OBJECTIVES, WORKING METHODOLOGY, STUDIES AND FORESEEN RESULTS AT THE RESEARCH PROJECT "COMPLEX MODELS AND METHODS OF RESEARCH IN SUSTAINABLE RURAL DEVELOPMENT FROM ROMANIA"

OBECTIVE, METODOLOGIE DE LUCRU, STUDII ŞI REZULTATE PRECONIZATE LA PROIECTUL DE CERCETARE "MODELE ŞI METODE COMPLEXE DE CERCETARE ÎN DEZVOLTAREA DURABILĂ A ROMÂNIEI"

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The paper will present partial results of the researches done in the frame of a complex project in progress, project realized by a team of specialists from 8 research institutes and prestigious universities from Romania. The paper will present also two questionnaires, realized by the research team, referring to Romanian village monograph, respective to the development degree of a family housekeeping. Taking in consideration the large territory considered that belongs to rural space it can be understand the importance of knowing the real situation, the degree and the future development of Romanian rural space.

***Key words**: sustainable rural development, complex models and methods of research*

INTRODUCTION

Romania, with a surface of 238.391 km^2, placed in S-E Europe at the crossing with the main European communication axes N-S and E-V, represents 5,49% from UE-25 surface and has a population of 21.733.556 inhabitants (from which 48% represents rural population). According to

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OECD methodology of rural regions classification al NUTS III level, in Romania rural space totalize 99% from territory and 90.6% of Romania's population, in comparison with EU which has 84.4% from total surface and 39.5% of total population. Rural space, basing on OCDE methodology, is defined as being the surface where population density is lower than 150 inhabitants/ km^2. In Romania, rural population density has maintained relative constantly around 46.6 – 46.7 inhabitants/ km^2.

For the acceleration of rural development process, Romanian Government realized: Rural Development National Plan and the Strategic National Plan for 2007 – 2013

These plans contain an analysis of economical, social and environmental systems and are established development basic indicators. Following the presentation of general aspects, nature, environment and of rural infrastructure (technical – public utilities and education, culture, economic activities, tourism and agro-tourism, S.M.I.) is presented the general strategy of rural development for 2007 – 2013 and the concordances of national strategic plan with some communitarian program, the organization of rural national network and a S.W.O.T. analysis. For defining the concept of Romanian rural development in concordance with EU standards, the researchers from Timişoara partner institutions had consulted a high volume of bibliographic sources, each in its own specialization domain, the entire team totalizing more than 150 bibliographic titles. From the models and scientific papers analyzed, for localities rural development, we enumerate: - European Rural Development Model; - R.A.P.S. model (Rural Analysis & Planning System); - Recent Advances in Survey Data Collection Methods and Their Implication for Meeting Rural Data Needs; - New Technologies in Social Science Research Methods; - Rural Data Needs in Changing Times: A Summary; - Methods in Rural Development: Policy Analysis; - Input-Output Analysis for Rural Development Policy: An Overview and an Example of the Impacts of New Highways in Rural South California etc.

For realizing the objectives establish through the research project „Complex models and methods of research in sustainable rural development from Romania" coordinated by Agrarian Economy Institute and its partners: Banat University of Agricultural Sciences and Veterinary Medicine Timişoara, Romanian Academy, Timişoara Branch, "Politehnica" University of Timişoara, West University of Timişoara, Tibiscus University

of Timişoara, University of Agricultural Sciences and Veterinary Medicine Bucharest and the Research Institute for Soil Science and Agrochemistry, it has started with the mention and the explanation of the concepts connected with: rural space, sustainable development and rural development, integrated rural development.

The new conception about rural space in Europe is referring to rural space as to a precious landscape space; the result of a long history which rescue is a preoccupation for society.

According to Kayser, B. (1990), rural space can be defined as a particularly way of using the space and social life characterized by: small density of inhabitants and constructions leaving place for vegetal landscape; economical uses with agro-forestry-pastoral dominance; the inhabitants way of life is characterized by their belongingness to small collectivities and a special report with space; An identity and a strong and specific representation of village's culture. Rural development has in view the fact that the amelioration of alimentary stocks and nutrition, as well as of basic services (health and education) canned not only to determine the progress of physical welfare and inhabitants life quality, but also, in an indirect way, to intensify their productivity and their aptitudes of contributing at national economy. Rural development must be preoccupied by the modernization and monetization of rural society and by its passing from traditional isolation to the integration in national economy.

The rural development objectives include the productivity amelioration, the rising of labor force occupation degree, and in consequence, a growing of beneficiary groups income, as well as the acceptable minimum level regarding the food, housing, education and health. In the frame of this international organization was debated almost thirty years ago the concept of integrated rural development. By integrated rural development it's understand the measures ensemble – governmental and not governmental – which has as target the spreading of modern techniques among rural populations and their adoption facilitation by the interested people; these techniques aim the grow of production, of productivity and incomes; life standard rising from social and economic point of view, the utilization, development and protection of environment, with the purpose to offer life and work places, delectable and permanent;

rural training at which they full and active participate together with the townsman at social, political and economical country life.

Romania rural space is composed by the 2685 commune administrative surfaces which regroup 12751 villages, the surfaces afferent to rural space, in this way delimitated, counting 21276 thousand hectares and representing 89% from country surface. Rural population is in present about 10.1 million persons, which means 45% from total population. Housekeeping number from rural is 3311 thousands (45% from total Romania's housekeeping), and of houses is 3656 thousands (46.8% from total houses number). This space is the storehouse of the economic resources main majority: basic materials for industry, agricultural, forestry, tourist and balneal resources.

OWN RESEARCHES IN THE FRAME OF RESEARCHING PROJECT

In the frame of researching project „ Complex models and methods of research in sustainable rural development from Romania" were conceived two questionnaires: A. a questionnaire for each commune and its belonging villages; B. a questionnaire for social investigation realized in population housekeeping

A. The questionnaire for commune contains: 1. A short history, 2. Physical-geographic conditions of locality: relief, soil fertility classes, water, clime, vegetation, pollution and specific elements, 3. Infrastructure: roads, water supply, water discharge from precipitations and housekeeping, housekeeping equipment with sanitary groups, electrical network, natural gases network, telephone network, cable, 4. The dynamic of habitat conditions (1992, 2002, 2006): living houses and their characteristics, housekeeping endowment, 5. Population and labor force. Population structure on age and gender groups, according to education level, religion, ethnic category; population dynamism in interval 1956 - 2000 on stages; migration, commuter. The existent labor force in comparison with education level and occupation migrated in other countries, etc, 6. Economy. Economy structures on sectors: - Agriculture, resources and results obtained. The surfaces after the uses way, exploitation form, private agricultural housekeeping on size classes, exploitation structure, information about evolution of vegetal and zoo-technical sectors (1992, 2002, 2006), the

production capitalization form, agriculture technical endowment. - Industry, commerce and tourism on enterprises types, public services, financial institutions. 7. Ecology, environment quality about pollution level and air, water and soil pollution sources, 8. Locality's cultural life, 9. Final appreciations.

B. The questionnaire for population includes questions of which answers will allowed the draw of some conclusions regarding economical-financial state of the families from respective area, as well as some aspects of social-cultural life. Records gathering from primary sources (information owners – farmers families) allows the completion of some information obtained from secondary sources (statistical, administrative, institutions) and to find out the respondents opinions regarding the economical-social situation of the families, of the agriculture and the problem of area economy integration in E.U. These records are useful for sectorial policies identification and to allow the correction of existent negative situations. The questionnaire conceived for investigations through sounding includes the following elements: - Records about family: composition, member's professional training, occupation, religion, born language, etc; - Records about house endowment; - Properties: land, settled materials, animals, firms, other properties (stable, barn, green houses, solar houses); - Land's exploitation form; - Income's sources and average income per person; - Family's position assessment from material state point of view; - Economics' mobility after 1990; - Knowledge and appreciations about land sale and rent (laws); - Remarks about agriculture support by central authorities; - Moral and behavior values which they appreciate it; - If they are satisfied by social environment, infrastructure; - Local leader's identification; - Remarks about strongest and weakness points of locality; - Objectives of investments in commune; - Information about firm (if they possess one); - Knowledge about ecological agriculture, agro-tourism; - Contact with mass-media; - Travels in other countries; - Remarks about adherence to E.U.; - Relations with banking institutions; - Housekeeping complex assurance; Building and its content, family, goods, yields and animals assurance; risks covered and the damages received in the last years; - Pensions for farmers – situation in 2006 and perspectives.

Analyzing with the help of these criterion allow the identification of rural space which to assure a sustainable development. The criterions were transposed in operations through the agency of some indicators which to

allow the phenomenon's and processes intensity measurement as well as the identification of evolution tendencies.

After were defined the rural development indicators and were established the minimum, maximum and optimum levels of rural development processes, it was elaborated the model for rural development optimization, which is a theoretical system that helps to the indirect study of properties and original system function, with which the model presents an analogy. An important activity was represented by the finalization of field questionnaires which must be spread and completed by the target group in order to select the problems, the options, the points of view of the different social-professional inhabitant's categories, according to the established investigation methodology. From the largest variety of real system's models we can use procedural models which mean successions of processes, of stages in a problem solution, logical models: qualitative relations between the processes and variables which characterize the concrete system, qualitative diagrams etc., mathematic models: mathematic relations between the variables and parameters which characterize the concrete system. Mathematic models are most valuable because their modeling precision and because of the simulation possibilities on computers. Among the mathematic models we consider that the most suitable are the linear and dynamic programming models of rural development processes as well as the statistical models of regression and dynamic series, they helping to foresee the subsequent phenomenon evolution. The model realized on the base of investigation forms was useful for establishing the database, being used the designing of relational model for the normalization, and consisted in the following steps: - was realized the attributes inventory – on the base of investigation forms and specifically mathematic indicators; - were specified the management rules, meaning that were established restrictions upon records, attributes dependencies, validation rules, computation algorithms; - was realized the record's dictionary, so that the attributes will appear only one time, to be eliminated the synonymous attributes, to be eliminated some derived attributes; - were established the dependencies between attributes through a dependencies graph, this method presenting the advantage of a larger visual impact and being much easier understandable by the people not-specialists in informatics; - were established the candidate keys; - were established the primary keys and external keys.

CONCLUSIONS

The partial results analyzes of researchers realized by a team, formed by 8 partners, which associate prestigious research institutes from Romania (Institute for Agricultural Economics, Research Institute for Soil Science and Agrochemistry, Research Center for Romania's sustainable rural development, Romanian Academy – Timişoara Branch), prestigious universities from different specialization domains (agronomy, technical, economy) conducted to the following conclusions: On the base of conceived questionnaires by the research team for each commune and their belonging villages, respective for the social investigation in population housekeeping, will be obtained complex records, detailed, which will reflect accurate the reality of actual situation in Romanian rural space. By records processing on the base of some mathematic models, finally will be selected a set of indicators which to allow analyzes and diagnoses of researched rural areas from social-economical point of view and to draw the most adequate development ways in future. The main purpose of researches is represented by harmonious development of rural areas, thing which will be realized basing on the indicators well arranged with proper objectives and well organized.

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THE AGRICULTURE OF THE 5WEST REGION – ACHIVEMENTS AND PERSPECTIVES

AGRICULTURA ÎN REGIUNEA 5 VEST – REALIZĂRI ŞI PERSPECTIVE

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The present paper analyzes the evolution of agriculture in the 5West region between 2000 and 2004, as well as its position in Romanian agriculture. It focuses on aspects with regard to the share of the region in agricultural production, the agricultural area, the production of the main agricultural vegetal and animal produce and the evolution of several macroeconomic indicators – the true GDP and GVA.

Key words: *agriculture, region, production, development, employment.*

INTRODUCTION

The region is situated in the West of Romania, at the Hungarian and Serbian border, including the counties of Timis, Arad, Hunedoara and Caras-Severin, as well as part of the Danube-Cris-Mures-Tisa euro-region. The geographical location of these three border counties (Timis, Arad and Caras-Severin) provides great opening for its future as a "connection and contact area" to Europe. In 2003 the region had a total population of 1.946.647 inhabitants with a density of 60.8%/km², with a rural population of 38%, less than the country average which was 46%.

Considering the 2000-2005 period, the true GDP dropped off in 2000, increasing several times during the rest of the period. The progress in this region was by far superior to the overall percentage of the national economy, making proof of the region's dynamism.

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True GDP generated within 2000-2005 (%)

Table 1

Name	2000	2001	2002	2003	2004	2005
Total national economy	2.1	5.7	5.1	5.2	8.4	4.1
5West region	-9.1	8.5	6.2	9.6	8.5	5.6

Source: PND 2007-2013

Between 2000-2005 the GVA of the 5West region developed as follows:

GVA between 2000-2005

Table 2

Name	2000	2001	2002	2003	2004	2005
Total agriculture	-18.1	28.0	-6.7	5.2	14.2	13.9
5West region	-18.5	48.6	-9.4	4.5	18.9	14.2

Source: PND 2007-2013

The GVA generated by the region's agriculture has been, starting from 2001, superior to the country average; the drop offs have been more significant as well. The explanation lies both in the influence of natural effects and in the evolution of the private sector.

GDP generated within the private sector in the 5West region (%)

Table 3

Years	2000	2001	2002	2003	2004	2005
%	11.1	13.4	11.4	11.7	13.0	10.7

Source: PND 2007-2013

The growth of the GDP generated by the region's agriculture has been superior to the country average, making proof of a better exploitation of the agricultural potential.

In the 5West region in 2003 there was a percentage of 1.4 ha/inhabitant, more than the country average of 0.65 ha. In 2004 the private sector held 80% of the exploited area. Timis County held the lowest percentage (75%), while Caras Severin and Hunedoara held the highest percentage (over 95%).

METHOD

The period between 2000-2003 was characterized by an inadequate evolution of the vegetal production-animal production-services report. Vegetal production still overweighs agricultural services. Thus:

- the percentage held by vegetal production within the total agricultural production increased from 61.7% in 2000 to 64.1% in 2003, while services dropped off from 1.2% to 0.9%.
- in the 5West region the percentage held by vegetal production is even higher, 68.5% in 2000 and 70.0% in 2003, while the percentage held by services was 0.5% in 2000 and 0.4% in 2003, which is inferior to the country average.
- rational agriculture supposes a zootechnical production percentage of minimum 45% and a services percentage of 10% at most.

The structure of agricultural production

Table 4

Name	Year	Total agriculture		Vegetal		Animal		Services	
Agri ultural produ ction		Mil lei	%	Mil lei	%	Mil lei	%	Mil lei	%
	2000	160712839	100.0	99105602	61.7	59621073	37.1	1986164	1.2
	2003	404118197	100.0	259192480	64.1	141175163	35.0	3750554	0.9
		The 5West Region		Vegetal		Animal		Services	
	2000	31682613	100.0	21692668	68.5	9822174	31.0	167771	0.5
	2003	46232136	100.0	32378814	70.0	13660284	29.6	193038	0.4

Source: according to the Statistical Yearbook of Romania 2005 and INS Territorial Statistics 2004

The 5West region holds an important position when it comes to the production of cereals, sunflower, sugar beet, as well as livestock.

The table analysis reveals the fact that in 2003 the region's percentage increased when it comes to cereals and sunflower and it severely dropped off when it comes to sugar beet.

The region's percentage dropped off for cattle and swine as well, slightly increasing when it comes to sheep.

The explanation lies in the dissolving of the public sector and in a slower development of the private one.

The 5West region of high agricultural potential held in 2004 11.5% of the total agricultural cultivated area.

In the same year the region held 12.8% of the area cultivated with cereals, 7.1% of the one cultivated with oil-bearing plants, 8.7% of the one cultivated with sugar beet etc.

The 5West region held in 2004 16.5% of the number of all tractors in agriculture and 16.1% of the number self-propulsion combines for the harvest of cereals, corn and fodder.

The percentage held by the 5West region in vegetal and animal production

Table 5

Current no.	Name	1990	2003
1.	Cereals	11.05	17.03
	Of which wheat and rye	11.4	28.0
	corn	10.0	12.8
	sunflower	9.9	10.1
	sugar beet	13.8	4.0
2.	cattle	10.0	8.2
3.	swine	17.7	12.6
4.	sheep	11.2	12.9

Source: according to the Statistical Yearbook of Romania 2005 and INS- Territorial Statistics 2005

The high number of employed population in agriculture has determined an inefficient use of the working time. Thus:

- in 2004 in the 5West region there was a percentage of 31.4 people/100 ha of exploited area, respectively 3.19 ha/employed person.
- the total agriculture looks worse – 53.6 persons/100ha and 1.86 ha/employed person.

The active population of the region was in 2005 8.58% of the total economy one; the activity rate in the rural environment was 37.04%, inferior to the country average of 45.58%. The employed population in the rural environment in 2005 was 46.55% of the total employed population and in the 5West region it was only 37.8%, positive phenomenon.

Timis held the most important position in the system of agricultural activities of the region and its development will have a determining role in the development and progress of the entire agriculture of this region.

This is also stated by the analysis of the percentage and position of the Timis County within the total Romanian agriculture.

The percentage and position held by Timis County within the Romanian agriculture

Table 6

Name	2002		2005	
	%	Position	%	Position
Agricultural area (ha)	4.7	1	4.8	1
Arable area (ha)	5.7	1	5.7	1
Agricultural tractors (number)	6.1	1	5.9	1
Mechanical seeder (number)	8.1	1	8.2	1
Self-propulsion combines for the harvest of straw cereals (number)	6.3	2	5.9	2
Cultivated area – total (ha) out of which:	5.3	1	5.3	1
- wheat and rye	5.5	6	5.3	6
- corn	5.0	1	5.5	1
Cereal production (tones) out of which:	7.7	1	6.7	2
- wheat and rye	9.2	1	6.4	4
- corn	6.1	1	6.3	1
Total vegetables (tones)	5.6	1	4.2	5
Livestock - swine (heads)	5.9	1	5.5	1
- sheep (heads)	4.4	2	5.5	2
Pork (tones of living weigh)	5.9	1	4.4	2
Wool (tones)	4.8	1	5.3	1

Source: Statistical breviary of Timis County – 2005

With regard to the evolution perspectives of the agriculture in the 5West region, there have to be taken into account both the positive and negative effects which are influencing and will be influencing the agriculture of the area, as well as the impact of Romania's adhesion to the EU, especially with respect to using the Structural Funds allocated for the development and progress of agriculture and the entire rural environment.

Positive effects

- natural resources (mineral resources, the forest and agricultural area, valuable elements of natural environment);
- the potential of qualified labor force;

Their use will lead to:

- the promotion and diversification of economic activities;

- an increasing number of small and medium sized organizations specialized in agriculture, handicraft objects, trade and services;
- the transformation of agriculture into a more competitive activity;
- the proper employment of the human potential within the rural environment;
- a better infrastructure and better living standards in this environment;
- more commercial farms within the total of agricultural units.

Negative effects

- the insufficient diversification of economic activities which would lead to an excessive dependency on agriculture;
- under developed infrastructure below civilized living standards;
- the danger of soil degradation, because of the insufficient land improvement works;
- the degradation of the forest vegetation etc.

CONCLUSIONS

- the 5West region holds an important position in Romania's agriculture, but its potential is not fully exploited;
- even though the results achieved in the agriculture of the region mostly exceed the average, they are far from the EU standards and from the ones of a modern agriculture;
- the agriculture of Timis County holds the highest percentage within the total agriculture of the region and the position of the region in Romanian agriculture depends on its further evolution.

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RURAL DEVELOPMENT RESEARCH IN PECICA (ARAD COUNTY

CERCETĂRI DE DEZVOLTARE RURALĂ ÎN LOCALITATEA PECICA

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Analysing for short Romanian rural area, is of particular importance from the point of view of positive and negative effects (mainly due to the relatively large share of agricultural and forestry areas of Romania compared to the area of the European Union, to the share of population employed in agriculture, of the traditions and customs specific to each country). In the context of the European rural area, the main objective is economic and social cohesion of the European Union, with particular attention to harmonious development of rural areas within the European area. Rural development should be a main objective of Romanian society, if we take into account the role Romania plays as a member nation with full rights of the European Union. The authors have chosen this topic for the present paper as at present rural development ranks first among development objectives of the European Union. Though Pecica has become a town on April 4, 2004, it still conserves the features of a rural area.

Rural development should be the main objective of Romanian society if we take into account the role Romania plays as a member nation with full rights of the European Union. This ranks first among the development objectives of the European Union.

Though Pecica became a town on April 4, 2004, it still has the features of rural area. This is a plain locality situated on the river Mureş. Pecica is in the Tisa Plain, having Hungary to the north, the locality Perega Mare to the north-west, the locality Semlac to the south-west, the river Mureş to the south, the city of Arad to the east, and the locality Iratoş to the north-east. It is 25 km from Arad, 10 km from the border (the Turnu

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customs), and 30 km from the Nădlac customs. Pecica englobes the villages of Turnu, Bodrogul Vechi, and Sederhat.

Pecica had a unique initiative in Romania. It developed an industrial area with Italian companies covering 18 ha, near the Romanian-Hungarian border, aiming at attracting in the area labour force from Hungary. The project has four component parts:

- incubator of business financed by the European Union;
- a centre of professional training;
- a terminal for long vehicles;
- an industrial area.

Pecica is among the newest towns of Romania, after being for ten years the largest commune of the country, with over 14,000 inhabitants.

For a long while, Pecica was the largest commune of Romania: it became a town in April 2004 as its inhabitants wished, which was proved by referendum. In Pecica there are Romanians, Hungarians, Germans, Rroma, Serbians, and other nationalities, grouped around several religions: orthodox, catholic, Baptist, reformed, neo-protestant, etc.

Table 1

Evolution of the population compared to Romania's population per counties and countryside

	1956	**1966**	**1977**	**1992**	**2002**
Romania	17.489.450	19.103.163	21.559.910	22.810.035	21.680.974
Arad County	475.620	481.248	512.020	487.617	461.791
Pecica	15.406	14.841	13.871	13110	13.011

Source: Institutul Național de Statistică, 2004

We can see that, while the evolution of the population at national level was slightly increasing until 1992, in the Arad County there was an increase until 1977, after which there was a decreasing trend, a trend that is still going on at present. In exchange, the population of Pecica knew a decreasing trend until 1992, after which it kept almost constant.

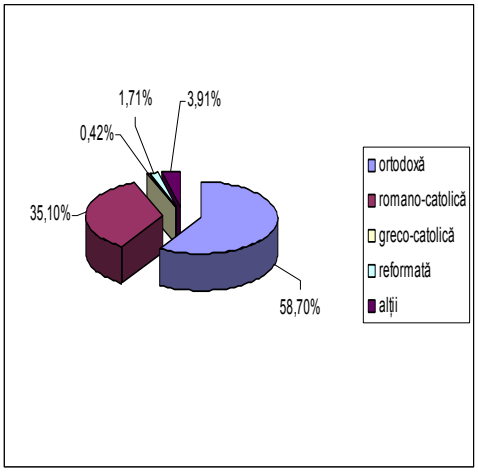

Figure 1 Population structure (religions)

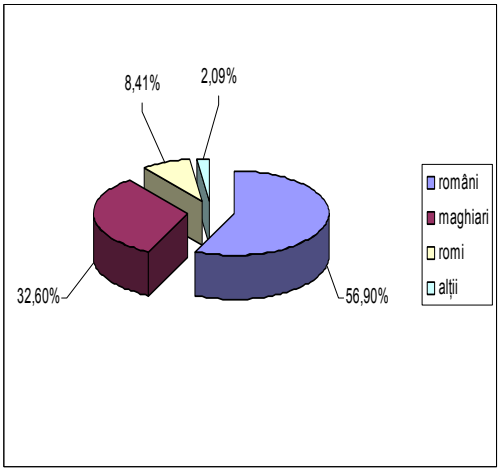

Figure 2 population structure (ethnic groups)

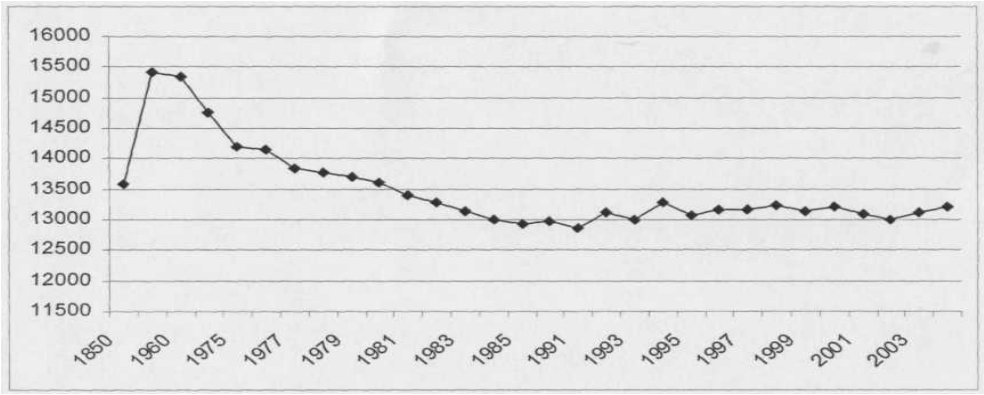

Figure 3 Evolution of population in Pecica

Pecica covers two distinct forms of relief: a low plain, located in the Mureş Flooding Plain, and a higher plain, stretching to north and north-west, both particularly fertile. The Arad Plain and, therefore, Pecica, is crossed from east to west by the lower Mureş over 18.7 km. Thus, in time, the inhabitants of this locality worked the land and bred animals. Another strong point of the place was trade.

After 1990, in Pecica grew a lot of economic activities, some of which disappeared in time; some others, maintained and developed. The situation of licences granted by the Office of the Trade Register per legal

form and per years show that there are about 270 commercial firms and about 222 family associations and physical persons, i.e. a total of 500 enterprisers.

Table 2

Development of economic activities

PECICA	SRL	SA	AF	PF
1991	11	3	-	-
1992	29	-	2	-
1993	14	-	2	1
1994	20	-	19	29
1995	8	-	7	6
1996	18	-	6	-
1997	13	-	3	1
1998	9	-	5	-
1999	13	-	12	2
2000	10	-	3	3
2001	11	-	7	1
2002	15	-	6	5
2003	37	-	8	7
2004	32	-	6	33
2005	29	-	13	35
TOTAL	269	3	99	123

Source: Plan Urbanistic General, Pecica, 2005

Table 3

Structure of economy per sectors

Specification	Number	Share
State owned	1 291	32.25 %
Privately owned	1 968	52.06 %
Mixed	142	3.76 %
Own administration	323	8.54 %
Other administration	128	3.39 %

Source: Plan Urbanistic General, Pecica, 2002

An important increase from the point of view of the number of commercial firms, mainly Limited Liability Societies, has marked the last years and particularly 2005, when by the half of the year they have registered a number

of firms equal to that of the previous year. The development of economic activities within the town of Pecica is particularly important not only for the development of new jobs and for the increase of population's incomes, but also for the increase of the incomes of local public administration.

There are in Pecica **8 large agricultural firms** that work 8,221 ha of agricultural land, the rest of 14,412 ha being worked by private land owners.

Besides these large agricultural firms, there are two silos that purchase, store, and dry cereals. The 8 large agricultural firms have also developed the animal breeding sector, each firm also having an animal farm.

Tourism resources of the town of Pecica consist of the natural beauty of the Mureş Flooding Plain. This can be a starting point for leisure and recreation activities such as open air concerts, motor races, and sport competitions. Transit tourism could be better exploited if there were accommodation facilities and more restaurants in the locality. Agri-tourism and rural tourism are considered alternative activities that will continue in the Romanian rural area due to the beauty of the landscapes, of a substantial part of the rural areas that still preserves its semi-natural state. Developing rural tourism is strongly dependent on the presence of basic infra-structure, as well as on the institutions that support tourism activities.

In the area, and even across the border, they know the game made up of deer, boars, hares, pheasant, and marsh game.

Pecica is famous in Romania for its pita bread, said to keep fresh for seven days if kept in a cool room. Every year, in August, there is a special festival destined to this special bread – Praznicul de Pită Nouă (The Dinner in Honour of the New Bread) – the most important cultural event of the year in town.

A SWOT analysis at the level of the town of Pecica showed the following:

Strenghts: -its strategic geographical location;
- the wide diversity of the natural environment (flora and fauna);
- the availability of labour force;
- the existence of highly fertile agricultural lands;
- the long-lasting experience in getting high agricultural yields;
-the preservation of some specific customs and traditions.

Weaknesses: - lack of running water and sewage networks;
- incomplete ownership title granting with negative impact on the development and consolidation of agricultural exploitations;
-unfavourable local conditions that do not attract skilled labour force.

Opportunities: - the existence of a weekly agricultural and agro-alimentary market;

- potential for wood processing;
- an economic increase trend in the area;
- opportunities for strategic development with low costs;
- support at county level for the implementation of local initiatives.

Threats:

- a high unemployment rate in second age persons;
- a mutation / change in consumers' preferences;
- lack of financial means;
- lack of a legal frame that allows tax exemption for rural investors.

