Nicolae Georgescu-Roegen is considered the father of bioeconomics. Through his works *Analytical Economics: Issues and Problems, The Entropy Law and the Economic Process, Energy and the Economic Myths, Institutional and Analytical Economic Essays, La Décroissance: entropie-écologie-économie*, to name a few, Georgescu-Roegen founded the broad scientific theoretical framework that would change the way of economic thinking and action.

Starting from the dynamic model of classical political economy thought, whose roots must be sought in the medieval space, *Roegen* shows that it is based on growth - without irreversibility, without time, without complexity, without creative destruction

9 Jinaru – idem.

10 Georgescu-Roegen, N. (1971), The Entropy Law and the Economic Process, Harvard University Press, Cambridge Mass.

and therefore, without the possibility of evolution and renewal[11].

Without refusing the accumulations [12], especially from a theoretical point of view, *Roegen* proposes another way of political economy and but also an economic policy revolution in view of thermodynamics, completed by his discovery of the double energy (first principle) and entropy (second principle). Compared to other economists who sought economic equivalent to entropy, *Roegen* directly argues that the economic systems exist in the real world of physics and therefore, we must comply with the law of entropy, as everything and everyone in this universe does.

The laws of thermodynamics and especially the law of entropy, tells us that the decrease of production is inevitable in physical terms. But this is not to say or to make us believe that it necessarily implies a decrease in the gross world product, much less, a decrease in the degree of satisfaction of people. This is a review of the concept of economic value production, able to create revenue using less material and more energy.

Indeed, an economic policy based solely on a strong reduction in consumption would generate (beyond the very probable final failure) given the current distribution of preferences, a drastic fall in global demand and, therefore, a significant increase in unemployment and social disparities.

We must therefore rely, *Roegen* states, on a different distribution of preferences for the inevitable and necessary decline of the physical quantities to meet the decrease in the value of production.

This implies, of course, a genuine reconciliation between the Western economic culture as a modern economic science, and biology, as the science of life and the outcome of this reconciliation - the bio-economy, in fact, a new science[13].

What is most interesting in *Roegen'*s view is the *equation of pleasure*.

If E is a particular pleasure of a man, we can write symbolically:

E = (the pleasure of consumption + the pleasure of leisure) – the chore of work

Symbolically, as in this equation the mathematical signs are not taken in the strict sense but rather as signs of convenience in order to summarize the imponderable elements contained negatively or positively in the entity on the left of the equals sign[14].

11 Georgescu-Roegen, N. (1971) – idem.

12 Roegen's scientific works were written first in the 'research program' (meaning the concept of 'research program' standard of mainstream economics). Gradually, he detaches himself from it and develops a new radical approach - bio-economy – of the economic phenomena, drawing and gradually constitutes a 'new scientific research program', which changes the paradigm of economic thought and even puts the foundation to achieve a revolution in economics.

13 Popescu, Filimon – idem

14 Georgescu-Roegen, N. (1979), *Legea entropiei şi procesul economic*, ed. Politică, Bucureşti, p.278

Roegen introduced the notion of *sustainable decline* or controllable decrease as opposed to liberal economy and the concept of sustainable development. He believed that the sustainable development endangers the natural balance of the planet because its resources are limited and non-renewable. He also believes that mankind cannot sustain indefinitely the current level of consumption and the inhabitants of the rich countries must reduce the present level of physical and energy consumption.

Given these realities, *Roegen* conceptualized some elements to be included in a minimal bio program, able to ensure a balanced standard of living for humanity and on long-term, the program is structured in eight main ideas.

(i) Not just the war itself, but also the production of the instruments of war should be banned completely.

(ii) By using redundant productive forces as a result of giving up the weapons policy, through well-planned and honest measures, the underdeveloped countries must be helped to reach in the shortest possible time an adequate standard of living, which would lead to the termination of the current state the reprehensible things characterized by a polarization of wealth of the planet[15].

(iii) Mankind should aim to gradually decrease the population.

(iv) Avoid any waste of energy and matter.

(v) We need to 'heal our infinite desire for extravagant gifts and gigantic splendor'[16].

(vi) We must 'break free from fashion as well'.

(vii) The goods must be designed so that it can be repaired.

(viii) Giving up the practice of ' the circular syndrome' [17].

These ideas should teach humanity how to create a sustainable better world. Thus instead of (or in addition) to give priority to solving the problems of knowledge, how it is now, scientists should be committed to help mankind (all of us) solve the huge and current global issues, such as changing climate, population growth, poverty, war, pollution of the seas, land and air, destruction of natural habitats, rapid species extinction, proliferation, tyranny and injustice.

Therefore, if the official economic theories are or become inaccurate and the error is allowed to persist, the consequences become tragic, reaching up to the destruction of the very civilization that gave them meaning in a given stage of evolution of biosphere. The acceptance of either economic theory cannot be reduced only to a matter of decision on the validity or non-validity of abstract theories but, that is a decision on its harmfulness or benefits in the case of formalization at a certain time in the evolution of our civilization.

15 Georgescu-Roegen, N. (1975), *Energy and Economic Myths*, in Southern Economic Journal 41, no. 3, January.

16 Georgescu-Roegen, N. (1975) – idem.

17 The syndrome of the circular razor. The contemporary man uses a device in the morning - disposable – in order to shave as soon as possible in order to speed up to the workshop where he manufactures a whole new razor and faster and so ad infinitum.

Also, the bioeconomic approach can be the foundation on which an economic theory oriented more on innovation can be designed, as well the basis for building concrete and realistic programs innovation-oriented for the civilization leap: to another global civilization, sustainable, based on knowledge.

In conclusion, we can say that the great problems facing humanity, problems that it has itself created from the unsustainability of global economic growth of the first Western-style civilization over the centuries of existence, and consequently the inadequate foundation of the economic science (theories of the mainstream) cannot, as Einstein said, '*... to be resolved at that same level of thinking with which we created them'*.

In this context, there is an urgent and profound need, both from intellectual and humanitarian reasons, to make a revolution (paradigm) in science and the scientific thinking as well.

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INTERNAL AUDIT AN FIRST AID SOLUTION WHO CAN LEAD TO EFFICIENT USE OF EU FUNDS FOR RURAL ECONOMIC DEVELOPMENT IN ROMANIA

Simona ISPAS[1], Adriana DUȚESCU[2], Oana STĂNILĂ[3]

Abstract

In 2007, the real stake for Romania in the relationship with the European Union was not the effective adhesion, which was a certain fact but only a matter of time. The real stake was Romania's capacity in absorbing the substantial funds that the union would provide access to. In other words the real stake at that moment was the adequate capacity of comuniy funds absorbtion.

According to the analyse of the Authority for Coordination of Structural Instruments, between 2007-2013, Romania had and still has at its disposal, funds in total amount of 19,2 mld EURO or 81 mld RON that should be absorbed by the end of 2015 (this amount does not include the agricultural funds). Taking into account that at the moment our country absorbed almost 9 mld RON, which means 11,06% from the total amount, in order to attract the entire sum it would be neccessary that by the end of 2015, payments of approx. 14 mld should be performed yearly, amount 7 times higher than in 2010.

In conformity with the report prepared by the Council Tax and recently published, at the end of 2010, Romania was the last country, out of 6 analised, regarding the absorbtion rate between 2007-2013 of 8,6%, behind Bulgaria (10,2%), Czech Republic(12,4%), Poland (20,4%),Estonia (26%) and Latvia Republic (29%).

Regarding the European fund dedicated to the rural development, Payments Agency for Rural Development and Fisheries approved 30.500 projects through the National Project of Rural Development 2007-2013, from the official starting date - 3 rd of March 2008, until the15 th of July 2011, in amount of approx of 4 mio EURO. This amount represents approx 40% from the total sum dedicated to the Romanian agriculture, rate that was achieved in 4 and a half years. In order to spent the rest of 60%, Romania has at its disposal 2 and a half years.

As a first measure in this situation, I consider that the development of rural segment can be influenced by the internal audit department, which can insure and

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advise through its actions a better fund administration and a substantial improvement of the public activities. This department can also help the Agency to fulfill its targets through a methodical and systematic approach, action which would also improve the efficiency and efficacy of the system, of the administration processes and controlling process.

Key words: internal audit, economical development, rural area, structural instruments, budget, global economic crisis

INTRODUCTION

The effects of European accession in supporting economic and social development of member countries, in converging and reducing gaps between Member States represent issues of high interest, both for researchers and practitioners.

Rural development and planning is one of the most complex topics of the contemporary world because the requirements of economic, environmental and socio-cultural conservation of the countryside, against modernization.

However, current global financial and economic crisis requires deep reflection and appropriate behaviors, more than ever, on all levels, including collecting and spending the funds of public entities.

CONTENT

Collecting and effective spending of public funds ensure the success of the current financial and economic reforms, thus the sustainable development of Romania.

Upon completion of a research-level territorial administrative units, focused on their experience in implementing development programs supported by national public funds and EU pre-accession funds, as well as the impact of the use of internal audit on spending these funds, we performed an assessment of the effectiveness of internal audit in terms of attracting and using these funds.

The research was conducted using the survey method applied among representatives of the territorial-administrative units. The sampling frame included the territorial-administrative units in rural areas in Vrancea, Dambovita, Bihor, Alba Suceava, according to the SIRUTA codes (Romanian Information System of the Territorial Administration Units).

The topics analyzed by the aforementioned questionnaire included:

- The participation of the territorial-administrative units in rural area in governmental development programs and the development programs implemented at their level,
- Perceptions of the barriers in accessing finances by development programs through governmental funds,
- Problems encountered in implementing the designed development programs,
- Perceptions about the performance of public institutions involved in implementation of SAPARD

• The internal audit role in improving public entity's operations and in supporting its objectives through increased management efficiency

Through this research we performed an independent monitoring of how European Union programs for local development in Romania are implemented, and how the actors of the communitarian/local development processes are trained and informed about these developments. Along with the help of research, we have highlighted the impact that of internal audit in helping rural economic development.

We refer in this case to internal audit tasks meant to draw up and use the national and EU funds.

Of the total administrative-territorial bodies of the 5 rural counties, 211 bodies were included in the final sample. 172 administrative-territorial bodies, representing a response rate of 81.51% responded positively to our application, therefore this sample is representative.

Collecting data for achieving the objectives of the study was conducted during November 2009 - February 2010, using the interview. The questionnaire was sent by mail, e-mail or fax, where applicable, to the territorial-administrative sampled bodies.

Following the research resulted information on how:

• Public entities have access to information that facilitates understanding the procedure for obtaining funds,

• Public entities have applied for programs / projects for rural development,

• Public entities have managed to access the targeted funds,

• Internal public audit is an optimization tool meant for increasing performance of the activity of public entities,

• The solutions proposed by the internal audit, concerning the improvement and efficiency of the activity of public institutions, regarding ongoing projects financed by public funds, are taken into consideration,

• Public entities face difficulties in using EU rural development funds.

Thus, public audit plays a key role in safeguarding financial resources, in promoting the responsibility of the entities involved in making up and using public funds, in managing public funds properly, as well as in consolidating and developing of public and private assets.

Internal public audit should not be regarded as a goal in itself, as it is currently perceived, but as a tool to optimize the performance of activities of public entities, by contributing essentially to identify irregularities and financial imbalances. The recommendations offered by the audit can contribute to strengthening the stability of public entities and fulfilling their objectives in terms of anticipation and appropriate risk management, as well as the efficient use of funds available under the law.

In the light of these general considerations, audit issues on structuring and using the funds of public entities in Romania, is a natural approach, still complex and difficult, as the Romanian specialized literature was not able to identify a complete and rigorous approach of this aspect.

Creating a base of theoretical knowledge on public internal audit and implementing it into the administrative-territorial bodies that use EU funds would significantly

improve the efficiency in using of funds, leading to an increased absorption and also to a growth of the national economy by encouraging and developing investments.

The European and global context requires the increase of economic competitiveness as a must. It is well known that economic competitive advantage no longer consists in running products or services business, in managing of natural resources, geographical or historical peculiarities. Today's competitive advantage consists in *innovation*, *in highly qualified* labor and extensive use of *knowhow*, namely an informational economy.

CONCLUSIONS

For Romania, as a member of the European Union, the acceding and use of EU funds represent an important goal to developing its economy and reducing the disparities in standards of living as against other countries.

Accessing and effectiveness use of EU funds leads to huge improvements in productivity and provide both opportunities for development in all areas. There are also created fair chances for all and ensure a viable solution for the enhancement of the national economy.

The use of theoretical knowledge of internal audit, the encouraging of experience exchanges, as well as training for employees in public institutions (e.g. organizing of specialized courses) represent important steps in recovering the "shortfalls" the research has found. Meanwhile, broadening the role of theoretical knowledge will help local authorities to strengthen their capacity and to gain experience in accessing, implementing and managing national and European funds.

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AGRICULTURE AND FOOD SECURITY IN ROMANIA

Victor Manole[1]

Abstract

Theoretical definitions are given within the article regarding food security and independence and also there are presented the agents that influence them. Moreover, a description of the security at global and national level is given, ilustrated by a series of specific indicators and trends of their evolution. Finally, it is described the perspective of food security in our country.

Key words: food security, food independence, food crisis, price volatility, food consumption.

Introduction

During the last three years, under the impact of crisis the global community faced, the problems related to food security aggravated. Predictions are no longer necessary to be made for Romania in regards to food crisis for a great part of the population is already affected by it. Romanians' precarious food security is not yet the direct consequence of the lack of food, but of the decrease of the purchasing power generated by at least four factors: salary adjustment, VAT increase, re-calculation and taxation of pensions and inflation increase. The aforementioned agents highly contribute to the decreasing of the food consumption, both from quantitative and qualitative point of view, and to the volatility of the prices for food, to the decreasing of self-consumption at the same time with the substantial increase of imports.

From ONU's perspective, the national and international (collective) security notion is a single whole of the following dimensions: economics, food, environmental, community, demographics and military. All these dimensions of the security concept are highly connected and interact with each other.

According to many field specialists, the food security of a country is the most important dimension of the national security. A state has food security when it has sufficient agricultural and food products in order to cover the feeding necessities of all

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inhabitants within its borders and to assure, at the same time, the necessary reserves of feeding stuff for animals and water in cases of natural disasters, war, crises etc. Not being able to ensure food security may lead, within the country, to social tensions, to the physical and psychical health deterioration of the population and may create economic and political instability. And outside the country, it may create diplomatic, economic and political pressures, triggering unwanted and dangerous influence upon national security.

Hunger has become an endemic phenomenon in the world. According to FAO, presently, the number of the persons that suffer from hunger exceeds 1.26 billions, compared to the estimated amount of only 862 millions during 2000-2004. The existence and amplification of food penury is favored mainly by the following factors: demographic increase; cataclysms; drought; climatic disorders (mostly generated by global warming); oil appreciation; poverty; financial crisis; economic crisis; urban development; cleavage augmenting between production and food consumption etc.

According to ONU, for over 8 years humankind has been consuming more food than it produces. Until now the food penury was mitigated by consuming the reserves gathered in the favorable agricultural years. The issue has become more serious as since 1999 until now, at a global level, the cereals reserves have been reduced to half of the total amount. Thus, if in 1999 the global cereals reserves could have ensured around 116 days for the whole worldwide population, nowadays it can only provide for 56 days, a period which is below the acceptable period of time for the food security assurance.

A few years ago, field experts estimated an imminent food crisis within the world, with serious manifestation forms for 2018-2020. Such crisis may have significant influence upon national and international security and may generate instability within economic, social, political and military environment. If unethical people or terrorist organizations should take the lead on such times, „food weapon" could cause unforeseeable effects that may outrun the ones caused by weapons of mass destruction. In fact, the World Bank Group and the International Monetary Fund have already noticed the state leaders from all over the world to take all necessary measures and to lodge all immediate efforts in order to prevent such crisis from happening.

Influenced by crises that affected during the last three years the global economy and by the political instability in many Arab countries that generated into food appreciation, the issues related to global food security aggravated. The Japan nuclear crisis, generated by the earthquake of approximately 9° on the Richter scale and the serious drought China and other Asian countries are confronted with, will aggravate much more the aforementioned issues. In this case, we can consider that the estimated food crisis will take place sooner than expected. There are already visible signs, that is the evolution of the price volatility to the mainly agro-food products. (see table 1)

Table no. 1. Annual indexes of the prices of primary food on a global level (1990-2011)

Year	Prices index					
	Total food	Meat	Milk	Cereals	Oil	Sugar
1990	105,4	124,0	74,8	97,6	74,0	178,1
1991	103,6	125,4	79,6	96,9	79,1	127,2
1992	108,4	125,2	95,4	102,3	84,3	128,5
1993	104,6	118,1	84,6	99,5	86,0	142,2
1994	110,5	115,0	82,3	104,5	113,4	171,8
1995	123,2	118,4	109,6	119,4	125,0	188,5
1996	129,1	128,4	109,4	140,7	111,2	169,7
1997	118,4	123,2	105,1	112,1	112,5	161,4
1998	107,1	103,2	99,1	99,8	129,9	126,6
1999	92,3	97,8	86,3	90,2	91,6	89,0
2000	90,2	95,8	95,4	84,5	67,8	116,1
2001	93,3	96,5	107,1	86,2	67,6	122,6
2002	89,9	89,5	82,2	94,6	87,0	97,8
2003	97,7	96,8	95,1	98,1	100,8	100,6
2004	112,4	113,7	122,6	107,4	112,2	101,7
2005	117,3	120,1	135,4	103,4	103,6	140,3
2006	126,5	118,5	128,0	121,5	112,0	209,6
2007	158,6	125,1	212,4	166,8	169,1	143,0
2008	199,6	153,2	219,6	237,9	225,4	181,6
2009	156,8	132,9	141,6	173,7	150,0	257,3
2010	185,1	152,0	200,4	182,6	193,0	302,0
2011	233,4	167,9	225,6	249,3	278,5	419,2

Source: Global Food Price Monitor March 2011, FAOSTAT

From the table above it results a significant price increase (price volatility) that occurred in the last two years for primary food on a global level. This evolution forebodes the start of a food crisis of great proportions within the world.

After Romania has adhered to NATO – being a full rights and obligations state member- politicians with national security responsibilities have rightfully considered, taking into consideration some of our troops' participation to several potential conflict areas, our country as a security ensurer. It would be „magnificent" if we made the same statement about food security. Unfortunately, this is not possible because, nowadays, Romania is a „net importer" of food and thus, of food security.

Most advantaged countries in what concerns the insurance of food security are those that have a great agricultural potential and can provide great quantities of food raw materials and food above the national demand. Romania is one of these countries and has a generous agricultural potential, being on the 5th place of EU countries, and can provide food demand for approximately 80 millions people. We can state that such countries may have – and most of them have – food independence. This advantage that Romania has is not sufficiently valued because, according to experts' estimations and

some of national and international institutes in domain, approximately 70% from the food aggregate demand is covered by import of such products.

In such conditions, the current status of Romania's food independence and security is unacceptable.

Predictions of food crisis are no longer useful because a more increasing part of the population is affected by it. This food crisis is not yet the consequence of food lack on the market, but the decrease in the purchasing power, generated by at least four factors: public workers salary adjustment with 25%, re-calculation of pensions and health insurance taxation (5,5%), and from these, VAT increase with 5% and inflation increase (the biggest in all EU state members).

After the National Institute of Statistics published the consumption price index in February 2011, it was considered that Romania was in food crisis, emphasizing that food prices have increased, at least in the last three years, more than those of non-food products or other services.

We also mention the prognosis made by Nomura Bank in Japan, which states that Romania's food problem will accentuate. According to it, our country is on the 12 place in the world in what concerns the food risk generated mostly by food price volatility (vulnerability). (table 2)

Regarding the disorders generated by food price vulnerability on the global market, Robert Zoellick, World Bank President, states the following: „We should be alarmed because price increase tendency causes pain for all poor people in the world", but he advised the international community to be aware of this risk and not to aggravate this problem by imposing measures, such as interdicting exports or setting administered prices. Moreover, he requested G20 leaders to consider food as number one priority of 2011. Angel Gurria, Secretary General of the OECD, asserts that „Agricultural markets have always been unstable, but if governments collaborate such extreme price variations can be diminished and vulnerable consumers and producers may be protected."

Table 2. Food price vulnerability index for 40 countries with food risk

#	COUNTRY	X	#	COUNTRY	X
1	Bangladesh	101,5	21	India	100,4
2	Morocco	101,3	22	China	100,4
3	Algeria	101,3	23	Latvia	100,4
4	Nigeria	101,2	24	Vietnam	100,4
5	Lebanon	101,2	25	Venezuela	100,4
6	Egipt	101	26	Portugual	100,4
7	Sri Lanka	101	27	Saudi Arabia	100,3
8	Sudan	100,9	28	Kazakhstan	100,3
9	Hong Kong	100,9	29	Uzbekistan	100,3
10	Azerbaijan	100,8	30	Russia	100,3
11	Angola	100,8	31	Mexico	100,3
12	Romania	100,7	32	Indonesia	100,2

#	COUNTRY	X	#	COUNTRY	X
13	Philippine	100,7	33	Croatia	100,2
14	Kenya	100,7	34	Peru	100,2
15	Pakistan	100,6	35	Greece	100,2
16	Libya	100,6	36	Belarus	100,1
17	Dominican Republic	100,6	37	Slovenia	100,1
18	Tunisia	100,5	38	Syria	100,1
19	Bulgaria	100,5	39	Turkey	100,1
20	Ukraine	100,5	40	South Korea	100,1

Source: Bussiness Inteligence no. 5074/2011, page 33

All the abovementioned regarding current situation and the perspectives of Romania's food security are supported by unfavourable trends of indexes evolutions by means of which population alimentation is characterized, respectively: monthly average consumption per person of agrofood products, the share of self-consumption in the total consumption of agrofood products and the evolution of external trade with agrofood products.

The annual average consumption per inhabitant for the primary agrofood products during 2000-2009 (Table 3) had oscillating evolutions. An increase tendency was registered for Romania during the period before adherence to the European Union, and afterwards a slight decrease. Moreover, it results that in the last three years a series of basic products for population's alimentation (cereals and cereal products, potatoes, vegetables, fruits, sugar, milk and dairy products, beer and wine) have suffered a decreasing trend, highlighting a deterioration of Romanians' alimentation.

Table 3. The annual average consumption of primary food products and beverages in Romania during 2000-2009 (kilo/pers./month)

Product or product group	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009
Loaf	9,925	9,825	9,931	10,112	9,875	9,713	9,55	9,37	9,223	8,978
Pork	0,699	0,747	0,72	0,79	0,859	0,761	0,799	0,869	0,899	0,891
Poultry meat	0,919	0,918	1,062	1,121	1,098	1,198	1,262	1,34	1,418	1,499
Meat products	0,733	0,822	0,839	0,894	0,945	0,958	1,003	1,05	1,111	1,106
Fish and fish products	0,327	0,353	0,363	0,376	0,426	0,467	0,505	0,547	0,596	0,636
Milk*	6,441	5,96	5,82	5,854	5,934	5,962	5,85	6,067	6,151	6,168
Cheese and cream	1,143	1,101	1,09	1,14	1,127	1,186	1,218	1,28	1,319	1,329
Eggs**	13,819	13,879	14,277	14,471	13,428	13,479	13,319	12,977	13,065	13,055
Oil***	0,867	0,911	0,907	0,916	0,9	0,913	0,915	0,907	0,899	0,914
Fruits	2,291	2,144	2,019	2,277	2,457	2,56	2,705	3,082	3,312	3,552
Potatoes	3,967	4,58	4,396	4,114	4,027	4,028	3,705	3,639	3,614	3,586

Product or product group	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009
Vegetables and vegetable tins	7,974	7,293	7,027	7,102	7,083	6,769	6,987	7,036	7,305	7,532
Tomatoes	2,065	0,923	0,94	0,994	0,891	0,825	1,007	1,032	1,089	1,148
Sugar	0,834	0,839	0,839	0,853	0,835	0,819	0,789	0,775	0,759	0,758
Honey	0,029	0,034	0,031	0,029	0,034	0,038	0,042	0,045	0,049	0,055
Mineral water and other non-alcoholic drinks *	1,735	1,842	2,132	2,48	2,737	3,067	3,437	4,259	4,833	4,821
Wine*	0,773	1,275	1,28	1,28	1,097	0,984	0,824	0,905	0,933	0,704
Beer*	0,64	0,554	0,549	0,634	0,701	0,797	0,919	1,081	1,201	1,165

* liter/pers./month ** pieces/pers./month *** corn, sunflower and soya oil liters

Source: Standard of living coordinates in Romania. Population's income and consumption, INS, Bucharest, editions 2000-2010

In 2009 self-consumption (Table 4) had significant shares in the primary agrofood products consumption, as it follows: eggs (52%), vegetables (37%), milk and dairy products (32%), potatoes (29%), pork (29%), poultry meat (25%), wine (75%) etc. The high level of agrofood products self-consumption influences the performance of agrofood system, the respective products are not validated on the market under no kind of performance in what concerns quality, safety and their prices. Economic agents resort to bigger and bigger imports of agricultural raw materials or finite food products in order to ensure continuity in providing manufacturing and distribution processes and satisfy the consumers' demand.