CONCLUSIONS

In order to develop Pecica economically, they should develop infrastructure and modernise roads.

The Pecica area has a lot of advantages (forests, thermal waters, the Natural Park Lunca Mureşului) to attract tourists to the area, but unfortunately these advantages are not enough promoted and valorised.

We think that exploiting the area from an agri-tourism point of view would make commune incomes increase considerably.

They should also develop the infrastructure of the town, by introducing sewage and running water in all the villages of the town, in order to improve inhabiting conditions and to ensure a decent living standard for its inhabitants.

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AN ANALYSIS OF THE LOCALITY OF SACOŞU MARE: PROPOSALS FOR ECONOMIC RELAUNCH

ANALIZA LOCALITĂŢII SACOŞU MARE: PROPUNERI DE RELANSARE ECONOMICĂ

NICOLETA MATEOC-SIRB [*], CAMELIA OBOROCEA [*]

In order to be able to support efficiently the process of integration of Romania in the European Union and to reach the level of Western European nations, it is necessary to direct the financial aid of the State to several directions.Developing agriculture and rural development are main factors of the policy of sustainable agriculture in the rural area, which aims at promoting a vast programme of rural development all over the country within an integrated concept of rural development, economic and social, of the Romanian village. They also aim at ensuring a favourable environment for foreign capital in order to support investment and development programmes of agricultural production in Romania, as well as in order to diversify rural economy.

The locality of Sacoşu Mare was mentioned in historical documents ever since 1369 as inhabited by a homogeneous Romanian population.

The locality of Sacoşu Mare is a typical Banat hill village with something special in it. Located in the southern part of the Timiş County, this locality situated at the border with the Caraş-Severin County, at the foot of the Grindu Petrii Hill, is a corner of Paradise, a typically Romanian village in a typically Romanian spot characterised by the alternance between hills and valleys.

The centre of the village is quite large (it covers 1,000 ha); the village is of the scattered village type (it has a main road and other roads crossing it). The houses, beautiful and well tended, were rebuilt in the 1970s and 1980s; they have large, metal gates decorated with specific figures and large yards that open to gardens.

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Before 1989, the locality was a commune, but because of the decrease of the population, it is again just a village. Nowadays, the locality Sacoşu Mare has the administrative statute of a village, part of the commune of Darova, together with the village of Hodoş.

The village Sacoşu Mare has, at present, a population of 950 inhabitants and 280 houses. In 1910, the village had 3,200 inhabitants and 800 houses. At present, the population is decreasing, with an average of 23 deceased people and with only 3 births per year.

Between 1972 and 1990, the population decreased because of the migration of the villagers to the towns and cities, where there were enough jobs for them. After 1990, the youth exodus continued in parallel with the ageing of the population.

Table 1

Evolution of the population in Sacoşu Mare

Specification	**1898**	**1910**	**1945**	**1972**	**1984**	**1994**	**2001**	**2004**
Total	1400	3200	2711	1914	1400	1354	1180	950

Source: Documents of the Darova administration, 2005

The commune of Darova has the lowest number of people – 2,840 – while the other localities have an almost equal number of people.

Table 2

Population of Sacoşu Mare per sexes

Locality	**Total inhabitants**	**Men**	**Women**
Sacoşu Mare	950	541	409
Hodoş	885	442	443
Darova	2840	1428	1412

Source: Documents of the Darova administration, 2005

Table 3

Structure of the population per age groups

Locality	0-4 years	5-9 years	10-14 years	15-19 years	20-64 years	Over 65 years	Total
Sacoşu Mare	23	58	32	87	527	223	950

Source: Documents of the Darova administration, 2005

The data in table 3 allow us to structure the population per age groups, as follows :

- young population 0-19 years 200 people
- adult population 20-64 years 527 people
- population aged over 65 years 223 people

As we can see, the predominant population in the village of Sacoşu Mare is adult, i.e. aged between 20 and 64 years. There is a large share of the aged population and birth rate is very low.

The structure of the population per religions is as follows: 934 orthodox, 12 Baptists, and 14 Adventists. The entire population of the village is of Romanian nationality.

The total area of agricultural land of the locality is 5,559 ha.

Table 4

Structure of the land patrimony per categories of uses

No.	Specification	Sacoşu Mare	
		ha	%
1.	Arable land	3,760	68
2.	Pasture	845	15
3.	Hayfields	488	9
4.	Orchards	240	4
5.	Vineyards	226	4
6.	Total	5,559	100

Source: Documents of the Darova administration, 2005

They cultivate mainly wheat, barley, maize, oats, and sunflower. Other crops, particularly intercalated ones, are fodder beets, beans, fodder pumpkins, trefoil, etc.

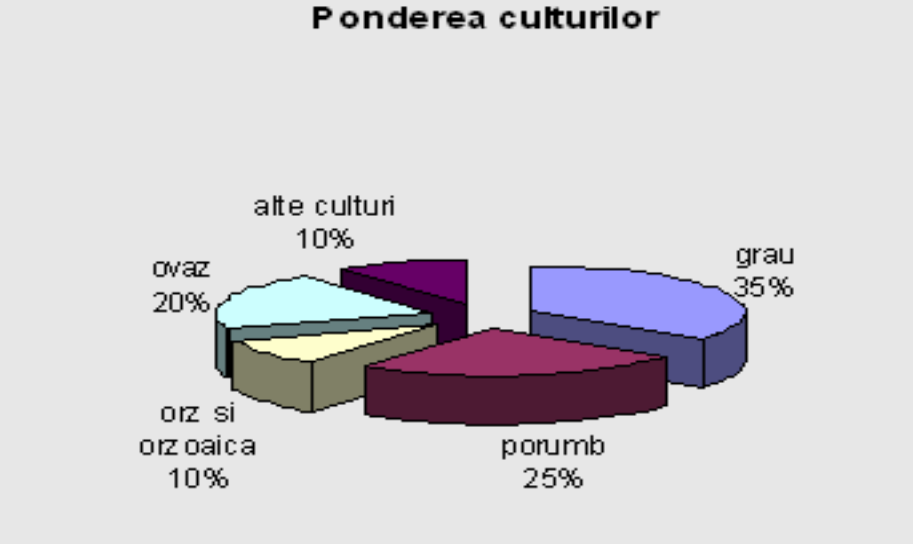

Figure 1. Share of the crops

At the entrance to the village there is a mineral water spring similar to those in Buziaş, i.e. ferruginous and carbonaceous water whose mineralization is 3-7g/l.

The services supplied for the population in the locality are scarce. There are two food stores, one in the centre of the village, and the other one at the entrance to the village. The population has no permanent medical care, no sanitary engineering, no common transportation, protection, or guard.

Since it is located on a relief characterised by the alternance valley – hill, the farmsteads cover a large area. In the past, the main building materials they used were wood and straw-clay. Nowadays, most houses are built from brick, with tile or zinc tin roofs. After 1990, no more houses were built because of the ageing population.

Any community, be it rural or urban, needs development programmes and projects to keep the pace with changes, with progress. So far, in the village of Sacoşu Mare there has been no such programme and no application for financing.

The main projects that could be developed, besides those concerning the consolidation of agricultural exploitations, would be infra-structure,

building a potable water abduction system, building a sewage system, and building a gas network.

As for the practice of agri-tourism, this could be one of the ways, maybe the only viable one, of preventing the disappearance of the locality in the quite near future.

The agri-tourism potential of the area allows the practice of agri-tourism for the following reasons:

- the environment is not polluted, and it has an attractive landscape, good for relaxation and recreation;
- the village is surrounded from three sides by deciduous forests which offer the possibility of hitchhiking in the area;
- there is a protected area in the neighbourhood: the Forest and the Park of Buziaş, an area of tourism attraction due to its resources in mineral water, to the ionised air, and to the pleasant landscape;
- there is the possibility of building a youth camp with accommodation in wooden houses similar to those in Chevereş, etc.

CONCLUSIONS

In order to relaunch economically the village of Sacoşu Mare we need to deal with the following priorities

1) facilitate the transfer of agricultural exploitations to young people through the collaboration of institutions specialised in the professional training of young farmers;
2) prepare people interested in agri-tourism through agri-tourism training courses;
3) develop the infrastructure as a main conditions in order to attract investors to the area;
4) maintaining the ecologic balance through the control of the storage and use of chemicals for agriculture;
5) valorise the mineral water spring by bringing a water bottling equipment.

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TENDENCIES IN HUNGARIAN RABBIT PRODUCTION

TENDINTE IN PRODUCTIA DE IEPURI DIN UNGARIA

K. BODNÁR*

The aim of the study was to demonstrate the tendencies in Hungarian domestic rabbit production. The data were collected by the author, and the data of Rabbit Production Board were also used. In the last 15 years the total rabbit production was reduced to less than half of the former production level. The sale of carcasses decreased with the parallel increasing of processed rabbit products. Three abattoirs are working permanently with variable capacity. The weak points of the rabbit production are the following: the traceability of rabbits from stable to table, and the quality management of the small household farming plots.

Keywords: *Rabbit production, export, farm size, slaughterhouse capacity, food safety*

INTRODUCTION

The perspectives of rabbit meat production have to be judged in a global context of meat production, which tends to decrease and scandals have a negative influence on the consumer behaviour (Maertens, 2001).

The rabbit meat is a very special product of the Hungarian agriculture, because more than 90% of the purchased live rabbit is exported to European countries. The production of Hungary nowadays is 1% of the world production (Table 1.) so the changes on the world market have remarkable effect on the Hungarian farms.

The accession to the European Union had no direct effects on the structure of rabbit and rabbit meat production, but new requirements appeared in the whole production chain.

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The aim of the study was to demonstrate the tendencies in Hungarian domestic rabbit production.

Table 1.: The main rabbit producers in the world

Country	Quantity (ton)	Distribution of world production (%)
1. China	440000	39,7
2. Italy	222000	20,1
3. Spain	114732	10,4
4. France	85200	7,7
5. Egypt	69840	6,3
6.Czech Republic	38500	3,5
7. Germany	33800	3,0
8. Ukraine	15000	1,4
9. Hungary	10932	1,0
10. Argentina	7150	0,6

(Szendrő, 2004)

MATERIALS AND METHODS

The data/information was collected from farmers, slaughterhouses and consumers on questionnaires and interviews. The data of Hungarian Rabbit Production Board were also used.

DISCUSSION

In the last 15 years the total rabbit production was reduced to less than half of the former production level (Table 2.). The total rabbit and carcass production are well known but there is only few data about its distribution on the counties of Hungary (Szendrő-Takács, 2005). The largest rabbit farms usually belong to the slaughterhouses, and most of the farms are close to one of the abattoirs, except the North-Eastern part of the country where the farmers produce far from the slaughterhouses, but their integration is better. The number of rabbits in Hungary: 1007206, out of this does: 183948. Formerly the household small scale farms produced more rabbits than large farms did, but now the approx. 20,000-doe farm owned by two slaughterhouses the number of farms with more than 200 does increased. The production conditions of these large farms fully conform to

the EU requirements. Small farms can become viable if they form integrated production systems.

Table 2.: The Hungarian rabbit production

Year	Purchase, live rabbits (ton)	Export, carcass (ton)
1990	33468	16763
1991	37132	19224
1992	34444	18512
1993	26255	13346
1994	15732	8845
1995	16939	8129
1996	15959	8866
1997	13743	7263
1998	13903	6419
1999	12716	6359
2000	10870	5118
2001	12761	5615
2002	11887	5388
2003	10932	5045
2004	12074	5287

(Kling, 2005)

More and more farm working with breeds and hybrids from recognized breeder organisation (Table 3.), and ask for the governmental support for breeding stock.

Table 3.: Rabbit breeder organisations in Hungary

Breed, hybrid	Name of the organisation	Recognition of the organisation
Pannon White	University of Kaposvár	recognized
Debrecen White	Juráskó Kft.	recognized
Hy-plus Medium	Bácska Rt.	recognized
Hy-plus 19 capitale	Olivia Kft.	recognized
Hycole	Leporex Kft.	recognized
Zika	Sándor Ferenc	recognized
Hila	Anifarm Kft.	provisional

(Kling, 2005)

The sale of whole carcasses decreased with the parallel increasing of processed rabbit products (48 vs. 52%). Three of the seven abattoirs (Baja, Lajosmizse, Baj) are working permanently with variable capacity. The total capacity is 15.7 million rabbits/year, but there are only four abattoirs which suit food-hygiene requirements of the European Union. The weak points of the rabbit production are the following: the traceability of rabbits from stable to table, and the quality management of the small household farming plots.

The most critical point of the systems, which covers the whole product paths (stable to table) is the slaughtering. Due to the Food safety requirements (traceability, risk management) and regarding the growing rabbit production, there is a future for the integrated systems, while the household farming plots are loosing their importance.

Domestic consumption of rabbit meat continues to be negligible: although the total of self-consumption rose, only about 3-5% of the processed rabbits were sold on the domestic market. Beside this the rabbit breeders' regular self-consumption, and their selling on local markets are not included in official statistics.

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ECONOMIC-MATHEMATICAL METHODS AND MODELS APPLIED TO AGROALIMENTARY ECONOMY

METODE ŞI MODELE ECONOMICO-MATEMATICE APLICATE ÎN ECONOMIA AGROALIMENTARĂ

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This article presents a classification of the main economic-mathematical methods and models appplied to agroalimentary economy, as well as a short description of these. Certainly, other classification systems then those presented below may be conceived, and there is always the possibility of combining such models, or the possibility that models not contained in the list to follow exist though. The present classification constitutes the point of view of the authors concerning minimal didactical aspects, necessarily to be imposed in view of creating the profile of a future specialist in the field.

Key-words: *mathematical models, mathematical methods, optimization, diferential models, stochastical models*

Economic-mathematical methods and models

A starting point in the presentation of such a study can base on the definitions presented in *Dicţionarul de neologisme,* authored by Florin Marcu and Constant Maneca, Editura Academiei, Bucureşti, 1986, respectively *Dicţionarul explicativ al limbii române,* Academia Română, Institutul de Lingvistică "Iorgu Iordan", Editura Univers Enciclopedic, 1998, which present as a definition for the term „modelare": „metodă utilizată în ştiinţă şi tehnică constând în reproducerea schematică a unui obiect sau sistem sub forma unui sistem similar sau analog în scopul studierii proprietăţilor şi transformărilor sistemului original", respectively for the term „metodă" „mod (sistematic) de cercetare, de cunoaştere şi de transformare a realităţii obiective". One can remark that the two terms cannot be considered sinonimous, but rather complementary.

Analisyng these definitions, it is clear that the extremely complex variety of the economical phenomena supports the realization of a great

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number of models, in most cases the same phenomenon being expressible in various ways. Hence a certain difficulty appears in adopting a strict and stable classification of all types of models appliable in this field. Such a possible classification is the following:

1. *Optimization methods and models*
- *production functions*
- *optimization using production functions*
- *optimization using linear programming*
- *optimization using nonlinear programming*
2. *Differential models*
- *models realized by means of difference equations*
- *models realized by means of partial derivative equations*
- *models realized by means of variational calculus*
3. *Stochastical models*
4. *Queuing theory*
5. *Game theory*

1. Optimization methods and models

The same sources describe the term „optimizare" as „raționament sau calcul care permite găsirea valorilor unuia sau mai multor parametri corespunzând maximului unei funcții" (sau minimului (n.a.)) or „alegerea şi aplicarea soluției (economice) optime (dintre mai multe posibile)", the word of origin being (fr.) *optimiser, optimisation*. Thus results the necessity of introducing the notion of a „production function" which is a model based on the mathematical definition of a function, described as a relation between two sets. Thus, the elements of a set are transformed by means of a correspondence law into elements in the same way as to the set of production factors corresponds a set of values representing details related to the aim of the process.

Once the concrete model realized by means of a function, the properties of the real system can be studied using the mathematical properties of the model function. This thing is easily achievable in view of the high level of mastering these mathematical notions. We refer to the theory of determining extreme points of real functions of several real variables, as well without as with restrictions – aspects that lead to the determination of the minima or maxima points of the function, in accordance with the definitions previously presented.

The programming problems consist in the elaboration of principles and models of solving a practical problem. The notions of „linear programming", respectively „nonlinear", come from the relations existing between the variables influencing a certain process, the aim of the method beeing each time the determination of the combination which would lead to an optimum of the analysed process. The term of linear programming was introduced by Georg Dantzig in the 1940's and does not directly refer to computer programming, though there are numerous common points, the initially studied aspects beeing of millitary nature – the instruction and logistics schedule in the USA, later beeing allocated for research and government funds, associated with various high technology areas.

Thus, the general form of a linear programming problem is:

$$(1)\ Ax\{=,<,>\}B,\ (optim)f(x)=\sum_{i=1}^{n}c_j x_j,\ \ x_j \geq 0$$

where: $A=(a_{ij})_{i=1,..,n;\,j=1,..,m}$ represents the consume matrix, $B=(b_i)_{i=1,..,n}$ the resources matrix and $X=(x_j)_{j=1,..,m}$ the variables matrix. In case between the variables exists a relation of the form: $(2)g_k(X)=b_k$ where g_k is a nonlinear function, and k is a finite number, then the expression becomes a nonlinear programming problem.

2. Differential models

In dependence of the *time* factor, mathematical modelels can be grouped in two categories: statical and dinamical. Thus, the process during its evolution, can be viewed as a time function, the change speed of the process is a notion which can be identified with the first derivative of the function with respect to the time. Herefrom the problem of determining the status of the process at certain moments of time, hence one observes the usefulness of adopting as mathematical models of processes, the differential equations. In the sequel we shall briefly define differential equations through these elements. Given a certain economic process, for which we denote by ***y(t)*** a state of it, then ***dy / dt*** , represents the change speed of the respective state. In numerous cases this depends on ***y(t)***, ***t*** or other parameters; mathematically the problem can be represented through an implicit function: $F(t,y,y',...,y^n)=0$ - that is an order „***n***" differential equation, and to determine the systems state at any moment one has to

determine the function $\boldsymbol{y}$ (the solution of the equation) which satisfies this relation.

3. Stochastical models

The stochastical model(fr. *Stochastique*) (probabilistic or random model) bases on parameters represented by random variables - models generally useful in the elaboration of a risk decision, of the forecast problems, of the theories which lie at the basis of genetics etc. Combining stochastical models with the optimization theory leads the foundation of stochastical programming as a branch of applied mathematics. The first steps in stochastical modelling date since the years 600, but only in the XXth, in the 30's, an axiomatic study of probability theory appeared, due to the mathematician Andrey Nikolaevich Kolmogorov, who in 1933, developped the theory in his book *Grundbegriffe der Wahrscheinlichkeitsrechnung*.

Thus, a stochastic process can be represented as an application $\boldsymbol{F : T \rightarrow L_0(\Omega, K, P)}$, where the codomain represents the set of measurable functions corresponding to the probability space $\boldsymbol{(\Omega, K, P)}$, or generally a collection of random variables defined on the same set T.

4. Queuing theory

One of the most relevant indicators regarding the consumers perception on the quality of services is represented by the very way the serving system is organized, to avoid prolonged waiting situations, delays or even overdemands, elements otherwise inevitable, due to the random character of arrivals and consumers demands. It is thus clear that the system's performances have an important role regarding the perception on the activities image, and in vue of the competitive system in which generally the economic activities are engaged, a careful study regarding the decision making imposes, to modify the systems chcracteristics. In this context, „*Queuing theory*" appears as a scientific branch, in the frame of „*Operational Research*". Taking into account that most practical activities aim to serve some beneficiars, the appliability of such models is very diverse, queuing theory finding hence applicability in the most various domains: telecommunications, IT, transporting, the taking over of machine constructing pieces, medical systems, banking, servicing units for products intended for agriculture etc.

The main elements of such a system are: *the source* – described as the set of individuals which request a service at a certain moment, *the service station*, unit designed to serve the individuals in the system, *the arrival of individuals in the system* - action expressed through a random variable representing the number of individuals arriving in the system in a certain time unit, *the waiting line* (*coada*, based on the latin word *coda*, that is the ordered lining of a number of persons in waiting for a service) containing the set of individuals in waiting.

Due to the impossibility of correlating several interdepending activities, often appear stoppage situations in the execution of certain branches or so called „queuing" situations. Often, concrete situations can be handled based exclusively on the manager's experience, but in the cases of systmes with an important number of activities it is necessary to imagine a queuing model, for which a detailed apprehension of the characteristics of the studied phenomenon is needed: the average number of units in the system, of units which are served, of unoccupied stations, of arriving units in certain time interval, of units in the queuing line and of the average waiting time in the system, serving time, and waiting time on the line.

5. Game theory

Because very often managerial and marketing problems and decisions lead to specific conflict situations, taking the high number of participants to an economic process into account, it is useful to adopt as mathematical models the models of *game theory* - branch of applied mathematics which studies the problem of optimal behaviour in games of *2* or *n* persons, models which base on the elaboration of the definition of the solution of a game in case of existence of such a solution, the elaboration of the determination methods of the solutions – thoery designed to comprise in its schemes as many as possible real situations.

The foundations of the theory appear in the 1710's, when Leibniz anticipates the necessity of such studies, then in 1713 when James Waldegrave formulates the minimax principle as a solution to a card game for two persons. In time significant contributions were made by the mathematicians Isaac Todhunter and Emile Borel, who also dealt with the minimax principle, theorem proven in 1926 by the hungarian mathematician John von Neumann. The modern principles of game theory are established after 1938, as a result of the collaboration of the economist Oskar Morgenstern and the mathematician John von Neumann.

A significant problem is that of „Nash equilibrium", a particular case being the following: two players may chose between two strategies, to each of these corresponding a certain gain. The data may be expressed in a table of the following type:

Player 1 / Player 2	Strategy 1	Strategy 2
Strategy 1	a_{11}, b_{11}	a_{12}, b_{12}
Strategy 2	a_{21}, b_{21}	a_{22}, b_{22}

Thus $a_{ij}, i, j = 1,2$ represents the gain of player 1 if he plays according to strategy „i" while player 2 uses strategy „j". Similarly, $b_{ij}, i, j = 1,2$ is the gain of player 2 if he uses strategy „j" while player 1 uses strategy „i". Solving the problem means to find an algorithm to determine the moves corresponding to a maximal gain for one of the players.

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TENDENCIES REGARDING THE REGIONAL DEVELOPMENT OF THE AGRICULTURAL PRODUCTION OF GOODS AND AGRICULTURAL SERVICES

TENDINŢE PRIVIND DEZVOLTAREA REGIONALĂ A PRODUCŢIEI AGRICOLE DE BUNURI ŞI SERVICII AGRICOLE

C. I. RUJESCU[*], F. CREŢ*, CODRUŢA CHIŞ*, M. BUTUR**

Analyzing the values of statistical data representing the agricultural production of goods and agricultural services, informations grouped corresponding to the geographical regions of Romania, one observes generally a positive tendency of these values. The paper contains a mathematical study regarding the regional developments, the visualisation of the results consisting in the analysis of corresponding statistical indicators, as well as the analysis of the order of magnitude of these in order to make some comparative studies.

Key words: *agricultural production, mathematical models, statistical data*

The principle of the method

The values of the agricultural production of goods and agricultural services in Romania for the time span 2001-2004 are known, these values corresponding to the geographical regions which cover the entire territory of the country: „1. North-East; 2. South-East; 3. South-Muntenia; 4. South-West Oltenia; 5. West; 6. North-West; 7. Centre; 8. Bucureşti-Ilfov". Also, given the total agricultural surfaces(including all use categories), as well as the mean reference prices of the euro currency for these years, in this paper we express the values of the agricultural production(values cummulated obtained from any agricultural source, including agricultural services) reported to one hectar of land. These are standardized values which along

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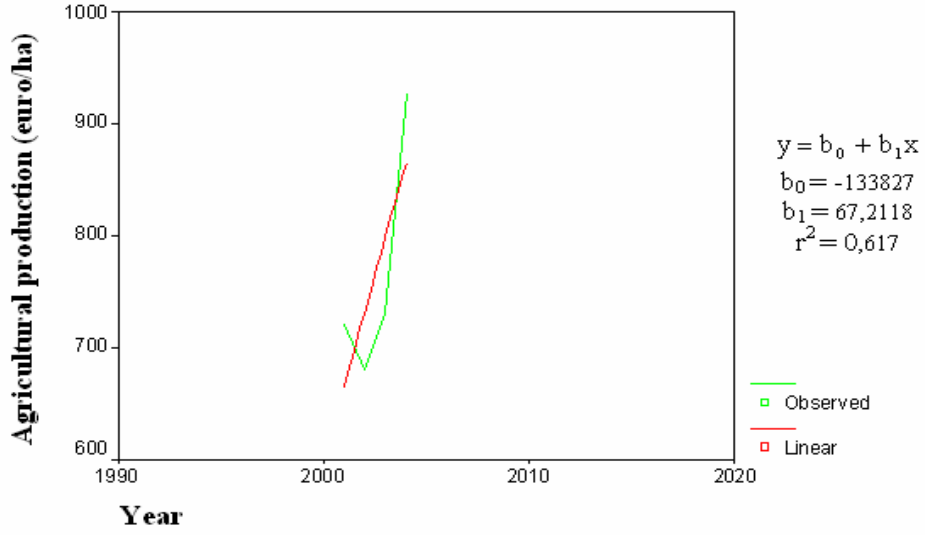
with the anual series can constitute a starting point in expressing the tendencies of the regional development in agriculture. Thus for each of the regions mentioned we computed the coefficients of the linear regression function $y = b_0 + b_1 x$, b_1 representing the slope of the line, the order of its magnitude being a useful indicator in the study of the evolution speed of each region. The results are presented in the following tables.

Results and discution

Table 1. Statistical data corresponding to the geographical region: Romania

Geographical region	Agricultural surface*	The agricultural production of goods and agricultural services (mil. lei)**	euro/ 1 mil. lei***	The agricultural production of goods and agricultural services (euro)	The agricultural production of goods and agricultural services (euro/ha)
ROMÂNIA					
2001	14852341	278428355	38,4218	10697718849	720,2716
2002	14836585	315848560	31,9946	10105455918	681,1174
2003	14717426	404118197	26,627	10760453211	731,1369
2004	14711552	553141357	24,6718	13646991272	927,6378



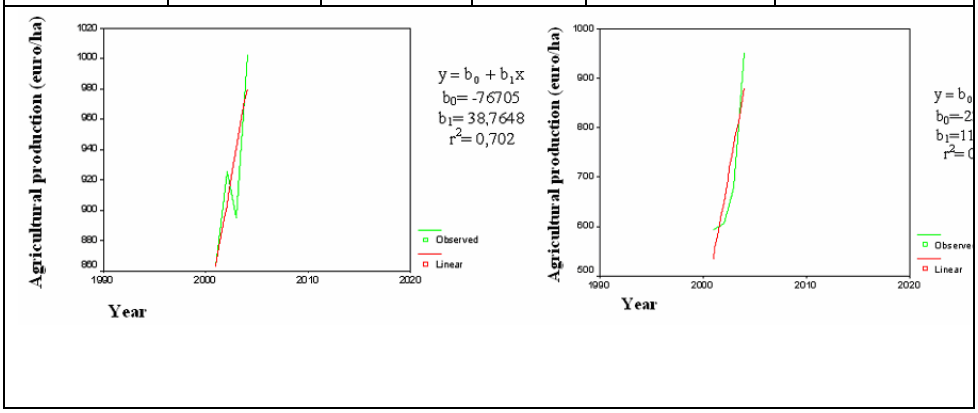
* the land fund, with respect to use, at 31 december, www.insse.ro

** the agricultural production of goods and agricultural services www.insse.ro

*** www.bnr.ro

Table 2. Statistical data corresponding to the geographical region: North-East and South-East

Geographical region	Agricultural surface*	The agricultural production of goods and agricultural services (mil. lei)**	euro/ 1 mil. lei***	The agricultural production of goods and agricultural services (euro)	The agricultural production of goods and agricultural services (euro/ha)
1. North-East					
2001	2130720	47882383	38,4218	1839727391	863,4299
2002	2131421	61674522	31,9946	1973253142	925,7923
2003	2133569	71726601	26,627	1909863846	895,1498
2004	2130876	86615951	24,6718	2136971160	1002,86
2. South-East					
2001	2337075	36073914	38,4218	1386024745	593,0596
2002	2335940	44226783	31,9946	1415019293	605,7601
2003	2335834	59440979	26,627	1582734651	677,5887
2004	2333499	90104712	24,6718	2223045163	952,666



* the land fund, with respect to use, at 31 december, www.insse.ro
** the agricultural production of goods and agricultural services www.insse.ro
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Table 3. Statistical data corresponding to the geographical region: South-Muntenia and South-West Oltenia

Geographical region	Agricultural surface*	The agricultural production of goods and agricultural services (mil. lei)**	euro/ 1 mil. lei***	The agricultural production of goods and agricultural services (euro)	The agricultural production of goods and agricultural services (euro/ha)
3. South - Muntenia					
2001	2450537	50495939	38,4218	1940144920	791,7224
2002	2448576	50600697	31,9946	1618950275	661,1803
2003	2442988	64295679	26,627	1712000723	700,7815
2004	2448272	101760646	24,6718	2510618001	1025,465
4. South-West Oltenia					
2001	1818878	36907934	38,4218	1418069295	779,6396
2002	1811385	30628671	31,9946	979952812,3	540,9964
2003	1810676	46783184	26,627	1245695606	687,9727
2004	1807794	65268691	24,6718	1610295895	890,7519

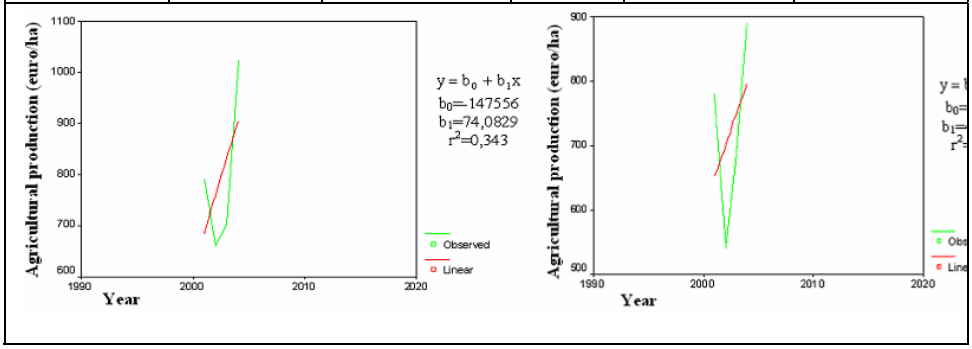

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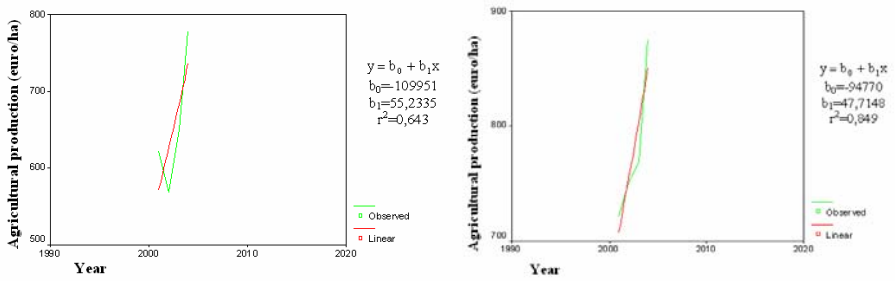
Table 4. Statistical data corresponding to the geographical region: West and North-West

Geographical region	Agricultural surface*	The agricultural production of goods and agricultural services (mil. lei)**	euro/ 1 mil. lei***	The agricultural production of goods and agricultural services (euro)	The agricultural production of goods and agricultural services (euro/ha)
5. West					
2001	1960656	31682613	38,4218	1217303052	620,8652
2002	1958610	34801001	31,9946	1113444942	568,4873
2003	1892888	46232136	26,627	1231022854	650,3411
2004	1892291	59647862	24,6718	1471619943	777,6922
6. North-West					
2001	2094928	39385830	38,4218	1513274522	722,3516
2002	2092275	49038188	31,9946	1568958387	749,8815
2003	2090531	60345984	26,627	1606832214	768,624
2004	2090349	74148491	24,6718	1829376518	875,1536



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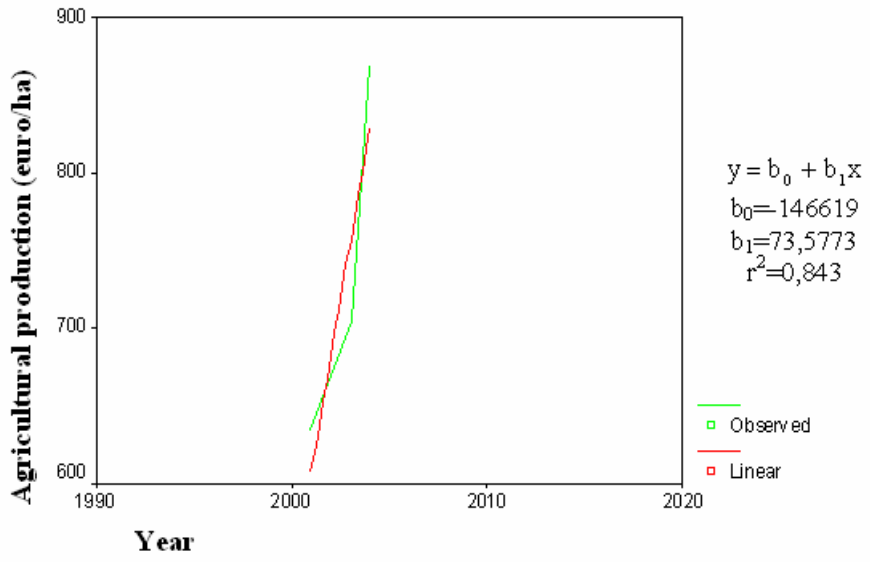
** the agricultural production of goods and agricultural services, www.insse.ro
*** www.bnr.ro

Table 5. Statistical data corresponding to the geographical region: Centre

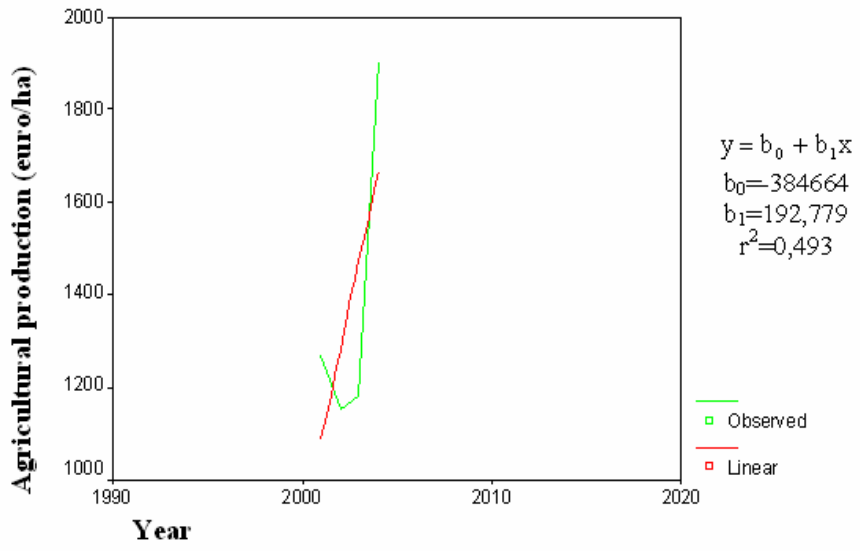
Geographical region	Agricultural surface*	The agricultural production of goods and agricultural services (mil. lei)**	euro/ 1 mil. lei***	The agricultural production of goods and agricultural services (euro)	The agricultural production of goods and agricultural services (euro/ha)
7. Centre					
2001	1941106	32087393	38,4218	1232855428	635,1304
2002	1940413	40627821	31,9946	1299871857	669,8944
2003	1893520	50091270	26,627	1333779996	704,3918
2004	1892480	66649182	24,6718	1644355089	868,889



* the land fund, with respect to use, at 31 decembre, www.insse.ro
** the agricultural production of goods and agricultural services, www.insse.ro
*** www.bnr.ro

Table 6. Statistical data corresponding to the geographical region: Bucureşti – Ilfov

Geographical region	Agricultural surface*	The agricultural production of goods and agricultural services (mil. lei)**	euro/ 1 mil. lei***	The agricultural production of goods and agricultural services (euro)	The agricultural production of goods and agricultural services (euro/ha)
8.Bucureşti - Ilfov					
2001	118441	3912349	38,4218	150319494,7	1269,151
2002	117965	4250877	31,9946	136005211,3	1152,929
2003	117420	5202364	26,627	138523320,2	1179,725
2004	115991	8945822	24,6718	220709504,4	1902,816



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The values of the coefficient b_1, reprezented in decreasing order, correspond to lower development speeds(analized for the time span 2001-2004). One must remark the fact that the method does not refer strictly to the evolution speed of the present agricultural economical regional states, which do not necessarilly express a certain performance level at local level.

Table 7. Regional results corresponding to the evolution speed of the economical processes in agriculture

Nr.crt.	Geographical region	b_1
1.	Bucureşti-Ilfov	192,779
2.	South-East	115,065
3.	South-Muntenia	74,0829
4.	Centre	73,5773
5.	**România**	**67,2118**
6.	West	55,2335
7.	South-West Oltenia	48,0313
8.	North-West	47,7148
9.	North-East	38,7648

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THE STUDY OF THE CORRELATION BETWEEN THE VARIATION SPEED OF AN ECONOMIC PROCESS AND THE PRESENT STATE OF DEVELOPMENT

STUDIUL CORELAŢIEI ÎNTRE VITEZA DE VARIAŢIE A UNUI PROCES ECONOMIC ŞI STADIUL ACTUAL DE DEZVOLTARE

C. I. RUJESCU[*], F. CREŢ*, CODRUŢA CHIŞ*, M. BUTUR, A. GĂVRUŢĂ***

For a set of statistical data representing the agricultural production of goods and agricultural services in geographical regions of Romania, one computes the slopes of the regression lines obtained for points of the form „year-production value", slopes which can be interpreted as mean speed of development of the economic process. The purpose of the paper is to analyse whether there is a significant correlation between these values and the present state of development, expressed through the mean values of the regional productions reported to one hectar of agricultural land.

Key words: *agricultural production, mathematical models, statistic data*

The principle of the method

For each geographical region of Romania : „1. North-East; 2. South-East; 3. South-Muntenia; 4. South-West Oltenia; 5. West; 6. North-West; 7. Centre; 8. Bucureşti-Ilfov", we computed the coefficients of the linear regression function $y = b_0 + b_1 x$, for the series of data containing on one hand the time moments analysed(the years 2001-2004) and on the other hand the regional agricultural productions of goods and agricultural services

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(euro/ha), b_1 representing the slope of the line, its order of magnitude being a useful indicator of the study of the evolution speed of each region. In the sequel we study the correlation level between the series containing these coefficients and the series formed by the means of the productions computed for each geographical region.

The indicators used are the correlation coefficients of Spearman and Kendall. Let X and Y be two random variables. Both Spearman's and Kendall's correlation coefficients measure the dependance of the two random variables, based on the rankings of the variables in n independent pairs of observations

$$(X_i, Y_i),\ i = \overline{1,n}.$$

Spearman's rank is computed from the relation

$$\rho_S = 1 - \frac{6\sum_{i=1}^{n} d_i^{\,2}}{n^3 - n},$$

where n is the sample's volume and $d_i = r_{x_i} - r_{y_i}$ are the differences between the ranks of the same element of the sample.

To test the significance of ρ_S when the sample's volume $n < 30$, one has to compare the statistics

$$t = \rho_S \cdot \sqrt{\frac{n-2}{1-\rho_S^2}}$$

with $t_{\alpha;n-2}$ from the Student's repartition table(two-tailed). If $|t| > t_{\alpha;n-2}$, the two random variables may be considered linear dependent, otherwise there is no significant linear dependence between them.

Kendall's rank correlation coefficient is also a rank statistics, defined by the formula:

$$\tau = \frac{2S}{n(n-1)},$$

where $S = 2N - \frac{n(n-1)}{2}$, N being the number of pairs of indices (i, j) with $i < j$, for which

$$(r_{X_i} - r_{X_j})(r_{Y_i} - r_{Y_j}) > 0.$$

Results and discussions

Table 1. Statistical data corresponding to the geographical region: România

Geographical region	Agricultur-al production of goods and agricultur-al services (euro/ha)*	Mean
ROMÂNIA		765,0409
2001	720,2716	
2002	681,1174	
2003	731,1369	
2004	927,6378	

Table 2. Statistical data corresponding to the geographical region: North-East

Geographical region	Agricultural production of goods and agricultural services (euro/ha)*	Mean
1. North-East		921,808
2001	863,4299	
2002	925,7923	
2003	895,1498	
2004	1002,86	

Table 3. Statistical data corresponding to the geographical region: North-West

Geographical region	Agricultural production of goods and agricultural services (euro/ha)*	Mean
6. North-West		779,0027
2001	722,3516	
2002	749,8815	
2003	768,624	
2004	875,1536	

Table 4. Statistical data corresponding to the geographical region: Centre

Geographical region	Agricultural production of goods and agricultural services (euro/ha)*	Mean
7. Centre		719,5764
2001	635,1304	
2002	669,8944	
2003	704,3918	
2004	868,889	

Table 5. Statistical data corresponding to the geographical region: Bucureşti- Ilfov

Geographi-cal region	Agricultural production of goods and agricultural services (euro/ha)*	Mean
8. Bucureşti - Ilfov		1376,155
2001	1269,151	
2002	1152,929	
2003	1179,725	
2004	1902,816	

*

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- The agricultural production of goods and agricultural services, www.insse.ro;
- www.bnr.ro

Table 6.

Regional results corresponding to the evolution speed of economical processes in agriculture as well as the mean values of the regional productions reported to one hectar of agricultural land

Nr.crt.	Geographical region	b_1	Mean values of the productions / 1 ha agricultural land
1.	Bucureşti-Ilfov	192,779	1376,155
2.	South-East	115,065	707,2686
3.	South-Muntenia	74,0829	707,2686
4.	Centre	73,5773	719,5764
5.	**România**	**67,2118**	765,0409
6.	West	55,2335	654,3465
7.	South-West Oltenia	48,0313	724,8402
8.	North-West	47,7148	779,0027

Table 7.

Spearman's and Kendall's correlation coefficients

		b1	average
Kendall's Correlation →	b1	1,000	-,254
	average	-.254	1.000
	n	9	9
Spearman's Correlation →	b1	1,000	-,192
	average	-,192	1,000
	n	9	9

Observation:

$\rho = -.254$; $\tau = -.192 \Leftrightarrow$ minor correlation.

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NEW SUSTAINABLE RURAL DEVELOPMENT STRATEGIES

NOI STRATEGII DE DEZVOLTAREA RURALĂ DURABILĂ

LUIELA-MAGDALENA CSORBA [*], RAMONA LILE [*]

Business means commercial and industrial/agrarian establishments and everything that affects them The study of businesses is not a single, tidy subject with its own body of knowledge and its own language. Rather, it is a blend of many specialist subjects. Business is dynamic. One of the dynamic side of business is sustainability – an issue we'll analyze in the present paper.

Key words: *rural development, sustainability, sustainable rural development*

Romanian's position in relation to Western Europe has changed since 1 January 2007, because, that nation effectively became a member of the EC overnight. The freeing of the economies of Romanian, Poland, Hungary and Czechia, formerly under communist control offers opportunities to make huge changes in a lot of economical fields. These economies need much development and, a lot of possibilities still exist, but, they are handicapped in a number of ways. Low incomes mean a lack of funds to purchase the materials needed for the production processes; experst are also required. In particular, these economies earn relatively little Western currency with which to purchase Western goods and services. Firms seeking to establish plants in Eastern Europe will probably fiind it difficult to acuire materials and the necessary business information owing to underdeveloped information channels. Distribution channels are often inefficient or absent and retail outlets primitive.

However, in spite of these difficulties, opportunities do exist-even în the short term. Some firms are setting up in Eastern Europe with the help of guarantees of access to Eastern markets as a result of negotiations with the relevant governments. Loans are granted by Western firms and governments

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to assist the Eastern Europe economies to purchase the output of Western companies. Western banks and building societies are improving the quantity and quality of data available on Eastern Europe. This service encourages potential investors. In addition, many governments are providing aid to assist development in this region.

Economists predict rapid rates of growth for the Eastern European markets and this potential has not been ignored by many companies from the EC and other parts of the world. The potential of Eastern Europe may be probably greater in the long term rather than the short term due to the limitations outlined above. It is likely to be exploited as a relatively low-cost base for production rather than as a market in the near future.

The extension of the Single European Market in the Eastern Europe will open up a huge market of about hundred million consumers. Whilst this will create opportunities, it will also allow further competition as European firms gain further access to Romanian markets. Thus, Romanian firms will have to be highly efficient to survive. Some may seek mergers or agreements to enable them to survive in this new, tougher market.

Firms will have to transport further a field and seek new distribution outlets to ensure sales. Marketing may have to be amended to meet the cultural circumstances of the nation. They may have to appoint local agents and marketing agencies.

The free movement of labor will create a new cheap supply of labor, but, at the same time may result in the loss of skilled workers to foreign competitors who offer better conditions or pay. Production may benefit from harmonization of standards and the economies of scale resulting from the longer production runs this allows. However, this may involve investment in new equipment and training.

Domains will be affected in different ways; the same tendency happens with firms. Those fields/firms that do not sell overseas may face only slight increases in domestic competition. Some managers have prepared for the Single European Market, and their managers have already made many of the necessary changes.

One of the above mentioned area, is those concerning with rural development in Romania. Rural development's is part of the regional development of the country.

Each countries macro level reform, use to contribute to the regional economic restructuring. The regional economic restructuring is a complex

Romanian field, because, speaking about Romania it is necessary to remember that this is an extraordinarily diverse country, where the implemented reforms have not followed a straightforward path. These reforms involved a lot of domains, like: economic and political liberalization, privatization of state enterprises, and stabilization of the national financial system, internationalization, and regionalization.

At the moment, in Romania there are large differences in the economic, social status of the rural areas. The impact of such disparities can be seen, in studying and penetrating the life stile in the rural and urban areas of the country. An estimated one third of the Romanian's population lives in rural areas. Some 22% of total population makes their living from agricultural activities. The transition years have seen a fall in the fertility rates and strong outward migration. As a result populations have decreased in many rural regions. Today, demographic projections, particularly those for just after 2010, show that this trend is even more pronounced than it was in the past.

The past experience shows that, regional and rural administration can stimulate or hinder economic development. Once the regionalization and decentralizations obtained/done, the independent regions will be able to avoid the negative effects of the "national-level" shock policies. So, that way will be efficient to stimulate a new increase of the rural strategies needed by each region. The main elements of the rural development strategies must follow the next steps:

1. To identify the concept and the practical alternatives to give solution in solving the strategic issues;
2. To establish the limits of the rural development strategies;
4. To elaborate real programs, which helps to hinder the limits; To determine the steps/activities needed for a long term, which may serve to solve the strategic issues.

The new rural development implied a lot of measures needed to:

- improve the life quality of the population;
- keep clean and intact the "rural nature";
- assure a sustainable development of the rural areas;

The rural development strategies are oriented towards the following directions:

- the development of the rural infrastructure;
- the development of the agriculture, tourism, rural SMEs;
- the creation of new jobs possibilities;
- the protection of the rural environment;
- the improvement and development of education;
- the development of the rural community.

The main issue the rural development strategies are concerning with are: human resources, local communities' development, the ecological values and the "rural nature".

Nowadays, the rural development seems to become a domain which has a global character. That's why, the term "integrated rural development" is used to describe the whole implementing process of the new rural development strategies.

The integrated rural development in Romania has some strategically objectives, regional policies and measures.

The **objectives** are:

- to integrate a sustainable development in the Romanian rural area;
- to maintain a viable rural community;

The **regional priorities** used to reach the above mentioned objectives, are:

- to develop the whole rural infrastructure (transport, communication, energetically one etc);
- to promote and diversity the economic activities;
- to assure the access of the population from the rural areas at a high quality of health and education services;
- to promote the cultural and historical patrimony;

to reinforce the identity of the villages.

The **measures** used to obtain these objectives, are:

- the development of transport and communication infrastructure;

- the development and modernization of the rural and agrarian firms;
- the development of the rural tourism;
- the financial sustaining of the rural activities;
- the elaboration and implementation of rural/local/regional development programmes;
- the implementing of electricity in the Romanian rural areas missing those services;
- the implementation of thermo- energy in that special areas;
- the implementation of measures able to prevent the soil erosion and to protect the agrarian environment;
- the elaboration of ways able to stock, administrate and commercialize the agrarian and forestry products;
- the financial support of the personal working in health and in the education field;
- the creation of rural institutions able to maintain and reinforce the values and the symbolical references of the region;
- the identification, stimulation and reinforcing of the local traditions, to assure a large extension of them in the tourism sector of the Romanian economy.

The last development decade of the EU Member States provides evidence of national successes and failures, set against the particular economic, industrial, historical, social and geographical context of each country or region concerned. They are regions or countries with fast economic growth at high rates, rapid reduction of unemployment rates and strong growth of employment rates, reduction of outward migration or even reverse migration. But, they are countries with economic growth at low rates and strong growth of unemployment rates. That's why, it is worthwhile considered how relevant initiatives in each national/regional context are, initiative able to assure regional and national development.

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THE ENVIRONMENTAL BUSINESS – MAIN FACTOR ASSURING A SUSTAINABLE RURAL DEVELOPMENT

BUSINESS-UL ECOLOGIC – FACTOR MAJOR DE INFLUENȚĂ A DEZVOLTĂRII RURALE SUSTENABILE

LUIELA-MAGDALENA CSORBA [*], RAMONA LILE [*]

Business means commercial and industrial/agrarian establishments and everything that affects them The study of businesses is not a single, tidy subject with its own body of knowledge and its own language. Rather, it is a blend of many specialist subjects. Business is dynamic. One of the dynamic side of business is sustainability – an issue we'll analyze in the present paper.

Key words: *Ecologic business, sustainability, sustainable rural development*

The dictionary give many meanings of the noun "business": a trade or profession; the purchase and sale of goods and services; a commercial, industrial/agrarian establishment; the volume of commercial activity; a commercial policy. They also exists other meanings, but they aren't relevant for our study.

It is essential that, they exist a lot of internal and external pressures that affect many organizations activity, for example, the way we earn or receive money; the influence of local government which places planning and development restrictions on business; or national government which passes laws that affect every business, and collects taxes on profits and VAT on purchases. Trade unions influence the pay and conditions that employers provide, and pressure groups can cause firms to alter the way they make or package their products. Similarly, we must consider the impact of international organizations such as the European Community and the International Monetary Fund. That means, business is dynamic, always changing in response to the changes within it, and in response to changes

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outside it. It has an energy of its own that affects its environment, just as its environment has energy that affects the business.

There exist a very wide range of activities that can be described as business. The most common and accepted classifications take three stages in the production of goods/services; **primary activities** (all the activities concerned with extracting ores, oil or other basic materials; growing grain, fruit and vegetables; breeding animals for meat and so on); **secondary activities** (converting these raw materials into useful products, either by manufacturing or processing); **tertiary activities** (distributing these goods to make it convenient for the consumer to buy them – transportation, wholesaling, retailing, direct mail). But, a new aspect of the nature of business, concerning with the whole range of the activities presented in the above mentioned three fields is – sustainability.

The Report of the Brundtland Commission: "Our Common Future" was published by Oxford University Press (1987). The report deals with sustainable development and the change of politics needed for achieving that. The definition of this term in the report is quite well known and often cited: "Sustainable development is development that meets the needs of the present without compromising the ability of future generations to meet the own needs." The Brundtland Report highlighted three fundamental components of sustainable development, the environment, the economy and society, and highlighted a number of major proposals for sustainable development.

We should conserve and enhance our resource base, by gradually changing the ways in which we develop and use technologies.

Developing nations must be allowed to meat their basic needs of employment, food, energy, water and sanitation. If this is to be done in a sustainable manner, there is a definite need for a sustainable level of population. Economic growth should be revived and developing nations should be allowed a growth of equal quality to the develop nations.

People in the society demand goods/services for a number of reasons. For example, we need food and drink in order to survive. It is very difficult nowadays for an individual or family to provide for them all that they want in the way of basic needs. So, they depend upon businesses to supply their needs. Also, we need good health care to keep us fit and free from disease. We also need recreation and leisure pursuits to help us relax and enjoy friendship. All these show us that we, individuals, use to have

very high expectations. As a very affluent society, we do not see our needs in terms of survival, but in terms of standard of living. And this standard is set not in relation to necessities, but in relation to how much other people have. Today's luxuries become tomorrow's necessities.

That way, our expectations are never allowed to rest. The power of advertising can and does create expectations that influence our society. Advanced economies become more advanced and developing economies try to grow by serving and competing with them. All this global growth of the economic activities generates the harming of the natural environment, because, the greatest part of the investments and businesses done, damages the environment.

Concerning these issues, governments made a lot of spending to sustain a new type of economic activity: the environmental business. This business activity is a complex one, which needs to be defined; but first, let's analyze: business ethics, social responsibility in business, and a link between ethics, social responsibility and environmental protection. The "environmental spending" are another half of fiscal policy. Not all spending by the public authorities has the same effect on the economy. All the spending done to improve the economic environment in which businesses operate is named: infrastructure spending.

Let's analyze the triangle: social responsibility, business ethics and environmental protection.

Businesses have **social responsibilities** to a number of groups. The major social responsibility which can improve the environmental state is the extent to which individuals and firms serve the environmental social needs, building up a clean environmental business. An increasing number of firms are analyzing the social impact of the policies through studying such area as: environmentally sound products and processes. This does, however, pose difficulties since, given the limited resources available to most businesses, trade-offs exist. For example, a firm might be able to adopt ecologically sound production techniques only by installing new machinery which involves job losses.

Social responsibility can increase costs in a number of ways.

Locating on a derelict site as opposed to a Greenfield one is likely to be more expensive because of the costs involved in clearing the site. Furthermore, the communication links may be better for a Greenfield site rather than for a congested inner city location. So, why, you might ask, do

some firms go to all this trouble and expenses? They are not, after all, legally obliged to do so and by so doing may come into conflict with their shareholders who are likely to be seeking the highest possible profits. A lot of firms used to do that way (in the past) because this is a basis for their publicity. Certainly, they wish to avoid the damaging publicity which may result from any form of environmental pollution. They believe, such socially responsible actions will improve their sales and profitability in the long term. Such actions enhance industrial relations with consequent commercial benefits. Undoubtedly, such an approach improves communications with the local community and so confers benefits on both parties. Nowadays, many businesses produce publicity materials relating to, for example, their caring environmental policy. Obviously they believe that consumers are influenced by this aspect of business behavior and response accordingly. In other cases, this kind of promotional literature and policy can be a reaction to past adverse publicity or a response to pressure from environmental groups or consumers. In recent years, environmental protection has become an increasingly important aspect of business management, and, gave birth to a new field of study: the environmental business. This new business domain is receiving a great deal of media attention at the moment giving rise to the question of whether tighter environmental controls on business activities should exist. You may have seen or read about cases in which companies have been involved in highly unethical ecological behavior, such as polluting marine life caused by a group of pollutants believed by researchers to contain organic compounds, such as pesticides, polychlorinated biphenyls (which kills fish and other marine creatures, and may harm the health of the human being because of the presence of organics compounds in fish). Another major ethical issue relates to the activities of food companies, which use to produce synthetically food, which harms the human health and the environmental health too. Is it correct to encourage people to consume goods which these arguments differ? Critics tend to attack the lack of ethics (ethical grounds), while the defense tends to underline the commercial meanings of that facts. But, managing businesses so as to minimize the adverse impact on the environment now attracts an enormous amount of media and public attention, and gave the necessary background of the environmental business. Society has come to expect higher standards of environmental performance. The media attention given to the environment has both been stimulated by and a response to public interest in this topic.

So, firms have become aware of the importance of being seen as environmentally responsible and reacting to the growth of "green consumerism". Demand from consumers for "greener" products is also creating opportunities for businesses. That way, rural development became one of the main factors which may assure the sustainability in the environmental business.

In the second part of the20th century was defined at the first time the term: "sustainable development"; as a part of these process was underlined the meanings of rural development.

Rural developments have a lot of components which build up the meaning of these terms:

- the local rural development;
- the regional rural development;
- the trans - boarder rural development;
- the Pan - European rural development.

So, the aim of the regional policy is not only to remove or lessen the regional disparities between incomes, industry and general prosperity, but also to permit the free market development of the rural policy. The success of the Romanian rural policy depends upon the relative strength of the governments measures as compared with other location factors (such as the cost of skilled labor, sources of supplies, proximity to markets). The increasing importance of the European Community as a market will attract investments in the Romanian rural area. But, the future is of those areas which are able to exploit "naturally" the "fruits" of the earth, withoutharming the environment. Still are factors limiting the success of rural policy.

- Some depressed rural areas have suffered shortages of suitably skilled labor and this dissuades firms from locating in such regions in spite of government incentives;
- Some firms remain in the more prosperous regions, with high rural development, where managers, peoples, families do not locate in other areas with, what they consider to be socially poorer;
- In the last decade, government has managed the economy with greater emphasis on market forces and less reliance on state intervention. This has resulted in less expenditure and commitment to regional policy.

But, indeed, the media attention given to the sustainable rural development - as part of the environmental economy - has been stimulated by and a response to public interest in this topic. As a result, a significant response came from business.