This situation could have a positive effect if subsistence and semi-subsistence farms (population's households) provide a greater quantity of products to the market.

Table 4. Share of self-consumption in the agrofood products and beverages' consumption in Romania (2000-2009) %

Product or product group	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009
Loaf	18,7	18,4	18,6	16,2	11,8	12,9	13,0	11,8	10,9	10,9
Potatoes	29,2	38,8	39,9	37,1	31,6	33,0	32,0	30,9	33,0	29,3
Pork	38,3	48,2	46,5	47,2	48,8	41,9	38,9	38,8	32,8	29,4
Poultry meat	61,8	54,0	50,5	49,1	43,8	38,6	34,1	31,0	26,7	25,4
Meat products	25,8	38,7	37,4	36,5	32,0	27,9	25,3	23,0	21,9	21,0
Fish and fish products	28,4	21,2	19,0	16,5	12,9	12,2	12,9	12,4	12,2	10,4
Milk	48,3	46,6	45,1	44,6	42,0	40,2	40,2	37,9	34,4	32,2
Cheese and cream	51,0	49,8	47,7	46,5	42,8	42,0	40,6	38,4	36,2	33,1
Eggs	64,2	59,1	60,0	59,6	59,1	56,5	55,5	53,3	52,5	52,6
Oil	9,3	7,9	8,9	9,2	5,2	5,3	4,9	3,3	5,2	1,9

Product or product group	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009
Fruits	42,0	40,5	38,3	38,1	31,7	31,8	30,8	27,4	26,2	25,2
Vegetables and vegetable tins	32,2	46,0	46,1	43,5	42,5	43,1	38,6	41,1	38,9	37,1
Honey	34,5	38,2	41,9	37,9	32,4	36,8	33,3	31,1	26,5	23,6
Wine	85,3	85,6	85,5	86,1	83,0	79,8	77,2	78,7	78,7	74,7

Source: Own calculations over the data taken from INS

As a conclusion, the evolutions in the first years regarding prices, average consumption, self-consumption per inhabitant, and also the external trade with agricultural products highlight an unfavourable evolution regarding agricultural production and, especially, population's food security.

The increase of the valorification degree of agricultural potential may transform Romania in an independent state in what concerns the assurance of population's food security, and also into a provider of such type of security for other countries by means of net export of agricultural products, raw materials and food. This can be made only by adequate strategies and policies, meant to stimulate investments in this area and to increase performance and competitiveness in agrofood sector and in all economic organizations that compound it. Thus, OCDE considers that „Agricultural investments in developing countries will be highly important for increasing the quantity of available food, and for obtaining income and creating new jobs."

Without a systemic approach and fare financial and investment support together with agricultural and rural development strategies and policies, the food security of our country may be seriously affected in the future. We must take into consideration that this issue will be aggravated by the effects of global warming and climate instability, by the increase of drought manifestation on land and other natural phenomenon that will have a negative impact on agriculture.

Romania's adherence to European Union on the 1st of January 2007 is only the beginning of a complex and – we hope- not long process of full integration within EU's structures. At least on the economic level, this process generates many challenges Romania must face. Due to the small level of performance and the degree of compatibility between agricultural sector and rural economy in Romania and similar entities from EU developed countries, we can consider that most challenges may occur in this domain. In order to reduce the aforementioned deviations, now Romania may benefit from two European funds: European Agricultural Guidance and Guarantee Fund and European Agricultural Fund for Rural Development. The main purpose of the second fund is to contribue to the increase of productive performance and competitivity in agrofood and rural economy and to the food security of the country and reducing the deviations of development and standard of living in villages and towns, between different agricultural areas and economic regions.

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ECONOMIC BACKWARDNESS OF SERBIAN RURAL AREAS IN TERMS OF GLOBAL CRISIS[1]

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Abstract

In great part of its rural areas, Serbia has all prerequisites for promotion and successful implementation of the concept of multifunctional agriculture and integrated rural development: richness of diversity in rural areas, significant natural resources, preserved natural environment of rural areas, great potential for development of wide range of non-agricultural activities in the countryside. On the other hand, there are many limitations and weaknesses in the field of rural development: unfavourable production and ownership structure in agriculture, unfavourable business environment for SMEs and enterpreneurs, little support for farmers from agricultural budget, underdeveloped physical and market infrastructure, lack of entrepreneurial spirit, lack of linkage between farmers, high government centralization and limitations of local self-government in implementation of rural development projects.

Key words: rural areas, multifunctional agriculture, employment, diversification.

Introduction

In Serbia there is no official definition of rural areas. The criteria applied by the Statistical Office do not include the standard rural indicators, which can be found in international practice (population density, population, the share of agricultural population, etc.), because rural areas are considered to be parts of the coutry which are not urban. In other words, the division between urban and other settlements is based

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on municipal decisions, by which the city status is granted to a settlement that has made the Master Plan. Therefore, urban settlements are those that are proclaimed as urban by the decision of the local self-government, and the rest of settlements is classified as „others", that is rural settlements. National Rural Development Programme, 2011[3], provides the modified strategical categorization, until the NUTS regionalisation is fully implemented. According to NRDP, 2011 rural areas are all inhabited territories except cities, which granted that status according to the Law on territorial organization of the Republic of Serbia and have more than 100.000 inhabitants[4]. Since in Belgrade and Niš there are municipalities where agricultural production is expressed, in these two cities was used the OECD definition of rurality which refers to the local level (rural settlements are those with a population density of less than 150 inhabitants/ km2). According to this classification, the municipalities Barajevo, Sopot and Surčin in Belgrade, as well as the municipality Niška Banja in Niš are subsumed under rural areas.

Economic structure of rural areas

Primary agricultural production is an important factor in the overall national economy, above all because of its share in GDP and total employment. The share of primary agriculture in the creation of Serbian GDP in 2009 is **10,45%** (GDP at constant prices in 2002). Together with manufacture of food products and beverages and manufacture of tobacco products, the agriculture and food sector make **14.7% of GDP in Serbia**[5]. Rural areas in Serbia:

- form 41% of GDP of the country;
- economic structure of these areas mostly depends on the primary sector (especially agriculture) and
- is still based on the depletion of natural resources[6].

According to NRDP 2011 data, the share of agriculture in GDP in rural areas is around **30%** (which is much more than in other transition countries), and realized GDP in rural areas per capita (for 2005) **is less for a quarter of national average**[7].

3 NRDP, 2011, page 11.

4 In Serbia 24 units of local self-government have city status, according to the Law on territorial organisation of the Republic of Serbia (Official Gazette RS No. 129/07). They are: Belgrade, Valjevo, Vranje, Zaječar, Zrenjanin, Jagodina, Kragujevac, Krajevo, Kruševac, Leskovac, Loznica, Niš, Novi Pazar, Novi Sad, Pančevo, Požarevac, Priština, Smederevo, Sombor, Sremska Mitrovica, Subotica, Užice, Čačak, Šabac.

5 SYS, 2010, pages 122-123.

6 Boganov: Small Rural Households in Serbia and Rural Non-Farm Economy, UNDP, 2007, page 31.

7 Table with economic structure scheme of rural areas in Serbia, without K and M, is given in NPRR 2011, on page 12.

Employment and sources of income of the rural population

Numerous statistical sources and conducted researches on employment of the rural population, indicate that, according to employment in agriculture, Serbia is overwhelmingly agrarian country. At the same time, it is emphasized that low productivity (intensity) in agriculture causes low standard of living for the agricultural population. Income earned in the agricultural sector has little effect on the standard of living of the rural population, while the income from salaries is of crucial importance for the growth of standard, that is consumption (LSMS, 2007, page 142). The following surveys reflect employment:

- According to the LFS data, October 2010[8], in the structure of all employed persons in Serbia, in the sector of agricultural activities, forestry and fisheries there are 21.9% of employed persons. **The highest percentage (exactly 43.6%) of employed persons in rural areas** is in the Agriculture, Forestry and Fisheries Sector (Table 1). According to the same source, from the total number of employed persons in Serbia (2,382,307), farmers and assisting members in agriculture (448,998) make **18,9%, that is 32.8% in** rural areas;
- According to the LSMS data, 2007, even **47%** of the rural population is employed in agriculture[9].

Despite the high share of agriculture in total employment, it is expected that the existing production structure, especially in some parts of Serbia, will be at risk in the future **due to the lack of labour force[10]**. In addition to this the LFS data from 2009 indicate that there is a great percentage of employed rural population (**66.2%) that has informal work engagement in agriculture**[11]. This population will take advantage of every opportunity to work outside the agricultural sector[12].

The unemployment rate is lower in rural settlements (16.4%) than in urban (21.4%). Proportionally speaking, (the Republic of Serbia = 100), share of the unemployed persons is higher in urban than in rural areas (62.7% compared to 37.3%)[13]. However, particularly difficult position in the labour market have young people in rural areas: unemployment rate for young people up to 25 years in rural areas is three times higher compared to the average[14].

8 LFS, October 2010, page 12.

9 LSMS, page 142.

10 NRDP, 2011, page 12.

11 LFS, October 2009, Bulletin No. 517, 2010, page61.

12 NRDP, 2011, page 12.

13 LFS, October 2010, pages 3, 5.

14 NRDP, 2011, page 12.

Table 1. Structure of employed persons in rural areas according to activities and settlement type, October 2010.

Serial number	Activities	Rural settlements, 100%
1.	Agriculture, forestry and fisheries	43.6
2.	Processing industry	15.3
3.	Wholesale and retail trade, motor vehicle repair	10.7
4.	Construction	4.7
5.	Transport nad storage	4.2

Source: Labour Force Survey, October 2010, SORS, page 12

Diversification of rural population activities: possibility to strengthen rural non-farm economy

The structure of employment and income of the rural population shows that in Serbia **income diversification is forced by circumstances,** reflecting the unfavorable economic environment and rural poverty[15]. Low productivity in agriculture and inability to earn enough from agriculture, are particularly expressed in small rural households (households whose area of utilised agricultural land does not exceed 3 ha), so that the high precentage of these households (nearly 50% according to researches of Bogadanov, 2007), see their perspective outside agriculture and in „off farm" activities[16]. However, among these, small households, there is a problem of inability to diversify activities, having in mind extremely low offer of jobs in rural areas, as well as the fact that these households do not have their own accumulation, which could invest to start some enterpreneurial activities.

Survey of UNDP (2010) shows that the differences in living standards of the rural population are oriented by the possibility to employ outside household. Therefore, according to this source, in the rural population[17]:

- Minimum share of the poor among employed persons in non-agricultural activities is (24%).
- Half of the people employed in agriculture live in financially poor households.

Research of UNPD, 2010, also indicate that the highest degree of diversification of agricultural income have households located in West Serbia (which have even more

15 Boganov: Small Rural Households in Serbia and Rural Non-Farm Economy, UNDP, 2007, page 32.

16 Ibidem, page 33.

17 Social Exclusion In Rural Areas In Serbia, UNDP 2010. page 14

mixed households than in other areas), and the least income diversification from agriculture have households in Vojvodina[18].

Limitations for rural economic development

Rural economic development (improving the competitiveness of the agricultural sector and diversification of the rural economy) is limited by numerous factors, of which the following are emphasized:

- ***Non-stimualtive/undeveloped economic environment for SMEs establishing and strenghtening of enterpreneurship***[19]: non-application of enacted and often non-conforming laws; high tax burden (especially taxes and contributions on gross wages); obligations to pay VAT when invoicing the products/services (for unpaid receivables); inefficient enforcement of court decisions/Enforcing contracts; long periods of receivables leading to insolvency of business entities; insufficient protection of property rights; underdeveloped market of agricultural products.
- ***Unsuccessful privatization of enterprises whcih leads to breaking the vertical connections*** and failure to establish ownership links between primary producers-processors;
- ***Underdeveloped financial market:*** high price of capital, lack of venture capital and foreign investments, underdeveloped misco-credit financial institutions with programmes designed for farmer needs;
- ***Insufficient budget support for strengthening the competitiveness of the agricultural sector and rural development.*** Support for agriculture in Serbia is very unstable in terms of scope and manner of distribution. For this reason large number of households are exposed to a high degree of business risk, and poor households do not manage to overcome their development limitations[20].
- ***Underdeveloped legal basis for establishing public-private parterships***;
- ***Underdeveloped physical infrastructure,*** especially infrastructure of electronic communications;
- ***Lack of trained human resources, low capacity of innovations and low level of private enterpreneurship.***

From all the above mentioned limitations, farmers emphasize **underdeveloped market of agricultural products** as a non-stimulating factor, which contributes to high-risk investments and prevents production planning.

18 Ibidem, page 67-68.

19 Conditions and Burdens on doing Business and Collective Bargaining, Sector of Agriculture, Serbian Association of Employers, Austrian Development Agency, 2010

20 Volk, T., Bogdanov, N., Rednak, M., Erjavec, E. (2009): Analysis of direct budget support to agricultural and rural development of Serbia, PRSP, Belgrade.

Conclusion

Rural areas in Serbia have generally unfavorable performances, both the standpoint of demographic characteristics, economy, infrastructure development and social capital. Rural development and strengthening of LAGs require, above all, clear defining or adoption of numerous laws that cover the fields of agriculture, entrepreneurship, trade, funding, decentralization etc. Above all, the assumption of rural development is the application of existing and future laws. Within the creation of positive environment for rural development the role of state is crucial in terms of: (1) regulation of agri-food market (strengthening and protection of competition in the domestic market); (2) financial market development, (3) high support from the budget to agricultire and rural development; (4) implementation of decentralization; (5) strengthening partnerships of local communities with associated farmers, that is with their associations and cooperatives.

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TRADITIONAL PRODUCTS AND ORGANIC FARMING - THE REVIVAL CHANCE OF THE ROUMANIAN VILLAGE

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Abstract

Consumers in the European Union are increasingly interested not only in food quality but also in the origin and methods of food production. The diversity expresses the richness of Europe and all traditional and organic products that meet quality standards set by the European Union should be recognized and protected. The protection and registration of Romanian traditional products as well as the certification of organic foods will ensure a fair competition between manufacturers and product credibility in the eyes of consumers.

Key words: traditional products, organic farming, organic products, quality, competitiveness

Considering the wide variety of marketed products and the abundance of information provided, consumers must have clear and succinct information on the origin of the products, production methods and history, thus enabling them to make the best choice.

The European Union, through the special commission of the European Parliament answered this trend with four systems of quality and origin of food:

- Designation of Origin (PDO)
- Protected Geographical Indication (PGI);
- Traditional specialty guaranteed (TSG);
- Organic farming.

We consider the system of organic farming and traditional specialties, a tool to support the development of rural areas, to protect the cultural heritage of regions and to stimulate employment and diversification in rural areas.

Both traditional and organic farming products could support the economic, social and environmental revival of rural communities based on the strength and diversity, culture and local resources.

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The word "traditional" means using usual methods based on the history and know how of the region. Due to the natural resources, the culture, the history and other factors different from place to place, the usual methods of obtaining products differ significantly from one location to another.

It is considered a traditional product if it is made from traditional ingredients, have a traditional composition or use a means of production that reflects a traditional type of production. To be certified as a traditional product, its description must incorporate the method of production, the geographical area and the evaluation of the traditional character.

In order to prevent the disappearance of traditional products and production know how, it was concluded that a European data bank focusing on old recipes and historical methods of food production should be created.

Organic farming is a production method that takes into account traditional knowledge of farmers, responding to social and environmental concerns and providing consumers healthy, quality products that are fully integrated in the environment. Functioning like a trademark, which guarantees high quality and product origin, organic agriculture is closely linked to strict production standards, legally defined, controlled and certified, the purpose being to support confidence in such products.

Organic food processing is mechanical, physical or biological and maintains the quality of agricultural products. The packaging of these products is made of biodegradable material that does not contaminate the product or the environment. They are labeled and accompanied by a document which specifies the following: the product name, the name and address of the manufacturer and the name of the company who certificated it, as well as the production or processing methods.

As a result of the EU accession, Romania has to alling its policies with the ones of the EU. The determining factor of economic growth in a free market is to increase economic competitiveness. The recovery of the competitive advantages must be a permanent objective while taking into account European trends.

The promotion of Romanian traditional products and organic farming can bring considerable benefits to the rural economy, especially in the less developed areas, by supporting the incomes of farmers and the retention of the rural population in the respective areas.

We believe it is fair to say that Romania is a major producer of traditional food, well liked by both Romanians and foreigners.

By knowing the historical cultural roots, the production techniques, the origin of organic and traditional products, the valued added to the consumer is in our view further enhanced.

By Orders issued by the Ministry of Agriculture and Rural Development, rules and regulations on geographical indications and protected designations of origin protected and recognized in Romania have been approved.

The following products are covered by the above mentioned rules and regulations:

- types of milk;
- types of yogurt;
- types of cheese;
- types of salami, ham, bacon and sausages;
- bakery products;
- natural mineral water;
- alcoholic beverages distilled from fruit;
- alcoholic beverages distilled from wine (brandy).

The request for certification and registration of operators of traditional products in "The Registry for the certification of traditional products" is voluntary. As a result, operators can benefit from regulated financial support for investments in upgrading and equipping production units.

The Ministry of Agriculture has developed since 2005 a list of Romanian traditional products. On this list there is a wide range of products such as: Bobalna cheese, Bucovina smoked ham, Tarnavioara salami, Plescoi sausages, Moeciu cheese ,"horinca" of Maramures and the Topoloveni jam.

According to the Ministry of Agriculture and Rural Development, the number of documented traditional products increased by 42% in 2010, from 449 the previous year to 638, and the number of traditional economic producers increased from 115 in 2009 to 255 in 2010. The largest share in these products is occupied by meat products followed by milling and bakery products.

The quality aspect is essential for the entire food chain and can bring greater competitiveness and value added to the economy of European regions. Traditional food products are often the only chance for many rural areas with few alternatives in terms of production and, it also stimulates quality product diversity.

It is clear that the competitiveness of traditional Romanian products is a function of their quality. For many of the traditional Romanian products it is precisely their quality which is an issue, in particular for the ones requiring very high standards by the European Union and other developed countries.

To improve the quality of Romanian traditional food products it is necessary to align Romanian quality standards to the quality standards of the European Union. At the same time, producers must be fully informed about about EU quality requirements, knowing that the EU has the highest quality standards in the world. Special attention should be paid to packaging so as to avoid any degradation of product quality and to increase attractiveness.

Due to the difficulties in penetrating supermarket networks by traditional food producers in Romania, openn agriculture markets have been encouraged as an alternative, as outlets local and traditional products, because they provide a fair price, strengthen the link between product and territory from which it comes and encourage consumers to make a choice based on knowledge and quality.

Concerning the organic traditional markets, it is known that many European customers are increasingly favoring organic products. Worldwide, the environmental related concerns, human health and genetic engineering have created a niche market for

this type of products that grow faster than any other food.

Romania has favorable conditions to promote organic farming. Soils are fertile and productive and part of the agricultural land can be easily converted to support organic farming given that historically the chemical treatment of soil was less common practice than in certain developed countries.

Organic farming can become a source of employment of the rural population given that 45% of the population lives in rural areas and over 30% work in agriculture. Organic farming has more and more followers among the Romanian farmers, as they are stimulated by growing demand from Western markets, where organic products command a premium price.

Because our country is in compliance with EU policy supporting sustainable agriculture, a number of laws an regulations to align Romanian legislation with EU legislation were adopted.

According to the Ministry of Agriculture and Rural Development, in 2011 farmers will receive support for organic crops from EUR153 to EUR400 per hectare, depending on the type of crops cultivated. Up to that point, Romania was the only European country not subsidizing organic crops.

According to data from the ministry, there was a positive trend in this sector, as follows: total organic farming surface increased in the period 2006-2010 from 143,194 ha to 260,000 ha (that being said it still accounts for a low proportion of 6 / 2% of total agricultural production).

Although more and more farmers are turning to organic farming we are far from EU agricultural powers such as Britain, France and Spain, which allocate each year more than 500,000 ha to this niche.

Most Romanian organic food products go to export. Over 90% of these products: honey, oil, oil based products, bakery products, fruits, are sold in countries like Germany, Italy, Spain, the UK and theNordic countries.

In general, organic products are sold abroad as raw materials; they are then processed abroad and often end up back in Romania as end products.

In order to develop organic farming and to increase the competitiveness of Romanian ecological products and thus support rural development, there should be considered a series of priorities:

- Increasingly processing internally raw material and exporting higher value added products
- The creation of sales promotion programs on the local market to support local and regional initiatives. For example, the demand for quality food products could be increased by supporting the catering supply system on the local and seasonal organic production level;
- Better implementation of existing legislation in this sector in order to strengthen the control and the monitoring of the production process of organic food, with the aim of increasing its quality;
- Ensure permanent feedback by consumer, thus helping producers to improve their products;

- Support the association of small farmers in order to expand the production and marketing of the organic products.

To conclude, the potential of rural areas could be enhanced by better supporting organic and traditional food production.

Examples:

An example might be Vrancea, where rural areas account for over 93% of the total surface of the county and the rural population accounts for over 62.1% of the total population. Acceptance of this situation led to the orientation of local producers in obtaining and promoting traditional products of this region. Aurora COM Company took advantage of this market niche, specializing in the industrial production of traditional food.

There are also other traditional products which are not fully taken advantage of. The Soveja cheese and Dumitresti brandy are such examples that remain exclusively in the traditional production of small individual producers and which are not being registered and integrated in the production, marketing and sales chain.

These traditional products can only be exported successfully if they benefit from proper promotion, with the aim to individualize them on the European market. In terms of organic farming, the farmers from this area are interested in particular in cereals, but also in other crops such as legumes, oilseeds, textile plants, vines and orchards, spontaneous flora , medicinal and aromatic plants as well as in the beekeeping sector.

The profit that they could achieve in relatively few years attracts them even if the production of organic crops is much more expensive. The one who buys these products must perceive Vrancea as a shelter of traditional life, healthy and relaxing, a place in which agriculture is based on the traditional methods.

The protection of the identity of regional food requires, in general, inter-regional cooperation with similar products and producers who have demonstrated their concern while maintaining their quality standards.

The future of agriculture during the coming century depends to a large extent on product quality. Products must be healthy and safe and they must respect the environment.

We believe that traditional products and organic farming represent an opportunity for Romania on the EU market, bringing considerable benefits to the rural economy and indirectly contributing to the development of disadvantaged rural areas.

By knowing the historical cultural roots, the production technologies, the origin of organic and traditional products, the value added to the consumer is further enhanced.

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THE WINE SECTOR SYSTEMS AND FINANCING IN EU VS ROMÂNIA SECTOR

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Abstract

The main actors involved in wine-producers, national and European associations, national governments, European Parliament and European Commission had concerns over he time to find some measures for increasing the competitiveness of European wine. Therewere however a number of constraints in determining the measures of support forviticulture and wine in view of some international treaties that the EU has concluded in the WTO and other treaties on economic and agricultural subsidies, and the interests of individual Member States and optics, some wine-producing countries with different specific interests and others seeking financing as low as agriculture.