A number of causes of damage to the environment have emerged over years, bringing harmful reaction of the rural side of environment. This is an enormous and complex area of study, which is always negatively influenced by the same causes which determine environmental damages. Environmental businesses have to solve these problems, using non-pollutant producing processes and trying to solve huge problems like:

a) Global warming

An insulating layer around the earth has been formed over many years by a concoction of gases, mainly carbon dioxide and CFCs. This layer admits the sun's rays but prevents heat generated on the earth from escaping. As these gases develop in the atmosphere, so the temperature on the planet's surface rises. These gases operate like the glass in a greenhouse to retain heat, giving rise to name "greenhouse effect". These effects generate problems in the human activity and in the human life generally, and in the rural field especially.

b) Acid rain

Is the result of acid substances and hydrocarbons entering the atmosphere and falling as rain, far from the source of pollution, and causing damages to trees and animal life, as well as buildings. Businesses and society, if they both rely on environmental business, must avoid to use fossilfuels (without using special filters) in generating electricity, and to emit pollutants into the atmosphere.

c) Depletion of the ozone layer

CFCs contribute to the depletion of the ozone layer, which generates a particular risk at the poles. If the amount of ultraviolet rays reaching the earth's surface increases substantially, then the result is likely to include an increase in the incidence of skin cancers and stunted plant growth (with negative impact upon sustainable rural development).

d) Waste is produced by almost every business activity.

These are the major types of pollution and some of their causes. Scientists readily admit that they do not know all the causes or consequences of pollution. But, it is an area that continues to be researched

by industry and governmental bodies and, to solve these problems, a sustainable rural development and an environmental business is needed.

Environmental pressure groups have determined many businesses to re-evaluate their costs of production; businesses have been long aware of private costs – the costs borne directly by the producer. The environmental lobby has increasingly felt that the true cost of production should include also those costs borne by third parties – the social costs of production.

Costs that businesses impose upon society include noise and congestion as well as air and water pollution; all of these can affect other local businesses and residents. If the polluting business either had to pay compensation to the third parties affected or adopt new (and presumably more expensive) production techniques, then the costs of production would be higher. As a result, the output and sales of polluting products would fall or the new techniques would eliminate or reduce pollution, generating at the end, a way to develop environmental rural business.

As protecting the environment has achieved a higher priority amongst societies throughout the world, so the pressures upon businesses to adopt environmental friendly processes and products internationally have grown. A sustainable rural development means to take account that, environmental protection has implications for most aspects of that business. There is a pressure on businesses to redesign products so as to eliminate those that are damaging the environment and the human health. Businesses in that field are also seeking new sources of supply – either from sources whose supplies are renewable or result from recycling. The most significant implication of the environmental business in assuring a sustainable rural development is, through production processes. These are often major sources of air, water and noise pollution and frequently result in large amounts of waste products, some of which are toxic in nature.

In 1995, EC elaborated a main directive relating to all aspects of sustainable rural development (The Cork Declaration), which contains 10 points covering a few rural regulation issues, like:

- Rural development must be a priority for the EC;
- The rural development policy must be a complex one;
- Sustainability in rural development means, to assure the cultural identity, the energy sources, the beauty of the nature;
- Subsidiary is the main principle of the rural development policy;

- Transparency is needed in implementing sustainable rural development programmes.

The final goal of rural development is to assure the integrity of rural environment, helping these pieces of nature to sustain a healthy environmental business, efficient for the society and for the human being.

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RESEARCH OF CITIZENS' OPINIONS ON LIVING ENVIRONMENT IN SMALL MUNICIPALITY

CERCETARI LEGATE DE OPINIA LOCUITORILOR PRIVIND MEDIUL DE VIATA DIN ORASELE MICI

ANNA ČERMÁKOVÁ*, R. BISKUP*, M. ROST*

Opinions of citizens living in small municipalities on the work of the local management, municipal facilities and local job opportunities were classified using fuzzy cluster analysis. We focused on young people aged 18–35 living in South Bohemia, close to the Czech-Austrian border. We classified respondents into tree clusters according to their sentiments. Cluster of "dissatisfied citizens" is generated by men aged 30–35 with secondary school or university degree. These men are not satisfied with anything except the quality of service in the local restaurant. Younger people are less critical and they generate two clusters – "clusters of satisfied citizens". Distinction between these two clusters is in the different opinion on the existence of job opportunities also on the work of the local municipal management. It is difficult to find a job for people without a upper-secondary school degree and at the same time the majority of these people do not run any business.

Key words: *Socio-economic conditions, sustainable development of countryside, citizens' sentiment to environment in small municipality and fuzzy cluster analysis*

INTRODUCTION

Today's phenomenon – present not only in the Czech Republic – is a migration of young people from the countryside to towns and cities. This causes a slow exodus of people form the countryside – most especially from areas close to the borders. The consequence of this fact is a lower state subsidy of local municipal budgets causing problems with municipal maintaining and functioning. We were interested how people living in small municipalities see their lives there. We focused on opinions of people living in the micro-region of Kaplicko, more concretely on municipalities situated in mountain and sub-mountain areas with less than 400 residents.

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AIM

The main aim of this contribution was to analyse and to find objective opinions of young people living in the micro-region of Kaplicko on living conditions in the particular municipality.

MATERIAL AND METHODOLOGY

In the contribution, we used results of the pilot research conducted under the grant MSM 6007665806.

We asked citizens aged of 18–35 years and divided them into tree age categories: (a) 18–24 years, (b) 25–29 years and (c) 30–35 years.

We asked them to express their satisfaction with the following items:

1. shop supply and services in the municipality,
2. service, tidiness and helpfulness of the personnel of the local restaurants,
3. transport accessibility and connection with other municipalities and regional centres,
4. equipment of local kindergartens and schools and work of the teachers,
5. social, cultural and sport facilities,
6. job opportunities in the municipality and its surrounding
7. work of the municipal management and representatives.

The respondents expressed their opinion using the following 5 point scale: 0 – I do not use/need it, 1 – I am not satisfied at all, 2 – I am rather dissatisfied, 3 – I am rather satisfied, 4 – I am totally satisfied.

As a categorical indicator, we took in: (a) gender, (b) age and (c) educational background (apprentice education 'SOU', apprentice education with upper-secondary education degree 'SOUM', upper-secondary education 'SS' and university education 'VS'.

The classification was made using the cluster analysis, more concretely using FANNY algorithm. There are essential differences from crisp clustering in classification of particular objects $\mathbf{x}_1, \mathbf{x}_2, ..., \mathbf{x}_n$ of data matrix $\mathbf{X}_{[n \times p]}$ into previously defined number of clusters, at the same time it allows to compute the degree of membership i^{th} object of data matrix $\mathbf{X}_{[n \times p]}$

in to v^{th} cluster., $v = 1,2,...,k$. This statistics is called degree of membership, symbolized by μ_{iv} and satisfy the following conditions:

$$\mu_{iv} \geq 0, \qquad \forall\, i = 1,2,...,n \qquad \text{and} \qquad \forall\, v = 1,2,...,k, \tag{1}$$

$$\sum_{v=1}^{k} \mu_{iv} = 1 \qquad \forall\, i = 1,2,...,n. \tag{2}$$

Basically, it is an optimalization problem. We use the given distance matrix and we minimize the objective function

$$\sum_{v=1}^{k} \frac{\sum_{i=1}^{n}\sum_{j=1}^{n} \mu_{iv}^2 \mu_{jv}^2 d\left(\mathbf{x}_i, \mathbf{x}_j\right)}{2\sum_{j=1}^{n} \mu_{jv}^2} \tag{3}$$

in a way that conditions (1) and (2) are met.

FANNY method was used also because it enables us to work with dissimilarity measure and with comparison to classical method for example *k*-means is more robust to assumption of sphericity of particular clusters. A detailed description of the solution is in monograph [3]. Taking into consideration the feature of the data, we used Gower's coefficient dissimilarity as a rate of dissimilarity measure.

Optimal number of clusters was obtained using the technique of incremental partitioning – see [4]. We considered the number of clusters showing the maximum value of average silhouette width for whole decomposition.

RESULTS

Using the technique of the incremental partitioning, we obtained values of silhouette width of particular clusters and values of average silhouette width for total partition k = 2,3,…,10. The partition was made gradually for 1,2,…,10 clusters. The obtained values are presented in table 1. Roughly, it is possible to present the average silhouette width as measure of compactness of particular clusters at previously defined number of clusters. The higher values indicate the best final solution.

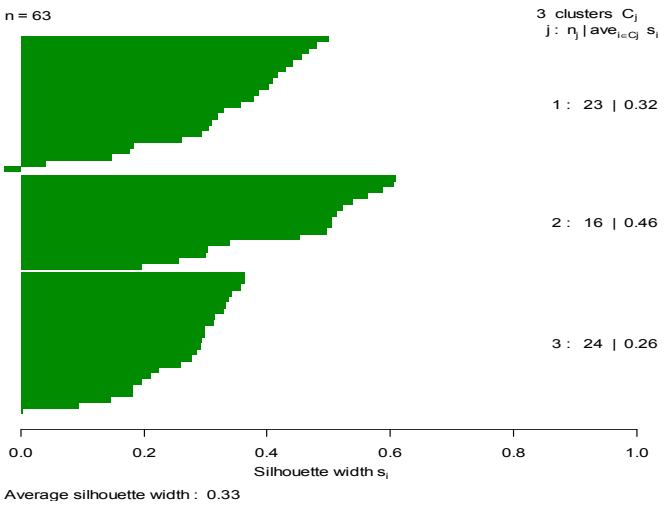
Table 1. Average Silhouette width

	Average silhouette width for whole decomposition	**Average silhouette width of each clusters**									
											0
	0.329	.366	.289								
	0.334	**.324**	**.455**	**.262**							
	0.232	.277	.347	.127	.000						
	0.243	.284	.394	.170	0.333	.000					
	0.176	.248	.174	.172	0.163	.000	.188				
	0.179	.288	0.222	.340	.041	.000	.198	.158			
	0.258	.088	.337	.402	.177	.000	.142	.142	.108		
	0.159	.070	.337	.169	.152	0.029	.000	.125	.094	.125	
0	0.137	.070	.341	.169	.083	0.029	.111	.082	.112	.112	.112

Analyzing the values in table 1, it is obvious that it is optimal to use a partition to three clusters. Using this method, the silhouette width of particular clusters has values of 0.324, 0.455 and 0.262. The general impression of the quality of such a solution can be obtained using a silhouette plot – see Graph 1.

The graph 1 and data in table 1, we can judge that the most compact cluster is in case of three cluster partition the second cluster with average silhouette width equal to 0.46. There were 25.4 % respondents in this cluster.

Graph 1. Silhouette plot for finally solution (k=3)



Several respondents were allocated in the first cluster falsely. In the relevant silhouette plot is this group of respondents pictured with the negative silhouette width. Regarding this, the least compact and fuzzy defined cluster is the third cluster, with average silhouette width equal to 0.26. This cluster contained the largest number of respondents – 38.1 %.

Based on the data from tables 2–5, we can particular clusters characterize.

The first cluster is a typical male cluster. This cluster contains more than 52 % of the addressed men. The third cluster could be regarded as typically female containing almost a half of addressed women. The second cluster is rather indifferent regarding sex.

Regarding the age, the first cluster is formed by almost 60% of respondents aged 30–35, while there are only few respondents of this age in the second cluster. The second cluster is typical of the middle age class respondents (25–29). The last cluster is a cluster of the youngest generation (respondents aged 18–24).

Table 2.

Mode categories for particular variables in dependence to membership to particular clusters.

	Cluster 1	Cluster 2	Cluster 3
Shop	1	3	3
Restaurant	2a3	3	3
Health centre	1	0	2
Public transport	1	2	2
Local management	1a2	3	2
Work	2	1	3
Kindergarten	1	0	3
School	1	0	3
Culture	1	3	3
Sport	1	3	3

Table 3.

Proportion of male and female in particular clusters (%).

Gender	Cluster 1	Cluster 2	Cluster 3
Male	52.38	19.04	28.57
Female	28.57	28.57	42.85

Table 4.

Proportion of age categories in particular clusters (%).

Age	Cluster 1	Cluster 2	Cluster 3
18–24	24.13	27.58	48.27
25–29	30.77	46.15	23.07
30–35	57.14	9.52	33.33

Table 5.

Proportion of respondents in particular clusters with respect to educational background (%).

Educational background	Cluster 1	Cluster 2	Cluster 3
SOU	18.75	43.75	37.50
SOUM	11.76	11.76	76.47
SS	52.94	29.41	17.65
VS	69.23	15.38	15.38

Regarding the education, the first cluster is formed above all by respondents with an upper-secondary or university degree. On the other hand, the other two clusters are formed by respondents without higher education (workmen, craftsmen etc.).

Based on the values in table 2, it is possible to characterize the first cluster as a cluster of dissatisfied citizens. These respondents think that there not enough job opportunities in the municipality and it's surrounding, the living conditions are not good and that the work of the local municipal management is also bad.

The second and the third cluster can be characterized as clusters of satisfied citizens. If they use provided facilities in the municipality, they are satisfied with them. There is not a clear difference in the opinion on the work of the local management. More sharp distinction can be seen between these two clusters is in the different opinion on the existence of job opportunities. The respondents of the second cluster (workmen and craftsmen aged 25–29) think that for their group there are not enough job opportunities. The respondent of the third cluster do not complain about this.

It is interesting that regardless the cluster membership, almost all the respondents are satisfied with the service in the local restaurant and dissatisfied with the work of the local transport accessibility.

CONCLUSION

We managed to classify the respondents into three clusters according their opinions on job opportunities in the municipality and its surrounding, the living conditions and the work of the municipal management and representatives. The first cluster of "dissatisfied citizens" is a cluster of men aged 30–35 with upper-secondary or university education. These respondents think that in the municipalities there are not enough job opportunities relevant to their education. They believe that the provided services and facilities are no sufficient and the work of the local management is rather bad. Younger respondents are less critical. If they use any provided facility, they are satisfied with it. To a certain extend, they are also satisfied with the work of the municipal management. It is difficult to find a job for people without a higher secondary school degree and at the same time the majority of these people do not run any business.

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EVALUATION OF EFFICIENCY AND SUPEREFFICIENCY OF PIG FARMS

EVALUAREA EFICIENTEI SI SUPEREFICIENTEI FERMELOR DE PORCI

L. FRIEBEL*, JANA FRIEBELOVÁ*

This paper deals with the technical efficiency of pig farms in the Czech Republic using Data Envelopment Analysis (DEA). DEA is a technique for measuring relative performances of different production units, where the presence of multiple inputs and outputs makes mutual comparison difficult. Besides evaluation of efficiency, the article is focused on an application of the Super Efficiency model. This model is aimed at the comparison of effective units.

Key words: *pig production, performance, efficiency, data envelopment analysis, super efficiency*

INTRODUCTION

Data envelopment analysis (DEA) models are instrumental to technical efficiency evaluation of decision making units (DMU) based on the size of inputs and outputs. Taking this into account, data envelopment models work with several inputs and outputs and therefore belong to multicriteria decision making methods.

DEA is used to measure the relative efficiency of comparable units. It means, these units use the same inputs to production the same outputs but there are some difference in their performance. The number of units must be biggish, because many units seem to be efficient with small amount of units in the group and big criteria number.

It is necessary pay attention to the choice of evaluating criteria. We have to choose relevant criteria that are not correlating for performance units.

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METHODOLOGY

Data envelopment analysis (DEA)

The aim of this method is to divide evaluated subjects according to spent inputs and produced outputs into two groups – efficient and inefficient. DEA compares units with respect to the best units. DEA is a method based on linear programming theory.

DEA models result from Farrel`s model for measurement of efficiency that Charnes, Cooper and Rhodes (CCR) and Banker, Charles and Cooper (BCC) upgraded. CCR models assume constant returns of scale; BCC models variable returns of scale. Both can be either input or output oriented.

In the next part of this text we assume an output oriented model, which means to minimize inputs with given size outputs. In the case of an inefficient unit we find necessary changes in outputs for this unit to be efficient.

Consider a set of p homogenous units. Reflect on m inputs (x_i , i = 1, 2, …, m) and n outputs (y_j , j = 1, 2, …, n) for each unit. Efficiency scale is determined by the technical efficiency coefficient. This is a weighted sum of inputs and outputs ratio.

Relative efficiency ratio can be expressed by the following formula

$$\Phi_k = \frac{\sum_{j=1}^{n} u_{jk} y_{jk}}{\sum_{i=1}^{m} v_{ik} x_{ik}}, \; k = 1, 2, ..., p. \qquad (1)$$

Where $v_{ik}, i = 1,2,...,m$ are weights of i-th input and $u_{jk}, j = 1,2,...,n$ are weights of j-th output. Vector $\boldsymbol{u}_k$ and $\boldsymbol{v}_k$ represent desired combinations of inputs and outputs for the k-th unit in order for the k-th unit to become maximally efficient.

Weights in (1) must be determined so that the technical efficiency coefficient is maximal or minimal (it is dependent on model orientation). If technical efficiency coefficient is equal to one, the unit is efficient. A non-efficient unit's coefficient is less or more than one (input or output oriented model). DEA models give for non-efficient units a set of recommendations in order to improve their efficiency, with increasing outputs or decreasing

outputs. A model based on (1) is fractional from a mathematical point of view. We can convert this model with Charnes Coper transformation to a standard linear model.

Input oriented model (CCR) The mathematical model for the *H*-th unit (*H*-th unit is one from *p* units) is as follows:

$$\max. \quad \sum_{j=1}^{n} y_{jH} u_{jH}, \tag{2}$$

s. t.

$$\sum_{j=1}^{n} y_{jk} u_{jH} \le \sum_{i=1}^{m} x_{ik} v_{iH}, \; k = 1,2,...,p,$$

$$\sum_{i=1}^{m} x_{iH} v_{iH} = 1, \tag{3}$$

$$u_{jH} \ge 0, \; v_{iH} \ge 0.$$

Weights are assigned to the *i*-th input and weights assigned to the *j*-th output for the *k*-unit ($k = 1,2,...,p$) in this model. The weights are determined individually for each unit, therefore it is necessary to solve p models.

An associated dual model is:

$$\min. \quad \theta_H \tag{4}$$

s. t.

$$x_{iH}\theta_H - \sum_{k=1}^{p} x_{ik}\lambda_{kH} \ge 0, \; i = 1,2,...,m,$$

$$\sum_{k=1}^{p} y_{jk}\lambda_{kH} \ge y_{jH}, \; j = 1,2,...,n, \tag{5}$$

$$\sum_{k=1}^{p} \lambda_{kH} = 1,$$

$$\lambda_{kH} \ge 0, \; k = 1,2,...,p.$$

The value of the objective function θ_H is equal to the value objective function of the primal model (2), (3). We can interpret this value as a necessary reduction of inputs in order to become efficient.

The λ_{kH} coefficients determine a linear combination of inputs and peer units creating a virtual efficient unit for unit H (see (6)).

$$x_{iH}^{'} = \sum_{k=1}^{p} x_{ik}\lambda_{kH}, i = 1,2,...,m, \quad (6) \quad \textit{Input}$$

$$y_{jH}^{'} = \sum_{k=1}^{p} y_{jk}\lambda_{kH}, j = 1,2,...,n.$$

oriented BCC model

The primal model BCC for unit *H* is as follows:

$$\max. \quad \sum_{j=1}^{n} y_{jH}u_{jH} + \mu \quad , \quad (7)$$

s. t.

$$\sum_{j=1}^{n} y_{jk}u_{jH} + \mu \le \sum_{i=1}^{m} x_{ik}v_{iH}, k = 1,2,...,p,$$

$$\sum_{i=1}^{m} x_{iH}v_{iH} = 1, \quad (8)$$

$$u_{jH} \ge 0, v_{iH} \ge 0, \mu - \text{a}rbitrary,$$

where μ isa variable belonging to the dual model condition of convexity:

$$\sum_{k=1}^{p} \lambda_{kH} = 1. \quad (9)$$

The dual model BCC is defined as:

$$\min. \quad \theta_H$$

$$x_{iH}\theta_H - \sum_{k=1}^{p} x_{ik}\lambda_{kH} \ge 0, i = 1,2,...,m,$$

$$\text{s.t.} \quad \sum_{k=1}^{p} y_{jk}\lambda_{kH} \ge y_{jH}, j = 1,2,...,n, \quad (10)$$

$$\sum_{k=1}^{p} \lambda_{kH} = 1,$$

$$\lambda_{kH} \ge 0, k = 1,2,...,p.$$

Superefficiency models

The base DEA model assigns to an efficient unit 100% technical efficiency. There is evidence that, with increasing amounts of inputs and outputs, there is an increases in the number of efficient units. Because of further qualification of the 100% rated units there was proposed a few techniques for measuring super efficiency. The score of a unit regarded as super-efficient exceeds 100%. The principles of all super-efficiency models are based on the removal of measured units and on establishing a new data

envelopment. The level of super-efficiency is given with the distance between inputs and outputs of evaluated units and new envelopment. There are used different metrics used for distance measuring and those metrics set super-efficiency models apart.

The first model of this category was formulated by Anderson and Peterson in [1]. Next, the SBM (Slack Based Measure) model was designed by Tone [7]. This model serves as the basis for the definition of superefficiency. Efficiency is measured only by additional variables $s+$ and $s-$. The model formula, providing constant returns to scale, is:

$$\min.\ \rho = \frac{1-\frac{1}{m}\sum_{i=1}^{m}\frac{s_i^-}{x_{iH}}}{1-\frac{1}{r}\sum_{j=1}^{r}\frac{s_j^+}{y_{jH}}} \tag{11}$$

s.t.

$$\begin{aligned}
&\sum_{k=1,\neq H}^{p} x_{ik}\lambda_k + s_i^- = x_{iH},\ i = 1, 2, ..., m,\\
&\sum_{k=1,\neq H}^{p} y_{jk}\lambda_k - s_j^+ = y_{jH},\ j = 1, 2, ..., n,\\
&\lambda_j \geq 0,\ s_i^- \geq 0,\ s_j^+ \geq 0.
\end{aligned} \tag{12}$$

The variables $s+$ and $s-$ measure the distance of inputs $X\lambda$ and outputs $Y\lambda$ of a virtual unit from those of the unit evaluated (X_H). The numerator and the denominator of the objective function of model (9) measures the average distance of inputs and outputs, respectively, from the efficiency threshold.

In our application we selected the SBMG model originating from the SBM model. The SBMG model measures super-efficiency with the Target programming method. The objective function is modified by following:

$$\min.\ \rho = 1 + t\gamma + (1-t)\left(\sum_{i=1}^{m}\frac{s_i^+}{x_{iH}} + \sum_{j=1}^{n}\frac{s_j^-}{y_{jH}}\right), \tag{13}$$

$$\text{s. t.} \quad \begin{aligned} &\sum_{k=1,\neq H}^{p} x_{ik}\lambda_k + s_i^- - s_i^+ = x_{iH},\ i = 1, 2, ..., m, \\ &\sum_{k=1,\neq H}^{p} y_{jk}\lambda_k + s_j^- - s_j^+ = y_{jH},\ j = 1, 2, ..., n, \\ &s_i^+ \le \gamma,\ i = 1, 2, ..., m, \\ &s_j^- \le \gamma,\ j = 1, 2, ..., n, \\ &t \in \langle 0,1 \rangle, \\ &\lambda_j \ge 0, s_i^- \ge 0, s_i^+ \ge 0, s_j^- \ge 0, s_j^+ \ge 0. \end{aligned} \qquad (14)$$

The SBMG model determines distance of DMU H from the virtual unit U* using positive and negative differential variables s_i^-, s_i^+ for inputs and s_j^-, s_j^+ for outputs. The objective function ρ involves only positive differences for inputs and negative differences for outputs because for inputs there are negative higher values and for outputs, lower values. For t=0 the weighted sum of differences is minimized, for t=1 maximal difference γ is minimized. Both approaches can be combined.

APPLICATION

We keep at our disposal information about pig farms that are focused on piglet production, starting from the period of fattening and fattening.

Twenty breeds were chosen for evaluation by data envelopment analysis. The program Frontier Analyst by the Banxia Copany was used for computation.

The following inputs for part of the breeding – piglet production – were chosen: the needs of the feeding mix for sows per piglet per day [kg]; labour cost per piglet [CZK]; amortization per piglet [CZK] and mortality [%]. Outputs for this part of breeding were chosen: the number of produced piglets by sow [head] and daily gain in weight per head [g].

The following inputs for this part of breeding – starting period of fattening – were chosen: needs of feeding mix per kg of gain in weight [kg]; labour cost per kg of gain in weight [CZK]; amortization per kg of gain in weight [CZK] and mortality [%]. Outputs for this part of breeding were chosen: gain in weight per head as the difference between entering weight and output weight (gain in weight in this part of breeding) [kg] and daily gain in weight per head [g].

Inputs for this part of breeding – fattening – were chosen: needs of feeding mix per kg of gain in weight [kg]; labour cost per kg of gain in weight [CZK]; amortization per kg of gain in weight [CZK] and mortality [%]. Outputs for this part of breeding were chosen: gain in weight in this part of breeding [kg] and daily gain in weight per head [g].

Non correlate data are supposed for successful use of DEA methods. Therefore correlated coefficients were calculated and only a weak correlation was found.

Results for the input oriented CCR model are shown in table 1. There are many 100% efficiency units and therefore it is a necessary evaluation of those units by superefficiency methods.

There are evaluation results of efficiency units by the SBMG model in tables 2, 3 and 4. These results were computed in Excel (Add-Ins Solver).

Table 1: Results of DEA

Unit	Efficiency(%)		
	Piglet production	Starting period of fattening	Fattening
1	87,15	100,00	92,77
2	100,00	94,65	67,33
3	84,85	77,64	89,81
4	100,00	83,89	88,85
5	93,08	100,00	100,00
6	88,07	95,91	82,83
7	100,00	100,00	89,25
8	90,08	40,92	93,77
9	100,00	100,00	88,34
10	81,70	77,87	100,00
11	83,92	80,91	91,01
12	100,00	97,16	100,00
13	94,75	97,67	89,22
14	100,00	100,00	100,00
15	88,87	100,00	100,00
16	100,00	100,00	85,68
17	100,00	90,73	89,58
18	90,26	76,18	89,90
19	91,07	100,00	100,00
20	86,77	96,15	100,00

Table 2: Rate of super efficiency for piglet production

Farm	ρ
4	1,894204
2	1,640119
14	1,447522
9	1,188227
7	1,140505
12	1,065435
17	1,05247
16	1,012487

Table 3: Rate of super efficiency for starting period of fattening

Farm	ρ
19	1,719631
15	1,404888
1	1,389848
5	1,28506
14	1,248539
7	1,180515
16	1,052715
9	1,038411

Table 4: Rate of super efficiency for fattening

Farm	ρ
14	2,312575
20	1,582867
12	1,222859
15	1,156622
5	1,116784
19	1,088434
10	1,037112

We determine efficient and inefficient units with a base DEA model. In the case of the inefficiency model, it indicates necessary input changes of relevant units for reaching the efficiency frontier. We can choose unit no. 3 for example. This unit is inefficient in all stages of pig breeding. DMU no. 3 is 84.85 % efficient in the stage of piglet production. To come up to the efficiency frontier it is necessary to reduce feed consumption by 15 %, labor costs by 40 %, and amortization by 40 %. This is necessary to make lower mortality also. Reduction of mortality would cause greater veterinary expenses. (We couldn't embrace veterinary expenses because we haven't got this data at our disposal). In the starting period of fattening this DMU is only 77.64% efficient. To come up to the efficiency frontier it is necessary to reduce feed consumption by 22 %, labor costs by 70 %, and amortization by 22 %. The mortality is very high too and needs to be reduced. In the period of fattening, DMU attains 89.81 % of efficiency. This level implies necessary changes in inputs. The bigger reduction is needed in amortization, about 42%. In the case of feed consumption and labor, it is recommended to reduce this by 10%. Under the terms of the super efficiency model we ranked DMUs according to distance from the efficiency frontier. We skipped considered DMU from the set and constructed a new efficiency frontier. The measure of super efficiency is the distance between the considered DMU and the new efficiency frontier. In other words, we surveyed which of the units is more or less efficient.

CONCLUSSION

There was shown an application of the data envelopment analysis method (DEA) in evaluation of the efficiency of pig farms in this contribution. The DEA method gave good results because of its orientation on technical merits. The results of DEA are not only a comparison between production units but a creation of a set of recommendations for non effective farms to reach the efficiency frontier, which is an additional advantage of this method.