Key words: Restructuring, retraining, regulation, support, subsidies

Systems and ways of funding the EU wine sector

Measures to support the wine have been implemented since Regulation (EC) 1493/1999 on the common market organization for wine. The main lines of support: conversion and restructuring that surfaces bearing vines that are receiving financial support for replacement plantings with other grape varieties more suited to demand, first for clearing a limited number of plantations less profitable (generally varieties of table), export promotion on third markets, the use of concentrated must to increase the potential alcohol.

Implementation of these measures was made by the following acts:

· Decision 2007/719/CE Commission establishing an indicative allocation by Member State on a number of hectares for restructuring and conversion of vineyards under R (EC)
1493/1999 marketing year 2007 / 2008;

· Decision 2008/799/CE of laying down, for 2008 and a number of hectares, the definitive financial allocations to Member States for the restructuring and conversion of vineyards under R (EC) 1493/1999;

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Wine laws but had to be adapted to the new EU agricultural reform by Regulation (EC) 479/08 on the common market in wine, amending R (EC) no. 1493/1999, R (EC) no. 1782/2003, R (EC) no. 1290/2005, R (EC) no. 3 / 2008 and repealing R (EEC). R 2392/86 and (EC) no. 1493/1999. This new regulation has been diminished by allocating amounts distillation and storage but was maintained for a period of abandonment which first requires that plantations less competitive can be taken out of production. This regulation was included in Regulation (EC) 1234/2007 establishing a common organization of agricultural markets and on specific provisions for certain agricultural products, so-called „Single CPO Regulation".

Measures are in force have been implemented by R (EC) 555/08 laying down detailed rules for the R (EC) no. 479/2008 on the common organization of wine market in terms of support programs, voluntary grubbing-up scheme trade with third countries, production potential and on controls in the wine sector.

Community law to inform and promote wine on third markets:

- R (EC) 3 / 2008 on information and promotion actions for agricultural products domestically and in third countries
- R (EC) 501/2008 laying down detailed rules for implementing Regulation (EC) no. 3 / 2008 of the Council on information and promotion actions for agricultural products domestically and in third countries

Legislation granting direct payments area:

R (EC) NO. 73/2009 establishing common rules for direct support schemes for farmers under the common agricultural policy and establishing certain support schemes for farmers and amending Regulations (EC) no. 1290/2005, (EC) no. 247/2006, (EC) no. 378/2007 and repealing Regulation (EC) no. 1782/2003.

TABLE 1. EU Support Programme 2009-2013

Measure	Total 2009 (in 1000 euros	Total 2010 (in 1000 euros)	Total 2011 (in 1000 euros)	Total 2012 (in 1000 euros	Total 2013 (in 1000 euros)	Total 2009-2013 (in 1000 euros)	%
1.Schema single payemnt		33 353	156 630	159 875	159 857	509 715	10%
2.Promotion	45000	139 838	149 922	214 340	246 161	798 250	15%
3a.Restructuring and conversion	233 958	335 764	349 189	452 103	461 127	1 832 141	34%
3b.Plans ongoing N°1493/1999	107 083	55 413	20 877	20 418	10 778	214 569	4%
4. Fresh harvest	150	30 450	30 750	30 100	30 100	121 550	2%

Measure	Total 2009 (in 1000 euros	Total 2010 (in 1000 euros)	Total 2011 (in 1000 euros)	Total 2012 (in 1000 euros	Total 2013 (in 1000 euros)	Total 2009-2013 (in 1000 euros)	%
5.Mutual funds							
6.Crop insurance	2 398	28 593	33 701	35 425	35 719	135 836	3%
7.Investments	19255	54 664	109 798	182 038	186 713	552 468	10%
8.Distillation by product	88485	100 220	99 710	99 495	99 495	487 405	9%
9.Distillation potable alcohol	159 354	161 823	22 952	12 232		356 361	7%
10.Crisis distillation	53 011	13 247				66 258	1%
11.Cncentrated grape	85163	70 457	45 356	37 789	170	238 935	4%
Total	794 145	1 023 822	1 018 886	1 243 815	1 230 120	5 313 488	100%

Source: http://ec.europa.eu/agriculture/markets/wine/facts/annex_4_en

Systems and forms of financing of the wine used in Romania

Romanian wine sector for the period 2006 -2010 has set as its main objective to increase the competitiveness on the world market and the European one. Achieving this objective involved:

- Restructuring and conversion of vineyards;
- Increase investments for modernization and upgrading units of wine;
- Increase the role and involvement of producer organizations in the wine market;
- Ensuring support for training, specialization and improvement of people working in wine;
- Creation of a favorable image of Romania by promoting local wines, recognized quality and certified worldwide by participating in fairs, exhibitions, international competitions respectively.

In our country, to implement R479/08, financial support measures were implemented by Ministerial Order, updated periodically depending on changes in legislation and by national budgetary provisions for the national contribution. They were based on European regulations, the Accession Treaty and specific legislation transposed in Romania, for example:

· Order no. 211/2007 for the approval of the implementation of restructuring / conversion of vineyards, campaigns 2006 - 2007 and 2007 - 2008, implemented with EU support (published in Official Gazette no. 189 of 19/03/2007).

Support measures at Community level set for the wine were included in the national program support, document was sent to the European Commission, which explicitly provides financial support directions, allocations and other related data. Support the

national program was enacted by Government Decision no. 1228/2008 establishing how the financial support from the Community wine producers.

National program support and support measures include:

Promotion on third country markets:

· Order 218/09 approving the methodological norms concerning the conditions of financial support to promote wine in third country markets in wine 2008/2009-2012/2013, eligible costs, payment methods, verification and control (published in Official no. 264/22.04.09)

Restructuring and conversion of vineyards:

· Order 247/2008 of the Minister of Agriculture and Rural Development regarding the approval of the implementation of restructuring / conversion of vineyards, developed with EU support for campaigns 2008/2009-2013/2014 (published in Official Gazette nr.355/8.05. 2008)

Harvest insurance:

· Order 756/2008 of the Minister of Agriculture and Rural Development on approving methodological norms of financial support from wine producers to ensure the harvest of grapes for wine (published in Official Gazette no. 879/24.12.2008).

The use of concentrated grape must and rectified concentrated grape must:

· Order no. 581/2008 for the approval of the financial support to wine producers who use concentrated grape must and / or rectified concentrated grape must to increase the share of natural spirits of fresh grapes, grape must, grape must in fermentation and new wine still in fermentation (published in Official Gazette, Part I no. 661 of 22.09.2008).

Deforestation volunteers:

- R (EC) 1026/2010 establishing a single percentage of acceptance of the amounts to the Commission by Member States on applications for grubbing-up premium for the marketing year 2010/2011.
- R (EC) 1092/2009 establishing a single percentage of acceptance of the amounts to the Commission by Member States on applications for grubbing-up premium for the wine year 2009/2010.
- R (EC) no. 1123/2008 fixing a single percentage of acceptance of the amounts notified to the Commission by Member States on applications for grubbing-up premium.
- Order 572/2008 of the Minister of Agriculture and Rural Development for the approval of the scheme to grub up vineyards (published in Official Gazette no. 641/08.09.2008).

TABLE 2. Support national program for crop years 2006-2013

No crt	Measure support	Campaign	Surface (ha)	The amont of support program (inițial) (thousand euro)	The amount allocated (additional) (thousand euro)	The amoun spent (thousand euro)
1	Restructuring/ reconversion	2006/2007	1.140	8,300.00	-	6,983.00
		2007/2008	4.022	25,050.00	10.000	35.05
		2008/2009	5.376	41,692.70	-	41,692.70
		2009/2010		36,362.00		41.548,58
		2010/2011		37,140.00		
		2011/2012		36,680.00		
		2012/2013		36,205.00		
2	Use concentrated must	2008/2009	X	31.00	-	29.50
		2009/2010		160.00		81,28
		2010/2011		160.00		
		2011/2012		170.00		
		2012/2013		170.00		
3	Promoting third	2008/2009	X	425.00	-	54.40
		2009/2010		375.00		109,48
		2010/2011		450.00		
		2011/2012		500.00		
		2012/2013		600.00		
4	Crop insurance	2008/2009	X	458.00	-	323.40
		2009/2010		3,950.00		360,66
		2010/2011		4,350.00		
		2011/2012		4,750.00		
		2012/2013		5,125.00		
	Total	X	10,538.00	243,103.70	10,000	49,118.05

Suurce: APIA-MADR

As the table shows the highest rate was a measure restructuring / conversion, then the crop insurance followed by the third promotion, the lower amount being allocated to the measure concentrated must use .

TABLE 3. Grubbing-up premium

N 0 . crt.	Campaign	Comunications to the CE		Approvals CE		Single percentage of acceptance
		No. ha	UE budget (thousand euro)	UE Budget (thousand euro)	No. ha	
	2008/2009	16	109	50	7	45,9 %
	2009/2010	501	2.412	1209	251	50,125 %
	2010/2011			2784		59,622 %

Source : APIA-MADR

TABLE 4. Direct Payments Scheme (SAPS)

The financial support	Year	Level of community financial support (euro/ha)	Exchange rate (lei/euro)	Financial allocation CE (Thousand euro)
SAPS	2007	50,55	3,3400	441.930
	2008	60,75	3,7413	532.444
	2009	71,12	4,2180	623.399
	2010	80,36	4,2718	729.863

Sursa APIA- MADR

Conclusions

Reviewing the funding systems and forms of the wine sector both nationally and globally as we outline the following conclusions:

- For Romania proved viable measure conversion / restructuring of plantations, for which should be maintained. Therefore bear in mind that the new CAP amounts given our country to grow to allow the measure to a greater number of hectares, an objective measure would be to apply feasible to 5-6000 ha / year.
- Businessmen and managers must draw up plans for medium and long term business that will lead to consolidation and business development and to provide protection in case of any adverse developments such as increased business input costs, price cap wine market, unfavorable to agricultural years.
- Guiding manufacturers in Romania and the EU to new consumer markets: China (as important and dynamic growth potential), the U.S. and Britain (the largest export markets).

- At EU level should be maintained of financial support measures aimed at increasing the competitiveness of European wine market and international markets Community.
- At the national level is needed to implement a modern marketing, courageous and effective, as applied in other beverages grabbed market share as beer, spirits, low alcohol drinks - alcopops or non-alcoholic beverages in so-called soft drinks and ready to drink.

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ACCOUNTS SYSTEM IN ANIMAL HUSBANDRY FINANCIAL ACCOUNTING IN ROMANIA

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Abstract

Agriculture, a continuous source of controversy, uncertainty, specific risks, but viewed as an unique and interesting field, generating interest for the accounting profession, in the sense of importance given to accounting regulations in agriculture, in general, particularly in animal husbandry.

It must be attracted attention to Romanian accountant normalizers, that the traditional accounting model does not provide enough information for agriculture in general, animal husbandry in particular.

Normalizers accountants, based on the role and importance of the agriculture at the macroeconomic level, reaching the evaluation of the accounting place and role in the society and economic development, must sustain and elaborate new regulations for agriculture accounting, coupled with EU regulations, international and national accounting regulations.

Key words: accounts system, accounting, biological assets, fixed assets, current assets

INTRODUCTION

Agriculture, with its specific, determinate some features at the financial accounting level.

Specificity refers not only to the representative elements of fixed and current assets in agriculture in general, animal husbandry in general and primary documents that have a specific character.

It should be noted that beside the fixed and current assets used in general, agriculture uses specific fixed and current assets, starting from its particularity and specific.

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Such tangible assets in agriculture include:
-animals for work
-animals for reproduction
-fruit plantations
-forests
Current assets specific for agriculture include:
-feed
-seeds and planting materials
-productions and reproductions animals
In the following we will stop, for presentation and exemplification to the accounts system and accounting of biological assets in animal husbandry.

MATERIAL AND METHOD

The research methodology is based on multidisciplinary approach that generates advanced environment, economical and social techniques. Materials for study are taken from specialized literature and national and international practice. All the results and conclusions will be specific, usable for the animal husbandry entities.

RESULTS AND DISCUSSIONS

Agriculture represents the material production branch that covers crop and animal husbandry in order to obtain food and raw materials.

IAS 41, Agriculture, defines agricultural activity as the administration by an entity on the biological assets transformation in order to sell in agricultural production, or in additional biological assets.

Agriculture has two big production sectors:
-vegetable production
-live stock

Vegetable production represents growing and reproduction system of one or more plants, in order to obtain some agricultural products.

Livestock production represents animal husbandry. Animal husbandry represents the science which seeks knowledge, reproduction, growth, feeding, feeding and domestic animals exploitation.

Current Romanian accounting referential is the actual OMFP no. 3055/2009 for approving harmonized with European Directives, as amended and supplemented.

Animals accounting, in livestock production, refers to two groups of assets: fixed and current assets.

Financial accounting in livestock is subject to current Romanian accounting referential although specifics are not given due importance in the livestock business.

Accounts system used in animal husbandry accounting starts from the fixed and current assets.

Starting from the fact that animal husbandry is an production activity and to understand the accounting records flow of products first, before presenting the system of accounts that are required to submit to the knowledge of the functioning of bifunctional account 711 "stock variation".

Account 711 "stock variation" - shows these flows and accounting records.

Is credited:

-with production cost or standard price of the animals obtained from own production

- with the increase in weight and related price differences

Is debited

-with the production cost or standard price of sold animals, slaughtered and corresponding price differences

Creditor turnover

-production cost or standard cost of the production obtained

Debtor turnover

-production cost or standard price of the exiting production during production

Final creditor sold

-is increasing(variation in plus) stocks of animals and agricultural products from the beginning of the period

Final debtor sold

- is reduction (variation in minus) stocks of animals and agricultural products from the beginning of the period.

Accounts system – fixed assets in animal husbandry

Fixed assets evidence in animal husbandry is mainly driven similar to other types of tangible assets but there is a specific feature, namely that the animal production and reproduction work are considered depreciable assets.

During the exploitation of animals for work, production and reproduction are obtained besides the main products and by-products (manure, wool, milk), as reflected in the accounting of agricultural production. In some cases Livestock production is an activity which results in both current assets and current assets, and in other cases such as poultry, the production activity generates current assets by kind of stock.

Accounts specific to the livestock assets are:

Account 2134 "Animals and birds' 2813 account, analytically distinct" Depreciation of tangible assets Animal "and Account 291" Impairment of plant-animal imobilizrilor, analytically distinct. "

We present detailed account 2134 "Animals and birds":

By its economic content, reflects the assets that generates future economical benefits that can be credible measured, to be used continously for a period longer than one year in production activity.

In terms of accounting function, account 2134 "Animals and birds" it is an active account and presents the following flows of accountin records:

Is debited with:

- the value of reproduction and work animals purchased;

- realized from own production;
- received as an contribution to capital
- acquired from affiliated entities or entities linked by participating interests,
- increased value resulting from the revaluation of their

Is credited with:

-depreciated value of animals removed from the records;

-undepreciated value of animals removed from the records;

-decrease resulting from revaluation;

-the contribution of animals to the capital;

-the value of animals destroyed by disasters.

Accounts system – current assets in animal husbandry

The current assets group included following animals categories:

• any young animals (calves, lambs, piglets, foals, etc.) that will be passed later in the category of tangible assets as work animals and breeding;

• animal fattening, slaughter or sale;

• livestock production (wool, milk, cheese, eggs);

• bee colonies.

Entering the body of animals can be mainly through acquisitions from third parties or from own production.

Aninalelor output is through the sale of live animals, as finished products, animal products or by selling through slaughter.

Evaluation of animals can be made at acquisition cost, production cost, or standard price. The increase in weight may be valued at production cost or standard price.

The main specific accounts of current assets in livestock are: Account 361 "Animals and birds," 368 account "Differences in the price of livestock and poultry," 3025 Account "Feed".

After the economic content, these accounts are active current accounts, meaning they are purchased or produced for own consumption or for sale and provides for a term not exceeding 12 months from the balance sheet date. It follows then that the cycle of exploitation , defined as the time between purchase of raw materials entering a process of transformation (in our case processing biological) and their completion in the form of cash or cash equivalent, should be less than 12 months Financial year-end.

After accounting function are active accounts that keep track of animals and feed categories.

In the context of the accounting function will analyze the flow of accounting entries most representative account of current assets, namely livestock activities account for 361 "Animals and birds"

Accounting records flows are as follows:

Is debited with:

• the cost of animal production obtained from own production, live weight gain, ups the inventory;

• the value of animals purchased from third parties;

• the animals received in the related party;

• the animals received in the interests of participation;
• the animals received free of charge;
• the animals received as a contribution to capital;
• anialelor value brought by third parties;

It is credited with:

• the value of animals sold, slaughtered, found minus the inventory;
• the value of animals lost as a result of disasters;
• the animals taught in the interests of participation;
• the animals surrendered to related parties;
• the value of donated animals;
• the animals sent to third parties, etc.
• the last animals to the herd for breeding, or for its unification.

The debit balance represents the value of existing stocks of animals in the patrimonial nature of the entity.

Specific is the fact that the act of mutation is transferred from one age category to another, from a lower to a higher category, accounting transactions are in the same account 361 "Animals and birds," but emphasized the analytical distinct.
Other specific accounts used in financial accounting activities are livestock account 606 "Expenditure on animals and birds" and 6026 "Expenditure on feed"

CONCLUSION

1. Livestock, agriculture production sector, with particular specificity, generated in the financial accounting, in which features on the elements of fixed and current assets;

2. Use of specific accounts in financial accounting is mainly due to the following:

• livestock production that result in both fixed assets and current assets in most cases, but here are cases where the nature of current assets based solely on stocks;

• work animals, production and reproduction generates over their main products and service so prodese secondary.

3. Analytical accounting of fixed assets in livestock is held by groups of property and each category of specific animals (eg in growing pigs, the herd is recorded on breeding gilts and boars for breeding);

4. Analytical accounts of current assets is held by each category of animals according to species, in young animals, animal fat, farm animals, birds, colonies of bees, etc. thus developed analytical accounts;

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TERRITORIAL ENVIRONMENTAL PROBLEMS MACROREGIONAL ANALYSIS CENTER AND BUCURESTI-ILFOV REGIONS

Elisabeta ROŞU[1]

Abstract

The environmental problems are phenomena determined by essential modifications that are produced in nature under man's influence. Initially the environmental problems have a local origin, yet they affect large areas and finally become regional or global problems.

Key words: environment, environmental problems, regional analysis

INTRODUCTION

The environment represents the total range of natural conditions and elements: water, air, soil and subsoil, all the atmosphere strata, the totality of organic and inorganic matter, as well as the living beings, the material systems in action comprising all the previously mentioned elements, also including material and spiritual values.
Environment degradation represents one of the great problems that mankind is facing. This process presents a multitude of regional and national aspects, depending on the economic and social development level, as the environment can be positively and/or negatively affected both by excessive development and by underdevelopment.

MATERIAL AND METHOD

The paper intends to put together the main environmental problems from Macroregion 1- Region 7 Center and Macroregion 3 - Region 8 Bucharest Ilfov.

The study was based on methods specific to selective research: identification of problem under research, delimitation of research framework, information collection, data processing, analysis and interpretation and drawing up the conclusions.

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The information sources that have been used are the official data and the data obtained from field surveys conducted under a research project. [2]

RESULTS AND DISCUSSIONS

Environmental problems, Region 7 Center

The region center consists of the following counties: Alba, Braşov, Covasna, Harghita, Mureş and Sibiu.

Due to its physical-geographic conditions, a wide range of **soils** exists in Region 7 Center, this diversity resulting from the complex action exercised by the lithological conditions, relief units, hydrological factors as well as the topoclimatic factors.

Table 1. Agricultural land distribution by categories of use in Region 7 Center, in the period 2007-2009

Crt. No.	Category of use	Area (thousand ha)		
		2007	2008	2009
1.	Arable	762.8	764.5	762.3
2.	Pastures	663.8	662.8	662.2
3.	Natural pastures and hayfields	477.0	475.4	475.6
4.	Vineyards	9.1	9.3	8.8
5.	Orchards	13.4	13.2	13.7
Agricultural total		1926.1	1925.2	1922.5

Source: Reports on environmental factor situation in Region 7 Center, ARPM Sibiu, 2007, 2008 and 2009

In the period 2007-2009, a slight diminution of agricultural land area can be noticed in Region 7 Center. Throughout the investigated period, it can be noticed that the agricultural activities are carried out on two main land operation types, arable on one hand and pastures and hayfields on the other hand.

The main constraints to soil quality in region 7 Center are determined by: acidity, fine texture, moisture excess, non-uniformity of land, erosion, landslides, slope, etc. For example, in the county Covasna, the main constraint is represented by the sanitary protection areas that are found around the drinking water supply wells of towns, as well as of the other localities. In the county Harghita, the most important constraints of soil quality are the following: moisture excess, depth of phreatic water layer, land slope, edaphic volume, taking into consideration the fact that from the relief point of view, the county belongs to the hilly and mountain area. For the county Mureş, there are constraints related to soil supply in humus, nitrogen, phosphorous and potassium. In the county Sibiu, the main constraints to soil quality are determined by: acidity,

2 Economic-social models for inequality attenuation in the rural area by regions (MESAIR), contract 92072/2008, period 2008-2011.

moisture excess, depth erosion, landslides and moisture excess, anthropic degradation and pollution of soils.

The industrial activities and agriculture are the main **air** pollution factors in the Region 7 Center.

In the county Braşov there are many economic operators who carry out their activity in different industrial branches and the critical areas with regard to air pollution are the following:

- the central area of the county, consisting of Braşov municipality and the neighbouring activities: Săcele, Cristian, Codlea;
- the central-northern area of the county, with the localities Hoghiz, Racoş, Rupea;
- the central-western area of the county, with the localities Făgăraş and Victoria.

In the county Harghita there are critical areas under air pollution:

- industrial activity areas: in the locality Miercurea Ciuc (due to the Mining Exploitation SC Exploatarea Minieră Harghita SA Miercurea Ciuc), in Gheorghieni (due to the working point Voşlobeni);
- refuse dumps remained after the mining and geological exploitations from SC Bălan SA (Sântimbru), Jolotca, Borsec, Tulgheş, Heveder, Belcina, Cianod.

An important air pollution source in the county Mureş is represented by SC Azomureş SA where the maximum accepted limit of ammonia is often exceeded.

In the county Sibiu, due to historical pollution (over 60 years) and to recent pollution, the zone Copşa Mică is highly affected by air pollution, being characterized by inadequate quality of ambiental air. SC SOMETRA SA is the main polluter in Copşa Mică, this being a company with non-ferrous metallurgy profile. The negative impact of sulphur dioxide emissions and dust with heavy metals is quite significant among the environmental factors in the area.

The surface waters were monitored in Region 7 Center, on a total length of 2891.2 km river sections.

The surface waters in Region 7 Center mainly fall into quality classes I and II, and as a result these water categories can be used as drinking water sources.

Table 2. Length of river sections in Region 7 Center, by quality classes, in the period 2007-2009

Year	Total km	Class I	Class II	Class III	Class IV	Class V
2007	2981.2	1090	1487.2	247.8	122	34
2008	2891.2	1046	1550.5	258.7	76	50
2009	2891.2	1039	1486.2	260	60	46

Source: Reports on environment situation in Region 7 Center, ARPM Sibiu, 2007, 2008 and 2009

In the period 2007-2009, for the **ground waters**, 159 drillings in Region 7 Center were monitored by chemical, biologic and bacteriologic tests. In the county Harghita (12 drillings) were within the accepted quality limits. Yet critical zones were found as regards ground water pollution; thus, in the county Alba (18 drillings) the

accepted limits were exceeded in the following indicators: conductivity, dissolved manganese, sulphates, chlorides, nitrates, nickel, dissolved cadmium, total hardness, organic substances; in the county Braşov (28 drillings) were under the legal limits, except for a few indicators: ammonium, total iron, total hardness, lead, conductivity; in the county Covasna (26 drillings) the limits were exceeded in the indicators: manganese, iron, ammonium, lead, conductivity; in the county Mureş (59 drillings) it was found out that ground waters cannot be included in the drinking water category; in the county Sibiu (16 drillings) it was found that the ground waters have an inadequate quality in the rural areas, as the liquid waste reach the ground layers directly through the non-impermeable latrines or the street drainage ditches, as well as indirectly, from the manure storage places and from the domestic waste storage places.

In the investigated period, the situation of **forests** was generally good, the main pressures exercised upon forest being of anthropic nature, namely: forest operations without respecting the legal provisions in the field, fires, illegal cuttings of timber, constructions built on forestland or in adjacent areas, illegal storage of domestic or industrial waste in the neighbouring areas of localities, uncontrolled tourism activities.

Table 3. Forestland evolution in the counties from Region 7 Center, in the period 2007-2009 **thousand ha**

Nr.crt.	Județul	2007	2008	2009
1.	Alba	227.9	206.8	206.8
2.	Braşov	174.6	174.2	204.3
3.	Covasna	165.2	165.2	165.2
4.	Harghita	237.7	225.0	225.0
5.	Mureş	208.7	208.1	208.8
6.	Sibiu	204.4	203.2	201,1
Centru Region 7 Center total		1218.4	1182.5	1211.2

Source: own calculations and data from the Reports on environmental factors in Region 7 Center, ARPM Sibiu, years 2007, 2008 and 2009

Environmental problems in Region 8 Bucharest-Ilfov

Region 8 Bucharest – Ilfov consists of Bucharest Municipality, Romania's capital and the county Ilfov.

In Region 8 Bucharest-Ilfov, the most common types of **soils** are the clay soils, followed by Mollisols and younger soils.

Table 4. Agricultural land distribution by categories of use, in Region 8 Bucharest-Ilfov, in the period 2007 – 2009

Crt. no.	Category of use	Area – ha		
		2007	2008	2009
1.	Arable	107452	105868	102012
2.	Pastures	2342	2382	1973
3.	Natural pastures and hayfields	83	58	58
4.	Vineyards	1571	1445	1412
5.	Orchards	1184	977	847
Agricultural total		112632	110730	106302

Source: Reports on environmental factors in Region 8 Bucharest-Ilfov, ARPM Bucharest-Ilfov, years 2007, 2008 and 2009

In the period 2007-2009, the agricultural land area decreased by 5.6%, by categories of use the largest decline being found in the areas under natural pastures and hayfields, followed by the land areas under orchards. In the Region 8 Bucharest – Ilfov, the main type of agricultural operation is arable land farming.

In the Region Bucharest-Ilfov, the soil pollution sources are the following: dry and wet deposits from the atmosphere, inadequate storage of domestic and industrial wastes and residues on areas that are not adequately equipped, discharge of sludge, slimes and waste water on agricultural land areas or on other areas; excessive use of chemicals on agricultural land and crops; soil degradation by physical factors, the action of which is favoured by wrong practices (deforestation, absence of consolidation and defense works, etc.); lead pollution specific for the areas with heavy road traffic, mainly in the city of Bucharest.

On the area of Bucharest municipality, the soils experienced strong anthropic modifications, the natural soil types being currently found only on limited areas in certain parks and on peripheral areas. The first stage of strong anthropic modifications was the result of all kind of constructions, by which practically other types of soils were created. The second stage was initiated by the massive industrialization and road traffic intensification.

The prevailing soils in the county Ilfov generally present a relatively low vulnerability to many polluting agents due to the good buffering capacity. Soil destruction processes by excavation works were found in the Argeş canal area and by the storage of garbage or of other construction materials in different areas. On smaller areas soils were polluted with waste water, sludge from the water treatment stations and organic residues from the large livestock farms from the zones Periş, Jilava, Buftea.

Air pollution in Region 8 Bucharest-Ilfov has a specific character, in the first place due to the emission conditions, to the existence of multiple sources respectively, different heights of pollution sources, as well as a non-uniform distribution of these sources, scattered throughout the region territory.

The air pollution sources can be grouped into several large categories:

- industrial objectives – there is a wide range of substances released from the technological processes into the atmosphere, namely organic and inorganic powders that also include metals, gases and vapours, organic solvents, soot;
- road traffic: the air pollution caused by vehicles is a mixture of several hundreds of different compounds. The air pollution levels caused by road traffic are quite variable in time and space. The concentrations of air pollutants are higher in the areas with traffic roads bordered by high buildings under compact form, which prevent the dispersion of pollutants;
- construction sites and concrete mixers: the share of construction activities increased very much, the construction sites and concrete mixers remaining potential air pollution sources, mainly with dust.
- thermal power stations: the thermal power stations represent main air pollution sources, by their operation on liquid fuels with a high content of sulphur, releasing significant amounts of SO_2, NOx, CO, CO_2, dust, smoke, light ashes into the atmosphere.

Under the National Water Integrated Monitoring System, S.G.A. Ilfov – Bucharest, **water** quality in the hydrographic basins Argeş, Ialomița and Mostiştea is monitored. The situation of inner rivers was monitored, in the period 2007-2009, in 12 surveillance sections in the Argeş hydrographic basin and in 2 surveillance sections in the hydrographic basin Ialomița.

Table 5. Quality classes of waters from Argeş hydrographic basin, in the period 2007-2009

Nr. crt.	River/sections	2007	2008	2009
1	Argeş – 3 sections	II	III	II
2	Dâmbovița – 5 sections	IV	V	IV
3	Colentina – 1 section	III	III	III
4	Ilfov – 3 sections	III	IV	II

Source: Reports on environmental factors in Region 8 Bucharest-Ilfov, ARPM Bucharest-Ilfov, years 2007, 2008 and 2009

In the hydrographic basin Ialomița, the two sections under monitoring fell into quality class III in the period 2007-2009.

Only waters that fall into the quality categories I and II can be used as drinking water sources.

In the period 2007-2009, 11 drillings were monitored, representative for the national observation network, and no exceeding of the threshold values were found.

In the period 2007-2009, the **forestland** of Region 8 Bucharest Ilfov continuously decreased, the main reason being the intensification of construction activities in the peripheral areas of Bucharest municipality and in Ilfov county in this period.

Table 6. Forestland area in Region 8 Bucharest Ilfov, in the period 2007-2009

	2007	2008	2009
Forestland – ha, out of which:	20711	20413	20323
Ilfov county	19928	19663	19653
Bucharest municipality	783	750	670

Source: Reports on environmental factors in Region 8 Bucharest-Ilfov, ARPM Bucharest-Ilfov, years 2007, 2008 and 2009

In the investigated period, forests were subject to increasing pressures from the population's side. Illegal cuttings, uncertain and continuously changing legal framework brought about severe losses to forests. Forest administration under sylvicultural regime contributes to forestland sustainable management.

CONCLUSIONS

The old specific occupations in the Region 7 Center, such as mining, animal husbandry, timber exploitation and quarrying, which have been carried out in this zone for centuries, resulted in an intense exploitation of natural resources and implicitly led to environment degradation phenomena. In time, the industrial activities added to these traditional activities, which amplified the pollution phenomena, by generating secondary processes, which by accumulation endanger people's comfort and health.

In Region 8 Bucharest Ilfov, industry, transport, agriculture and the expansion of the construction sector are the main environment pollution sources.

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ROMANIAN RURAL AREAS DIVERSITY – TYPOLOGIES OF SUSTAINIBILITY

Marioara RUSU[1]

Abstract

Relatively new concept, sustainable development as economic development is providing the current consumer satisfaction without compromising or prejudicing those of future generations. The main objective of this paper is to identify similar developing structures in rural communities, using significant indicators of sustainability. Methodological approach included four steps: i) defining the rural space ii) selection of indicators of sustainability, what are specific for economic, social and environmental fingerprint; iii) integration and aggregation of indicators; iv) the grouping of communes - features six categories relatively homogeneous. This approach to classification of rural communities can be a model-based approach that could be a start in developing effective strategies for rural development.

Keywords: rural development, rural space, sustainable typology

INTRODUCTION

In recent years, interest in the concept of local development is growing due to globalization of economy, multiplying the phenomenon of relocation of businesses, emerging channels of information, etc.. Most developed countries have expanded their concerns to achieve a balanced economic and social development in the territorial level. This tendency has imposed, primarily due to the important role that local economic development has in the efficient use of existing resources.

STAGE OF THE KNOWLEDGE

The concept of sustainable development means all forms and methods of socio-economic development, whose background is primarily to ensure a balance between these systems and socio-economic elements of natural capital. Relatively new

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concept, sustainable development is a form of economic development that ensures the current consumer's satisfaction without compromising or prejudicing those of future generations. In the seventies, a number of researchers and politicians have pointed out that the traditional model of economic growth and development are facing serious problems, economic, environmental and social. The debate that followed these signals have resulted in the emergence of the concept of sustainable development, a concept enshrined in the report "Our Common Future" prepared by the Independent World Commission on Environment and Development report adopted by the Conference in Rio de Janeiro (1992).

The concept involves the analysis of society behavior in relation to existing resources and corrects this report in order to avoid jeopardizing the existence of future generations. Applying the concept of sustainable development means not only a realignment of economic and political forces at national and international level, but also a fundamental change in human relations with its natural environment.

MATERIAL AND METHODS

Methodological approach taken included the following steps:

1. Defining rural areas. The paper was considered as a rural area the administrative territory of the communes because this is the base from which the statistical information are collected. Use of this level allows a deeper identification of disparities in economic and social development and therefore implicitly favors obtaining results with a higher degree of fidelity.

2. Selecting indicators of sustainability for a specific economic, social and environmental footprint at local level. Considering the indicators a tool for describing and assessing the development of rural communities, in their choice assumed multidimensional nature of rural development and its local specificity. In this context, the best known batteries of indicators were analyzed, both at the international level (Eurostat, 2008 OECD, 2007 EU, 2006) and national level (Florian et al ., 1998 and Rusu, 2005). These studies were used as a starting point for selecting relevant indicators for the approach of this chapter. Existing contributions in the literature were consulted as a guide for selecting indicators. The aim was twofold: to establish a list of indicators and their grouping on the three pillars of sustainability: environmental, economic and social. Thus, identified a number of 36 indicators grouped into six dimensions (demographic dimension, demo-economic dimension, agricultural dimension, industrial dimension, tourism, infrastructure, social dimension and environmental dimension).

3. Integration and aggregation of indicators. The volume of data has led to some difficulty in the capture specific features of rural communities in terms of sustainability. In order to identify common elements of the set of variables to be represented by a common factor, factor analysis was used. Using exploratory factor analysis the number of factors and how variables contribute to the total variance of the factor they represent was determined.

4. Grouping communes. Communes under study were grouped by hierarchical cluster analysis (Euclidean distance, the farthest neighbor method). The objective of the cluster analysis was to classify villages, starting from a range of known attributes (the elements of each class to be as similar to each other). Thus, the database units (communes) were grouped into a number of six clusters. This analysis facilitated the characterization of rural communities, in terms of the three pillars of sustainability.

RESULTS AND DISCUSSIONS

Cluster analysis led to the identification of six categories of rural communities with relatively homogeneous characteristics (Figure 1).

Cluster 1 contains the lowest common number (4). This category is characterized by a rural economy dominated by agriculture, with a weak industrial sector development. The share of arable land is reduced resulting in a limited diversity of cultivated plant species. Livestock sector is also weak. Even tourist potential is important the tourist activity is weak. Road and rail accessibility is good and very good: quick access to European road and rail system. Employment is relatively low. In terms of demographic dimension, the situation is following: small size of villages, average population density and average net migration. In terms of the social dimension, the characteristics of this category are given by a low to medium development degree of health and education services and a medium to high degree of accessibility to telecommunications networks and media. In terms of the environment this cluster is characterized by high values of soil and forests pollution.

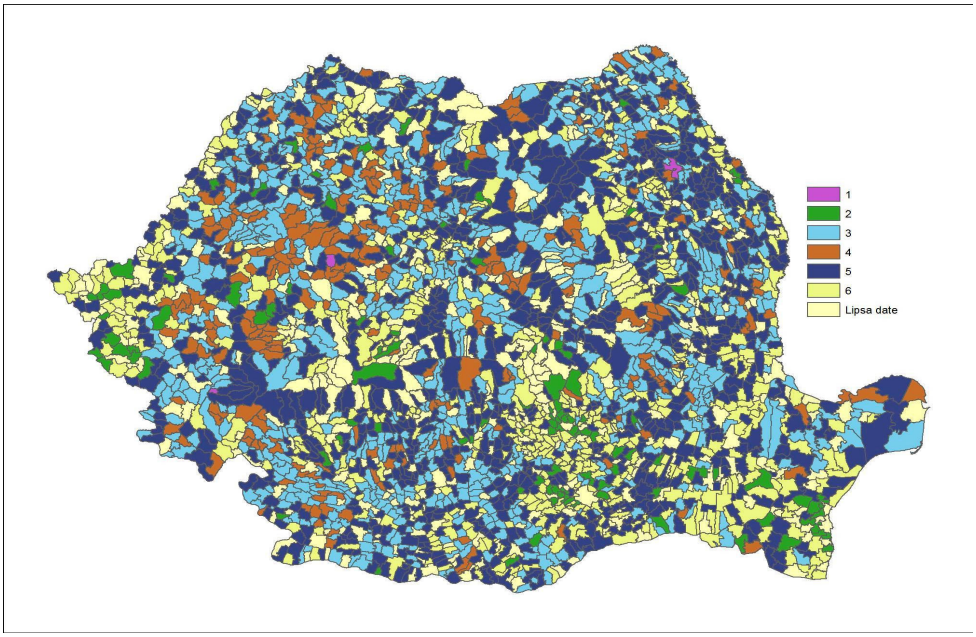
A total of 111 communas are grouped in **cluster 2**. They are located in compact areas, particularly in the counties of Constanta, Prahova, Dambovita, Ilfov and Timis. Agricultural economy is medium diversified. Turistic potential is medium to high and accommodation capacity is average. Agriculture and industry are developed. There is a significant share of employment and also a high of the employment in non-agricultural sectors of economic activity. Technical infrastructure is well developed: in terms of accessibility this fall on a common medium to upper landing. The share of agricultural land is medium to large and the share of arable land is low. Communas falling within this category have good conditions for growing fruit trees and grape-vine. Livestock sector is poorly developed. In terms of demographic dimension, these communas are characterized by high population density with low aging index and an average net migration. In terms of the social dimension, this cluster shows a significant diversity. Most of these communities face problems of medium environment pollution. Forest per capita charge is reduced, because of either high population density or small areas of forests.

Cluster 3 includes 790 communas and is characterized by a relatively uniform localization throughout Romania. Technical infrastructure is medium developed there is good accessibility, both on road and rail as well. There is a significant share of the working population and a medium share of employment in non-agricultural sectors. The agricultural sector is likely to develop a wide range of crops, as the share of arable

land is generally high. As regards diversification of economic activities, there is a real tourism development potential and medium to high tourist accommodation capacitiy. Development of industrial sector registered low to medium values. The social dimension is characterized by a medium level of development in terms of health and education system and high in terms of access to information. In terms of environmental dimension for this cluster is specific relatively high degree of pollution: both land and forests.

Located, especially in Transylvania, a total of 262 communes were classified in **cluster 4**. In terms of economic dimension, this cluster is characterized by high agricultural potential with a large share of agricultural land and a medium to high livestock sector development. Technical infrastructure has a medium to higher development degree. Employment of the population is medium to high and the employment in non-agricultural is low to medium. In terms of economic dimension, a relatively balanced proportion of agricultural land and forests characterizes cluster 4. Social pillar, in terms of sustainability, presents a good case: the rate of net migration recorded averages value as indicators that capture the social services: education and health. Environmental dimension records a wide range of values.

Fig 1. Typologies of sustainability in rural space



(Source: own data processing based on Localities Data Base, NIS, 2008)

A number of joint 991 are grouped in ***cluster 5***. They are located in areas scattered throughout Romania. Agricultural economy is medium diversified. Touristic potential is medium to high and accommodation capacity is medium. Industrial sector is poorly to medium developed and the agricultural sector is medium to high

developed. There is a significant share of employment and a relatively low share of employment in sectors of nonagricultural economic activity. Technical infrastructure, both road and rail is medium developed. In terms of accessibility of these communas are situated on medium to higher level. Livestock sector is medium developed. In terms of demographic dimention this cluster is characterized by high population density with low aging index and an average net migration. In terms of the social dimension this group shows a significant diversity. Most of these communities face medium problems of environmental pollution.

Cluster 6 contains 528 communas and is characterized by a relatively uniform localization throughout Romania. Technical infrastructure is medium developed: there is a good accessibility on road and rail. Significant share of the working population is employed and the share of employment in non-agricultural sectors is average. The agricultural sector is expected to develop a wide range of crops and the share of arable land is high. As regards diversification of economic activities it is based on tourism development: turistic potential is medium to high and tourist accommodation capacity is medium. Development of industrial sector registered low to medium values. The social dimension is characterized by a medium level of development in terms of health and education system and high in terms of access to information.

CONCLUSIONS

The main objective in this paper was to identify rural communities with similar sustainable development structures, using significant indicators of sustainability that led to the shaping of six different types / clusters. The approach taken was intended to draw attention to the fact that any proposed strategies / policies should start from existing reality and the Romanian rural area has, as we have seen, specific characteristics. In general terms Romania need for a specific concept of rural development.

This approach for the classification of rural communities may be an approach that, in future, could be for both local governments and central government, a startup based in developing effective strategies for rural development. In addition, the existing database, including a large number of indicators, harmonized for the entire studied rural area could be a real support for local actors in the identification of specific areas of action.

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ROMANIAN RURAL AREAS TODAY: FROM UNDERPERFORMANCE TOWARDS SUSTAINABLE DEVELOPMENT

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Abstract

EU cohesion policy measures aim to overcome interregional disparities and strengthen backward regions, while rural development policy should contribute to the better standard of life of rural inhabitants. To achieve synergy between these policies (and many others), a stronger linkage is needed between the development strategies of regions and the strategies of development formulated by component localities. Competitiveness has become a key term in economic theory in general, and in the EU in particular.

The problem of the sustainable development of the rural areas constitutes a high priority for Romania as a new member of the European Union. This can be entailed by implementing a coherent strategy that can realize a balance between the need to preserve the economic, ecologic and socio-cultural area on one hand, and the tendency of country life modernization, on the other side.

Although the Romanian rural area hosts a rich culture with a strong traditional character, with regional differences, this cannot fully put into value its resources, and a paradoxical scarcity is maintained, due to the lack of attractiveness and promotion of rural areas.

Key words: rural area, competitiveness, rural policy, sustainable development

Introduction

The economic, social, political and ecological dimensions of the rural environment are complex and have multiple implications, starting with theoretical and practical reasons. The process of urbanization that takes place at world-wide level has become one of the global problems of mankind, because of the disparities created

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between the countryside and the city, which are materialized in the cultural, economical and social aspects that are synthesized in the terms of urban and rural civilizations, which define the different realities of the geographical space.

On the other hand, there have been deep changes in the rural area, therefore the traditional image of the village with its specific cultural array is going through a profound transformation, tied to the contemporary technical progress which firstly influences the rural economy, but also the elements of comfort, civilization, cultural traditions, education, spiritual life, etc., in the rural world.

The practical implications of the rural space notion are related to the legal elements, to the strategic and operative actions tied to the implementation of the regional development policy, which imply the preferential use of resources in order to achieve the economical-social cohesion and other priority objectives of the European Union.

The stipulations of the Council of Europe recommendation no. 1296/1996 regarding the European Charter for Rural Areas define this notion as being determined by those areas that belong to townships and outer-urban regions where the economic activities that take place are related to the vegetal and animal agricultural production, forestry production, fishing and water-crops, the industrial processing of the agricultural, forestry, fishy, and water-crops products, as well as handcraft and small industries activities, and rural tourism and recreation services. This definition of the rural area takes into account the occupational identity of its population, to which is necessary to add the cultural identity and the identity tied to the specific social relations.

According to the reasons mentioned before, the complex approach of the rural area offers the possibility to identify the specific functions performed by the rural space, such as:

- the economic function – has as a main objective the production of agricultural products and other goods from the productive branches of upstream and downstream the agriculture, as well forestry, handy-craft, etc;

- the social-cultural function – keeps in sight the preservation and development of traditions, customs, cultural creations and social relationships specific to the rural area;

- the ecological function – pursues the achievement of a sustainable development, in full accordance with the elements of the natural environment.

From the perspective of the EU directives and community regulations, as well as the strategies and the national regional programs, thenceforth we'll display the present features and action direction towards a sustainable development of the rural region in Romania.

The current features of the rural region in Romania

The rural area consists of approx. 12,000 villages that house around 44.9% of the entire Romania's population. 67% of the rural population is involved in agriculture, 17% work in food industry and the other 16% practice non-agricultural activities; 30% of rural inhabitants work on subsistence and semi-subsistence exploitations of 1.17

ha and respectively of 3.3 ha, representing about 97% out of the total of approx. 4 million agricultural exploitations; one of the major problems of the rural areas is that its population grows older.

According to the national legislation, the Romanian rural area covers 87.1% of the territory and 44.9% of the population. Considering that Romania accounts for 6% of the European Union's surface, and the population makes up for 4% of the EU's population, we can assess the major development potential the Romanian rural space has in the national and international context. According to the data supplied by the National Institute of Statistics for the year 2007, the agriculture's contribution to the Gross Domestic Product (GDP) was 6.6% and although the population working in agriculture has dropped, it still holds a high weight of 29.5%, but the number of employees in this branch of the economy doesn't exceed 3%. From the active population's total, about 45% comes from the rural area, which shows the human resources potential the rural region has. The unemployment rate in the rural environment was 4.9%, under the average of the national economy, which was 6.4%, but those numbers don't include the disguised unemployment that is more acute in the rural region.

The rural population has a continuous lowering tendency because of the aging process which leads to a negative natural increase of population, to which the international migration is added. The internal migration rate from the urban to the rural is positive for the last the years, but it can't compensate for the down-fall caused by the two tendencies and is representative for the population over 45 years old, the younger population being attracted towards urban areas. The stabilization of the population in the rural region is one of the fundamental problems of the sustainable development.

The education level of the population in the rural area is lower than the urban populations. This is a factor that attracts towards cities young families who want to ensure a future for their children through a more performing education.

The majority of the active population in the rural area (64.2%) works in agriculture where low productivity is recorded, and as a result the incomes are lower than in the urban. The income per capita in the rural for the year 2003 was only 77.6% from the income per capita in the urban, and the gap is continuously growing. Agriculture represents the main income source in the rural area (it generates over 40% of the total incomes), but the incomes from the farmers' housework are regularly lower than the ones recorded in the rural households that also have incomes from salaries, obtained by doing other activities. In order to have a sustainable development, diversifying the activities that bring incomes is a must-solve problem.

As a result of the low incomes, the poverty rate in the rural region has been higher than the rate in the urban area throughout the years and, although both rates decreasing, the gap became relatively more significant (47.8% rural poverty compared to 25.9% urban poverty in year 2000, 38% rural poverty compared to 13.8% urban poverty in year 2003, 22.3% rural poverty compared to 6.8% urban poverty in year 2006). The most vulnerable persons to poverty are the ones who work in agriculture on their own, their poverty rate being 22%.

Regarding the economic activities run in the rural environment, agriculture is

still the main occupation of the inhabitants. Although Romania has a high agricultural potential, the agriculture remains a non-performing sector because of its organization manner, tied especially to the structure of the rural fund, developed after the privatization process. In 2005, from the total of 4.256.152 agricultural holdings, 4.237.889 were individual agricultural holdings (99.6%) and only 18.263 were units with legal status (0.4%). The individual agricultural holdings use an area of approximately 2.2 ha, and the medium size of the areas used by the units with a legal status is 269.2 ha.

Considering the average size of the used areas by the individual agricultural holdings, which are usually plotted (an average of 3.7 ha/holding), it is practically impossible to implement efficient agricultural technologies. That's why in Romania most agricultural holdings practice sustenance agriculture, which is non-competitive and unsuited to competitive market conditions. In the European Union the average size of a farm is 12 ha and in the Czech Republic it is 80 ha.

The agricultural production is vulnerable to the natural conditions and especially to drought. The farm equipments owned by individual agricultural holdings are insufficient and outperforming. The population which works in sustenance agricultural holdings is generally old and its technological knowledge is empirical.

The sustenance agricultural holdings maintain the general agricultural efficiency to a low level and will have to cover a restructuring process that especially targets the improvement of the land structures, which will lead to viable exploitations. This can be achieved through specific actions of agglomerating the land, such as: selling-buying, lease, associations, land swopping.