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SUCCESS OF BIODIVERSITY CONSERVATION THROUGH THE RURAL DEVELOPMENT REGULATION IN SELECTED EU MEMBER STATES

SUCCESUL CONSERVARII BIODIVERSITATII PRIN DEZVOLTARE RURALA, IN ANUMITE STATE MEMBRE U.E

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Integration of environmental and biological diversity conservation considerations into agriculture is a fast developing priority in European agricultural policy. Agri-environment schemes (AESs) are the main vehicles to deliver this integrative approach at the moment. Member States' mid-term rural development review reports (2003) and within that Member States' response to the European Commission's Common Evaluation Questions (CEQs), in particular, are seen as being the most recent official information source to get an overall picture on the status and environmental efficiency of AESs in contributing to biodiversity conservation. The objectives of this paper is to provide an overview of the results and quality levels of AES monitoring and evaluation with special regard to biodiversity conservation in some Member States (MS) and to summarise some best practice examples. It is concluded that Member States had short time so far to assess and quantify the environmental outcomes of agri-environmental (AE) measures of the 2000-2006 programming period. More comprehensive environmental monitoring systems should be based on adequate scheme administration and procedures that also records aspects to be used as basis for environmental monitoring, proper monitoring data management system and techniques linked to planned and representative monitoring research and regular fieldwork.

Keywords: *agri-environmental schemes, mid-term evaluation,biodiversity, monitoring*

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INTRODUCTION

Integration of environmental and biological diversity conservation considerations into agriculture is a fast developing priority in European agricultural policy. Agri-environment schemes (AESs), designed to encourage farmers to protect and enhance the environment on their farmland, are the main vehicles to deliver this integrative approach at the moment.

Why focus on biodiversity? Over the last few decades biodiversity on farmland in Europe has declined seriously (Donald et al. 2006, Hoogeveen et al. 2004). Large scale rationalisation and intensification of agricultural production has taken its toll. The conservation of biodiversity on agricultural land therefore is now high on the political agenda involving several conservation efforts at EU level such as the habitats and birds directives and the biodiversity action plan for agriculture.

The poliltical document of the European Union, the Agenda 2000 identified the new multifunctional model of European agriculture in 1999 and gave a new basis for agricultural and rural development policy development. As a result the Rural Development Regulation (EC/1257/99) made compulsory for Member States to develop national rural development programmes for the period 2000-2006 and introduce agri-environment schemes in order to to counteract the negative effects of contemporary agriculture. The run and so-far results of rural development support schemes were evaluated by Member States in their mid-term rural development review reports to DG Agriculture by early 2004.. Member States' response to the European Commission's Common Evaluation Questions (CEQs) in these mid-term review reports, in particular, are seen as being the most recent official information source to get an overall picture on the status and environmental efficiency of AESs in contributing to biodiversity conservation.

Based on the first available mid-term rural development review reports of Member States (MS) the objectives of this paper is to provide the first overview based on the available reports at the time of the analysis in early 2004 on the results and quality levels of AES monitoring and evaluation with special regard to biodiversity conservation and to summarise problems and best practice examples.

MATERIALS AND METHODS

In many countries already the second generation of AE measures was implemented with the 2000-2006 rural development programming period.

The Common Evaluation Questions, set by the European Commission, serve as a guideline for Member States in preparing their mid-term evaluation reports and concern matters relevant at EU-level. They examine programme effects (i.e. results, impacts) that can be expected thanks to the means and objectives of Regulation 1257/99.

The biodiversity CEQs (Table 1) contain three groups of questions covering to what extent species diversity, habitat diversity and agricultural genetic diversity has been maintained or enhanced thanks to AE measures. The structure and headings of the analysis also follow this structure.

Table 1: Common evaluation questions with criteria and indicators for evaluating the impacts of agri-environmental schemes on biodiversity

VI.2.A. Species diversity: To what extent has biodiversity been maintained or enhanced thanks to agri-environmental measures … through the protection of flora and fauna on farmland?	
VI.2.A-1. Reduction of agricultural inputs (or avoided increase) benefiting flora and fauna has been achieved	
	VI.2.A-1.1. Area with assisted input-reducing actions
	VI.2.A-1.2. Reduction of agricultural input per hectare thanks to agreement
	VI.2.A-1.3. Evidence of a positive relationship between assisted input reduction measures on the targeted land and species diversity (description, where practical involving estimates of species abundance)
VI.2.A-2. Crop patterns [types of crops (including associated livestock), crop rotation, cover during critical periods, expanse of fields] benefiting flora and fauna have been maintained or reintroduced	
	VI.2.A-2.1. Area with beneficial lay out of crops [types of crop (including associated livestock), crop-combinations and size of uniform fields] maintained/reintroduced thanks to assisted actions
	VI.2.A-2.2. Area with beneficial vegetation/crop-residues at critical periods thanks to assisted actions
	VI.2.A-2.3. Evidence of a positive relationship between the layout of crops or cover on the farmland under agreement and the impact on species diversity (description, and where practical, estimates of numbers of nest (of birds, mammals, etc) or species abundance (or observation frequency)
VI.2.A-3. Species in need of protection have been successfully targeted by the supported actions	
	VI.2.A-3.1. Area of farmland under agreements targeting particular wildlife species or groups of species
	VI.2.A-3.2. Trend in populations of target species on the specifically targeted farmland (cf., indicator 3.1) (where practical involving estimates of *population size*) *or* other *evidence for a positive relationship* between the supported actions and the abundance of the targeted species
VI.2.B. Habitat diversity To what extent has biodiversity been maintained or enhanced thanks to	

agri-environmental measures … through the conservation of high nature-value farmland habitats, protection or enhancement of environmental infrastructure or the protection of wetland or aquatic habitats adjacent to agricultural land?	
VI.2.B-1. "High nature-value habitats" on farmed land have been conserved	
	VI.2.B-1.1. High nature-value farmland habitats that have been protected by supported actions
VI.2.B-2. Ecological infrastructure, including field boundaries (hedges…) or non-cultivated patches of farmland with habitat function have been protected or enhanced	
	VI.2.B-2.1. Assisted ecological infrastructure with habitat function or nonfarmed patches of land linked to agriculture
VI.2.B-3. Valuable wetland (often uncultivated) or aquatic habitats have been protected from leaching, run-off or sediments originating from adjacent farmland	
	VI.2.B-3.1. Area under assisted farming systems or practices that reduce/prevent leaching, run-off or sedimentation of farm inputs/soil in adjacent valuable wetland or aquatic habitats
	VI.2.B-3.2. Adjacent valuable wetland or aquatic habitats that have been protected thanks to the assisted actions
VI.2.C. Genetic diversity: To what extent has biodiversity been maintained or enhanced thanks to agri-environmental measures … through the safeguarding of endangered animal breeds or plant varieties?	
VI.2.C-1. Endangered breeds/varieties are conserved	
	VI.2.C-1.1. Animals/plants reared/cultivated under agreement

Mainly due to size of the country and institutional arrangements, member states announced rural development measures either at national or regional level. Mid-term evaluation reports were prepared at national level in many member states but there are also a number of countries (e.g. Spain, Italy, Belgium) where reports were prepared at a regional level.

RESULTS

At the time of analysis (February 2004) not the full spectrum of mid-term reviews was available yet. This has limited the number of observable reports. The available Member States' mid-term rural development review reports are available in national languages only that, when regarding the short project period for analysis, has further limited the scope of this review to 10 reports covering a part of Belgium (Wallonia), Ireland, parts of Italy (Sicily, Toscana, Venice Region), Luxembourg, Portugal, a part of Spain (Navarra) and parts of the UK (England and Northern Ireland). Beyond language constraints, the selection of reports and the in-depth analysis, in the case of regional reports in particular, was limited to those either containing information on agri-environment all (e.g. in the case of Spain

only the regional report on Navarra contained agri-environmental evaluation) or those containing relatively the largest volume of information on agri-environmental (AE) evaluation among the regional reports of a Member State. This latter was the case when selecting three regional reports from Italy when at the same time also considering the geographical representation of the reports.

Table 2 shows that there is a great diversity in the scope and implementation of AE measures of the investigated Member states and regions.

Table 2: The number of agri-environmental measures (AEM) in selected Member States (MS) and regions

MS and region	MS and region
Belgium, Wallonia	More than 20 measures
Ireland	ca. 8 sub and supplementary measures
Italy, Sicily	10 (old) + 6 (new)
Italy, Toscana	7 (old) + 5 (new)
Italy, Venice	4 measures with 13 actions
Luxembourg	ca. 10 measures with many options
Portugal	19
Spain, Navarra	6 (old) + 3 (new)
UK, England	3
UK, Northern Ireland	3

The variability in the breadth and quality of information on potential and actual impacts and effects of AE measures on biodiversity among reports of Member States is considerable.

Despite the pre-defined list of Common Evaluation Questions not in all reports were this structure followed.

GENERAL OBSERVATIONS

Data management problems and area quantification

The clean cut quantification of AE areas for the various CEQ indicators or by objectives proved to cause difficulties in many reports.

In Wallonia there are difficulties with proper area accounting by related questions partly because AE measures do not mutually exclude each other, meaning that a farmer can hold several different AE contracts even

for the same plot, therefore the areas calculated for certain CEQs and the final number of beneficiaries contain bias.

In Luxembourg the main challenges associated with answering the CEQs to help measuring the impact on biodiversity included the issue that the RDP spans over many administrative domains (different ministries), the existing data was not in a form or structure to enable calculation of the required indicators, and the development of GIS aided scheme administration was not yet available at the time when the report was prepared.

Relevance of biodiversity CEQs

For some questions no answer was possible in the mid-term review report as the rural development plan of Member States did not contain relevant AE measures (Table 3).

Table 3: Ommitted or not relevant issues

MS or region	Issues not relevant / omitted
Belgium, Wallonia	Evidence of positive relationship between layout of crops and species diversity, valuable wetlands,
Ireland	Valuable wetlands
Italy, Sicily	Valuable wetlands
Italy, Toscana	HNV farmland benefiting specific species, HNV farmland as rare habitat, valuable wetland conservation
Italy, Venice	Valuable wetlands, evidence of positive relationship between input reduction and species diversity
Luxembourg	HNV habitats, valuable wetlands
Portugal	HNV habitats, valuable wetlands
Spain, Navarra	Species protection: area targeting particular wildlife species (except for widespread species), trends of populations of target species
UK, England	Valuable wetlands, genetic diversity
UK, Northern Ireland	Valuable wetlands, genetic diversity

Some CEQ indicators are omitted, modified, adjusted or sub indicators added to be applicable to the RDPs in some reports which then actually remain unanswered, for instance in the case of Toscana.

The evaluators in Northern Ireland recommend that the ability of future evaluations in assessing scheme impact should be improved. For further monitoring of AE schemes attention should be given to conducting research in light of what impact indicators now known to be of interest to the European Commission in the form of the CEQs. Also a greater attention should be paid in monitoring reports to aggregating the results both for the individual schemes in the case of the ESA scheme in particular but also the impact of the overall scheme upon NI.

PROBLEMATIC ISSUES

Targeting

In Portugal it is believed that zonal programmes can help to increase targeting and the efficiency of interventions.

The Wallonian (BE) evaluation recommends that the targeting of schemes should be improved through adjustments to eligibility zone definitions, payment levels and prescriptions.

In England it is noted that there is a need to continue the integration of CSS with other key environmental policies such as Biodiversity Action Plans and Habitat Action Plans, and eventually encourage the setting up of similar appropriate policies for landscape and historical features.

Contract renewal

Low contract renewal rates seem to threaten long term environmental gains in Wallonia (BE), therefore it is suggested that a special premium for those who renew their contracts should be introduced. This would be particularly important in some schemes (measures 1 et 9 "fauches / pâturages tardifs et très tardifs", 10 "mesures conservatoires en zones humides", 2 "tournières", et 3 "maintien et entretien des éléments du paysage").

Current levels of contract renewal appear to be low and falling in England, too, that give concern for the long term sustainability of scheme environmental gains and outputs achieved so far.

Short time period to quantify environmental impacts

At the time of the analysis the Wallonian RDP had been running for less than 3 years, the short period did not allow for quantifying the *overall* impact of AE measures on biodiversity. However, some positive impacts on

flora diversity and wildlife quality of the "Late and very late mowing" measure in meadows were confirmed via surveys (of e.g. plant species in meadows) taken by an interuniversity research group in applied biology (GIREA, Groupement Interuniversitaire de Recherches en Ecologie Appliquée) that will continue research in this field. A table of potential indicators to be collected also covering input reductions and biodiversity are demonstrated in the report. With regard to the yet limited success of the programme the environmental efficiency of the AE measures remain relatively weak and localised. Still, AE measures have an important indirect effect to sensitize farmers to consider the environment.

For measuring progress and impact in Ireland it also seemed to be *too early* in some instances to provide meaningful indicator data especially where anticipated environmental improvements are long term in nature.

Northern Ireland also reported that it was not possible to isolate impacts so early on in the programme as CMS, new ESA and OFS have only been underway, from standing starts, for just over two years at most.

Commitment baselines

Reassuring that the commitment level of popular AE schemes go beyond the GFP requirements and compliance is appropriately controlled are highlighted in the Wallonia report as an important factor of success of AE come from the fact that farmers mostly enrol to those schemes (e.g. "conservation des haies", "couverture du sol pendant l'interculture", "faible charge en bétail") that require the fewest modifications to their practices.

DISCUSSION AND CONCLUSIONS

Assessments are a critical element in a learning process that can continuously improve the effectiveness and environmental performance of AESs.

There are many agri-environment measures throughout the EU whose objective is to enhance biodiversity. However, measuring the impacts of agri-environment measures efficiently (i.e. to get representative results both over space and time) on biodiversity are complex to analyse and likely to be expensive. The classical approach to evaluation would be to relate each measure to its environmental impacts and then draw more general conclusions about the impacts of the measure. This is often not possible either due to lack of monitoring data

or rather due to the difficulty in isolating the effect of AE measures from many other factors that influence environmental outcomes. This is often reflected in the analyzed reports. The available mid-term rural development evaluation reports suggest that the three years of the programming period was very short period to quantify environmental outcomes. The evaluation of environmental benefits of AE schemes therefore, on biodiversity in particular, are based on assumed environmental impacts and expert opinion in many cases.

A great part of the immediate effects could be better assessed if some monitoring requirement aspects are taken into account during the scheme administration. For the assessment of immediate effects of a scheme the role of farm level information is inevitable. It is suggested that a very basic survey of farms on their input use and cropping patterns etc. before entering a AE scheme be part of the application procedure. This could give a very useful information for later comparison when changes in farming practices are evaluated.

It is of paramount importance that proper co-ordination is established between scheme administration and monitoring and there is congruence between databases that are also supported by adequate spatial data management techniques. GIS tools are becoming widely used in an increasing number of countries for scheme administration but environmental monitoring aspects are hardly considered at present.

In general, there seem to be a lack of planning of and coordination between different evaluation administration, research and fieldwork. It is difficult to measure/assess classical additionality of different AE actions that seek to protect existing environmental capital against loss or degradation, especially if we do not know the degree of loss and clearly see the causalities of factors lying behind (difficulty in establishing causality). These gaps should be filled with research for finding appropriate methodologies and research design adapted to particular issues.

In species diversity research there is huge bias to monitoring birds. This might be explained by the relatively abundant methodologies and literature available but also to the strong bird conservation environmental lobby. Other animal groups, such as insects and invertebrates, however, could shed light from a different point of view on the quality of the environmental outcomes of AE measures.

Identifying HNV habitats covered by AE measures and investigating scheme effects on these areas, in valuable wetlands in particular, also need resources. Agricultural genetic resource protection of traditional animal breeds and crop varieties through AE measures generally shows poor uptake. Research resources should be put to investigate how these measures could be run more effectively. It is concluded that Member States had short time so far to assess and quantify the environmental outcomes of AE measures of the 2000-2006 programming period. Overall, based on indirect assessments and some actual research there is evidence of positive effects of AE measures on biodiversity, although this evidence does not fully meet the scientific criteria. More comprehensive environmental monitoring systems should be based on adequate scheme administration and procedures that also records aspects to be used as basis for environmental monitoring, proper monitoring data management system and techniques linked to planned and representative monitoring research and regular fieldwork.

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CONNECTION OF REGION MARKETING AND HUNGARICUMS

CONEXIUNEA INTRE MARKETINGUL ZONAL SI PRODUSELE HUNGARICUMS

G. TOTTH[*], MÁRTA NÓTÁRI[**]

Region marketing is barely known in Hungary and we have only limited experience in connection with its Hungarian applications. It is a mixture of such activities which purpose is to effectively channel products to the customers. Main goal of region marketing is to help discovering the competitiveness and charm of the region. Being a member of the European Union, it is vital for Hungary that its food industry could reserve its traditional role. Numerous high-quality, special products (hungaricums) are produced in the South Great Plain Region. Farming experience – gained throughout centuries - resulted in special, unique products representing national values.

***Key words*:** *Region marketing, marketing objectives and strategies*

INTRODUCTION

Regional marketing is a new concept, which is not widely known in Hungary, there are only very few and limited experiences with it. It is a total of all the activities and at the same time a way of thinking, the aim of which is to take a product to the customers very efficiently. The task of regional marketing is to explore the competitive assets and attractions of a region, to help the realization of the plans in order to support achieving the goals of economic and community life (Lakner-Hajduné, 2002).

In the South Great Plain Region several top-quality products are made and these products are Hungarian specialties (Hoffmeister-Totth, 2003). In this immense competition an image formed about a country, a part of a country or about a region has a considerable influence on the decision of customers – both on the national and international market.

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ROLE AND NECESSITY OF MARKETING STRATEGY IN THE REGION

Necessity of region marketing strategy in the South Great Plain Region

- The South Great Plain Region, similar to the other regions of Hungary is an artificially made formation which does not have independent internal government. One important condition of the maintainable competitiveness of the region is the foundation of independent internal identity which grounds effective regional cooperation (Hajduné-Lakner, 1999).
- Even currently, numerous organizations conduct marketing activity which are not coordinated with each other, and as a result they give contradictory pictures. Thus, it is necessary to coordinate region marketing activity, applying a uniform frame.

Role of the marketing strategy of the Region

- Basic document from the aspect of regional level organizations and institutions, reliable starting point for the marketing activity which provides information for the business organizations of the region.
- Draws the intentions and projected future image for the population and public opinion.

The connection between rural development and marketing is not a recent phenomenon, it has a long tradition: the big economy boom after the World War II had different effects on each region's development and the pre-existent differences among the regions had been even more increased. The new rural development policy wishes to change this unfavourable tendency and it sets its an aim to moderate the regional inequality. The social, economic, cultural and natural differences among the regions have turned into a value-maker feature.

The most important effect of the image next to its decision manipulator feature is the so called image-transfer ability. The images have effects on each other and this interaction called image transfer, means in the course of the company image and the product image impinge on the image of the brand. The region image is a transition between the company and the

country image. The strategies of creation or correction and managing a region's image based on the adaptation of a country or company image's managing practices. The so called umbrella image strategy builds upon the image transfer phenomenon and tries to exploit a much as it can. The region attempts to put all its supply under the common umbrella. The advantage of this tool can also become its disadvantage as the image transfer can also operate backwards so if an element of the supply becomes worse it can cause negative effect on the entire image. The components are: Economic image, Ecological image, Social image and Cultural image.

An image development can be realizes in three steps. The first step is the discovery of the current situation, the identification of the dominant, key factors and gathering information about the ideas, expectations and opinion of the potential customers. In the second move the improvement of achievement is needed in accordance with the requirements of the desired image and finally the third step is the communication of the worked up strengths and corrected achievements. It is very important that the real situation and the new image must fit to each other, be in harmony.

The communication strategy stands on four pillars. The important target groups have to be determined and identified including the inner groups, the resident population and the small and medium entrepreneurs which have to be continuously informed to obtain their loyalty. Those tools and techniques of marketing communication have to be chosen with that our massage can reach to the target group. In case of image building two very important things – the integration and continuity – have to be fulfilled. There is a significant importance of favourable ecological situations in the competency image of the Southern Plain Region, the region has remarkable, in some cases world famous production zones and products. Let me mention just a few of them vegetables' production zone of Szentes, the fruit production sector of Kecskemét, Kecel, Szatymaz, the onion from Makó, the paprika of Szeged and Kalocsa, the sheep breed cigája, the sausages of Békéscsaba and Gyula, the Pick salami of Szeged. The quality and uniqueness of our agricultural products could be the base of a successful region's development. A planned, conscious and corporate regional marketing activity is required to make this realized.

ASPECTS OF SITUATION SURVEY BASING THE MARKETING STRATEGY IN THE SOUTH GREAT PLAIN REGION

Region marketing has to rely on the sources of the region, thus it is vital to conduct a situation survey before the workout of marketing strategy (Fig. 1.).

Results of situation survey

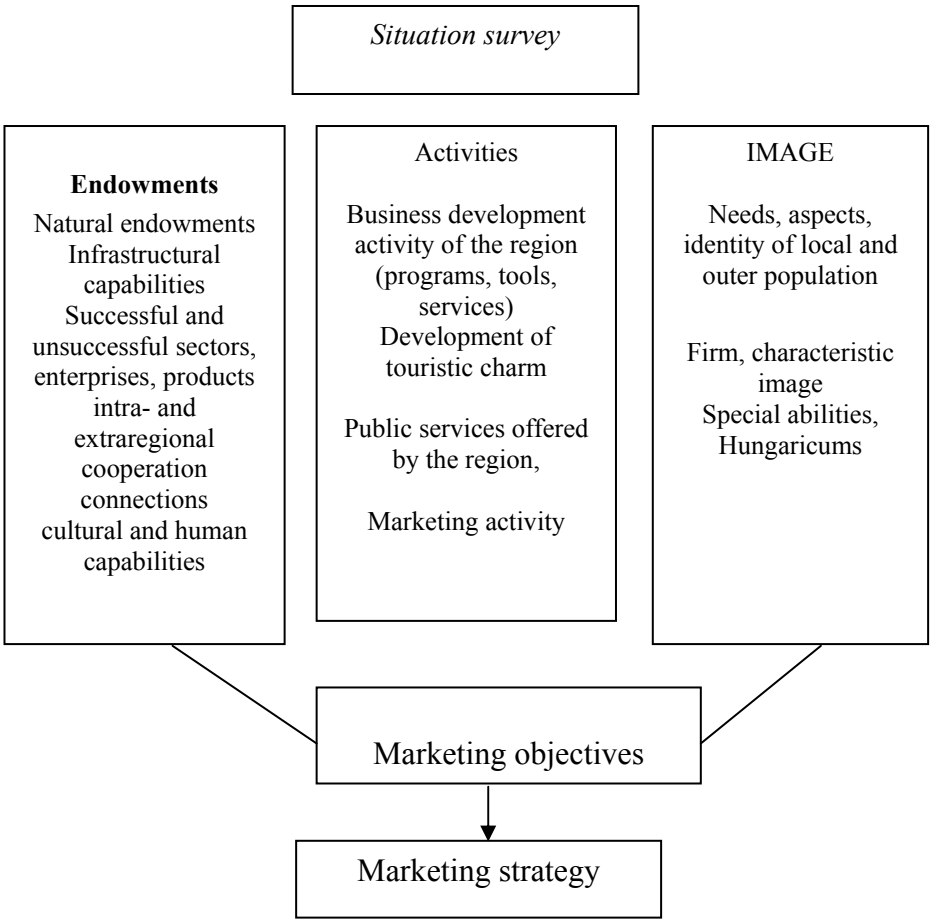

Figure 1.: Aspects of situation survey basing marketing strategy

The South Great Plain Region is the largest region of Hungary, expands to one-fifth of the area of the country. Its population of 1.36 million gives 13.4 % of the country's population.

The region lies on flat land and thus, the most important natural resource of the region is arable land. This region also provides significant proportion of the country's hydrocarbon energy resources. From the 37 towns of the region, 4 have county rights. Employment situation is about average, but differs greatly by counties: most favourable in Csongrád County, average in Bács-Kiskun, and unfavourable in Békés. Population structure by education level improved continuously in the past decade, the proportion of secondary and high-school graduates increased steadily (Ferencz,2003).

As for economic infrastructure, density of railway network shrinks continuously but the M5 highway has been built from Budapest to Kiskunfélegyháza.

Level of communication network exceeded the average of other regions as did tube gas supply. Public water supply was also appropriate but the sewer network was quite undeveloped. An outstanding endowment of the region is education, but GDP is well below national average.

SWOT ANALYSIS OF THE REGION

Strengths of the region:

- Role of agriculture is dominant in the Region, the food industry is competitive even by international comparison;
- Number of sunshine hours is very high and the average yearly temperature is also amongst the highest in Hungary;
- One of the busiest international transportation lines towards South-Eastern Europe crosses the Region;
- Number of tertiary educational-, research- and cultural centers is outstanding in national comparison.
- Many famous firms with high level of professional culture and brands connected to them works in the Region.
- There are a number of unique, excellent quality „Hungaricums" produced, which are unambiguously characteristic to the region.

Weaknesses:

- The GDP per capita has remained unchangedly below the national average in the past years;
- Quality and quantity of transportation infrastructure is insufficient;
- Proportion of foreign capital is lower than the national average;
- Many small regions of the Region belong to the group of small regions currently being in critical position.

Threats:

- Regional effects of the EU's Agricultural Policy;
- Uncertainty of the Balkanic policy;
- Appropriate environmental protection agreements and cooperations wouldn't be signed with the neighbouring countries;
- Sharpening competition between the domestic region and the regions of neighbouring countries.

Possibilities:

- Growth of the role of euroregional organizations;
- Affirmation of the South-Western European gate role with the reconciliation of the Balkanic situation
- Change in consumer preferences (Totth, 1998);
- Positive international image of certain kinds of foods;
- Demand for unique, special provincial products.

Based on the results of situation survey it can be stated that the South Great Plain Region wants to be positively distinguished and also to shape a clear image. In case the efforts will be successful in the future, the region would gain domestic and foreign sources and in addition, the capital flow to the region could become more intensive.

MARKETING STRATEGY OF UNIQUE, SPECIAL QUALITY REGIONAL PRODUCTS IN THE SOUTH GREAT PLAIN REGION

One of the problems of the South Great Plain Region lies in the relatively limited number of such well-known, unique products which determine a clear, united image. And even if some are present, they exist separately. In the same time there are numerous „Hungaricums" produced in the region, which are available for conserving local traditions and forming the image of the Region. Definition, management and protection of the group of these products with the tools of active marketing policy could contribute to positively influence the image drawn from South Great Plain Region. They facilitate stabilization of special producing districts, affirmation of local economy and the melioration of the income conditions of the population.

Region-specific products (e.g.: Kecskeméti barackpálinka) which fulfil strict regulations and requirements could be the key elements of the marketing strategy of the South Great Plain Region.

Quite important, that the unique products of the Region should remain real „Hungaricums" and behind trade-marks constant, guaranteed quality must appear.

TASKS OF THE REGION IN MELIORATING THE MARKET SITUATION OF HUNGARICUMS

Instead of mass production the sortiment of traditional, special products should be broadened given the fact that experiences of the centuries-long production already brought up those „Hungaricums" which represent the outstanding qualities and national values of the region;

High-level professional skills, training and flexible marketing activities are needed;

Origin, trade-mark and adept information must be indicated on the packaging of the products;

Forming of support systems must be conducted in such a way that it could facilitate establishment of special production structures and concentrate on resurrection of the values of the region.

SUGGESTIONS

Material and immaterial products which are manufactured in, and are representative exclusively to the Region should be supported practically in regional cooperation. Beside measurable economic profits the following advantages can be achieved:

- conservation of traditions and cultural heritage, strengthening the idea of belonging to the same community among the people living in the region;
- forming the peculiar image in the competition among the regions and in the accelerating globalization processes of our days.

It can be expected only as a result of a long-term, coordinated marketing strategy that the image of South Great Plain Region becomes widely known and attractive. One precondition of this is that the Region should successfully represent the selected image and to develop a positive affection for its „Hungaricum" products. This affection could be formed inside the region by positive local-patriotism, while outside the region with the sympathetic and valuable features.

This is important because the South Great Plain Region has its competitors by now – certain domestic and neighbouring country regions. In the future, the enhancement and specialization of the competition between regions could be expected. The South Great Plain Region only has its chance to effectively join the domestic and international competition if conscious preparations and image-forming takes place.

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RURAL REGIONS IN BULGARIA - CONSTRAINS AND PERSPECTIVES FOR DEVELOPMENT

REGIUNI RURALE IN BULGARIA – LIMITE SI PERSPECTIVE ALE DEZVOLTARII

NELLY BENCHEVA*, G. BOGOEV*

The purpose of this study is to analyse some main constraints of rural development in Bulgaria and t o identify perspectives in the context of the Common Agricultural Policy (CAP). Based on comparisons of different country's regions development and features of the rural areas, implications for the future of the rural development are discussed. It is argued that despite of the difference of rural regions development they have common characteristics. Thus, emphasis on rural development issues currently promoted by the National Strategic Plan 2007-2013 can be fruitful for Bulgaria as a newly EU member state.

Key words: *Bulgaria, rural region development, SWOT analysis.*

INTRODUCTION

The main priority of CAP is maintained of rural region development and environmental protection. The main goals of that policy are keeping of rural communities as a source of labor force and cultural traditions, expanding of agrarian sector through development of alternative, high yielding and profitable industries, providing of high employment and sustainable incomes of rural population, revealing options for development through diversification of business activity, and strengthen competitiveness.