The agro-food industry is one of the main ways to capitalize the agricultural products. The development of this industry as closer as possible to the place where the products are obtained is necessary for improving the economic efficiency and the diversifying of the economic activities within the rural region. Although the production capacity of the agro-food industry in Romania is relatively developed, it still confronts with many problems tied to obeying to the EU standards regarding food safety and the quality of the production. The rational use of the production capacities and their optimum dimensioning, the adequate technical endowment and the supply with raw materials are problems which must be solved in order to increase the enterprises' competitiveness. The production of traditional products also constitutes an opportunity for the economic growth in the sectors of dairies, meat, bread manufacture and drinking products.

The handy-craft activities and services could become a more important segment of the rural economy. However, these activities are still poorly developed, although there is a potential which could contribute to improving the quality of life and increasing the attractiveness of the rural area.

The rural tourism and agro tourism represent activities that generate alternative incomes in the rural area, which can be developed by taking into account the natural and ethnographic potentials, the folkloric traditions, the agricultural practices and the architecture specific to the Romanian countryside. In Romania this form of tourism has been developed in areas with a special natural potential and around sightseeing spots.

Another important potential for the tourism practiced in weekends is represented by the rural areas outside cities. Although the number of agro-boarding-houses has grown from 343 in the year 2001 to 1753 in 2007, the tourism infrastructure still doesn't cover the demands of the tourists from the quantity and the quality point of views.

Despite all the efforts put into accessing European pre-joining and structural funds, the transport infrastructure is still poorly developed in the rural region. The length of the roads in counties and townships was 63970 km in 2005, which represents about 80% from the total. Only 6774 km (about 10.6%) from the counties and townships roads were modernized.

The public infrastructure which ensures the water, sewage and marsh gas supplies is still very rare in the rural area. In 2005 from a total of 2851 townships, only 742 (26%) were connected to the natural gases, 1620 (56.8%) had running water and 693 (24.3%) had sewages. Not all the villages that are a part of those townships have the mentioned utilities.

The natural environment, the airy landscape, the flora and fauna specific for the rural area represent its irresistible attraction and a priceless treasury for humanity. The natural resources are well preserved, the variety of the traditional landscapes and the biological diversity are the main characteristics of the rural environment in Romania. In many areas, however, certain industrial agriculture practices made their mark on the environment: soil pollution, especially by using synthesis chemical substances for plant-health treatments, the artificial fertilization of soils, slopping vegetal and animal residuals; the air pollution through treatments applied to crops; water pollution, etc. The abandonment of arable areas after 1990, narrowing the pasturage, the lack of land improvements have led to soil erosion, the degradation of meadows and of the landscape and other phenomena with negative consequences on the environment.

The cultural and spiritual life of the habitants in Romanian villages is an important segment of the rural space's European treasury because of its richness and authenticity. Traditions, customs tied to different family events or religious celebrations, art and other folkloric creations constitute elements that round up the real dimension of the rural area. The Romanian rural space includes many antrophic spots that have an intrinsic value, such as: archaeological sites, historic centres, churches, memorial houses, museums, libraries, community centres, buildings with an architectural value, etc.

The mentioned realities of the rural region make apparent the need for a new approach regarding the policies meant to promote sustainable development by making use of the economic, social, cultural and environmental aspects of the Romanian village.

Sustainable Development of Rural Areas

The new philosophy of rural area development is based upon the concept of sustainable rural development, which entails the harmonious blending of the agricultural (and forestry) component and the non-agricultural rural economy component, based upon the following principles:

- harmony between the rural economy and the environment (economy – ecology equilibrium), with a medium and long term approach;
- rural area naturalization, by preserving the natural environment mostly intact and designing the man-made environment in accordance to the natural environment;
- the use of local natural resources, mainly of renewable resources, in the rural economic activity;
- diversification of the agricultural economy structure through plural-activity, firstly by developing sectors of non-agricultural economy and services.

The new philosophy of rural area development, in its essence, is based upon its characterization from the European Charter as "a precious landscape space, fruit of a long history, whose preservation is a vivid concern of the society". The rural area can carry out its supply, recreation and equilibrium functions, as long as it remains an attractive and original living space, equipped with good infrastructure, a viable agricultural and forestry sector, local conditions favourable to non-agricultural economic activities and an intact environment with a well-cared landscape.

The promising qualities of the Romanian agricultural space are the natural, ecological premise for our products' competitiveness. The basic agricultural products (wheat, maize, sunflower, soybean, vegetables, fruit, meat, milk, etc.) obtained under medium technical conditions, can be perfectly competitive with the products from other countries, while the quality provided by the soil and weather factors to many Romanian agricultural products may be even higher.

A new rural strategy for Romania, by implementing the sustainable rural development tools, should result in the Romanian rural structures getting compatible with the EU rural structures in a short period of time provided that the need for a modern infrastructure, correlated with the present needs of life in the countryside and with the complex rural economic activity, is not overlooked.

Romania presents great differences between the rural area and the urban area both from the point of view of physical infrastructure and the social infrastructure. The lack of basic equipment and modern utilities from the rural homes should be one of the first issues on the agenda as it is a serious health hazard, increasing the risk of sickness among inhabitants.

We propose that improving the quality of life for the rural population can start by its income increasing, through:

- stimulating the emergence of small and middle enterprises for the primary agricultural products processing or other non-agricultural profiles, leading to the integrated use of human resources from the rural communities, to the increase of rural production value and the gradually decrease of the percentage of the agricultural production value in the total rural production structure;

- encouraging holders of capital and know how to invest in the rural development, bringing better management based on adequate organization and equipment and thus increasing the agricultural efficiency.

Joining the European Union has put on the line for our country new challenges and objectives. One of these objectives is the sustainable development of the rural

region and it constitutes a priority for the agricultural policies. This objective can be achieved by defining a few political options and adequate strategies that will meet the consensus of the involved authorities, economic agents and population. Taking into account the human, natural and cultural resources and the implicated technical capital synthesizes the road to a sustainable development of the rural region.

Conclusions

The analysis presented in the previous chapters has emphasized the socio-economic, natural and cultural potentials of the Romanian space, its current features and the future development directions. The sustainable development of the rural region is a present and future option of the rural policy that seeks its preservation and improvement, the growth of the economic competitiveness and improving the quality of life.

Our study of the present agricultural structures (with their underperformances) presented the structural difficulties that need to be overcame: the predominantly primary character of the rural economy and of the consumption of resources by the rural population, the Romanian countryside facing a high poverty rate, with the tendency to become chronic poverty which makes the rural economy shift towards the natural, subsistence economy and get isolated from the market economy.

Stimulating the complex and sustainable development of the Romanian village economy could start by gradually shifting from subsistence economy to a competitive, commercial economy immerging into the competitive contemporary European business environment, through an infusion of capital, making the cohesion funds and other European instruments accessible to the rural population, educating the older generation to the new way of relating to their environment and the younger generation to embracing the opportunities the rural areas embody.

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INDICATORS FOR INTEGRATION OF ENVIRONMENTAL CONCERN INTO THE AGRICULTURAL POLICY

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Abstract

Links between the rich natural environment and farming practices are complex, agriculture continues to be the main user of the countryside, and a determinant factor of landscape and environmental quality, therfore in recent years more attention was paid to the integration of environmental policy objectives in agricultural policy. The paper aims to analyze the main environmental requirements of Common Agricultural Policy in relation to the indicators used to measure integration of environmental concern into the CAP.

Key words : Agriculture, environment protection, indicators,integration

INTRODUCTION

EU policies, particularly the Common Agricultural Policy emphasizes more and more the risk of environmental degradation, while encouraging farmers to continue to play a positive role in maintaining the environment and rural development by using measures to ensure increased profitability in different regions. Some measures to support agricultural policy, caused damaged of natural capital through erosion, water pollution and biodiversity loss. Follow the Gothenburg European Council was agreed that "economic performance must go in correlation with sustainable use of natural resources", principles that have been also confirmed in the Lisbon strategy.

Environment and Common Agricultural Policy

First agri-environment schemes were introduced in 1992, after the 2003 and 2004 CAP reforms represented a major step to sustainable development of agriculture; sustainability is supported by a number of initiatives, including cross-compliance.

Agenda 2000 reorganized orientation of instruments of development policies to strengthen agricultural and forest sector and improve competitiveness in rural areas and preserve the environment and rural heritage. Therefore, the need to create a new framework for rural development as the main starting point in restoring economic and social network in rural areas has become indispensable.

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Development and implementation a policy of rural development has become with the CAP Agenda 2000 the second pillar of Common Agriculture Policy. Together with the first pillar - market support through joint organization of market, rural development policy has become an essential part of the European development model.

It has been passed to adoption of measures that put based of new EU agricultural policy, measures whose main purpose is to apply the Community Strategy for rural development in member countries, a greater emphasis was gave to the environmental dimension of agriculture, great importance had agri-environment measures, which generally have been assessed positively by the population and are also well accepted by farmers. Agri-environmental measures are intended to provide additional payments to farmers who provide environmental services and maintenance of the country-side site, on a voluntary basis (which means more than the minimum requirements in the field). The purpose of agri-environmental measures is to strengthen the role of farmers and encourage their actions to conserve biodiversity and rural landscape diversity.

Reform effects on the environment were different. Intensive models of culture and farming were removed. Can be identified in this respect some positive aspects: more rational use of fertilizers and pesticides to reduce the guaranteed price, environmental benefits generated by the restriction of production areas, stimulation of a better territorial distribution of livestock.

2003 and 2004 CAP reforms represent a major step forward in improving the competitiveness and sustainability of farming in the EU and provide the framework for future reforms.

A simplified system was proposed to new Member States: a system known as the Single Area Payment Scheme (SAPS). Receiving direct payments to farmers under the SAPS is subject to compliance with a set of environmental standards and animal and plant health through cross-compliance system, farmers must comply with 19 measures and a set of standards aimed at protecting agricultural land, known as The good agricultural and environmental practices - GAEC. The introduction of these standards aimed, first to ensure a minimum level of maintenance of agricultural land to prevent their abandonment, a possible threat during the decoupled payments and maintenance, on the other hand of areas occupied by pastures, partly in order to slow an massive conversion toward production of arable crops and to preserve the environmental benefits associated with certain types of grassland.

Based on the document Towards a Sustainable Agriculture, Commission presented a package of proposals for CAP reform, discussed by the Council of Ministers on Agriculture and Fisheries on January 2003. After difficult negotiations, in which opponents of reform were particularly net recipients of financial funds, it has reached a consensus on the package on June 2003.

One of the main elements of reform is to follow certain standards required by farmers as the environmental, food safety, animal and plant health. The inclusion of environmental, food safety, animal health and welfare increases consumer confidence and improve the environmental sustainability of agriculture.

In accordance with rural development policy, in 2007-2013, the European Union allocates 88.3 billion euros for rural development projects in 27 Member States. Land administration projects that support and improve the environment must receive at least 25% of this amount. However, in practice, national and regional authorities often decide to allocate a greater percentage of the budget for environmental measures.

In February 2006 it was adopted a European strategic guidelines for rural development. Rural development policy has been strengthened to meet the challenges of rural economic, political and environmental aspects century. The new legal framework and European Agricultural Fund for Rural Development emphasize the need to stimulate growth and create jobs in these areas to enhance sustainable development in accordance with the Lisbon and Gothenburg Council. As regards environmental protection are set a series of priorties: promoting environmental services and agricultural practices that protect animals, cultivated landscapes and forests, climate change, contribution of organic farming, promoting territorial balance.

On November 20, 2007, the EC started the public debate about improving the common agricultural policy. Currently, a new structure of the CAP reform is being discussed at European level. Its importance can not be underestimated, because on the results of so-called "Health Check" CAP will depend developments of multi-annual budget plan by 2013.

New challanges

Currently, crucial challenges are raised for agriculture: climate change, water management and bio-energy. Of these, climate change influence evolutions of two areas. Much of the uncertainty concerns link on rainfall, extreme weather phenomena, the temperature, available water resources and soil conditions.

The EU policy also needs to meet public expectations for a sustainable agricultural policy, to turn on sustainable production patterns, especially when climate change affects both product capacity and alimentation of population.

Another issue is the sustainable use of water resources, as already provided health control of CAP will enables analyse of including water resources management aspects in the relevant CAP instruments category. It is essential that EU agriculture to have sustainable management of water resources, failing of this pressure both the quantity and quality of water used in agriculture will increase considerably.

Biodiversity decline remains a major challenge, and this is exacerbated by climate change and water demand, agriculture plays a key role in protecting biodiversity. Traditional agricultural practices have shaped the landscape and affect biodiversity, the existence of many of the rarest species actually depend on the continuation of traditional agricultural practices.

A significant challenge for agricultural policy is to provide economic incentives to farmers to continue using agricultural practices that protect biodiversity.

CAP-HC examines how the CAP could consider these complex areas, but after 2013. One option could be to introduce measures concerning climate change and water

resource management in cross-compliance measures. Another alternative would be to supplement funds for rural development so that under this pillar to be supported such measures.

Agri-environmental indicators

In an attempt to integrate the proposals at the international level, the OECD proposed in 1999 a set of agri-environmental indicators, establishing a series of attributes that must be met by the indicators: to be relevant to politicies, to be made on sound scientifical basis and to be measurable.

At the meetings on Cardiff (June 1998), Vienna (December 1998) and Helsinki (December 1999), the European Council asked the Commission to report on the integration of environmental concerns into Community sectoral policies and asked for development of a set of indicators to monitor integration.

In January 2000 the European Commission published a policy document „Indicators for integrating environmental issues into the CAP", which identified a set of agri-environmental indicators to serve the following purposes:
- provide information on environmental conditions in agriculture,

-monitor the links between agricultural practices and their environmental effects,

-provide contextual information, particularly concerning the diversity of agro-ecosystems EU

-asses the measures on which agricultural policies promot rural development and and environmentally sustainable agriculture,

- inform on the overall assessment process of agricultural sustainability.

To improve and develop agro-environmental indicators system was launched in 2002 IRENA project (Indicator Reporting on the Integration of Environmental Concerns into Agricultural policy).

IRENA project results are the follows:

- 40 indicators and sub-indicators and corresponding data sets,

- an indicator report, which reviewed the agri-environment interaction on the basis of indicators and describes the development and progress on development of agro-environmental indicators;

-an indication that the assess report on integrating environmental concerns into the CAP, which assesses the usefulness of indicators for policy evaluation system policy;

-an evaluation report, which examines the implementation of the IRENA operation, evaluates the indicators and data sources used, and identify areas for future work.

In 2006, the European Commission adopted 28 indicators of environmental agriculture (AEIs) to assess the interaction between CAP and the environment.

The indicators are identified under the DPSIR (Driving forces - Pressures and benefits - State/Impact - Responses) analytical framework:

Tabel 1 Consolidated agri-environmental indicator set

Domain	Sub-domain	Title
Responses	Public policy	Agri-environmental commitments
		Agricultural areas under Natura 2000
	Technology and skills	Farmers' training level and use of environmental farm advisory services
	Market signals and attitudes	Area under organic farming
Driving forces	Input use	Mineral fertiliser consumption
		Consumption of pesticides
		Irrigation
		Energy use
	Land use	Land use change
		Cropping patterns
		Livestock patterns
	Farm management	Soil cover
		Tillage practices
		Manure storage
	Trends	Intensification/extensification
		Specialisation
		Risk of land abandonment
Pressures and benefits	Pollution	Gross nitrogen balance
		Risk of pollution by phosphorus
		Pesticide risk
		Ammonia emissions
		Greenhouse gas emissions
	Resource depletion	Water abstraction
		Soil erosion
		Genetic diversity
	Benefits	High Nature Value farmland
		Renewable energy production
State/Impact	Biodiversity and habitats	Population trends of farmland birds
	Natural resources	Soil quality
		Water quality - Nitrate pollution
		Water quality - Pesticide pollution
	Landscape	Landscape - state and diversity

Source: EC,2010

Conclusion

Development level of agro-environmental indicators is different, some are already operational, their concepts and measurement are well-defined. However, a series of indicators need substantial improvements in order to become fully operational, for example indicators related on benefits and landscape.

In order to improve the set of indicators and their availability for analyses on the integration of environmental objectives is required a unitary monitoring of agri-environmental indicators at national level. Moreover, given the interdependence relation among agriculture and environmental, indicators should assess factors that contribute to agricultural production, but have an impact on environmental conditions.

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RURAL INEQUALITY IN OPPORTUNITIES - A MULTICRITERIAL APPROACH –

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Abstract

The economic and social inequalities take multiple forms. Their complexity and effect upon individual and overall human development are increasingly deep as several inequality risk sources are cumulated. There is a well-known mutual driving effect that the economic inequality causes have upon social inequality, the reciprocal being also valid. The present study attempts to identify the main inequality sources in the rural area: the territory equipment in the first place, followed by the demographic disequilibria, economic development of the area that provides occupational opportunities, social infrastructure and appetence for investments. We propose a theoretical methodology for the aggregation of rural inequality indicators, which enables grouping the communes from Romania into three clusters, depending on the cumulated intensity of the manifestation of factors that describe and/or condition the socio-economic inequalities.

Key words: socio-economic inequality, rural area, Romania

INTRODUCTION

The complexity and size of inequalities, the existing interdependency between the different aspects of people's life and their impact upon human development in general have represented one of the most controversial aspects of the economic and social discourse in latest years, both at global and local level. Briefly considering the conclusions of this type of discourse, the specialists from the World Bank, from the United Nations Development Program and the United Nations Organization make a clear distinction between two categories of inequality aspects: a) *economic aspects* (income distribution, poverty level, occupational status, etc.); b) *non-economic aspects* (health, life expectancy, education, malnutrition, ethnic group, residence region, etc).

The economic-social inequalities are not accidental or isolated in a uniform

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population mass, but they are rather materialized into combined structures of the above-mentioned disadvantages that are mutually intensified. *Equity* is defined in the terms of two basic principles. The former is represented by *equal opportunities:* the achievements in any person's life should be determined, in the first place, by his/her own talents and efforts, more than by pre-determined circumstances, such as race, gender, social or family origin or the country of origin. The latter has in view *the access* to the health and education systems and an acceptable level of consumption. (Paul Wollfowitz, World Bank - 2006).

The investigation of inequalities has been the object of many studies in the world as this aspect fundamentally conditions the human development premises. The different aspects of inequality (of economic and non-economic nature) have potentiation and mutual driving effect; out of this reason, we consider it interesting to propose *an aggregation model of the economic and non-economic inequality indicators. The theoretical model aggregating the inequality indicators* is constructed on the basis of those aspects of inequality with the greatest mutual driving force and permits the evaluation of the socio-economic inequality level that the population in a given area is facing. This model was constructed within the project PN II, Partnerships in priority domains, no. 92072/2008 and is concerned with the socio-economic inequality aspects that the Romanian rural area is currently facing.

Such a unitary and integrated approach of the relevant inequality aspects permits to make a *typology of the rural area by rural inequality level.* The hierarchy of rural communities and/or regions by the socio-economic inequality level reveals the areas that are most vulnerable and less submitted to the inequality risk and enables strategic decisions with regard to the corrective intervention stringency.

MATERIALS AND METHODS

On the basis of the diagnosis analyses of the rural socio-economic inequalities by regions, the analyses made under the above-mentioned project, a set of five criteria has been selected describing and conditioning the rural inequality level in Romania. Each criterion is associated to a number of indicators that describe the inequality level, calculated at the level of commune, on the basis of available statistical data from the NIS local databases for the year 2008.

MATRIX OF SOCIO-ECONOMIC INEQUALITY CRITERIA AND INDICATORS

Criterion 1: **TERRITORY EQUIPMENT –** *provides information on the on-dwelling comfort; rural technical infrastructure as support to rural development – to business environment included. Selected indicators:* Living floor/inhabitant; Quantity of drinking water supplied to consumers for domestic use*;* Simple length of the drinking water supply network; Simple length of the sewerage network; Length of natural gas supply pipelines
Criterion 2: **DEMO-ECONOMIC DIMENSION –** *provides information on the local demographic perspectives, on the disintegration of family values, living attractiveness of the zone and the economic-social opportunities that the respective area is presumed to provide, etc. Selected indicators:* Natural increase/1000 inhabitants; Divorces/1000 inhabitants; Balance of change of domicile /1000 inhabitants; Balance of change of residence /inhabitants; External migration balance/1000 inhabitants.
Criterion 3: **SOCIAL INFRASTRUCTURE –** *provides information on the educational and health infrastructure and its adjustment to the community needs; potential access to ICT, etc***.** *Selected indicators:* Enrolled pupils /teacher; Number of inhabitants / physician; PC/1000 inhabitants.
Criterion 4: **ECONOMIC DIMENSION –** *provides information on paid job access opportunities and the rural population's dependence on the social transfers and agriculture, agricultural land operation intensification, development of economic activities complementary to agriculture, the abilities to promote rural services complementary to agriculture, etc. Selected indicators:*Number of employees/1000 inhabitants; share of arable land in total agricultural land; share of area under vineyards and orchards in total agricultural area; average number of beds/accommodation unit; number of nights spent on accommodation units / accommodation beds.
Criterion 5: **INVESTMENTS –** reveals the projection on the future development potential of the rural community, etc. *Selected indicators:* Number of dwellings finished in 2008 / 1000 existing dwellings.

The theoretical model aggregating the rural inequality indicators that is used in the present study is based on **cluster analysis** as this method makes it possible to classify the objects into homogenous clusters, according to a given set of variables. As the cluster analysis permits the identification of a set of homogenous groups by grouping the elements so that to minimize variation within the group and to maximize variation among groups, it was considered as the most adequate method for the aggregation of inequality indicators.

The cluster analysis of the secondary statistical data available in the commune fiches provided by NIS for the year 2008 enabled a *typology of the Romanian rural area by rural inequality level.*

RESULTS AND DISCUSSIONS

The importance of each of the five selected criteria for the explanation of the community socio-economic inequality level is different, the **factor analysis** revealing the contribution of each of the selected community characteristics to the total variation

of cumulated inequality.

The factors on which the rural socio-economic inequality level mostly depends are those regarding the *demo-social dimension*, the indicators attached to this criterion explaining 31.4% of the total variation of the inequality level. Under this dimension, the most relevant aspects are related to:

Change of residence balance/1000 inhabitants which reflect the demographic desertification risk of rural communities that are economically and socially isolated and are no longer attractive for living.

Table 1. Importance of socio-economic inequality criteria and indicators in explaining the general variation of the inequality level

Criteria	Indicators	% in total variation of cumulated inequality	
		indicators	cumulated by criteria
TERRITORY EQUIPMENT	Living floor/inhabitant (m²/inhabitant)	1.86	24.76
	Drinking water quantity supplied to domestic users (m³/inhabitant)	10.65	
	Simple length of drinking water supply network – km	2.64	
	Simple length of sewerage network - km	3.01	
	Simple length of natural gas supply pipelines - km	6.59	
DEMO-SOCIAL DIMENSION	Natural increase/1000 inhabitants	5.67	31.38
	Divorces/1000 inhabitants	3.70	
	Change of domicile balance/1000 inhabitants	2.64	
	Change of residence balance/1000 inhabitants	14.00	
	External migration balance/1000 inhabitants	5.37	
SOCIAL INFRASTRUCTURE	Enrolled pupils/teacher	5.21	17.12
	Inhabitants/physician	3.81	
	PC/1000 inhabitants	8.10	
ECONOMIC DIMENSION	Number of employees/1000 inhabitants	4.80	23.11
	% arable land in agricultural land	4.22	
	% area under vineyards and orchards in total agricultural land area	4.36	
	Average number of beds/ accommodation unit	6.46	
	Number of nights spent in accommodation units in 2008 / bed	3.28	
INVESTMENTS	Dwellings finished in 2008 / 1000 existing dwellings	3.63	3.63

Source: processing Project PN II, Partnerships, no. 92072/2008 on the basis of statistical information from commune fiches, NIS, 2008

The second demo-social aspect relevant to socio-economic inequality is the natural increase, which reflects the demographic ageing risk, labour force ageing and depopulation of rural communities.