Due to increasing disparity in rural region development in Bulgaria those issues attain a crucial significance. Successful implementation of the policy for development of rural regions requires a profound analysis of the main problems limiting their development. Based on that analysis it could be revealed perspectives for development in the light of CAP.

The main constrains for rural development are viewed as follows:

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- Role, place and importance of agriculture in rural region development;
- Social economic profile;
- Structure and development of holdings;
- SWOT analysis of rural regions.

The purpose of this study is to analyze some main constraints of rural development in Bulgaria and t o identify perspectives in the context of the Common Agricultural Policy (CAP).

ROLE, PLACE AND IMPORTANCE OF AGRICULTURE IN RURAL REGION DEVELOPMENT

Over the last 5 years Bulgarian economy has grown steadily. The real GDP growth rate is 5.5% in 2005, driven mainly by export and investments. Agriculture remains one of Bulgaria's most important sectors. It has a significant contribution to GDP, exports and employment in Bulgaria (table 1). Agriculture's share in the Gross Value Added /GVA/ has retained its downward trend. The slow and shaky growth in the sector is a consequence of its slow restructuring and the faster development of industry and the service sector.

In 2003, 1.35 million people were engaged in agricultural activities, of which 25% - full time. The share of agriculture in employment was 24.9% in 2004.

Selected agricultural indicators

Table 1

	2002	2003	2004	2005
Growth of GDP	4.9	4.5	5.7	5.5
Gross value added as % of total	12.1	11.6	10.9	9.3
Ag investment as % of total	2.6	3.1	3.9	3.0
Level of unemployment. %	17.1	14.2	12.7	11.5

Bulgaria is divided into 6 planning regions ,28 administrative regions and 264 municipalities. Rural regions cover 98.8% of the territory and account for 84.3% of the population.

Rural regions generated in 2003 about 70% of the Bulgarian GDP and contributed to nearly 80% of the employment in Bulgaria. Rural areas in Bulgaria are highly dependent on agriculture . In 2003, in the predominately rural regions the share of agriculture and forestry in GVA was 50% higher than the average for Bulgaria. There are significant differences by regions. Rural development has crucial importance for employment in regions. The greater portion of this employment is generated in low productive subsistence or semi-subsistence farms, indicating high rural underemployment and rural poverty.

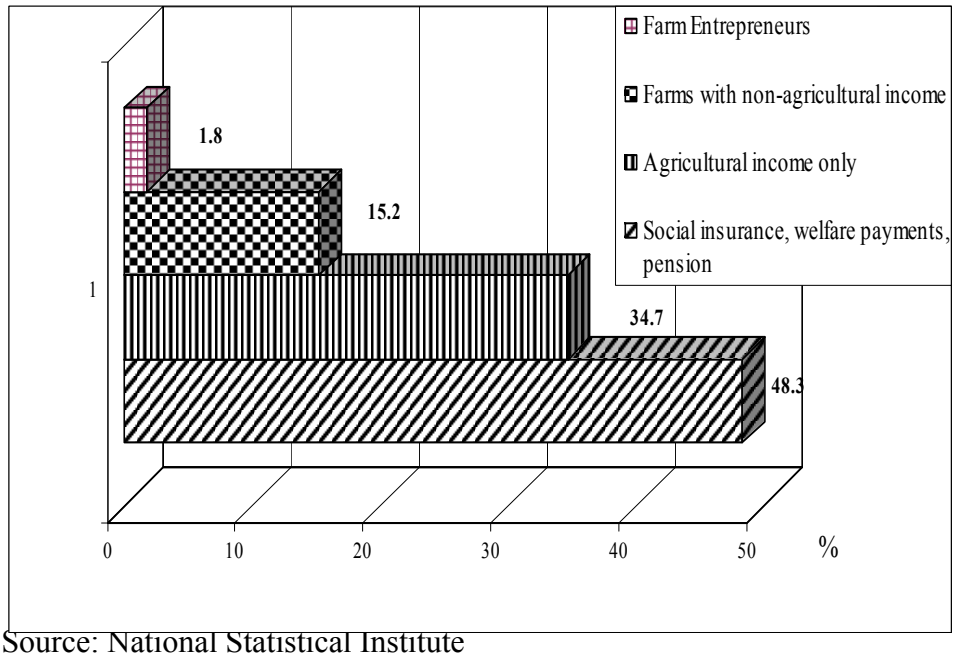
SOCIAL- ECONOMIC PROFILE

The overall population of Bulgaria has been declining but in the rural areas, the rate of population decline is significantly higher. Between the 1992 and 2001 Census, the population of rural areas dropped by 9.4%. The age structure of the rural population is less favourable than the urban one due to the comparatively low share of population at working age. About 45% of the population below working age live in rural areas. The rural areas have problems in retaining the young population. The share of the population above working age is 27% in rural areas. In some regions like the North-West and North-Central regions, the share of the population above working age exceeds 30%.

The educational status of rural population is significantly lower than of urban. Almost half of the population in rural areas have no secondary education, compared to 20% in urban areas. There are significant differences in the shares of the population with university education – 5.5% in rural areas versus 20.6% in urban areas.

A significant problem in rural regions is the high level of long-term unemployment. In 2004, the long-term unemployment rate in rural areas was 11.3% compared to 3.6% in urban areas. The high long-term unemployment rate is explained by the lack of employment opportunities in rural areas and the deteriorating quality of the labour force.

The main source of farm household income is coming from social insurance, welfare payments and pensions (Fig.1). The income from agriculture is only 35%. Farm entrepreneurship out of farm as a type of job creation is too limited. Due to the low level of farm household income, crop diversification is strongly recommended as an approach for rural development. A good example for Bulgaria are oil crops like peanuts, sesame, nut production for which there are suitable soil and climatic conditions. The flat regions, especially those located along the Danube River and Black See have a great potential for growing peanuts.



Source: National Statistical Institute

Fig.1 Farm households by source of income, 2004

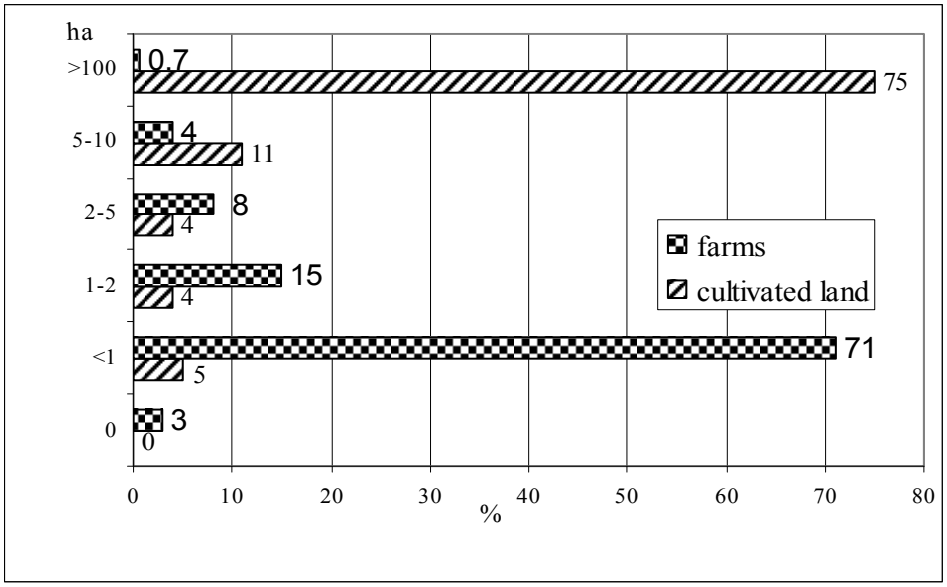
STRUCTURE AND DEVELOPMENT OF HOLDINGS

Rural areas in Bulgaria are highly dependent on agriculture. Living and labor conditions in the rural regions, in the medium and long-term will

depend on the development of competitive farms, which will function under the increasing competition.

At present, duality structure is dominated in Bulgarian agriculture. 71% of farms cultivate up to 1 ha land; their crop areas, however, account for only 5% of the total cultivated land in the country (Fig.2). 0.7% of the farms cultivate more than a hundred ha and cover ¾ of the total land.

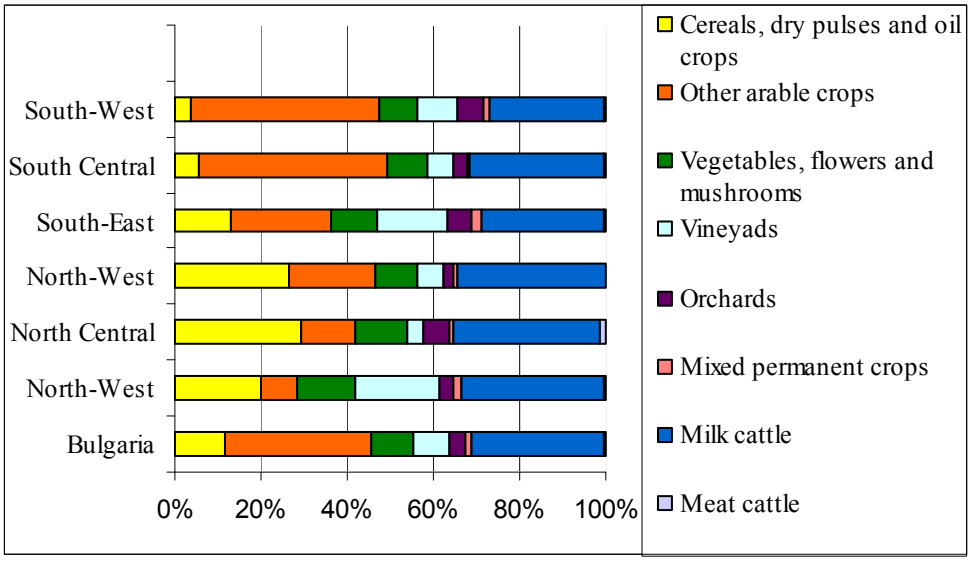
The structure of farm household income supports the duality structure and constrains the expansion of farm business activity.



Source: Ministry of Agriculture, "Agristatistics".

Fig.2 Duality of the farm structure

One of the most developed agricultural country's regions is South Central (Fig. 3). In that region there is the greatest variety of grown crops. 56% of farms grow a wide range of arable crops. 41% of farms are specialized in growing of vegetables, 32% produce fruits, and 32% grow vineyards. Over 50% of cereal production farms are concentrated in Northern regions.



Source: Ministry of Agriculture, "Agristatistics".

Fig. 3Holdings by farm type and planning regions

SWOT ANALYSIS OF RURAL REGIONS

The SWOT analysis of rural areas brings forth the following main weaknesses:

- Aging population and negative population growth;
- Unfavourable educational status of rural population;
- Deteriorating quality of labour force;
- High dependence on agriculture;
- Poor job opportunities;
- Increasing disparities between rural and urban areas in economic development.

The strengths of the rural areas may be summarized as follows:

- Rich, diverse and preserved nature;
- Well-developed settlements network;
- Big number of preserved vital rural communes with rich historical and cultural traditions;
- Presence of major road infrastructure with secured access to relatively smaller settlements in rural areas; as well as developed electricity supply and telecommunication network.

The opportunities for rural development are:

- National strategy for rural development (2007-2013);
- Strong scientific and research institutions in agriculture;
- Establishing infrastructure institutions meeting the EU requirements addressed to increase competitiveness;

CONCLUSION

Rural regions in Bulgaria have a serious potential for development. The process of adopting the EU funds used for rural development policies will accelerate the mitigation of constraints and create prerequisites for economic and social rural posterity. A great proportion of the regions are predominantly rural. The guarantee for that are rural populations involved in farm and non-farm occupations. They use a variety of income sources.

Agribusiness development and the process of diversification would increase efficiency of resources utilization and facilitate the rural development through establishment of partnership and networking.

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POSSIBILITIES FOR ENVIRONMENTAL MANAGEMENT EVALUATION ON THE BASIS OF HABITAT MAPPING

POSIBILITATI DE EVALUARE A MANAGEMENTULUI MEDIULUI PE BAZA CARTARII HABITATELOR

A. NAGY*, K. PENKSZA*, A. LABORCZI*, T. KISS[*]

In terms of the long term preservation of the living world it is vitally important to be familiar with the state-of-naturalness of our regions. In connection with the habitat-mapping of a given area, surveys of naturalness can also be done. Our surveys were conducted in a SE Hungarian nature conservation area. For our surveys of naturalness we have used 5 different and one complex – containing more methods – valuation systems. The results illustrate, that it is unquestionably desirable to use more different methods at once for the valuation of naturalness, because thus can the most informative picture about the condition of the area be given.

***Key words*:** *natural conditions, habitat mapping, land use, naturalness*

INTRODUCTION

The first step towards preserving the naturalness of an area is the exploration of the past conditions and the preservation of the present conditions. The establishment of the Hungarian Biodiversity Monitoring System is destined to follow this principle. The habitat mappings performed in the scope of the HBMS are of fundamental importance to the long-term preservation of the living world. The results of the habitat mappings provide a good basis for performing a comprehensive and graphic state-of-naturalness valuation of the mapped areas. Here we are going to provide a short survey of the state-of-naturalness valuation possibilities based on habitat mapping taking Mágorpuszta (nature conservation area, SE Hungary) as an example. Following the presentation of the methods the results will also be shortly introduced.

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MATERIALS AND METHODS

The basis of the following different state-of-naturalness valuations is in all cases the habitat mappings done in the given area and the adjunct charts.

State-of-naturalness valuation methods

Valuation based on nitrogen figures (NB)

The value of nitrogen figures concerning the examined area was applied in accordance with the Borhidi (1993) system. We deemed the analysis of the nitrogen figures important, because it is significant in connection with nitrogen-overload and the anthropogenic effect. For the valuation of nitrogen figures we used the list of species prepared for the habitat-spots. We determined the NB values in every spot for every species, and after that we summarised and diagrammatised the values. This diagram shows the species-frequencies connected to the individual NB values with reference to the areas relatively weighted. The characteristics connected to the individual NB values are:

1 - only in soils, extremely poor in mineral nitrogen, e.g. peat bog plants,
2 - plants of habitats very poor in nitrogen,
3 - plants of moderately oligotrophic habitats,
4 - plants of submesotrophic habitats,
5 - plants of mesotrophic habitats,
6 - plants of moderately nutrient rich habitats,
7 - plants of soils rich in mineral nitrogen,
8 - N-indicator plants of fertilized soils,
9 - plants only on hyperfertilized soil, extremely rich in mineral nitrogen

Valuation based on the Social Behaviour Types (SBT) of the species

We applied the social behaviour types following Borhidi's work (1993). The valuation based on the social behaviour types of the species was done alike the nitrogen-demand. Thus, employing the species lists we determined the SBT categories applied to the individual species, then we diagrammatised the relatively weighted values in connection to species-frequencies with reference to the areas. The SBT categories of the species are:

Social Behaviour Types of natural habitats:

S: Specialists, **C:** Competitors, **G:** Generalists, or companion species, **NP:** Natural pioneers

Social Behaviour Types of plants living in disturbed, secondary and artificial habitats:

DT: Disturbance tolerants, **W:** Weeds, **I:** Introduced alien species, **A:** Adventives, **RC:** Ruderal competitors, **AC:** Aggressive alien species or invaders

Rarity categories: **r :** Rare species, **u:** Unique species

Valuation based on the Environmental Protection Value Categories (EPVC) of the species

The valuation of the species based on their Environmental Protection Value Categories was done similar to the previous valuations. Here too we diagrammatised our results and worked with relatively weighted species numbers. The Environmental Protection Value Categories (EPV) of the species according to Simon (1988, 1992, 2000) are:

Referring to natural conditions: **U**: unique species, **KV**: specially protected species, **V**: protected species, **E**: association forming species, **K**: accompanying species, **TP**: pioneer species.

Referring to degradation: **TZ**: disturbance tolerant species, **A**: adventive species, **G**: agricultural species, **GY**: weed species.

Valuation based on the naturalness categories by Seregélyes

The valuation system of Seregélyes (1995) defines 5 naturalness categories. When using this category-system we gave a point value from 1 to 5 to each habitat-spot taking into consideration the given descriptions of categories, then we represented the spots of different point value with different colours. By this method we represented the results on maps. The naturalness categories according to Seregélyes are: "1" - **Totally degraded,** "2" - **Strongly degraded,** "3" - **Moderately degraded,** "4" - **Quasi-natural,** "5" - **Natural.**

Valuation based on the categories of GHHCS

By using the categories used for determining the regular habitats of the General Hungarian Habitat Classification System (GHHCS) we used a self-finished system. With this system we took the GHHCS categories (semi-natural, semi-natural disturbed and weedy, silvi- or agricultural and other habitats) of the naturalness of the given habitat-spots of the analysed area into consideration, and we classified according to the often occurring complexes. We gave the groups colour labelling, then mapped them.

Valuation based on a complex, self-finished state-of-naturalness valuing system

Our self-finished state-of-naturalness valuing system has a high complexity because the previously presented indicators, valuations and the habitat-spot-characterisation aimed at the state-of-naturalness finished

during the field-work are all taken into account at the same time. Our system of categories separates the specific classes according to their naturalness-degradation stages within the groups of natural or semi-natural, silvi- or agriculturally affected and other habitats. With the use of this colour-coded map we get a simple, clearly arranged, but at the same time most informative picture about the state of naturalness of a given area.

Natural or semi-natural habitats

Key-letter: **HN,** The most valuable areas regarding the species to be found and the naturalness of the habitat-spot.

Key-letter: **N,** The state of the habitat-spot can be considered natural, or closest to that. The original vegetation can be found. The proportion of the weeds and the nondescript species is not considerable. Human influence is not significant. The habitats of the categories GHHCS A, B, C, D, E, F, G, H, I, J, K, L, M, and N belong here.

Key-letter: **MOS,** A mosaic of natural, or close natural and semi-natural, secondary, but quality habitats is characteristic of the given habitat-spot. Weeds are not significant. The types O9, O11, P1, P2, P4, R1 that appear together with the semi-natural GHHCS categories.

Key-letter: **MSN,** Apart from the close natural type there is a significant proportion of disturbed, weedy habitats. Not the whole area is strongly affected by weed or disturbances, rather they appear in spots of different size. Those semi-natural habitat-spots belong here, where the weeds or the species referring to degradation are mentioned in the short description of the given areas.

Key-letter: **MSNW,** The species referring to degradation appear in great numbers, the state of naturalness is badly damaged. Among the GHHCS categories the habitats called O2, O3, O13 are to be mentioned.

Silvi- or agricultural habitats

Key-letter: **OSAN,** Those habitats which were previously used for silvi- or agriculture, but where the natural flora begins to take possession of the area again.

Key-letter: **SA,** Parts of areas that are silvi- or agriculturally used and in good conditions. The proportion of weeds is not significant.

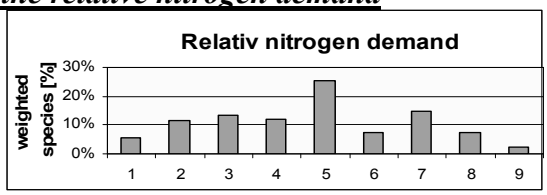
Key-letter: **MNSA,** Neglected, abandoned areas that are silvi- or agriculturally used, partly burdened with weed.

Key-letter: **SAW,** Significantly weedy, worn out areas that were silvi- or agriculturally used.

Other areas Key-letter: **HSET,** Larger human-made objects, settlements, built-in areas.

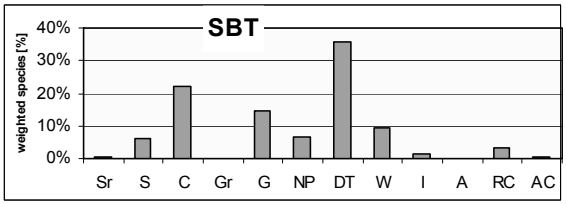
RESULTS AND EVALUATION

Results of the research based on the relative nitrogen demand



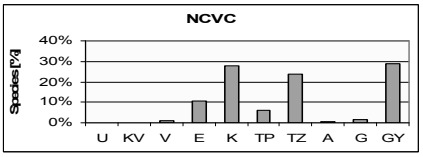
In accordance with the graph it can be said, that those species can be most significantly found in the researched areas that live in mesotrophic habitat circumstances. It can be deemed good, that species referring to nitrogen-load (6, 7, 8, 9) are present in a much less proportion than the species of favourable nitrogen-complement.

Results of the research based on the Social Behaviour Types of the species



The graph representing the Social Behaviour Types of the species shows that the distur-bance tolerants (DT) are of the greatest number in the area. It is prominent, that the generalists (G) and the competitors (C), that indicate natural conditions, are also present in a good proportion. Despite the great number of disturbance tolerants we deem the state of naturalness good, since the species referring to natural conditions (NP, G, C, S) are significant in the area in greater numbers than the species referring to disturbances.

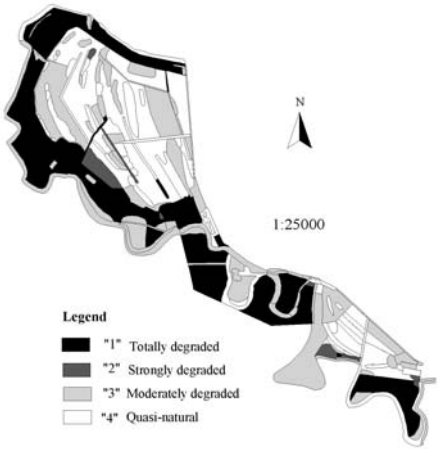
Results of the research based on the Nature Conservation Value Classes of the species



Using this valuation method led to similar results to the previous method (SBT). In accordance with the NCVC values it can be said again, that species referring to good natural conditions (E, K) are significant. The species referring to disturbances (TZ, GY) appear here too, but again in a smaller proportion than those referring to a favourable condition.

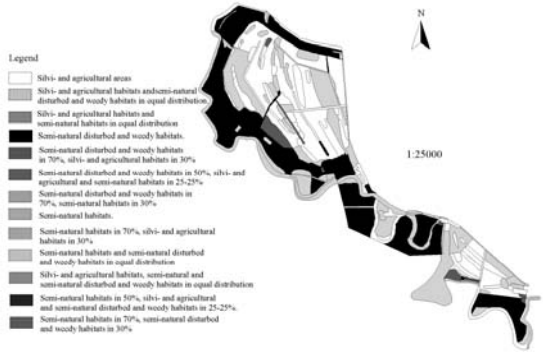
Results based on the naturalness categories by Seregélyes

It can be said about the map made on the basis of the valuation system of Seregélyes, that in three-fourth of the habitat-spots a naturalness condition of ’3’ and ’4’ is characteristic, and thus the naturalness can be valued average, or semi-natural. In areas of good condition semi-natural conditions are most significant. No value of ’5’ can be found in the researched area. The proportion of the areas that show a worse condition (’1’, ’2’) is highly diverse. About 20% of the area, a cultivated, or abandoned agricultural area is characterised by a value ’1’.



Results of the state-of-naturalness valuation based on the GHHCS’s categories

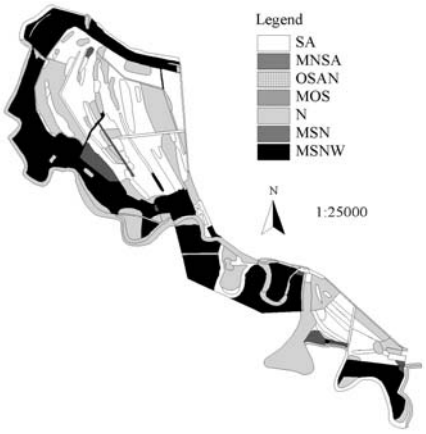
The map shows, that the silvi- or agricultural areas are significant at the bottom of the key-formed area. Near the silvi- or agricultural areas abandoned agricultural areas can be distinguished, which are mostly characterised by disturbed circum-stances. At the wider part of the area semi-natural circumstances are dominant, these areas can be deemed of good condition according to the habitats found in this area. Between the semi-natural areas and the silvi- or agricultural areas more spots of semi-natural disturbed and weedy habitats can be found as a sort of transitional stripe.



Results of the self-finished state-of-naturalness valuing system

On the basis of our self-finished system of categories the cultivated and the natural or semi-natural habitats can be unambiguously divided. We can receive information about the state-of-naturalness relations and the condition as well as the division of the types of habitats in the given habitat-

spots. This system does not merely validate the condition of the natural or semi-natural areas but the cultivated areas as well. This value system emphasises the ”transitional” spots (OSAN, MOS), and thus makes the later changes in the habitats well traceable. On the basis of the state-of-naturalness map we can say that habitats of good natural conditions can be found in great proportions in the researched areas. Tessellated habitats can also be considered common. The presence of areas strongly infested with weeds is not significant. The areas where silvi- or agricultural work is characteristic are well-kept and are in a good condition.



The mapped area can generally be described as a composition of habitats of extraordinarily good condition.

SYNOPSIS

In the above we provided a short survey of the possibilities of state-of-naturalness valuations through habitat-mapping based on the example of Mágorpuszta (SE Hungary). Some of the above presented methods for valuation are often used in practice, some are experimental systems ”under development”. Because of the exceptional complexity of the habitat-mapping – state-of-naturalness valuation, it is difficult to tell which system provides the most comprehensive picture about the naturalness of a given area, but that has never been an aim. In most cases it might be expedient to use the available methods parallel in order to receive a more accurate characterisation of the state-of-naturalness.

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HABITAT MAPPING OF VÉSZTŐ-MÁGORPUSZTA (SOUTH-EAST HUNGARY) PROTECTED NATURAL AREA

CARTAREA HABITATELOR DIN REGIUNEA PROTEJATA NATURAL VÉSZTŐ-MÁGORPUSZTA (SUD-ESTUL UNGARIEI),

A. NAGY*, K. PENKSZA*, A. LABORCZI*, T. KISS[*]

The more comprehensive survey and mapping of habitats is a national programme in Hungary. With the employment of the General Habitat Classification System of the Hungarian Biodiversity Monitoring Programme habitat-mappings can be done, which allows for a good recording of the present states of the given areas. We have concluded a mapping in SE Hungary in association with this Programme. On the basis of the finished habitat-map we have created a thematic map using geospatial information technology methods, which is significant, because it approaches the main characteristics of the area from many different sides.

Key words: *habitat mapping, land use*

INTRODUCTION

The mapping of Vésztő-Mágorpuszta nature conservation area was done in the frames of the Hungarian Biodiversity Monitoring Programme. The primary goal of the survey was the regional monitoring of the condition of the living world, the habitat-mapping of the area. We have also created a habitat-map-based thematic map about the area that was originally visited in order to be habitat-mapped. This work was done based on the data-samples collected in the area, in order to better record, emphasise and value the main characteristics.

MATERIALS AND METHODS

Field data acquisition

We completed the survey of Mágorpuszta in 2005. The field surveys included scouring the area many times in the whole vegetation period. While taking samples we followed the ideas to be found in the 2nd and 3rd chapter of Kovácsné Láng és Török (1997) IV. During the field work we

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used a basic M=1:25000 EOV map, where we marked the habitat-spots using ordinal numbers. Thanks to the mosaic structure of the area a given habitat-spot usually means the collective occurrence, the complex of more than one habitat. After we determined the GHHCS category/categories to each individual spot, we provided a detailed list of species – emphasising the protected and invasive species –, and we gave habitat-characterisations based on the condition and main characteristics of the habitat-spot

Creating habitat-maps

Following the making of habitat-maps and the elaboration of the data in charts we created the habitat-maps using the ArcView GIS 3.1 software. The digitalisation and correction of the habitat-maps were assisted by the EOV sections used as basic maps and aerial photos. During the field survey we digitally matched the characteristics of the spots to the spots, which later provided us with the possibility to value the area in different respects comprehensively. The colouring used by depicting the habitat-spots helps in easier distinction of the border-lines, but has no further informational value. The identification of the habitats is made available by the ordinal numbers, since the great number of spots (178) makes a colour-based distinction impossible.

Creating thematic maps based on habitat-maps

In order to make a more comprehensive valuation of the area we have also created some thematic maps of different positions using the maps of the habitat-spots. Considering the natural characteristics of Mágorpuszta we depicted the following characteristics on the maps:

- Areas affected by water,
- Expansion of saline areas,
- Saline habitat types,
- Characteristic habitats.

By creating the thematic maps we used the habitat-spot-maps as basic maps, and we picked the habitat-spots according to different topics, based on the GHHCS categories of the spots (Table 1.).

DEPICTED TOPICS	Habitat-spots picked based on their GHHCS categories
Areas affected by water	**GHHCS**
	A Euhydrophyte habitats
	B Marshes
Expansion of saline areas	**GHHCS**
	F Halophytic habitats
Saline habitat types	**GHHCS**
	F1 *Artemisia* salt steppes
	F2 Salt meadows
	F3 Tall herb salt meadows
	F4 Puccinellia swards
	F5 Annual salt pioneer swards
Characteristic habitats	**GHHCS**
	D4 Lowland eu- and mesotrophic meadows
	F Halophytic habitats
	H5 Closed loess and sand steppes
	J4 Riverine willow-poplar woodlands
	J5 Riverine ash-alder woodlands
	J6 Riverine oak-elm-ash woodlands
	K1 Lowland oak-hornbeam and closed sand steppe oak woodlands
	S Forestry plantations
	T Agricultural habitats

TABLE 1. A GENERAL DIAGRAM ABOUT THE METHODS OF CREATING THEMATIC MAPS

Methods of valuation

While valuing the surveyed area we concentrated on the distribution of characteristic habitats, the expansion of the saline areas and the occurrence of their types according to the finished maps. Apart from the maps we have also finished diagrams for the valuation. For the general valuation and characterisation of the habitats of Mágorpuszta the maps and the diagrams provide the methods.

RESULTS AND VALUATION

The habitat-map of Vésztő-Mágorpuszta nature conservation area

During the mapping of Mágorpuszta we distinguished 178 spots (Figure 1.). The map consisting of 178 spots includes 153 numbered habitat-spots. Based on the characteristics added to each spot it can be seen, that more than one GHHCS categories belong to a spot in most cases. Bordering the habitat-spots according to the GHHCS categories was not possible due to the great complexity of the area. From the separation and characterisation

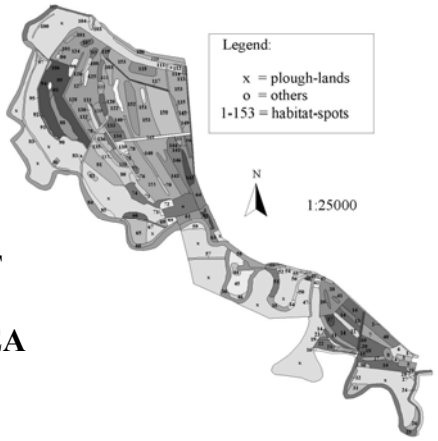

FIGURE 1.. HABITAT-MAP OF VÉSZTŐ-MÁGORPUSZTA NATURE CONSERVATION AREA

of the spots we can deduce information about the appearing, physiognomic and state-of-naturalness condition of the vegetation. The size and expansion of the habitat-spots can be said to be mosaic-like, made up of lots of small spots. The greater areas at the bottom boundaries of the key-formed area (W, SW parts) are mostly agricultural areas. The complexes made up of salty pastures and meadows determinated by Alopecum are significant in greater spots too.

Characteristic habitats of Vésztő-Mágorpuszta

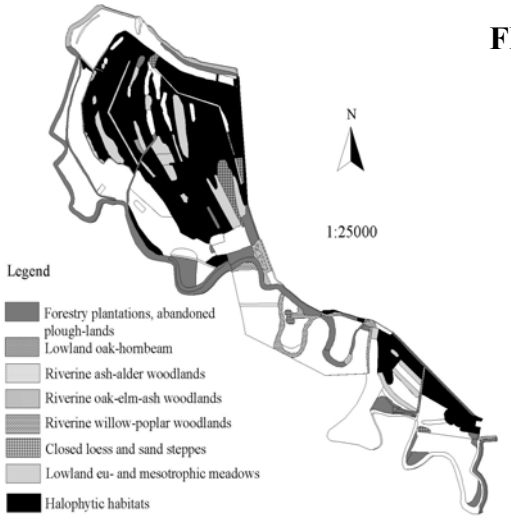

FIGURE 2. CHARACTERISTIC HABITATS OF VÉSZTŐ-MÁGORPUSZTA NATURE CONSERVATION AREA

The characteristic habitats of Mágorpuszta are shown on figure 2. According to that the following are to be pointed out: three-quarter of the area (the middle part) is saline. Between the saline areas some scattered lowland eu- and mesotrophic meadows can also be found, and a few small closed loess and salt steppes have also been formed. Along the Holt-Sebes Kőrös, that marks the boundary of the area run a number of forestry plantations, riverine oak-elm-ash, and willow-poplar woodlands. The riverine willow-poplar woodlands often appear together with forestry plantations (e.g. hybrid poplar, black-locust plantations), rows of trees and shrubberies. Alder-grove and lowland oak-hornbeam is significant only in spots. We can find many abandon-ned orchards, plough-lands in the surveyed area that are settled in cases by semi-natural sward, but the settlement of thick brushwoods, and/or black locust can also be characteristic. In some mosaic-like spots weedy lowland grass can also appear.

Areas affected by water in Vésztő-Mágor nature conservation area

According to figure 3 it can be said, that in three-quarter of the area those habitats are characteristic, that admit water effects of some form. Such areas are the woodlands near the canals, the lowland eu- and meso-trophic meadows, the euhydrophyte habitats, marshes and the wallows in the deeper parts of the halophytic habitats. It can also be noted, that abandoned plough-lands appear in greater numbers in areas

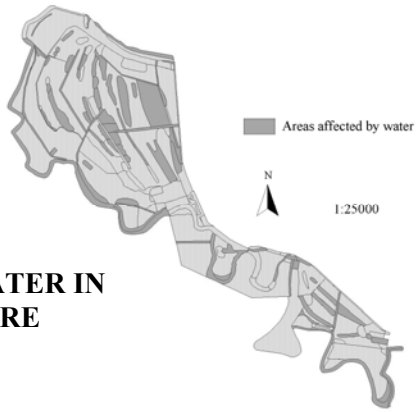

FIGURE 3. AREAS AFFECTED BY WATER IN VÉSZTŐ-MÁGORPUSZTA NATURE CONSERVATION AREA

affected by water, thus it can be concluded that the water was the reason of the ceasing of agriculture in those areas.

The halophytic habitats and its types in Vésztő-Mágorpuszta nature conservation area

As I have mentioned above, the types of halophytic habitats can be considered characteristic habitats of Mágorpuszta. These habitats can be found in 75% of this area (figure 4.). Among the halophytic habitats the complexes of *Artemisia* salt steppes and salt meadows are most common. In more than one habitat-spot the salt meadow type appears constantly. The triple complex of *Artemisia* salt steppes, salt meadows and saline bench is characteristic for 25% of the saline spots. The saline bench appear in more parts of the area, sometimes in the complexes of salt meadows or *Artemisia* salt steppes. The tall herb salt meadows and the saline bench of the halophytic habitat types rarely appear in independent spots, they are usually separated in complexes with other types.

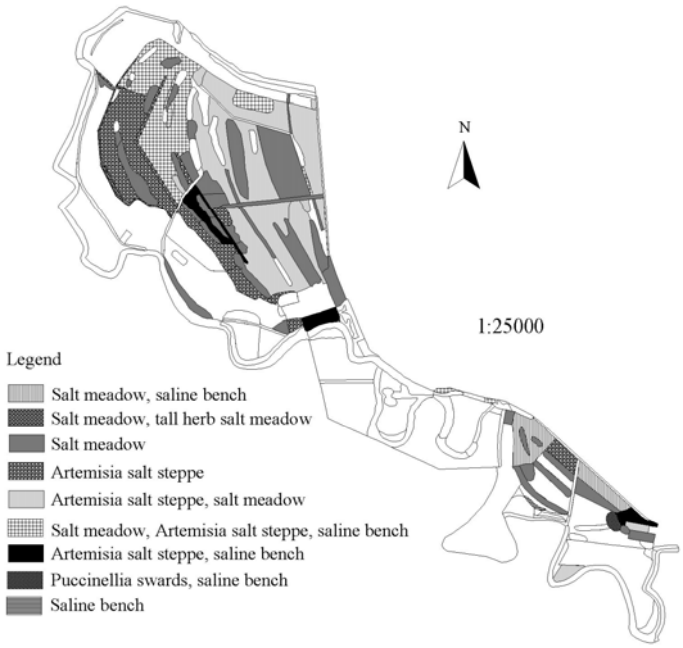

FIGURE 5. HALOPHYTIC HABITAT TYPES OF VÉSZTŐ-MÁGORPUSZTA NATURE CONSERVATION AREA

Synopsis, looking out

On the basis of the habitat-mappings in Vésztő-Mágorpuszta nature conservation area the following can be stated: the area can be well characterised thanks to the finished habitat-map and the habitat-map-based thematic maps, and these results can be used in later researches in connection with this area. Dependences of effects upon a causes can be revealed based on the characteristics of the habitat-maps of the area, the lists of species, and the GHHCS classifications. With the finishing of the habitat-map the first recording of conditions in the frames of the HBMS has been done, and thus the present state has been recorded. It is definitely desirable to follow the conditions and the changes of the area with attention. It is especially important, since this is the only way to see if the changes point towards naturalness or degradation, and the decisions that can diminish or stop the unfavourable conditions can only be made if the changes are observed. In conclusion, the present results mean starting points and guidelines towards the long-term goal, the preservation of biodiversity.

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LUCRĂRI ŞTIINŢIFICE, SERIA I, VOL. IX(2)

ENVIRONMNETAL PROTECTION, AN IMPORTANT COMPONENT OF RURAL DEVELOPMENT

PROTECTIA MEDIULUI INCONJURATOR, O COMPONENTA IMPORTANTA A DEZVOLTARII RURALE

OANA BRÎNZAN*, EUGENIA ŢIGAN [*]

Regulating politics that have to be respected by the agriculture are reported to environmental protection and environmental resources and is not directly addressed to agriculture The instruments that are normally applied to agriculture are legislative regulations regarding exploitation modalities in agriculture. The new instruments have the advantage of allowing a large flexibility to the procedures in demands adjustments for environmental protection. The measures purpose is to contribute to a rural space sustainable development. The agri-environmental measures are different, but speaking in general, it could be told that each measure has at least one of two main general objective: risk reducing for environmental protection associated with modern agricultural techniques o none side, and environmental conservation and cultivated landscapes on the other side.

Key words: *agrienvironmental measures, rural development, agriculture*

INTRODUCTION

The EU's rural development policy evolved as part of the development of the CAP. Agenda 2000 established rural development policy as the 2nd pillar of the CAP, to accompany the further reform of market policy (the 1st pillar). The CAP is increasingly aimed at achieving the right balance between the two pillars. The complementarity of the two pillars of the CAP has been accentuated by the recent reform of the CAP, introducing 'decoupling', 'cross-compliance' and 'modulation' (the transfer of funds from the 1st to the 2nd pillar), to be implemented from 2005 onwards. The 1st pillar concentrates on providing a basic income support to farmers, who are free to produce in response to market demand, while the

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2nd pillar supports agriculture as a provider of public goods in its environmental and rural functions, and rural areas in their development.

Payments under Axis 2 aim at ensuring the delivery of environmental services by agri-environment measures in rural areas, and preserving land management (including in areas with physical and natural handicaps). These activities contribute to sustainable rural development by encouraging the main actors (farmers, foresters) to keep up land management so as to preserve and enhance the natural space and landscape. This means protecting and improving environmental resources, and ensuring the sustainable use of forestry resources. Such measures also help prevent the abandonment of agricultural land use through payments to compensate natural handicaps or handicaps resulting from environmental restrictions..

A general condition for the measures under Axis 2 (at beneficiary level) will be respect of the relevant EU and national mandatory requirements (cross-compliance). If these requirements are not complied with, payments in some measures of Axis 2 can be reduced or cancelled. Farmers play an essential role in providing environmental services and therefore, payments may be given to farmers who sign up voluntarily to agri-environmental commitments for a minimum period of five years. Longer periods may be set for certain types of commitment, depending on their environmental effects. Payments are annual, calculated according to the income loss and additional costs resulting from the commitments made, including the costs for letting the transaction take place. Agri-environmental measures are the only compulsory measure to be included in the rural development programmes (European Commision, The EU Rural Development Policy 2007 – 2013).

DISCUSSIONS

Agri-environmental measures are diverse, but broadly speaking, one could say that each measure has at least one of two broad objectives: reducing environmental risks associated with modern farming on the one hand, and preserving nature and cultivated landscapes on the other hand. Agri-environment commitments have to go beyond usual Good Farming Practice (GFP) (European Commission, Directorate General for Agriculture and Rural Development, 2005, Agri-environment Measures, Overview on General Principles, Types of Measures and Application, Brussels, 11-13)

The 'horizontal regulation' (so-called because it covers all direct payments established under the CAP), requires account to be taken of environmental aims in the implementation of first pillar measures; the second the rural development regulation consolidates earlier agri-environmental measures and adds to them, thereby covering the second pillar of the CAP. Central to the new approach are the concepts of *'crosscompliance', 'direct income support', 'good farming practice'* and *'modulation'* (Council Regulation (EC) No 1259/99 of 17 May 1999 (OJ L 160, 26.6.1999), Council Regulation (EC) No 1257/99 of 17 May 1999 (OJ L 160, 26.6.1999).

'Cross-compliance'

The 2003 CAP reform includes a reinforced cross-compliance as a standard sanctioning approach to be applied to selected statutory requirements in the field of the environment, food safety, plant and animal health, and animal welfare. In addition, cross-compliance will apply to the obligation of farmers to keep their land in good agricultural and environmental conditions. Examples of environmental conditions applied are adherence to maximum stocking rates for cattle or sheep, compliance with specific conditions for the cultivation of sloping land, respect of maximum permitted volumes of fertilisers per hectare and compliance with specific rules concerning the use of plant protection products.

Direct income support' and 'decoupling

A major element of the 1992 CAP reform was the introduction of direct payments to farmers for a number of arable crops and cattle, to compensate for support price cuts. The 1999 CAP reform entailed a further shift from price support to direct payments, with payments becoming essentially direct income supports.

Good farming practice (GFP)

Another principle set out in the Agenda 2000 CAP reform is that of 'good farming practice' (GFP). Member States have to define codes of GFP at regional or national level. GFP should correspond to the type of farming that a reasonable farmer would follow in the region concerned, which entails compliance with existing statutory environmental requirements. GFP constitutes the baseline requirement for farmers wishing to join agri-

environmental schemes. Only farming practices going beyond GFP may qualify for agri-environment payments. These payments mainly cover the loss of farmers' income for adopting environmentally friendly practices.

Modulation

The Agenda 2000 CAP reform also introduced the possibility of a shift of support from market policy to measures contributing to environmentally benign practices. Thus, part of the contribution to farmers in direct payment may be made available by Member States to increase the budget available for agrienvironmental measures. This concept, known as 'modulation', is a part of the horizontal regulation.

Greener less-favoured areas (LFAs)

The less-favoured areas are areas of the EU where natural physical conditions cause lower agricultural productivity. A major objective is to ensure the continuation of farming in the LFAs, in order to preserve scenic landscapes as well as environmentally valuable habitats. Compensatory allowances in LFAs are now paid on an area basis and not in relation to production.

Forestry activities

The afforestation of agricultural land has become an established part of agricultural policy. If correctly managed forestry can have a significant and positive impact on the natural landscape and on biodiversity. Forests also play a role in offsetting the 'greenhouse effect' and the threat of global warming. In addition, forest management is an alternative source of revenue and employment for rural areas, especially in more marginal land conditions.

Agriculture and climate change

Agriculture adds to greenhouse gas (GHG) problems. However, it could also contribute to providing solutions to the EU's overall climate change challenges. The Commission launched the European climate change programme in March 2000 (COM (2000) 88 final). This contains plans for how the EU will meet its Kyoto Protocol commitment to reduce GHG emissions by 8 % by 2012.

Measures being considered include: encouragement of more efficient fertiliser applications to reduce overall use, a process already started under existing nitrate legislation (the nitrates directive (Council Directive 91/676/EEC of 12 December 1991 (OJ L 375, 31.12.1991); composting and improvements in anaerobic digestion systems (e.g., for production of biogas), to deal with biodegradable by-products and waste; renewed emphasis on biomass production, conservation tillage and organic farming.

Nitrates

The EU's nitrates directive was introduced in 1991 with two main objectives in mind: to reduce water pollution by nitrates from agricultural sources and to prevent further pollution. The directive is managed by Member States and involves: monitoring of water quality in relation to agriculture; designation of nitrate vulnerable zones; establishment of (voluntary) codes of good agricultural practice and of (obligatory) measures to be implemented in action programmes for the nitrate vulnerable zones.

Codes of good agricultural practice cover such activities as application periods, fertiliser use near watercourses and on slopes, manure storage methods, spreading methods and crop rotation and other land management measures.

Action programmes must include obligatory measures concerning periods of prohibition of the application of certain types of fertiliser, capacity of manure storage vessels, limitations to the application of fertilisers (on steep slopes; to water-saturated, flooded, frozen or snowcovered ground; near water courses), as well as other measures set out in codes of good agricultural practice.

Pesticides

Pesticides used in agriculture are usually referred to as plant protection products. They protect plants or plant products against pests. They are widely used in farming for their economic benefits to fight crop pests and reduce competition from weeds, thus improving yields and protecting the quality, reliability and price of produce. However, their use does involve risk because most have inherent properties that can make them dangerous to health and the environment if not used properly.

There are EU regulations covering the placing of plant protection products on the market, the placing of biocide products on the market and

fixing maximum residue levels in food. The EU also regulates to protect water quality in respect of pesticides. The water framework directive provides an integrated framework for assessment, monitoring and management of all surface waters and groundwater based on their ecological and chemical status.

Soil protection

Soil degradation processes such as desertification, erosion, decline in soil organic matter, soil contamination (e.g. by heavy metals), soil sealing, soil compaction, decline in soil biodiversity and salinisation can cause soil to lose its capacity to carry out its main functions. Such degradation processes can result from inappropriate farming practices such as unbalanced fertilisation, overabstraction of groundwater for irrigation, improper use of pesticides, use of heavy machinery, or overgrazing. Soil degradation may also result from abandonment of certain farming practices.

Agri-environmental measures offer opportunities for favouring the build-up of soil organic matter, the enhancement of soil biodiversity, the reduction of soil erosion, contamination and compaction. These measures include support to organic farming, conservation tillage, the protection and maintenance of terraces, safer pesticide use, integrated crop management, management of low-intensity pasture systems, lowering stock density and the use of certified compost.

Water management

Agriculture is a significant user of water resources in Europe, accounting for around 30 % of total water use.

Under rural development measures, the CAP provides support to investments for improving the state of irrigation infrastructures and allowing farmers to shift to improved irrigation techniques (e.g., drop irrigation) that require the abstraction of lower volumes of water. And, agri-environmental schemes cover commitments to reduce irrigation volumes and adopt improved irrigation techniques.

Biodiversity conservation

In recent decades, the rate of decline and even disappearance of species and related habitats, ecosystems and genes (i.e. biodiversity) has

increased throughout the world. Maintaining biodiversity is an essential element of the long-term sustainability of agriculture.

The existing CAP for biodiversity conservation and sustainable use, concerning for example: supporting extensive methods of production; developing sound agricultural practices taking biodiversity into account; sustainable management of natural resources including linear features (hedges, wildlife corridors); action to conserve local or threatened livestock breeds or plant varieties; targeted actions aimed at conserving agri-biodiversity in the enlargement countries; all these supported by research, training and education.

Natura 2000 has its main purpose to maintain in a favourable status of conservation a selection of the most important types of habitats (specified in Annex I of Habitats Directive) and European species (specified in Annex II of Habitats Directive and Annex I of Birds Directive) (Directiva Habitate 92/43, 1992; Directiva Pasari 79/409, 1979).

Natura 2000 is an ecological network of natural protected areas which is formed by: Special Areas of Conservation – constituted in conformity with Habitats Directive (Directive 92/43 from 1992 regarding Natural Habitats Conservation of Wild Flora and Fauna); Special Protected Areas – constituted in conformity with Birds Directive (Directive 79/409 from 1979 regarding wild birds conservation) (European Commission, General Directorate for Agriculture and Rural Development, 2003, Life and agri-environment supporting Natura 2000, Brussels, 50-61)

Genetically modified organisms (GMOs)

EU legislation on GMOs has been in place since the early 1990s and this regulatory framework has been further extended and refined. Specific legislation is designed to protect citizens' health and the environment while simultaneously creating a unified market for biotechnology (European Commission, Directorate General for Agriculture and Rural Development, March 2004, Agriculture and the environment, Fact sheet, Brussels)

CONCLUSIONS

The links between the richness of the natural environment and farming practices are complex. While many valuable habitats in Europe are maintained by extensive farming, and a wide range of wild species rely on this for their survival, agriculture practices can also have an adverse impact

on natural resources. Pollution of soil, water and air, fragmentation of habitats and loss of wildlife can be the result of inappropriate agricultural practices and land use. EU policies, and notably the common agricultural policy (CAP), are therefore increasingly aimed at heading off the risks of environmental degradation, while encouraging farmers to continue to play a positive role in the maintenance of the countryside and the environment by targeted rural development measures and by contributing to securing farming profitability in the different EU regions.

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LUCRĂRI ŞTIINŢIFICE, SERIA I, VOL. IX(2)

SOCIO-ECONOMIC STRUCTURE OF RURAL LOCALITIES FROM BOUNDARY AREA OF NATURAL PARK MURES MEADOW

STRUCTURA SOCIO ECONOMICĂ A LOCALITĂȚILOR RURALE DIN ZONA TAMPON A PARCULUI NATURAL LUNCA MUREŞULUI

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Natural Park Mures Meadow includes numerous rural localities from Arad and Timis county, with their administrative territory inside the boundary area of the park. The socio – economic analyse is an integrated part of Management Plan which intent to identify the economical activities with potential impact upon the protected area. The economic activities are generally oriented to agriculture, commerce and servicing activities. The only economic activities with a significant impact are ballast – holes and oil – gas extraction societies, which are still allowed by legislative point of view to be placed in the boundary area. On the social plan the localities are residences by many nationalities which preserved the cultures and the traditions. Within the framework of localities ancient ruins could be found from the Dacia period of time, fortified places and wood churches, objectives that could be included in the touring park circuits.

Key words: *rural space, protected area, boundary area, social, economic*

INTRODUCTION

There are three main aspects of biological diversity: ecosystems, species and genetic material.

Loses of biodiversity are occurring at accelerating rates at all three levels. The immediate causes of this trend include the expansion of agriculture and forestry, and the over-cropping of some species of plants and animals. Like deforestation to which it is related, loss of biodiversity results from a variety of causes operating at different levels. One underlying

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cause is the growth of the human population and its requirements of food, wood and other resource products.

At the more immediate level, the loss of biodiversity is undoubtedly related to intensification of production in existing areas of agriculture and forestry, and the encroachment of these activities into new areas where agriculture is practiced. Not at last, the increasing use of fertilizers and pesticides has direct ecological effects, does the increasing use of drainage and other techniques of land management.

Attempts to protect area and biodiversity have taken to main forms in modern times (Pearce D.; Turner R.K, 1990) :

- through laws that proscribe the taking or killing of named species (species protection) and the control trade in live plants and animals;
- through the protection of habitats (focusing on the living species or specific areas of land rather than on individual species)

Protection has different management implication in different types of areas. In some conservation or preservation in the main objective, but in others is pursued alongside other resource activities.

Mainly there are five categories of protected areas according IUCN classification: category I – Scientific Reserve/ Strict Nature Reserve, category II – National Parks, category III – Natural Monument/Natural Landmarks, Category IV – Nature Conservation Reserve/Managed Nature Reserve/Wildlife Sanctuary Areas, category V – Protected Landscape or Seascape Areas.

DISCUSSIONS

The Mures Flood Plain Natural Park is established downstram Arad City (173.000 citizens), to the Hungarian border, along the Mures river. It comprises the surface between the dams on one side and the other of the river shores, or between the high terraces. It is a region which supports periodical flooding, in which the plants and animals adapted smoothly to this environment. Surface: 17.166 ha.

The Mures Flood Plain Natural Park was legally declared, in conformity with the Governmental Decision No. 2151 from 2004, on a surface of 17.166 ha, with the main purpose of landscape preservation. The natural park comprises 4 natural reserves (IUCN IV category): "Cenad Forest" - 310,5 ha, "Big Isle of Cenad" - 3,0 ha, "Igris Isles" - 3,0 ha and

"Prundul Mare" - 654,9 ha, from which the first three are recognized at national level like protected areas.

The main purpose of the protected area is to protect and preserve the habitats and landscape diversity from the region, and the developed measures will have the next objectives:

-to encourage the preservation of terrestrial and aquatic ecosystems, valuable and very sensitive, by encouraging the sustainable land and water use, avoid overgrazing, extensive drainage or habitat fragmentation;

-to administrate semi-natural habitats, meadows, marshes, afforested flood plain, in the best way for keeping the optimal conditions for wildlife development and to preserve endangered species;

-to promote the organic agriculture and the entrance of its products on the free market, mentioning their origin from a protected area, with better organoleptic characteristics, high nutritive value and higher biological quality;

-to improve information dissemination, concerning the state of the resources and encourage the expertise sharing necessary for a sustainable forest management;

-to preserve or to improve the quality of the forest and other wetland ecosystems;

-to support environmental research;

-to support the water quality monitoring and the sustainable management of the water resources;

-to promote tourism in accordance with the nature conservation principles and sustainable use of natural resources.

These objectives will be realized better due to the fact that the Forestry Directorate Arad is the beneficiary of a Phare CBC project: "Promotion and protection of the Mures river flood plain", with a main objective to protect the biodiversity of the region, through scientific monitoring of different ecosystems, implementation of educational and informational programmes and a programme to promote tourism.

The two counties, Arad and Timis have a population of about 1,000,000 inhabitants and are mainly situated in a plan area (which represents 67%, respectively 80% of their surface).

The localities from Timis county that are included in the boundary area of Mures Meadow Natural Park are: Făget, Recaş, Bogda, Secaş,

Maşloc, Margina, Ohaba Lungă, Brestovăț, Pişchia, Mănăştiur, and all belonging little villages.

The localities from Arad county that are included in the boundary area of Mures Meadow Natural Park are: Lipova, Conop, Bârzava, Vărădia de Mureş, Săvârşin, Petriş, Zăbrani, Şistarovăț, Dorgoş, Bata, Birchiş, Arad, Pecica, Seitin, Semlac, Nadlac, Zadareni, Felnac, Secusigiu, and all belonging little villages.

Table no. 1 – Population at 1st of January 2006

LOCALITATI	**TOTAL**
ORAS LIPOVA	11379
BARZAVA	2910
BATA	1190
BIRCHIS	2031
CONOP	2395
PETRIS	1625
SAVARSIN	3215
SISTAROVAT	316
USUSAU	1334
USUSAU	1334
VARADIA DE MURES	1972
ZABRANI	4552
TOTAL ARAD	**34253**
ORAS FAGET	7351
ORAS RECAS	8218
BOGDA	413
BRESTOVAT	702
MANASTIUR	1720
MARGINA	2340
MASLOC	2160
OHABA LUNGA	1215
SECAS	310
TOTAL TIMIŞ	**24429**

Source: Mures Meadow Natural Park Administration

In the past and nowadays this are was populates by many nationalities, from which the Romanians and the Hungarians are in large numbers. Localities as Periam or Sampetru German used to be populated by Germans, whereas in Felnac there were many Serbians and in Nadlak there were and still are many Slovakians.

The Mures Floodplain and in its boundary area have a vary importance for the local community and the wider region from the aspect of existing and potential social and cultural values. Oil and natural gas enterprise represents one of the important activity and in the same time timber harvesting and hunting alongside agricultural activities are the main economical activities.

Table no. 1 Land structure of localities from Timis county throughout the boundary area (%)

Nr crt	**Locality**	**Arable**	**Pastures**	**Hay field**	**Vineyards**	**Orchards**
1	Faget	49,95	39,75	9,58	0,01	0,71
2	Recas	61,30	24,32	4,92	8,29	1,17
3	Bogda	46,61	32,22	17,93	0,02	3,21
4	Secas	38,87	45,25	11,37	0,00	4,51
5	Masloc	74,17	16,07	7,42	0,00	2,34
6	Margina	36,80	37,24	24,71	0,00	1,25
7	Ohaba Lunga	44,61	39,35	14,89	0,08	1,07
8	Brestovat	38,93	40,12	20,48	0,00	0,47
9	Pischia	73,80	13,00	5,26	2,92	5,01
10	Manastiur	59,05	33,46	5,81	0,00	1,68
	TOTAL	**55,53**	**29,54**	**10,35**	**2,57**	**2,02**

Source: Direction for Agriculture and Rural Developent Timis

The present legislative orders are making possible a sustainable management for this protected. Agriculture and livestock husbandry is taking place mostly in private properties. Agricultural farms are used mainly for growing crops. Main crops are maize, wheat, water and yellow melon, sunflower, while pastures in public property are used for grazing, which is focused especially on sheep and less cattle.