The territory equipment of the rural communities is the second predictor of

inequality, as this explains 24.8% of the total variation of rural inequality. The most important aspect from the territory equipment point of view, relevant for socio-economic inequality, is the dwelling comfort (expressed by the amount of drinking water supplied to inhabitants and the living floor per inhabitant).

Equipment of the communes with technical infrastructure elements (water supply networks, natural gas supply networks and sewerage systems) which, in its turn, has a significant contribution to the explanation of the general socio-economic inequality, as the indicators that measure the simple length of natural gas supply pipelines of the are the most relevant for the general inequality, as compared to the indicators related to other technical infrastructure networks.

The indicators related to the *economic dimension* of rural communities represent the third stage in the order of importance of factors determining the socio-economic inequality level. Overall, the economic dimension explains 23.1% of the total variation of the inequality level.

Among the indicators composing this dimension, the most relevant in the differentiation of communes is average number of beds/ accommodation unit due to the poor development of tourism infrastructure and weak tourism potential promotion.. The second aspect, economically important, is the incidence of contractual relations on the labour market (measured by the indicator *number of employees/1000 inhabitants),* which reflects the access opportunity to a paid job and the diminution of the risk of dependence on own agricultural holding.

Social infrastructure is on the fourth position in the hierarchy of criteria conditioning the distribution of communes on the socio-economic inequality scale, this criterion explaining 17.1% of the total variation of the inequality level. The indicators that measure the social infrastructure development level (load of pupils per teacher, number of inhabitants per physician) have a narrow variation range, the most part of the communes from Romania being characterized by the poor development of these infrastructure elements which make them have a low incidence on the inequality level.

The number of computers per 1000 inhabitants reflects the risk of not having access to electronic information resources. This indicator is the third indicator that explains the total variation of cumulated socio-economic inequality.

The criterion *Investments* has a low incidence upon the general inequality level (it explains only 3.6% of the general variation of socio-economic inequality). Only for the communes from cluster 1 – accounting for only 1/5 of the rural localities – the number of investments in new dwellings is statistically representative, for the other 80% of the communes the share of new dwelling is not significant, which overall also makes the criterion *Investments* be less relevant for the economic-social inequality structuring in rural Romania at present.

The results of the cluster analysis of data series on the rural economic and social inequality led to the division of the communes from Romania into three clusters.

The distribution by clusters of the 2860 communes under investigation is the following:

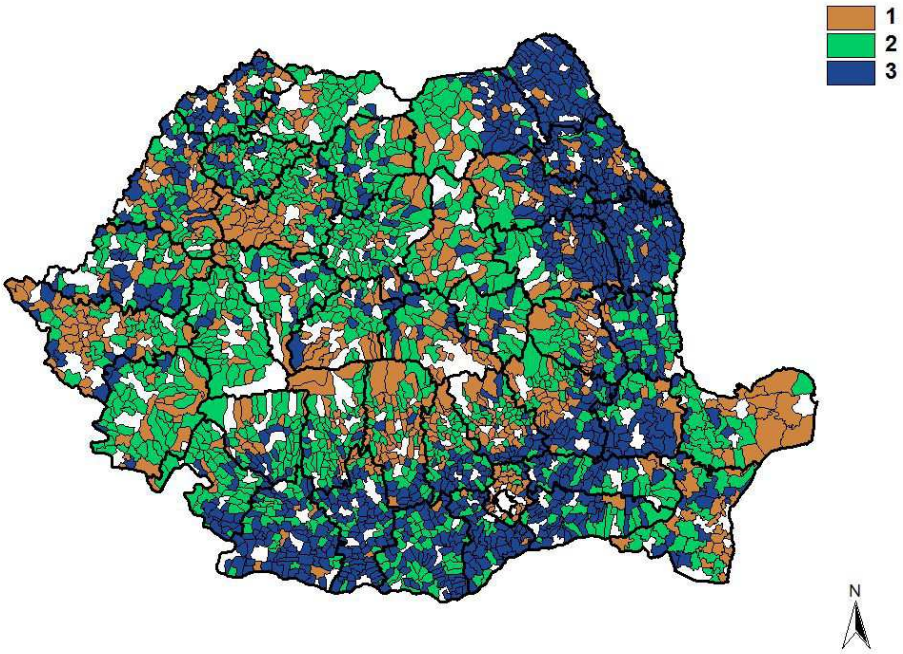
- cluster I – 20.5% of communes

- cluster II – 40.7% of communes
- cluster III – 38.8% of communes

and it is graphically presented in Map no. 1

The three clusters can be interpreted as categories that regroup the communes of the country *according to the cumulated intensity of the manifestation of the factors that describe and/or condition the socio-economic inequalities.*

Map 1. Community profile of rural inequality in Romania



Source: processing Project PN II, Partnerships, no. 92072/2008 on the basis of statistical information from commune fiches, NIS, 2008

Thus, we make the difference between:

- rural communities characterized by a lower rural socio-economic inequality level (cluster I)
- rural communities characterized by a medium rural socio-economic inequality level (cluster II)
- rural communities characterized by a higher rural socio-economic inequality level (cluster III).

It is necessary to specify that the parameters in which this classification was made are characteristic to the Romanian rural area, the distribution by clusters being made by taking into consideration the variation range of indicators throughout Romania's territory.

CONCLUSIONS

The hierarchy of the main inequality sources in Romania's rural area led to the conclusion that the element that mostly conditions the socio-economic inequality in rural Romania is territory equipment. This is followed, as source of socio-economic inequality, by the demographic disequilibria, the economic development of the area providing job opportunities, social infrastructure and the inhabitants' appetence for investments.

The rural communities that cumulate the most economic and social vulnerability sources are grouped into relatively compact areas. These are in general communes located in the plain areas, whose local economies highly depend on agriculture, providing relatively few opportunities for ascending occupational mobility as the nearest areas are also less attractive to investors. Urgent corrective interventions are needed in these rural areas in order to remove the causes of social inequalities as there is the risk of an increase in the negative social and economic effects translated into the absence of available resources and access to resources that should sustain an acceptable human development for the 21st century.

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AGRICULTURAL INPUT MARKET IN ROMANIA WITHIN THE CONTEXT OF THE WORLDWIDE CRISIS

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Within the double context of the worldwide crisis and the crisis of the Romanian economy, of the factors that contribute to the achievement of performance within the economic system an important role, as far as ensuring an increased level of productivity is concerned, is played by the agricultural inputs. The analysis carried out upon the market of agricultural inputs in Romania underline a decrease of performance of the domestic input producers in front of an increased external competitiveness, which also has a strong impact upon the food industry.

Key words: agricultural inputs, performance, competitiveness, market

INTRODUCTION

Within the double context of the worldwide crisis and the crisis of the Romanian economy, of the factors that contribute to the achievement of performance within the economic system an important role, as far as ensuring an increased level of productivity is concerned, is played by the agricultural inputs. Agricultural inputs are machines, products and materials used in the agricultural production process. In the Romanian Chart of Accounts these inputs appear under the form of intermediate consumption and consist of: seeds and propagating material, agricultural machines, products of the chemical industry, fuels (diesel fuel), electric power, thermal energy, water, feedstuffs, construction materials.

As far as the worldwide economic crisis is concerned, it affects the market of agricultural inputs in two ways. The first aspect refers to the slowdown in the acquisition of agricultural inputs, both as quantity and quality are concerned, and the second aspect is linked to the fact that the financial problems of the agricultural producers lead to delays in the payments towards the agricultural input suppliers.

MATERIALS AND METHODS

The analyses are based on EUROSTAT statistics regarding the intermediate consumptions and their evolution in Romania during the period between 2006-2010. The evaluations of the indexes of the uniform values in the trade with agricultural

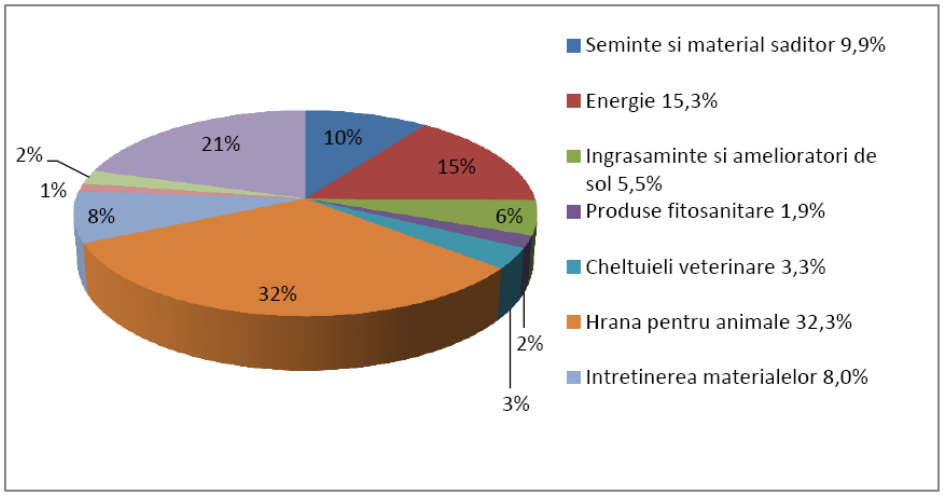
inputs have comprised products, aggregates divided according to the chapters of the Combined Nomenclature (C.N.).

As far as the method is concerned, the evolution of intermediate consumptions during the period between 2006-2010 is used, applying values at constant base prices.

RESULTS AND DISCUSSIONS

During the transition period the structure of agricultural production got out of balance, meaning that within the total agricultural production there was an increase of the plant production to the detriment of the animal production. As a consequence, today we are witnessing in our country within the context of the worldwide crisis a pregnant manifestation of the extension phenomenon of the agricultural production, because it is well known that the share of animal production within the agricultural production constitutes a clue with regards to the degree of intensification in the agriculture of any country.

Image1: The intermediate consumption during 2010-2006



Source: adaptations of the author by using the EUROSTAT data base, values at constant base prices

On the seeds and propagating material market there are over 270 suppliers (part of these suppliers are also producers). The undisputed leader on this market is Semrom, but its share declined from over 29% in 2007 to 20% in 2010. At the same time there are certain important foreign companies who sell their products through different dealers, as for e.g. Pioneer, Monsanto, Saaten Union.

The use of fertilizers and other chemical substances has a remarkable impact upon the yield per hectare. The chemical fertilizers are expensive because of the high level of energy consumption and because of the energy prices. Given

these circumstances, each new allocation of chemical fertilizers has to be done after the economic efficiency of each culture has been exactly assessed. Beginning with 1990 - with small fluctuations - there is a pronounced tendency towards reducing the consumption of industrial fertilizers. Until 1990 between 1200 - 1300 thousand tons of chemical fertilizers (active agents) were used, but starting with 1991 the quantities used have dropped dramatically, varying between 331 and 538 thousand tons of active agents in 2010.

Many international companies that produce pesticides sell their products on the Romanian market. The biggest market shares in 2010 were held by Oltchim (19%), Dupont Zeneca, which sells through Aectra Agrochemicals (8.3%) and Novartis, which sells through Agrointernational (6.6%). Other international suppliers of pesticides are Rhone-Poulenc (6.3%), , Monsanto (5.7%), BASF(5.6%), Ecochem (3.1%) and Makhteshim Agan (3%).

As far as the technical endowment is concerned, i.e. tractors, agricultural equipments and machines, Romania is ranked on the last places in the hierarchy of European countries. Thus, at the end of 1989 the Romanian agriculture hat 129.230 tractors at its disposal, i.e. a number of 17 tractors for 1000 hectares of arable land. This level was 2 times smaller than in Czechoslovakia and Spain. In 2010 there was one tractor for every 54 hectares of arable land in Romania, whereas the average value in the European Union was of one tractor for every 17 hectares of arable land, i.e. three times less than in Romania. According to the "National strategy for the durable development of the agriculture and the food industry" and according to the importers and local producers of agricultural machines, Romania needs over 300.000 tractors worth about 10 billion Euros.

The Romanian market of agricultural inputs is mainly characterized by the offer of agricultural and non-agricultural inputs of foreign companies. There are two main modalities by means of which farmers can procure the agricultural inputs, namely:

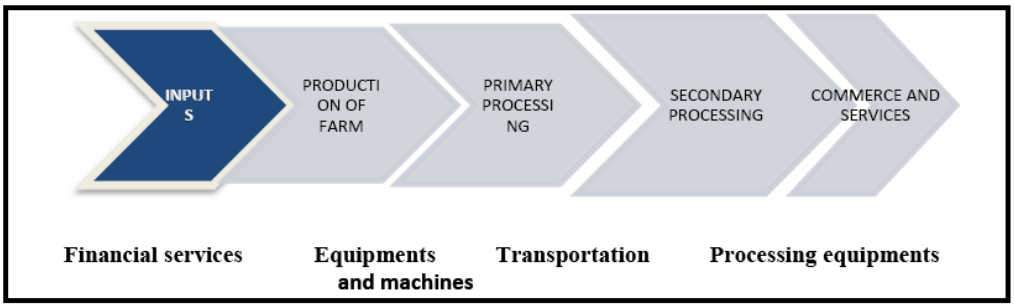
- directly from the producer
- from dealers.

The emergence of input dealers was determined by the quite fragmented agrarian structure in Romania. These dealer-operators are trying to have an integrated supply, the same operator providing both pesticides, seeds, growth stimulators, veterinary drugs and fertilizers. The number of dealers may exceed several hundreds and is generally increasing. However, especially on the seed and pesticide market the sold products come from quite a small number of producers and hence these markets still maintain strong elements of oligopoly.

A development strategy, which is meant to generate performance within the agriculture and food industry should encourage the domestic competition, based on the specialization of the operators, increase of productivity and the efficiency of production.

A development strategy has to take into account the opportunities and synergies on the value chain, the final beneficiary of which is the consumer.

Image2. The chain of agricultural operators



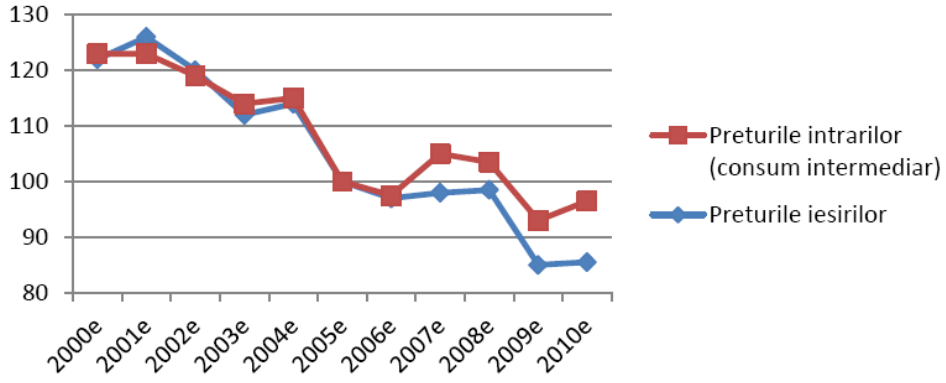
Source: Personal formulation following an Agricover presentation, March 3rd, 2011

The less favorable evolution of the business conditions between agriculture and industry during the "post-liberalization" period is the result of certain distortions of the market that act as a constraint upon the agrarian sector and they are amplified in case of Romania through the following:

- extremely fragmented agrarian structure;
- absence of the channels for the collection and merchandising of the agricultural products;
- lack of professional organizations oriented towards merchandising of agricultural products and towards the supply of inputs;
- absence of a coherent, long-term agricultural financing policy. Practically this policy changes from one electoral cycle to the other, and sometimes even more frequently.

The result was a much faster increase of input prices compared to the prices of agricultural products.

Image3: Price evolution of the inflows and outflows in agriculture



Source: statistic data EUROSTAT

CONCLUSIONS

The results point out the main characteristics of the agricultural input market of Romania, as follows:

1) The structure of the input market is the result of the process through which the modern technology was adopted and has penetrated the Romanian agriculture;
2) The development of the input market and of the private sector cannot take place without an appropriate institutional framework;
3) The success of the input market development is influenced by the applied agrarian policies;
4) Usually it is the small farmers with a reduced buying capacity who are mostly affected by the reforms implemented on the input market. The main problem they are confronted with is the costs for the acquisition of agricultural inputs.
5) The consumption of agricultural inputs has decreased during the period of the worldwide crises, mainly because of the lack of financing in the agricultural sector, the absence of characteristic forms of association for the procurement and supply of inputs, the lack of marketing for the inputs produced on the domestic market, the high prices of agricultural inputs and the worsening of the transactioning and merchandising conditions for these inputs.
6) Presently, in our country the production of tractors, combines, agricultural machines, installations and equipments is reduced because of the increased prices of the raw materials that are necessary for their production (mainly from imports), because of the reduced level of productivity and of the reduced demand for final goods, given that the agricultural producers have a low buying power. The agricultural producers turn to imported non-agricultural inputs because of their more attractive prices and of their efficiency. It is very important to analyze the influence of external shocks upon the market of means of production for the agriculture.
7) The competitiveness makes it necessary to increase the efficiency in agriculture, which can be done only by using quality inputs.
8) Foreign companies often ask for high prices for their inputs on the Romanian market. This happens not only because of the transportation and handling costs, but also because of the fact that the input suppliers operate in a very unsafe economic environment in Romania with a legislation that is modified permanently.

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CONSUMER PROFILE OF KNOWLEDGE IN RURAL- EDUCATION AND AGE

Andra Valentina Tudorica[1], Livia Mirescu[2]

Abstract

Education and therefore learning is the main pillars that form the new generation of society, the student is the focus of the work carried on and the performance gained during years of study.

Problems currently affecting the whole rural educational system by very low possibilities to advance professionally, being found among the determining factors: standard of living low and insufficient funds allocated for education.

In terms of age, the evolution of Romanian rural area is marked by a real decline, manifested in the aging population, low birth and fertiliate, external migration and depopulation of certain areas strong.

Keywords : Knowledge consumer, information, rural, demographic decline

Intellectual dimension of personality appears to be related to the quantity and quality of knowledge and experience action that a person has accumulated, and its possibilities to operate mentally with such content, to respond satisfactorily to the requirements that are addressed the natural and social environment in which they live. (I. Nicola, 1996).

Profile of consumer knowledge in rural areas can be shaped primarily by environmental-impact-factor school education very important.

In rural areas there are problems of access to education, including the most important are: poor conditions for learning, high costs of education, poverty. High schools, schools of arts and crafts works mostly in urban or more common, hence other obstacles in access to education for children (additional costs for accommodation or transport). For this reason many students from rural areas to stop only eight grades.

In about 90% of the communes, the teaching is done mostly by secondary school level. Secondary institutions or post secondary level is very low in number. Thus, only 173 reach common educational process from pre-school to high school or post

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secondary level. Financial resources are insufficient and therefore are declining school performance and dropout is increased. [3]

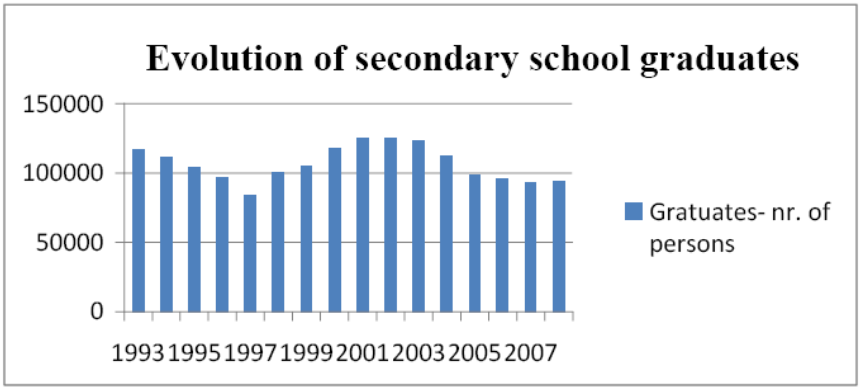
Graduates by level of education and area of residence (primary and secondary)[4]

From 1992-1993 to 1996-1997 school year significantly decreases the number of graduates, but in 1998 an increase of almost 20% of the critical period (1997) - from 84,146 in 1997 to 100,317 in 1998).

In rural areas, the number of pupils in rural primary and secondary school graduates is considerably lower compared to urban areas. Critical period of rural education was known between 1996-1997, when the number of graduates has fallen below 90,000. In the 1993-1994 school year 1992-1993 there was a comparable 4.25% decrease in the number of students from 116567-111627. A positive trend was recorded in 2000 (117.000 people).

In 2000-2003, compared with previous years, there is an increase of graduates, maintaining this value constant up to 2005 when it begins to decline significantly.

Fig. 1 .Evolution of the number of high schools and vocational graduates

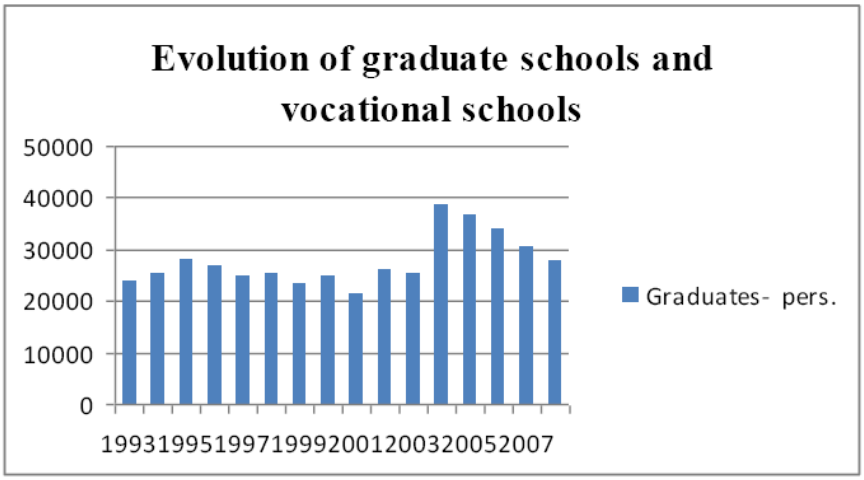


Source: after INS

3 Ministerul Educației şi Cercetării, Statistici, http://harta.bdne.edu.ro/harta/statistici.html?idNomenclator=0

4 http://www.insse.ro accessed on 11.04.2011

Fig. 2



Source: after INS

In the third stage of education, that colleges and vocational schools, the number is between 21,000 and 40,000 graduates, known as the critical period of 2001 and the most favorable in 2004-2007.

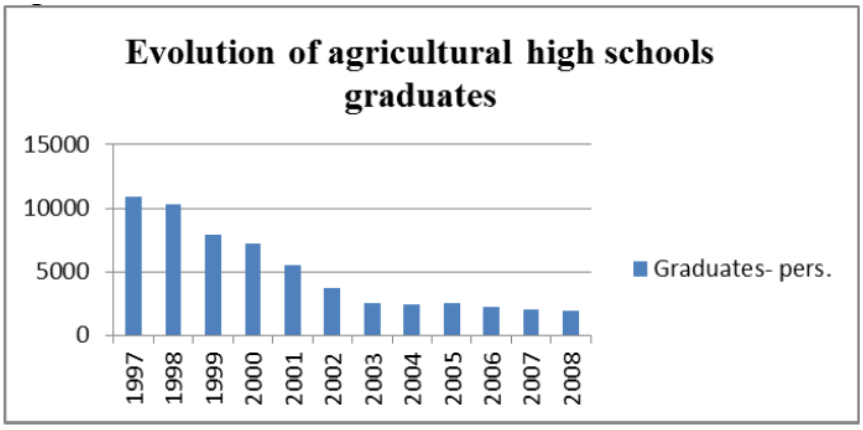
Graduates by level of education and area of residence, agricultural high schools[5]

Agricultural high schools play an important role in education, but the share of their total is less significant.

As shown in the graph, the number of graduates of agricultural colleges continues to decline, registering values even 1800 people for 2008.

Evolution of agricultural high schools graduates

Fig. 3

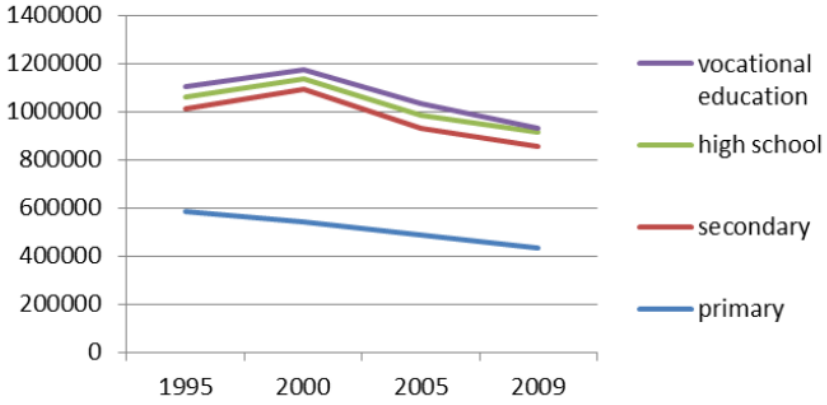


Source: after INS

5 www.insse.ro accessed on 11.04.2011

Current state of education in rural areas can be defined as: lack of financing sources, failure to adapt educational programs to the labor market, dropout and illiteracy default.

The dynamics of the number of students in rural areas during 1995-2009



Source: INS-Tempo

Measures that could be taken to improve education in rural areas include:
1. Training areas and facilities available to enable the development of general authorities, general training in specific field, without being able to offer an effective simulation training specialist associated.
2. Training school network reorganization aimed at ensuring quality in training students.
3. Attracting qualified teachers in schools in rural areas by creating incentives to motivate them.
4. Increasing the share of schools in rural areas to provide level 3 qualification from 7.69% in 2005 to at least 20% in 2013 to create equal opportunities of young people in rural areas, and ensuring adequate workforce needs of local needs.
Vocational and technical education must find effective solutions to attract the school population in rural areas to follow a training course. Although the analysis of labor market results in a decrease in pressure in the labor market, long-term, self-employed population in rural areas will generate increased pressure on the labor market.
Educational pyramid
The national system of university education is structured in four levels: [6]
- Pre- School, including: junior, middle group, large group, preparatory school;
- Primary- including primary-grades 1-4;
- Second, including: lower secondary education, organized into two cycles succeed: gymnasium, classes V-VIII and junior high school or arts and crafts classes IX-X, upper secondary education: upper secondary school classes XI - XII / XIII, preceded, where appropriate, the year of completion;
- Post secondary

6 http://www.edu.ro/index.php/articles/c21

"Using the information relates to the specific purpose that addresses a topic of knowledge. The goal behind the effort to understand the facts will determine the manner of their research: for example, some are concerned, first, the usefulness of that information for their daily life, others to gather information which would enable them to deepen their understanding of theoretical concepts, principles and processes, as some people may be concerned mainly with the functional aspect of things and want to "try".[7]

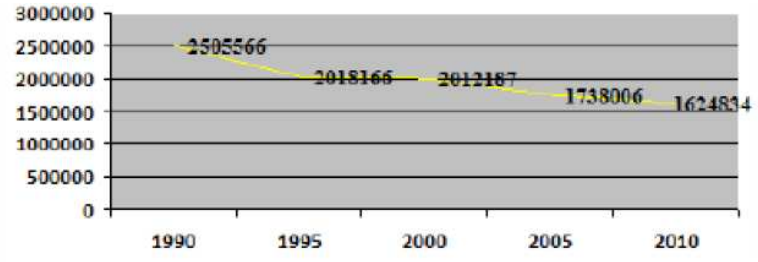
AGE

Romania is the state with the highest percentage of rural population in the EU (45%), being located at a significant distance from other Member States such as Poland (38%), Hungary (34%), Austria (34%), France and Spain (24%)[8]. Although more than a third of registered farmers in the EU are living in Romania, agricultural production achieved is only a tenth of that recorded for the Community[9], which can be explained by the fact that the Romanian rural subsistence agriculture predominates, being practiced to ensure population self-consumption.

Romanian rural areas are facing issues related to aging, negative birth rate, the depopulation of certain areas and migration to urban areas or foreign, all bringing a significant change in rural population structure.

In the period after 1989, the Romanian village has declined in terms of 0-14 years age group the share of total rural population, among the main factors are found: lower living standards, unemployment, uncertainty, and decreasing natural growth. Rural areas has become increasingly attractive for people over 35 who is usually more vulnerable to changes in the labor market in urban areas and who are turning to rural areas where subsistence operates.

Fig.1 Age group 0-14 years

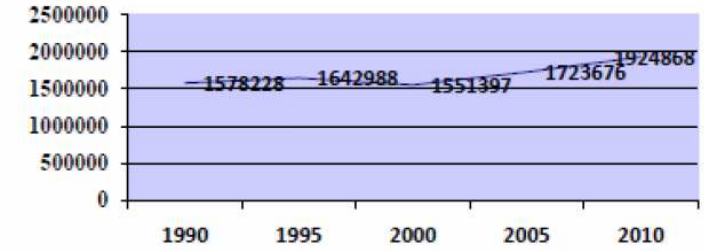


7 Jinga, Olga Ciobanu- Pedagogy, Economic Publishing, Bucharest, 2001

8 NationMaster

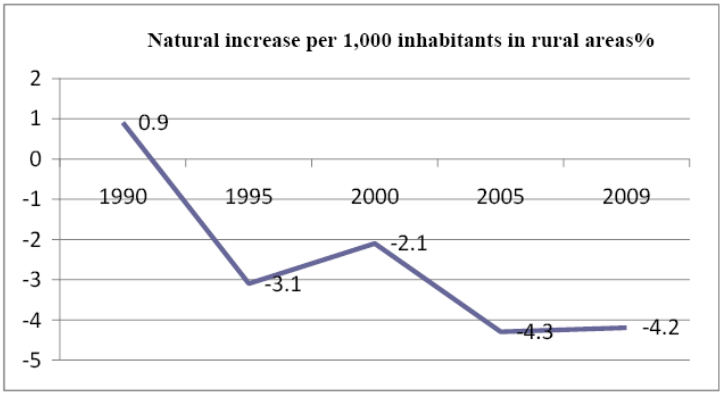
9 World Bank

Fig.2 Age group 35-49 years



Although birth rates in recent years recorded some stability, the continuous degradation of fact, the imbalances that affect the age structure of population, a situation amplified by unexpectedly large size of external migration.

Declining birth rates is a problem facing Europe. To consider a stable population, that simple replacement of generations, thus counteracting mortality, we need a total fertility rate of 2.1. Romania has a 1.38, which means it is below the stabilization of population during 2002-2011 was most relevant in this respect.



Source: INS-Tempo

Although the share of elderly persons increased by a few percent in the last twenty years, the current situation is not critical, there is still a significant sector of middle age. On the other hand, the population over 65 years in 1990 represented only 13% of the total rural population in recent years to deposit the value of 18.5%[10] and growth prospects are even more pronounced .

The most important issues facing rural areas are related to lack of water supply networks and the sewage has implications for comfort in living space, low population continues to increase elderly and young, low birth rate, migration of young people with training, the large share of workers in agriculture, given that agriculture isn't yet a competitive field.

When the standard of living, quality of care and access to health services will meet marked improvement and lifestyle of the population will be oriented to a greater extent in good health, birth rate will know almost automatically, the desired evolution.

10 INS Statistical Yearbook, 2009

CONCLUSIONS

The role of education in the transfer of knowledge is based on the requirement to use advanced technology in almost all fields and thus the formation of specialists to cover labor, which is thus forced to become more competitive. Information becomes an essential requirement for any employee.

Regarding the educational level of rural population, there is a steadily falling trend due to reduced possibilities in primary physical access, poor learning conditions, poverty, unemployment and relatively high costs of education, even for the basic , plus the relatively low proportion of qualified teachers in rural areas.

On the other hand, age plays a role as important in knowledge transfer equation by the fact that rural needs people able to accumulate and use information to transform agriculture into a truly competitive.

After analyzing demographic and educational profile of consumer is emerging knowledge represented by a person of middle age, strongly rooted in rural areas with limited access to education system due to insufficient funds allocated to rural education, the share of low qualified teachers, and because of unemployment, lack of information and stimulation for continuing professional training.

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EVOLUTION AND DEVELOPMENT POTENTIAL FOR INPUTS IN THE ROMANIAN AGRICULTURE

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Abstract

The paper assumes that the trends of the Romanian agriculture structural characteristics and of the main inputs are basic elements in assessing the development potential of the sector. The results show that the current endowment of Romanian agriculture with technical means, together with poor management at farm level cannot ensure timely performance of agricultural operations as required by proper technologies. Several causes of this situation have been identified, including: excessive land fragmentation, low scale use of material and technical base, poor operation of irrigation systems, inadequate farm and inputs management in general. This leads to low productivity and crop losses, compared with the situation in other EU Member States.

Key words: agriculture, holdings, land fragmentation, mechanization, irrigation, labour force.

INTRODUCTION

The main areas covered by the analysis were: (i) the structural changes in the structure of the utilized agricultural area and its distribution by main land use categories, reflected in the data of the 2002 Agricultural Census, Farm Structure Surveys 2005 and 2007; and (ii) evolution of the main inputs (equipment, irrigations, fertilizers, labour force) during the analysed period.

1. Trend of the holdings structural characteristics

The final results of the 2002 General Agricultural Census (GAC) are indicating a severe

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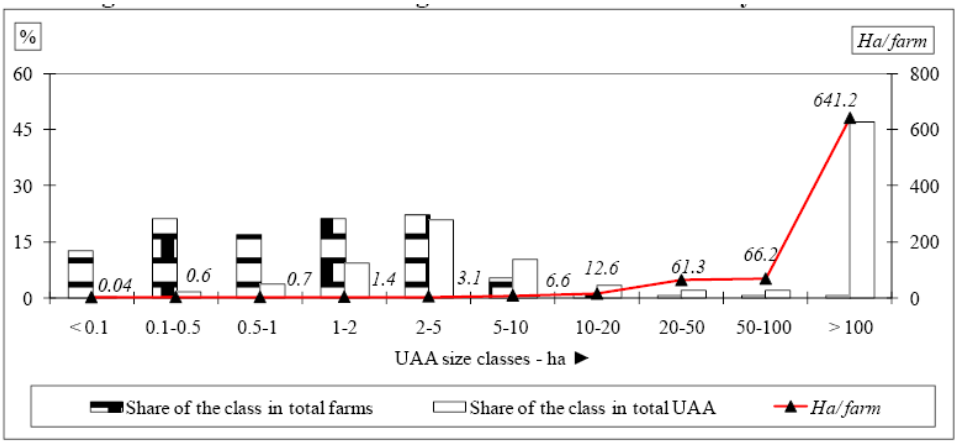
fragmentation of the Romanian land capital (figure 1). Family farms utilized 55.3% of the total agricultural area of the country and had an average size of 1.73 ha/holding. At the other end, the legal entities utilised 44.7% of the total agricultural area of country and had an average size of 274.4 ha/holding[4]. About 0.2% of the total number of holdings, sized over 100 ha, are utilising almost 47% of the total UAA, in holdings with an average size of 641 ha/holding. The largest concentration of holdings (22.2 %) corresponds to 2-5 ha land size category and is utilising 20.9% of the total UAA, with an average size of 3.05 ha/holding.

Census results revealed a *predominant orientation of the family farms towards subsistence agriculture* (table1).

Figure 1: Number of holdings and structure of UAA by size classes



Source: General Agricultural Census 2002, Romania, National Institute of Statistics, 2004

Table 1. Destination of the agricultural production by the farm's legal status

Legal status of the farm	Destination of the agricultural production			TOTAL
	Only for self consumption	The surplus may be marketed	Mainly for marketing	
Number of holdings				
Share in total Family Farms	*76.7*	*21.2*	*2.1*	*100.0*
Share in total Legal Entities	*32.5*	*19.7*	*47.8*	*100.0*
Share in Total holdings	**76.5**	**21.2**	**2.3**	**100.0**
Total Utilized Agricultural Area *(ha)*				
Share in total UAA of the Family Farms	*52.0*	*40.6*	*7.4*	*100.0*
Share in total UAA of the Legal Entities	*21.2*	*18.2*	*60.7*	*100.0*
Share in Total UAA of the country	**38.2**	**30.6**	**31.2**	**100.0**

Source: General Agricultural Census 2002, Romania, National Institute of Statistics, 2004

4 General Census of Agriculture 2002, Volume 1, table 3, pg. 3, National Institute of Statistics

Out of the total Utilized Agricultural Area (UAA), 38.2% was utilized only for self consumption by 76.5% of the holdings, 30.6% of UAA was utilized by 21.2% of the holdings that were occasionally marketing the surplus, while only 7% of the UAA was utilized by the remaining 2.3% of the holdings for obtaining a production mainly marketing oriented. In the period 2002-2007, significant changes occurred in the structure of Family Farms (FF), by UAA size classes and use categories (table 2). The number of FF in the class under 5 ha, diminished by 14%, with different allocation on land use categories (decline by 11% in arable land, by 19% in permanent crops and by 24% in permanent pastures and meadows). An increase by 45% was noticed in the number of holdings in the class 5-20 ha, by 80% in the class 20-50 ha and by 19% in the class over 50 ha.

Table 2. Trend in the number of family farms, by size classes and use categories, 2002-2007 ('000 holdings)

Family farms ('000)	Arable land			Kitchen gardens			Permanent meadows and pastures			Permanent crops		
	2002	2005	2007	2002	2005	2007	2002	2005	2007	2002	2005	2007
< 2 ha	2195	2006	1843	2038	1703	1740	927	771	602	792	620	603
2-5 ha	916	985	928	659	659	673	533	529	513	397	382	362
5-20 ha	244	345	355	175	235	260	153	209	232	96	132	136
20-50 ha	8	15	15	5	9	11	3	9	8	2	4	5
> 50 ha	5	6	6	3	3	4	1	3	3	1	1	2
TOTAL	**3368**	**3356**	**3146**	**2879**	**2609**	**2688**	**1616**	**1520**	**1357**	**1288**	**1140**	**1107**

Source: GAC 2002, FSS 2005, FSS 2007, NIS Romania

The number of Legal Units (LU) experienced a continuous decrease for all categories of land use (Table 3).

Table 3. Trend in the number of LU, by size classes and use categories, 2002-2007 (number of holdings)

Legal Units (number)	Arable land			Permanent meadows and pastures			Permanent crops		
	2002	2005	2007	2002	2005	2007	2002	2005	2007
< 2 ha	3048	1975	1571	1766	1279	937	430	331	230
2-5 ha	2386	1899	1749	1235	1013	967	273	208	181
5-20 ha	4049	3516	3069	2020	1830	1756	466	421	325
20-50 ha	801	672	755	342	344	400	137	125	124
> 50 ha	7127	5480	5881	4072	3561	3566	978	611	466
TOTAL	**17411**	**13542**	**13025**	**9435**	**8027**	**7626**	**2284**	**1696**	**1326**

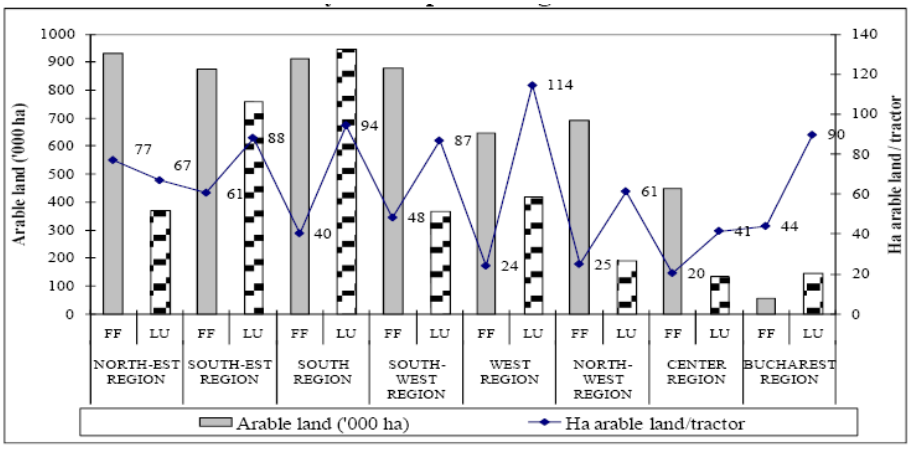
Source: GAC 2002, FSS 2005, FSS 2007, NIS Romania

We can associate these trends with the agricultural policy that **stimulated the association process**, taking into account as well that the increase of the UAA has been a pre-conditions for holdings to qualify for access to development funds.

2. Evolution of the main inputs

In order to estimate the mechanization level of agricultural holdings, the tractor fleet has been investigated by development regions (figure 2). The slight increase in the number of tractors resulted in reducing the load of arable land per tractor, which reached an average of 55.1 hectares of arable land/physical tractor (FSS 2007). The value of this indicator is, however, far beyond the normal parameters needed for the current conditions of Romania (25-35 ha / tractor). There are large disparities by development regions as well: the load varies from 33.2 ha arable land/tractor in Central region to almost 90 ha arable land/tractor in the South-East.

Figure 2. Arable land and arable land/tractor, by legal status of the holdings, by development regions



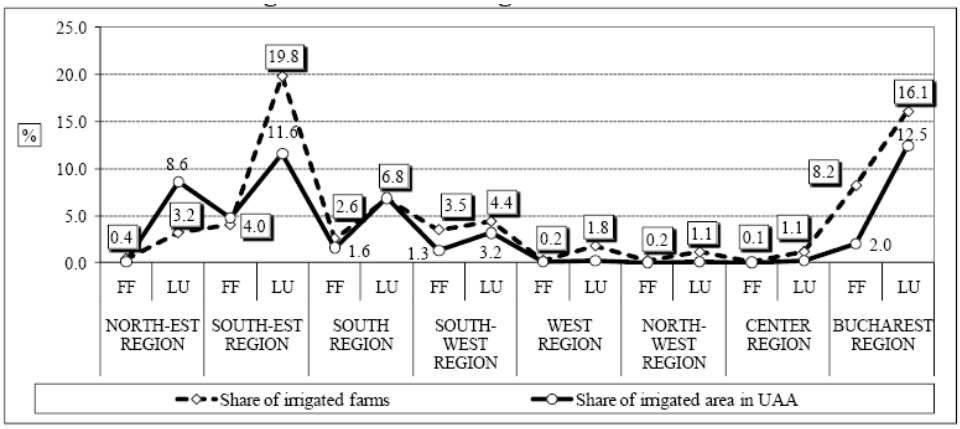
FF = Family farms; LU = Legal units

Source: authors' calculations based on the General Census of Agriculture 2002, NIS, 2004

With 55 hectares of arable/tractor, Romania is attending a low level of endowment, versus 4.2 ha of arable land/tractor in Austria, 5.0 ha of arable land/tractor in Italy, 7.9 ha of arable land/tractor in Belgium, 14.6 ha of arable land/tractor in France, etc.

According to the data of 2002 GAC, few holdings applied irrigation (figure 3).

Figure 3. Share of holdings that applied irrigations in total number of holdings and share of irrigated area in total UAA



FF = Family farms; LU = Legal units

Source: authors' calculations based on the General Census of Agriculture 2002, NIS, 2004

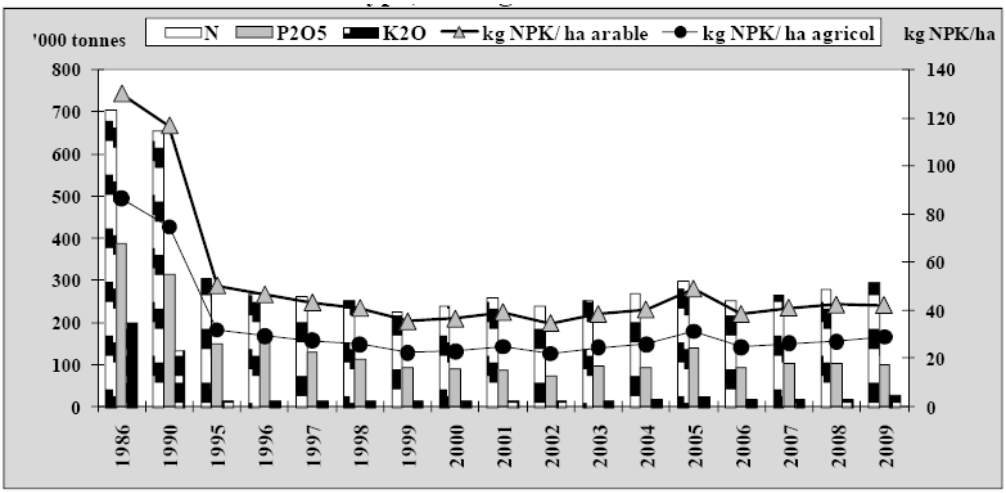
By regions, the share of irrigated area in the utilized agricultural area of the region had the highest values in the region Bucharest (12.5% of UAA), followed by the region S-E (11.6% of UAA), the region N-E (8.6% of UAA), the region South (6.8%) and the region S-V (3.2% of UAA). The largest share of irrigated areas in total UAA belongs to Legal units (LU). The number of holdings that applied irrigations, both under individual and common operation system decreased by almost 60%, while the effectively irrigated area decreased by 57% (table 4).

Table 4. Agricultural holdings and area arranged for irrigation and total irrigated area, by UAA size classes, 2002-2007

			Size classes of the UAA					
			< 2 ha	2-5 ha	5-20 ha	20-50 ha	> 50 ha	TOTAL
Area arranged for irrigation	Holdings number	2002	172,434	60578	14,645	1,040	2,354	**251,051**
		2007	65,262	28,197	7,346	543	898	**102,246**
	Area - ha	2002	117,025	180,195	107,343	31,443	1,074,813	**1,510,819**
		2007	53,388	84,148	56,558	16,409	404,826	**615,328**
Irrigated area	Holdings number	2002	72,053	5,242	1,319	405	803	**79,822**
		2005	31,352	2,719	1,132	93	146	**35,442**
		2007	29,223	2,919	741	139	343	**33,365**
	Area - ha	2002	30,484	14,114	11,128	12,621	332,172	**400,518**
		2005	14,118	8,052	9,315	2,749	58,960	**93,194**
		2007	15,511	8,215	7,538	4,471	137,717	**173,452**

Source: General Agricultural Census 2002, FSS 2005, FSS 2007, NIS

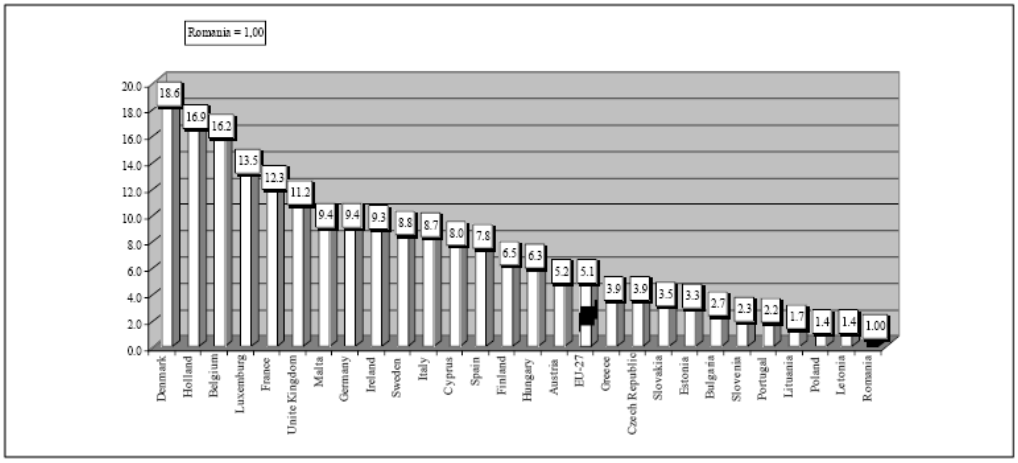
Figure 4. Trend of using chemical fertilizers in Romanian agriculture, by type, during 1986-2003



Source: Romania's Statistical Yearbook, 1987-2010 series, NIS

As compared to the other EU Member States, the amount of chemical fertilizers applied in Romania is 4 times lower, far below the technological requirements (41 kg/ha in 2007). This represents both an asset and a constraint (figure 4). The total consumption of N, P, K kg/agricultural ha correspondingly decreased in the same period, from 86.4 kg/ha in 1986, to about 24 kg/ha (1999-2009 average).

Figure 5. Economic efficiency of utilizing labour (GVA/ person working in agriculture) in Romania, compared to EU-27 (2006)



Source: Calculations based on Agriculture in the European Union, Statistical and Economic Information, Eurostat, 2008

As compared with other EU Member States, Romania has the highest share of population employed in agriculture (30%), in total employed population (2007) (figure 5). On a full-time basis (expressed in Annual Working Units) it has been estimated that only one-third of the total number of persons involved in agricultural activities would be really needed (based on 2002 GAC data).

Conclusions

The low profitability in Romania's agriculture resulted in the decapitalization of this sector and represented the main factor of agricultural production stagnation. The large gaps compared to the EU Old Member States (EU-15) also stem from the differences in the agricultural support policy. The European Union largely supported the increase of the agricultural output as well as farm modernization for more than 40 years. The New Member States will no longer get production subsidies from the Community, the support will go mainly for rural development. The effects of the new agricultural production mechanisms cannot be predicted yet, mainly for the New Member States. The human factor, with a decisive role in the increase of agricultural performance, largely depends on the development of entrepreneurial skills among the large mass of farmers.

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THE INFLUENCE OF FINANCIAL AND MONETARY VARIABLES ON THE ECONOMIC GROWTH IN POLAND

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Abstract

The paper analyzes if money and other monetary and financial variables cause economic activity using quarterly data from Polish economy starting with 2003 to 2011. I made bivariate models to see if the monetary and financial variables from this country cause the real economic activity in the short term or in the long term and the neutrality hypothesis of money is confirmed.

Key words: business cycles, bivariate models, financial market, money market, real activity.

INTRODUCTION

In the context of international economic crisis, the banking system is one of the pillars which provides confidence in certain economic activities as lending to certain sectors of a nation leads to relocation of relative prices of assets. This process is the foundation of economic growth in the next cycle. Nevertheless, the banking system can't achieve an efficient process for sustainable economic growth and reduce uncertainties in the absence of a coherent policy mix.

Many empirical studies have found that a significant contribution to the economic growth are the influence of factors such as degree of financial development or the efficiency of the risk management system(Levine, 2005; Wachtel, 2001). From the perspective of Levine, there are some advantages of the financial development: mobilize resources as deposits from a large number of investors, provide simplification in the exchange of goods and services due to payment services, more efficient allocation of resources by better processing of information relating to customers, increase liquidity in the economy by reducing inter-temporal risk.

After the '90s a sustained process of reforming the banking system in Central and Eastern European countries has started and foreign banks have begun investing, so that by 2004 most of them had a foreign capital.

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Credit to private sector grew rapidly during this period but with different rates, especially in terms of mortgage loans. Heterogeneity among different countries lending may have different causes, such as different degrees of development of financial intermediation or different regulatory and institutional frameworks. Among the determinants of credit factors we can enumerate the income growth and falling interest rates, bad debts or inflation, the implementation of reforms in the banking sectors. Noteworthy is that a household credit boom adversely affect the current account, a common problem in transition economies.

Caporale, G.M., Hassapis,C., Pittis, N.(1998) analyzed the correlation of the following quarterly data series for the period January 1979 and December 1993, using VAR models: the real GDP, the monetary aggregate M1, the short-run interest rate and the long-run interest rate for five industrialized states: US, UK, Germany, Canada and Japan. The interest rates used are 3-month interbank rates, for the short-term interest rate, and 10-year Government bonds yields for the long-term rate. Other monetary aggregate variables were used only if their inclusion changed the relevance of the model. After testing the presence and persistence of the unit root (integrated series of first order), bivariate models (incomplete models) or trivariate models (complete models) have been made, and the most statistically significant models were chosen. The article concluded that SR is a better predictor for Y than M1, with the exception of Germany where monetary aggregates targeting recommended.

In economics the Granger causality (Granger, 1969) is one of the most commonly applied research methods for testing the correlation between variables. A new stage of analysis of causality was made later by Engle and Granger(1987), and Johansen(1988); they used VECM (Vector Error Correction Model) to analyze causality for integrated data series. This method involves testing unit roots and cointegrating the series before testing causality.

METHODOLOGY

1. VAR Estimation

Given a VAR representation with two variables y_{1t} and y_{2t}. Each of this variables depends on it's own past values and the values of the other variables. For example, the VAR model of p = 2 order can be written as:

$$x_t = a_1 + \sum_{i=1}^{2} b_{1i} * x_{t-i} + \sum_{i=1}^{2} c_{1i} * y_{t-i} - d_1 * y_t + \varepsilon_{1t}$$

$$y_t = a_2 + \sum_{i=1}^{2} b_{2i} * x_{t-i} + \sum_{i=1}^{2} c_{2i} * y_{t-i} - d_2 * x_t + \varepsilon_{2t}$$

2. Co integration in bivariate models and estimating the Error corrector model (ECM) for two integrated variables of first order

Bivariate models test the correlation between monetary/financial variables and the economic growth. In order to be cointegrated two time series must be integrals of the same order and the residual variable (obtained by applying OLS to the initial variables)

must be stationary.
Engle and Granger have demonstrated that all cointegrated time series can be represented with an error correction model. Let there be two integrated variables of first order x_t, y_t.
In the first phase an estimation is made using the method of least squares for the relation between x and y: $y_t = \hat{a}_0 + \hat{a}_1 x_t + u_t$.
In the second phase the estimation of the dynamic $\Delta y_t = \alpha_1 \Delta x_t + \alpha_2 u_{t-1} + e_t,\ \alpha_2 < 0$ model is made.
The α_2 coefficient (the force of attraction to equilibrium) must be significant and negative. This way a representation of ECM type is rejected. In this case, the error correction mechanism (the movement that allows the attraction to equilibrium) is of opposite way, and the evolution is moving away from the target in the long term.

DATA AND RESULTS

The data series refer to the economy of Poland and have a trimestrial frequency from 2003-01 to 2011-01. The selected variables are: the rate of modification of GDP regarding the previous trimester (gdp_p), the government bond yields for 10 years (lr_p), the three-month interest rate on the money market (sr_p), and the rate of change for the monetary mass M1. The variables are chosen in order to reflect the monetary and financial market regarding the real economy. Data was collected from the following sites: www.eurostat.com and www.oecd.org.
In the first phase the unit square root was tested using the ADF test. For Poland gdp_p and dm1_p are stationary but sr_p and lr_p are not. In this case a stationarity through differentiation of first order is performed so that the series will be integrated and series of type I (1) are obtained. The new series will be called dgdp_p, ddm1_p, dsr_p, dlr_p.

The condition of integration for the same order was respected for the four variables. In order to emphasize the short term relation between the variables, bivariate models of type VAR are going to be constructed. The following equation systems were obtained:

dgdp_p=-0,03-0.81*dgdp_p(-1)-0.39*dgdp_p(-2)+7,06*ddM1_p(-1)+6,43*ddM1_p(-2),R^2=0.43 (1)

ddM1_p=-0.002-0.09*ddM1_p(-2)-0.73*ddM1_p(-1)+0.0006*dgdp_p(-2)-0.002*

dgdp_p(-1),R^2=0.64 (2)

The first equation system (1 and 2) suggests that the variable specific to the evolution of economic growth has a strong autoregressive characteristic which pays of in time. If the real GDP is growing in the present, then in the future it will drop because the sign of the coefficients between the present and past value is a negative one. This fact is explained by the Ricardian equivalence and the intertemporal choices. The evolution of money supply M2 has a strong multiplicative character on the economic growth. An increase of 1% for the rate of change of money supply will cause an increase of GDP with 7.06% after a month, and 6.43% after two months. The multiplicative effect diminishes over time, which shows that although the initial impact of money

supply growth strongly influences the evolution of GDP, it drops until it reaches the level of equilibrium. In reverse, the coefficients of 0.002 or 0.0006 expresses a weak correlation between variables, GDP having a weak influence on the evolution of monetary aggregate M2. The increase of the money velocity or disinflationary policy measures can be explanatory factors for the lack of coordination between the money supply (endogenous variable) and the economic growth (exogenous variable).

dgdp_p=-0.08-0.49*dsr_p(-2)-0.29*dsr_p(-1)-0.62*dgdp_p(-2)-0.93*dgdp_p(-1), R^2=0.55 (3)

dsr_p=0.002+0.02*dsr_p(-2)+0.53*dsr_p(-1)+0.17*dgdp_p(-2)+0.35*dgdp_p(-1),R^2=0.28 (4)

The short-term interest rate has a different character from that of the money supply because its effect increases from a coefficient of 0.29 after a month, up to 0.49 after only 2 months (equation 3). The meaning of the relationship is inversed, as the interest rate for three months drops, the economic growth process increases, which demonstrates the functionality of the credit channel. But the equation does not say anything about the effectiveness of credit or its effect on long-term GDP. The positive sign between the two variables from the 4th equation indicates an anticyclical behavior of short-term interest rate. According to the first two equations the money supply M1 has a stronger impact on the rate of evolution of the real GDP compared with short-term interest rate. This confirms the lower reliance on credit and explains why Poland was the only country which has not entered into recession although the growth rate of real gross domestic product fell from 5% in 2008 to 1.8% in 2009.

dgdp_p=-0.02-0.27*dlr_p(-2)-0.02*dlr_p(-1)-0.44*dgdp_p(-2)-0.72*dgdp_p(-1), R^2=0.38 (5)

dlr_p=0.02+0.05*dlr_p(-2)+0.34*dlr_p(-1)+0.18*dgdp_p(-2)+0.26*dgdp_p(-1), $R^{2=}$0.24 (6)

Using a VAR model, the long-term interest rate has the lowest impact on economic growth, which suggests testing the correlation between two variables in the long term, so testing the cointegration was started. Cointegration test results indicate the possibility of long-term relationships over the economic growth only for lr_p, therefore only for this equation the autocorrelation model for errors that expresses the relationship between variables will be realized. The equation for the models looks like:

$dgdp\_p = 0.02 - 0.21 * dlr\_p - 0.79 * u1(-1)$ R^2=0.46, where u1(-1) is the residue delayed by one unit. Tests on coefficients and residual term indicates that this model is relevant.

In the error correction model the residual term is significant and negative, which means that the influence in the long-term of the financial variable on the real activity is found in the residual value and this may be explained by the fact that the long-term dynamics is found in short-term evolution of the economy.

CONCLUSIONS

M1 is a leading indicator for the economic cycle, pro cyclical to the real economy, which was demonstrated by the evolution before the international crisis when the growth rate of money supply in the last stages of economic growth tended to decrease as the ability of banks to create deposits restricting the availability of reserves. Although Poland hasn't entered recession, the risk adversity of investors generated by the international economic situation determined a preference for liquidities instead of assets and M1 increased (anti cyclical behavior).

This result is consistent with Caporale's paper (1998) who found that Germany is the only country from the European Union where money supply had a great impact on the real economy. The other countries were mostly affected by the short interest rates. It can be concluded that the monetary policy of Germany has a significant influence on the other member countries, and financial convergence between Germany and the other member states has increased.

Short interest rate has a different behavior compared to the money supply: if the three-month interest rate decreases then the real activity increases demonstrating the efficiency of the credit channel. Monetary aggregate M1 has a more significant effect on the real GDP than the short term interest rate. This confirms the lower reliance on credit in Poland.

Te existence of long term correlation between the 10-year bond yields and real GDP dynamic infirms the money neutrality theory. According to this theory, a growth of monetary aggregate M2 will only influence prices in the long term and the real activity won't be affected. Therefore, in order to ensure a sustainable growth, it is recommend to avoid long-term loans and credit tips.

ACKNOWLEDGEMENT

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THE PERCEPTION OF ORGANIC FISHERY PRODUCTS IN SOUTH – EAST DEVELOPMENT REGION OF ROMANIA

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Abstract

The paper follows two main objectives: to understand consumers' perception and image of fishery ecological products and to identify communication levers in order to improve the perceived image of fishery products. Orientations in terms of communication are product-focused and aim at enhancing the reputation of products, consequently with impact on product consumption. The present research is focused on the Fishery products, regardless of their presentation – fresh, frozen or processed. This paper conducted a questionnaire survey of Romanian consumers' perception toward fishery products. The empirical study with tractor brands indicated that farmers shown different awareness to domestic and foreign fish ecologic products. National fishery ecological products got more attention from the consumers. Foreign fishery ecological products had higher perceptive price, but Romanian fishery ecological products acquired higher perceptive value, and got a better rank in the preference list and in the purchase intention of the consumers.

Keywords: ecological products perception, perceptive price, fishery ecological product

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INTRODUCTION

The ecologic fish market is mainly concentrated in five countries, representing 71% of the total European market: Spain (18%), France (17%) and Italy (14%), United Kingdom (12%) and Germany (10%). These are the most populated countries in Europe, representing a naturally more of Community consumption. Apparent consumption in EU 25 for aquatic products amounted in 2009 to 21.8 kg per capita in equivalent live weight, 16.1 kg of which 5.7 kg of fish and shellfish. This data includes all presentations (fresh, chilled, frozen or canned) and all places of consumption (home, restaurant or while travelling). The average consumption of the EU is slightly different from the average world consumption (20.0 kg) (Xiong et all, 2010).

The general trend, however, masks the highly heterogeneous levels of consumption by country and type of product. Thus, by way of example, per capita consumption is 20 times higher in Portugal than in Romania. Three categories of consumer countries in Europe stand out:

• countries with high consumers (40 kg and over): Portugal, Spain

• consumer countries moderately (16 to 30 kg): Finland, France, Malta, Sweden, Estonia, Greece, Denmark, Cyprus, Italy, Latvia, United Kingdom, Netherlands, Ireland, Belgium and Malta.

• low-consumption countries (2.5 to 13 kg): Germany, Austria, Poland, Czech Republic, Slovakia, Slovenia, Hungary, Bulgaria and Romania.

The fishery products represent a kind of important producer goods as it plays a significant part in agricultural production market. With the development of aquaculture, there are rapidly growing demands for fishery ecological products from consumer, so fishery ecological products farms will face increasing fierce competition in the market. (Armstrong et all, 2000) In the modern market economy, consumers are the main body of fishery ecological products market, their attitude, perception and preference toward a brand will largely influence the sales volume of this kind of products, and even the survival and development of the fishery farm.

There are plenty of research on brand management based on consumers' perspective, such as consumers' brand experience (Bernd, 2009), brand image and consumers' purchase decision (East et all., 2008), brand competition (Ding, 2009), and brand satisfaction (Zeng, 2009). Moreover, there are not many researchers pay close attention to the consumer-based ecological products research in Romania. Some papers involve brand development research of fishery ecological products, but mostly are qualitative research and macro-economy approach (Ernst et all, 2000).

This paper purpose is to investigate and analyze consumers' fishery ecological products awareness, purchasing behaviour, based on an empirical survey.

MATERIALS AND METHODS

Conceptual framework

Consumers' perception to the fishery ecological product included product familiarity, perceptive price and value, which were influenced by consumers' demographic characters and their economy condition, also by their purchase experience and information from others.

Questionnaire

A questionnaire about fishery ecological products consumers' perception was designed based on conceptual framework. The questionnaire consists these sections:

- consumer demographic (gender, age, education level, labor number and annual income of household);
- farmers' purchase behavior of fishery ecological products (purchase experience, money source, information source);
- product perception (familiarity, perceptive price, value.

Survey

The questionnaire survey was conducted with consumers from Braila, Galati, Tulcea, Constanta, Vrancea and Buzau, all being counties of South East Romania's development region, were chosen as the respondents.

200 questionnaires were distributed in above 6 counties and returned 134. After eliminating the validity of the returned questionnaire, 26 questionnaires that incomplete and with logical mistakes were deleted, 106 valid questionnaires were obtained; the effective response rate was 53%. From 106 respondents 82 expressed the intention to buy organic fish products.

Statistical methods

All the data obtained from the responses at the questionnaires were transformed into statistics variables and then processed. Descriptive Statistics method was mainly adopted to calculate the mean with standard deviation of each variable, and to examine the different levels of consumers' awareness.

The index values of product familiarity were the ratio between each product's familiarity value and the average value. The same calculation method was adopted in perceptive price and perceptive value.

RESULTS AND DISCUSSION

Consumer characters

The questionnaire survey gained a total of 106 valid samples and 82 with intention to buy organic fish products. Table 1 shows the demographic characters of respondents.

Table no. 1 Demographic description of organic fishery products consumers

Demographic variables	Categories	Subjects no.	Percent %
Gender	Male	31	37.80
	Female	51	62.20
Age	18-30	24	29.27
	31-40	29	35.37
	41-50	19	23.17
	51-60	6	7.32
	Above	4	4.88
Educational level	<primary school	1	1.22
	primary school	5	6.10
	junior school	18	21.95
	senior school	20	24.39
	≥college	38	46.34
Labor number of household	<3	41	50.00
	3	19	23.17
	4	21	24.39
	5	2	2.44
	>5	0	0.00

Samples are mostly female (62.20%). They are more inclined to interest in organic fishery products. Women show a higher sensitivity in health and a greater propensity than men to follow the recommendations for nutrition. This does however not always reflected by a high consumption of fish higher in women than in men in Western Europe.

Age is often presented as an important determinant of demand for food in general and more specifically the consumption of fish. However, the demographic determinants such as age will also be correlated with other determinants such as interest and knowledge of nutrition topics (including aspects so beneficial to health) or health status of person. The interest in issues related to health and nutrition, for example increases with age. The most common age group was 31-40; educational level college (46.34%). Less than 3 person accounts for 50% in the labor number of household.

The education level is correlated positively to the image of fish as food easy to prepare. The higher the education level increases, the consumer sees the fish as a food easy to prepare.

Place of residence (and more specifically its coastal or continental character) is an important factor in explaining the consumption of different seafood and is linked to historical and current availability of fresh fish.

Purchase behavior

Information plays an important role in the process of consumer purchase. The survey research displayed consumers' main sources of organic fish products information coming from friends and relatives, 34.74% consumers chosen this item. It implied consumers were convinced of people that having close relationship with them or surrounding them. It also implied that word of mouth communication of public would have a strong impact on consumers' brand awareness, which was in accord with the existing research (Wang et al., 2009). Fishery products producers must attach much importance to their brand reputation so as to retain their old customers and develop new customers, and then keep customers loyal on their brand, which is a successful marketing.

Purchase intention is widely believed that directly interrelated with purchase behavior, it is the main index to forecast whether consumer will purchase (Zheng et all, 2010), so the organic fish products intention could imply the familiarity of whether consumer will choose a organic fish product in the future. Among the respondents, 82 described that they considering purchase a organic fish.

Price, risks of contamination (microbiological and chemical), sustainability aspects such as environmental risks (damage of the ecosystem, animal cruelty, etc.) and risks of depleting fish stocks are the main barriers to eating fish in general for the consumers.

Barriers vary a lot depending on the levels of processing (for example, price is no longer the main barrier for eating frozen fish products).

In general, consumers would eat more fishery and aquaculture products if: there was a quality label, prices were more affordable and they had a better knowledge of the quality of these products.

Guarantee of the European origin of fish encourages consumers to eat fish in general, all the more so in Southern European countries. Consumers have a positive overall image of fishery and aquaculture products. In general, they think they are good for health, and that they are fresh products.

Fresh fish received the most positive overall image score and the most positive image with regard to health (Table 2).

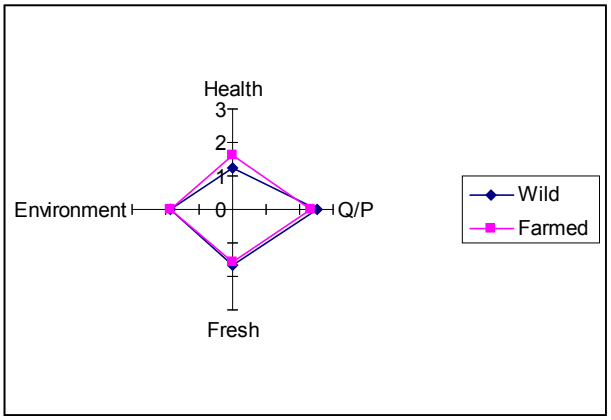
Table no. 2. Image scores for fish production method in South East development region of Romania

	Health	Quality/Price	Fresh	Environment
Wild	1,26	2,51	1,68	1,86
Farmed	1,63	2,34	1,59	1,85

Thus, the image of fresh fish is very similar to the image of fish in general. However, this kind of product obtains a poorer image in terms of quality/price ratio (mostly due to its price, since its quality is considered as good). With regard to health benefits, frozen fish has a less positive image than fresh fish, but its quality/price ratio is considered to

be good and its availability to be higher. Preserved fish has a poorer image in terms of quality, but its quality/price ratio is more positive. This product is also considered by all respondents to be the most available. Fish-based ready meals receive the poorest image with regard to health and to quality/price ratio (Fig. 1).

Fig. 1: Results on the perception of the fish product



When buying fish, a quality and/or food safety label is the most important expectation of consumers in terms of information on fishery and aquaculture products. Nutritional information as well as information on the geographic origin of production is among the most important pieces of information consumers are looking for. However, fishing zones as defined by FAO is ranked last by consumers. Consumers are also interested in information relating to the production method and its environmental characteristics.

The most popular sources of information used by Europeans are labels and sellers in retail and in supermarkets. These two types of information is directly gathered by consumers at the time of purchase. The media (Internet, television, advertising followed by written media) also plays an important role in the information of consumers. Non commercial sources of information like scientific reports, consumer associations, institutional campaigns and information are less popular. However, this remark should be qualified by the fact that the question asked within the survey implied an active investigation by consumers.

For the retail sector, farmed fish offers major advantages. On a general level, retailers perceive farmed fish as a product much easier to market than wild fish. Regularity in terms of supply, taste, quality and freshness are the main arguments put forward. One disadvantage of farmed fish for the retailers has to do with the somewhat negative image that can be associated with the aquaculture sector. Still, in most cases, the aquaculture product does not possess any specific image in the mind of the consumer. There is henceforth no distinct link in the mind of the consumer between the aquaculture sector and its image on the one hand and the aquaculture product on the other hand. This is reflected in the behavior of the consumer, who does not differentiate between farmed and wild products when purchasing fish.

The absence of image of the aquaculture sector is still seen as a risk by some managers of the retail sector. Indeed, the image can then still be developed and hence be hijacked. To fill this gap in terms of image should therefore be considered as a strategic priority for the aquaculture sector. The consumer places a high level of trust in the retailer. He/she has the tendency to transfer the responsibility of some of his/her consumption decisions to the retailers, what leaves these later as unmistakable partners in any communication action.

Fish is generally considered as a healthy product by consumers. Any type of communication on fishery and aquaculture products should capitalize on this image of "healthy" product, and put "health" at the centre of the message conveyed. Communication on fishery and aquaculture products should mention the efforts made to guarantee their healthiness to the consumers (quality and food safety labels, standards of production used). The other side of the coin is that fish products in general are considered to be expensive. Proposing special offers may thus be a relevant manner to appeal to new consumers.

Consumers have a confused and slightly negative image of the aquaculture sector. The image of aquaculture products derives from the image of the sector, although consumers generally do not distinguish wild fish products from farmed fish products. They generally consider that the products they buy are wild fish products. Thus, the issue at stake is to understand whether to promote farmed products as such or to promote them as "fish products".

If a specific promotion of farmed products were to be preferred, it should base itself on the positive but often unknown attributes of these types of products: o an affordable price, freshness and guaranteed nutritional characteristics, optimum traceability along the production process. Beyond the product in itself, filling in this information gap will benefit the image of the sector as a whole. Indeed, improving the image of aquaculture products should be a priority of the aquaculture sector, as it will contribute to improving market acceptance of this type of product, on the long term.

Consumers place environment amongst their first preoccupations and declare to be ready to pay the price requested for a guarantee of quality.

CONCLUSION

The research results show organic fish consumers have different perception of organic fishery products. The information channels of brand are mainly from friends, relatives and neighbors, so word of mouth spreading is very important for a brand. The higher perceptive price of foreign organic fishery brands may reduce consumers' perceptive value and purchase intention to them.

In conclusion, although this paper is an empirical study based on 106 valid samples, it provides a chance to understand consumers' awareness to different organic fishery products brands in Romania. A further quantitative research with wider samples will be necessary in the future.

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