Table no 2. Land structure of localities from Arad county throughout the boundary area (%)

Nr. crt.	Locality	Arable	Pastures	Hay field	Vineyards	Orchards
1.	LIPOVA	45,91	22,75	2,16	0,08	29,11
2.	CONOP	44,64	46,35	7,50	0,00	1,50
3.	BÂRZAVA	30,98	35,96	32,37	0,00	0,69
4.	VĂRĂDIA	28,59	40,35	27,76	0,13	3,17
5.	SĂVĂRŞIN	27,10	41,97	30,39	0,00	0,53
6.	PETRIŞ	17,94	71,77	10,10	0,00	0,19
7.	ZĂBRANI	74,98	16,04	2,44	0,00	6,55
8.	ŞIŞTAROVĂŢ	20,75	63,35	14,58	0,00	1,32
9.	DORGOŞ	46,01	40,37	11,06	0,00	2,55
10.	BATA	62,58	25,61	11,78	0,00	0,03
11.	BIRCHIŞ	48,34	30,70	20,96	0,00	0,00
12.	ARAD	89,28	10,02	0,70	0,00	0,00
13.	PECICA	90,34	8,76	0,89	0,00	0,01
14.	ŞEITIN	94,56	5,18	0,26	0,00	0,00
15.	SEMLAC	97,44	2,52	0,00	0,00	0,04
16.	NĂDLAC	96,57	3,01	0,32	0,02	0,07
17.	ZĂDĂRENI	95,12	3,68	1,10	0,05	0,05
18.	FELNAC	97,50	2,31	0,10	0,07	0,02
19.	SECUSIGIU	90,44	8,07	1,49	0,00	0,00
	TOTAL	**69,40**	**21,21**	**7,31**	**0,01**	**2,07**

Source: Direction for Agriculture and Rural Developent Arad

Table no. 3 Animal husbandry structure in localities from Timis county throughout the boundary area

Nr. Crt.	Villages	Cows	Sheep and goats	Pigs	Horses	Poultry
1.	Faget	2,83	9,62	4,45	0,74	82,36
2.	Recas	2,55	14,84	7,19	1,23	74,19
3.	Bogda	2,82	24,67	3,44	1,05	68,01
4.	Secas	0,44	66,27	1,27	0,24	31,78
5.	Masloc	4,48	36,62	8,46	0,61	49,83
6.	Margina	2,14	4,43	2,86	0,41	90,16
7.	Ohaba Lunga	3,06	19,75	4,03	1,43	71,72
8.	Brestovat	1,73	54,97	2,47	0,74	40,08
9.	Pischia	3,02	28,69	7,10	0,38	60,81
10.	Manastiur	1,49	36,41	2,66	0,75	58,69

Source: Direction for Agriculture and Rural Developent Timis

Table no. 6 Animal husbandry structure in localities from Arad county throughout the boundary are of Mures Meadow Natural Park

Nr crt.	Villages	Cows	Pigs	Sheep	Goats	Horses	Poultry	Rabbits	Bees families
1	LIPOVA	6,46	12,75	36,09	2,77	0,69	27,17	6,18	7,89
2	CONOP	1,49	11,07	22,43	1,12	0,47	60,02	0,22	3,18
3	BÂRZAVA	2,48	2,19	3,88	0,23	0,32	88,79	0,78	1,32
4	VĂRĂDIA	5,43	15,12	5,43	0,62	1,00	68,72	1,37	2,31
5	SĂVÂRŞIN	3,94	10,94	2,57	0,44	1,15	76,59	1,91	2,46
6	PETRIŞ	4,81	6,49	2,18	0,77	0,56	75,35	3,11	6,73
7	ZĂBRANI	1,76	5,90	14,16	0,51	0,56	74,42	1,60	1,09
8	ŞIŞTAROVĂŢ	1,35	2,01	80,34	0,13	0,48	12,18	0,00	3,51
9	DORGOŞ	2,24	8,49	29,82	1,02	0,84	56,60	0,25	0,75
10	BATA	4,98	12,24	6,07	0,00	0,88	73,12	0,00	2,71
11	BIRCHIŞ	3,66	11,77	6,93	0,00	1,04	73,82	0,00	2,79
12	ARAD	1,98	6,49	2,92	0,09	0,41	85,16	0,89	2,07
13	PECICA	1,78	13,19	18,94	0,24	0,82	63,80	0,17	1,04
14	ŞEITIN	1,75	13,92	7,06	0,31	0,61	73,74	1,21	1,39
15	SEMLAC	1,52	12,56	4,55	0,40	0,70	78,25	0,87	1,15
16	NĂDLAC	2,47	28,96	12,00	0,16	0,39	55,41	0,00	0,60
17	ZĂDĂRENI	2,99	15,10	12,03	1,78	0,74	64,08	1,42	1,85
18	FELNAC	2,00	8,83	39,81	0,60	0,71	45,93	1,41	0,71
19	SECUSIGIU	2,72	9,69	30,44	0,45	1,23	54,02	1,12	0,34
	TOTAL	**2,48**	**9,86**	**12,40**	**0,32**	**0,62**	**71,51**	**0,90**	**1,91**

Source: Direction for Agriculture and Rural Development Arad

The protected area includes many archelological sites (about 37 of them in the Arad county), among which can be found the most important site in the country of Arad, "Santul Mare", a fortified settlement dating from the Bronze age, superposed by another Dacian settlement, where Ziridava, a Dacian citadel, is supposed to have existed. The contributions to the complete landscape are the Hodos – Bodrog and Bezdin Monasteries, important objectives for ecumenical tourism. Făget village is the centre of a very distinctive etnofolcloric area and it is distinctive due to its wood monastery. Recas city it is well known as valuable vineyard are for the West part of the country. Margina village has in its proximity the Romanesti cave where are organised cultural activities.

The economical activities are mainly centred on agricultural ones: cereals, husbandry, fruits and vegetable growing. And for a few localities

like Zabrani, Manastiur and Ohaba Lunga wood manufacturing is representing an alternative economical activity. Most of the localities are in Arad county and it could be observed that most of the enterprises are focused on commerce and servicing.

The economic activities that have an important negative impact upon the protected are is ballast-holes in Zadareni si Savarsin. The legislation is going to be changed in this direction, and this type of activities will have to move out from the park area.

Another activity that have a high negative impact upon the protected are is placed in Zadareani and is a oil – gas extracting company.

CONCLUSIONS

The main features of the Management Plan of Mures Meadow Natural Park should be the following:

- development of local plans, strategies or programs, for the conservation and sustainable use of biodiversity;
- inventory and monitoring of biodiversity and the impact on it;
- development and straightening of the current mechanism for conservation of the biodiversity, both within and outside the protected area and the development of new mechanisms;
- restoration of degraded ecosystems and endangered species;
- preservation and maintenance of indigenous and local systems of biological resource management and equitable sharing of benefits with local communities ;
- assessment of impact on biodiversity of proposed projects programs and policies;

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DETERMINATION OF MAIN FACTORS INFLUENCING WILLINGNESS TO LIVE IN MICRO-REGION OF KAPLICKO

DETERMINAREA PRINCIPALILOR FACTORI CARE INFLUENTEAZA DORINTA DE A LOCUI IN MICROREGIUNEA KAPLICKO

M. ROST*, ANNA ČERMÁKOVÁ*, R. BISKUP*

Miscellaneous forms of incentive were selected by municipal representatives to forestall possible municipality depopulation. These incentives can be for example finance benefits for citizens making permanent residence at the particular municipality or parent benefits for every new-born child. In this contribution, we focus on detection factors, which hold citizens in the municipality. Knowledge of those factors helps the regional management to set up a functional and effective system of incentives. To detect these factors, we chose young people (aged 18–35) living in the micro-region of "Kaplicko" (position of the region: South Bohemia, close to the Czech-Austrian border) as a target group. We analysed the following factors: quality of housing, age, educational background, number of dependant children, hobbies and interests, labour market position, commuting to work, and satisfaction with local sport and social facilities. The analysis shows that the main determinants affecting citizens' decision-making are the housing level, the satisfaction with sport facilities and the number of dependant children. All other factors were found redundant in the decision-making process.

Key words: *Socio-economic conditions, sustainable development of countryside, factors of continuance in municipality and regression trees*

AIM

The main aim of this contribution was the determination of attributes influencing young people's willingness to live in the countryside. For the analysis, we chose municipalities in the mountain and sub-mountain micro-region of "Kaplicko" situated in South Bohemia in the district of Český Krumlov close to the Czech-Austrian border.

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MATERIAL AND METHODOLOGY

This paper contains results of the statistical analysis data subset from the opinion poll survey in the chosen municipalities of the mountain and sub-mountain micro-region of "Kaplicko". We carried out a survey in summer 2006 and we asked citizens in the fertility age (aged 18–35 years) living in the chosen municipalities.

We divided the citizens in tree age brackets: 18–24 years – "early youth", 25–29 years – "youth" and 30–35 years – "middle age". Therefore the age is considered to be the order indicator.

Further, we observed the following 8 attributes:

1. **Tradition**. We mean the period of living in the municipality and our scale is: (a) less than 1 year, (b) 1–3 years, (c) 3–5 years, (d) 5–10 years and (e) more than 10 years.
2. **Housing level**. We considered four alternatives – living in a: (a) family house, (b) flat, (c) family house with parents and (d) flat with parents.
3. **Educational background**. We considered five alternatives: (a) elementary school education, (b) apprentice education, (c) apprentice education with upper-secondary education degree (d) upper-secondary education and (e) university education.
4. **Position on the labour market**. We chose nominal scale of four alternatives: (a) sole trader etc., (b) employee, (c) to be in household and (d) unemployed.
5. **Necessity of work commuting**. We considered only binary (dichotomous) indicator.
6. **Number of dependant children** (None, one child, two children, tree children and more than tree children).
7. **Individual hobbies**. We were interested in the respondents' hobbies such as hiking, hand work, gardening, hunting, fishing, breeding of domestic animals, etc.
8. **Satisfaction with social and sport facilities** (shops, restaurants, school, kindergarten, health-care and sport facilities).

The response – where the respondents want to live in the future – was the categorical indicator. The respondents could choose from the following items: (a) I will stay in the municipality, (b) I will move in

another municipality in the countryside, (c) I will move in a city (town) and (d) I do not care about it / I do not know.

For the identification of the decisive factors influencing the willingness to stay living in the municipality, we applied the methodology of classification trees. More concretely, we use algorithm CART, see **Error! Reference source not found.**.

Necessary numeric computation related to building of classification trees was made in software R release 2.4.0 using library RPART **Error! Reference source not found.**. The methodology of classification trees was selected because of the supposed non-additive intersection between both qualitative and categorical indicators.

Classification tree is built through a process known as binary recursive partitioning. This is an iterative process of splitting the data into partitions (via classicising rules), and then splitting it up further on each of the branches.

Essential approaches to building classification trees consist of classification rules arranged into the binary tree. The aim of such arranged rules is "correct" splitting of p-dimensional space X.

There were tree fundamental stages of building classification trees:

1. **First stage:** In this stage, suitable splitting rules are chosen for each of nodes in building tree. This is solved via so-called "Measure of node impurity". As measure of impurity we chose Ginny's measure of diversity:

$$i(t) = \sum_{i \neq j} p(i \mid t)\, p(j \mid t)\,,$$

where $p(j \mid t)$ represents probability, that same object is in the node t assigned to class j. Computation of this probabilities was based on training dataset.

2. **Second stage:** A decision which node becomes to be a leave (terminal node of tree), this is essential problem solved in second stage. Usually pruning of tree is used. After building $T_{\max}$ tree (each leave contains the objects only from one class, or the number of classifying objects in each leave is smaller then prescribed value) is this tree pruned to tree T_{optim} This pruning of tree $T_{\max}$ to tree T_{optim} minimize estimation of relative error of classification $R(T)$.

3. **Third stage:** This stage is the simplest part of tree growing. Each of class is assigned to one of the leaves. Necessary and sufficient condition to correct assignation of one class to the leaves t is to assign the value minimizing the estimate of the misclassification error, e.g. to assign the value $p(j(t)\,|\,t)$ satisfying the following equation:

$$p(j(t)\,|\,t) = \max_j \frac{N_j(t)}{N(t)}.$$

For further information about classification and regression trees methodology see monograph **Error! Reference source not found.**.

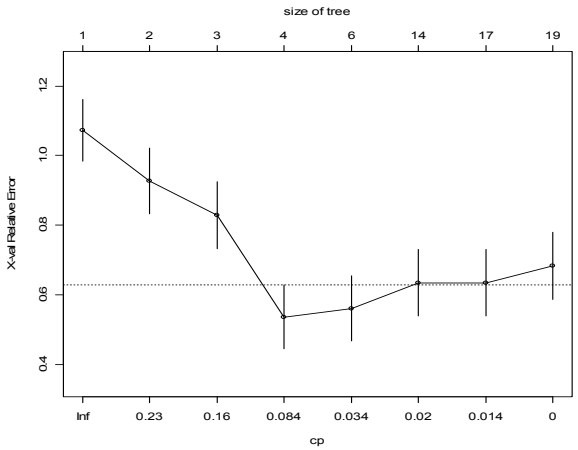
RESULTS

At the beginning of the computation, sufficiently branched tree $T_{\max}$ was created. To secure the branching process, the complexity parameter was adjusted to value of 0. The low value of the complexity parameter made the tree sufficiently branched.

There was not shown recursive binary splitting during tree building because of good arrangement of paper, but every one can see the relation between the crossover error and the complexity of the tree displayed with corresponding standard deviations. For completeness of results, we must mention variable involving in $T_{\max}$ tree for splitting: quality of housing level, the age of respondents, the educational background, number of dependant children, period of living in the municipality, labour market position, commuting to work, satisfaction with sport and social facilities, and breeding of domestic animals.

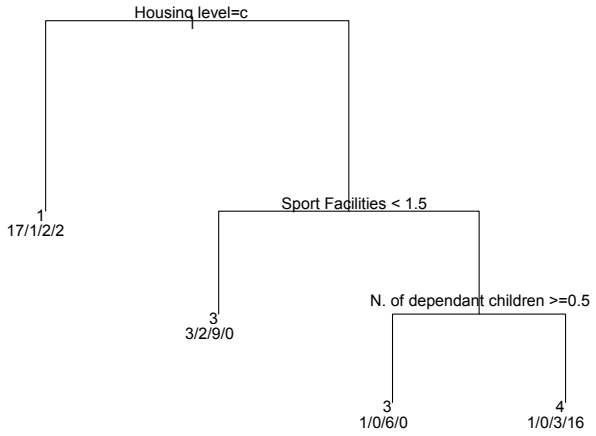
The high value of estimation of error (computed via crossover verification) was caused by the over-fitted tree. For this reason, we continued with pruning of $T_{\max}$ tree with using of rule 1 – *SE*. Value of error equal to $\min R(T) + 1SE$ is displayed on graph 1 as dashed horizontal line. This value is essential for closing of pruning.

Graph 1: Graphical representation of complexity table



This graph shows that the tree with four leaves has the complexity parameter equal to 0.084 meets the above mentioned rule. After adjusting of the complexity parameter to this value, final tree T_{optim} with optimal relative error was obtained. Result (binary tree of classification rules) is shown in graph 2.

Graph 2: Pruned tree T_{optim}



Classification rules, number of objects and some others characteristic are shown in table 1 a) and table 1 b).

Table 1 a) Classification rules

Type of node	Marking of node			Classification rule [specification]	N. of objects	Classification [misclassified]
Root	1				63	1 [41]
Node	2			Housing level = FH	22	1 [5]
Leaf	3			Housing level = rest	41	3 [23]
Leaf		6		Satisfaction with sport fac. < 1.5	14	3 [5]
Node		7		Satisfaction with sport fac. ≥ 1.5	27	4 [11]
			1	N. of dependant children		
Leaf			4	≥ 1	7	3 [1]
			1	N. of dependant children		
Leaf			5	= 0	20	4 [4]

It's evident that in the tree growing process, only the tree attributes were identified as significant: housing level, satisfaction with sport facilities in the municipality and number of dependant children. See tables 1 a–b).

Objects, fulfilled condition in the node, are assigned to next left node (leaf). The significance of classification rules corresponds to branch length. So the most important classifier in this case is the housing level. Respondents living in family houses do not want displace, the others do not care about displacing or speculate about moving to city (town). For young people is the significant motivation to moving to city satisfaction with sport facilities in the municipality especially for non family house residents. The number of dependant children influences the willingness of moving to city. Young people satisfy with sport facilities not living in family house and which have more than one child speculate about moving to city.

Table 1 b) Classification rules

Type of node	Marking of node	Conditional probability			
		p(t|1)	p(t|2)	p(t|3)	p(t|4)
Root	1	0.349	0.047	0.317	0.287
Node	2	0.772	0.045	0.091	0.092
Leaf	3	0.122	0.048	0.439	0.391
Leaf	6	0.214	0.143	0.643	0.000
Node	7	0.074	0.000	0.333	0.593
Leaf	14	0.143	0.000	0.857	0.000
Leaf	15	0.050	0.000	0.150	0.800

Table 2. Efficiency of classification rules

Reality	Prediction			
	(1)	(2)	(3)	(4)
(1) Continuance in the same municipality	17	0	4	1
(2) Changing municipality (other countryside)	1	0	2	0
(3) Moving to city (town)	2	0	15	3
(4) Do not care about it / do not know	2	0	0	16

Quality of classification rules was evaluated via resubstitution method. It is possible to calculate the classification efficiency (76.19 %.) from table 2. The value of efficiency is relative high but because of the resubstitution, it is slightly overestimated.

CONCLUSION

We used CART methodology to analyse data from respondents living in the micro-region of "Kaplicko" with regards to possibility of the future migration of inhabitants. This fact will be able influence natural demographic trend. We identified some essential factors influencing the willingness to live in the same municipality: housing level, satisfaction with sport facilities and number of dependant children.

Quality of classification rules is 76.19 %. Municipality representatives and management should focus on two groups of citizens willing to live in the particular municipality. The first one are people owning or thinking about a construction of family houses. The second group are respondents who cannot afford to build a family house. These people benefit the most from sport and social facilities. Therefore it is necessary to create a suitable condition for building new houses and to provide the citizens with suitable sport and social facilities. The second attribute can be seen important also for its important contribution to the harmonic atmosphere and development in the municipality and their citizens.

SPECIAL THANKS

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CORPORATE SOCIAL RESPONSABILILITY – SUPPORT FOR SUSTAINABLE DEVELOPMENT

RESPONSABILITATEA SOCIALĂ A CORPORAŢIILOR – PREMISĂ A DEZVOLTĂRII DURABILE

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Organizations Social Responsibility (or CSR – Corporate Social Responsibility) represents a new way „to make business" in the new European and global economic framework. This kind of business strategies includes social responsibility as an answer to a variety of social, economic and environmental pressures. These companies aim to transmit a signal towards all the stakeholders: employees, shareholders, banks, customers, providers, public authorities, and non – governmental organizations. The main aim of this paper is to present the European Union concept of CSR, emphasising its multiple dimensions and the linkage between responsibility and sustainable development and

***Key words**: business strategy; ethics; sustainable development; stake holder's satisfaction.*

1. INTRODUCTION. LITERATURE PREVIEW

In the modern commercial era, companies and their managers are subjected to well publicise pressure to play an increasingly active role in society – so called „Corporate Social Responsibility". Corporate Social Responsibility is an increasingly important part of the business environment. Gradually, this has become an interesting subject for academic research. The last twenty years have seen a radical change in the relationship between business organisation and society. The key factors which catalyse these changes are: globalisation and the associated growth in competition, increased size and influence of companies, changing in governments' industrial and environmental politics, the rise in strategic importance of knowledge, brand/reputation image and relations between stakeholders.

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The first publication specifically on the field dates back to 1953, with Bowen's „Social Responsibilities of the Businessman" (Bowen, 1953). H. R. Bowen argues that an organisation has an obligation „to pursue those policies, to make those decisions, or to follow those lines of actions which are desirable in terms of the objectives and values of society". D. Wood extended these ideas, identifying three driving principles for social responsibility (Wood, 1991):

(i) Business organization is a „social institution" and thus obliged to use its power responsibly;

(ii) Business organizations are responsible for the outcomes relating to their area of involvement with society;

(iii) Managers are „moral agents" who are obliged to exercise discretion in their decision-making.

Generally, the social responsibilities of a company seem to arise from the intersection (and compatibility) of the political and cultural systems with the economic system (Jones, 1983). Social responsibility is seen as a consequence of and an obligation following from the increase of firm's social power as tax payers, recruiters etc. (Davis, 1975). Another point of view belongs to T. Donaldson, who considered social responsibility as a contractual obligation firms have towards society. A firm own the central role in society and that reason allow it to use both natural and human resources in order to perform its productive functions and to attain its power status. As a result, society has the implicit social rights: in the return for the right to exploit resources in the production process, society has a claim on the firm and the right to control it (Donaldson, 1983). The specifics of this contract may change as social conditions change, but this contract in general always remains the basis of legitimacy of the demand for or assertion of the need for CSR (Epstein, 1987). The same author attempted to differentiate „business ethics" and „social responsibility" ant to incorporate them into a strategic process. Thus, business ethics refer to issues and dilemmas related to the morality of organisational actions or decisions. CSR focuses more on the consequences of organisational actions and can be define as „discernment of issues, expectations and claims on business organisations regarding the consequences of policies behaviour on internal and external stakeholders" (Epstein, 1987).

CSR is defined in various ways by the political or professional institutions or business community's organisations:

"Corporate Social Responsibility represents the continuing commitment by business to behave ethically and contribute to economic development while improving the quality life of the workforce and their families as well as of the local community and society at large." (World Business Council for Sustainable Development).

"Being socially responsible means that not only fulfilling legal expectations, but also going beyond compliance and investing into human capital, the environment and relations with stakeholders" (The European Commission, 2001).

„ Corporate Social Responsibility is a concept whereby companies integrate social and environmental concerns in their business operations an in their interaction with their stakeholders on a voluntary basis" (The European Commission, 2002).

"A socially responsible company operates a business in a manner that meets or exceeds the ethical, legal, commercial and public expectations that society has of business" (bsr.org).

2. DIMENSIONS OF CSR. CONNECTIONS WITH SUSTAINABLE DEVELOPMENT

The main aspects regarding on dimension of CSR are:

(i) Human resources management

For many European companies at the beginning of the 3rd millennium, a major challenge is to attract and retain workers with high professional skills. In this context, CSR could include relevant measures as lifelong learning, empowerment of employees, transparency and better information throughout the company, a general and sustainable balance between work objectives and family needs, equal pay and career opportunities for women or minorities (ethnical, religious or sexual), higher job security, active follow – up of employees who are off work due to injuries or permanent or temporary disabilities.

A special importance must be given to recruitments procedures, whose social impact is invaluable. The recruitment procedures that contribute to CSR non – discriminatory practices which facilitate the recruitment of people from ethnic or religious minorities, older workers, women, the long – term unemployed people. Such practices are essential in

order to achieving the primary European Employment Strategy objectives: reducing unemployment, raising the employment rate and decreasing the social exclusion.

Other very important element for human resources management in contemporary European corporation is representing by the applying of lifelong learning principle. In relation with this aspect, companies play a key role at several levels: a better definition of training needs using a close partnership with local actors who design and develop education and training programmes; supporting the transition from school to work for young people by providing apprenticeship places; developing an internal environment and organizational culture which encourage lifelong learning for all employees, particularly for the less – educated, less – skilled and older workers.

(ii) Adaptation to change

The European economy knew widespread structural changes which affected employees and others stakeholders, primarily due to the necessity of production facilities' closure. In year 2000 was more mergers and acquisitions than any other year in history. These transformations could be associated with a heavy cut in the european workforce, which involve a serious economic, social or political crisis in local or national communities. In addition, according to some studies, less than 25 % from restructuring operations reached their targets in terms of reducing costs, increasing productivity or improving quality of products or services, but often they caused a decrease in motivation, loyalty, creativity and satisfaction of the employees.

Restructuring in a CSR means to balance and take into consideration the interests of all those who are affected by this changes. This balance, as a social objective, has the same importance like the economic objectives of restructuring. In particular, to reach this balance involves the participation of all those are affected through transparency and open information and consultation. Also, restructuring needs to be well prepared by identifying the risk factors, counting all the costs (direct and indirect), associated with strategic alternatives and policies and evaluating all of the alternatives which would reduce the need for workforce cut. Experience of the major restructuring operations carried out in European Union in the steel, coal and

shipbuilding industries has shown that successful restructuring can be better achieved through joint efforts involving the public authorities, companies and employees' representatives. This process should seek to protect and preserve employees' rights and enable them to follow retraining where is necessary, to modernise production process in order to make it more safety, to mobilise public and private financing and to establish the framework for information, dialogue, cooperation and partnership. Companies should take up their share of responsibility to ensure the employability of their staff and must be involved in local development and in creation of active labour market strategies. In that way, companies can lessen the social and local impact of large scale restructuring. The Fundacion Empresa y Sociedad (FES) constitutes a good example of the involvement of private business in the promotion of social cohesion. This organisation promotes the support for micro – projects and micro – firms from Madrid. Apart from providing micro – grants, a system of tutoring is made available free. The FES has also mobilised additional support in the form of access to additional micro credit funding.

(iii) Management of environmental impacts and natural resources

This dimension is basis on the logical correlation: reducing the consumption of resources or reducing polluting emissions and waste can reduce environmental impacts. A company has found that less use of resources can lead to increase profitability and competitiveness.

Regarding this dimension, it could be said that the environmental investments are normally referred to as „win – win" policies – what is good for environment is good for business, too. This principle has been established for a number of years, being recently recognised in the European Commission's 6th environment action programme. It explains how the European Union and national governments can fulfil their role to help business to identify market opportunities and to apply a win – win strategy in order to preserve the environment quality. It set out a number of measures aimed to business: establishment of a assistance programme to help business organisations for understanding the European Union environmental requirements, development of harmonised environmental performance reward schemes which could identify and reward good performers for encouraging voluntary commitments and agreements.

(iv) Local communities

An important dimension of CSR is focused on integration of companies in their local settings, both European area or worldwide. Companies have a major contribution to their community's development (especially to local development) by providing jobs, wages and tax revenues. On the other hand, companies depend on the stability and prosperity of the communities in which they operate. For example, a company recruit the majority of their employees from the local labour market and, therefore, has a direct interest in availability of the skills they need. The reputation of a company at its location, its image as an employer and producer influences its competitiveness.

Companies also interact with the local physical environment: business can be responsible for a number of polluting activities – noise, air emissions, contamination of soil, waste and water pollution.

Many companies become involved in community causes by means of additional training places, assisting environmental charities, recruitment of socially excluded people, provision for childcare facilities for employees, sponsoring of local sports and cultural events or donation to charitable activities. Also, non - local companies (i.e. multinationals) are involved in the community's development. The increasingly use of the positive relations between these companies and local community allows a better integration of their affiliates into the local market. A complete knowledge database about the local actors, the local environment tradition and strengths is an asset which the multinational companies can capitalise. In addition, financial institutions can play a special role through community investing in projects that create benefits or reduce regional disparities. Also, recognising that access to affordable prices for everyone to services of general economic interest is at the heart of the European model of society, some companies endeavour to ensure such access as part of their social responsibility where it is not guaranteed by legislation.

(v) Global environmental concerns

Through the transboundary effect of many business – related environmental problems, and their consumption of resources from across the world, companies are also actors in the global environment. They can therefore pursue social responsibility internationally as well as in Europe. For example, they can encourage better environmental performance

throughout their supply chain within the International Production Process approach and make larger use of European and international management and product – related tools. Investment and activities in other countries can have a direct impact on social and economic development in these countries.

3. CONCLUSIONS

Corporate Social Responsibility should nevertheless not be seen as a substitute to regulation or legislation concerning social rights or environmental standards, including the development of new appropriate legislation. In countries where such legislation does not exist, effort should focus on putting the proper regulatory or legislative framework in place in order to define a level playing field on the basis of which socially responsible practices can be developed.

The economic impact of CSR can be divided into direct and indirect effects. Direct results may derive from a better working environment, which leads to a more committed and productive workforce or from efficient use of natural resources. In addition, indirect effects result from the growing attention of consumers and investors, which will increase their opportunities on the markets.

There is a need for a better knowledge and further studies on the impact of CSR on business performance. This could be a field for further research between companies, public authorities and academic institutions, the framework programmes for research and technology development could support These efforts.

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CONSIDERATIONS UPON THE ROLE OF THE INFORMATION REGARDING THE PRODUCTION COSTS IN THE MANAGERIAL PROCESS

CONSIDERATII PRIVIND ROLUL INFORMATIILOR REFERITOARE LA COSTURILE DE PRODUCTIE IN PROCESUL MANAGERIAL

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Understanding the production costs, in their theoretical and practical complexity, represents basic instruments that serve the management activity and implicitly the goal to increase the economic activity's efficiency. To this regard , a structure of the of the costs' informational system according to the classic calculates principles- which presently rules in our country's enterprises- is no longer in accordance with the latest demands and strategies of the economical development. A modern management must also take into account the changes appeared in the costs' structure, the internal and external agents that influences the costs' height under the conditions imposed by the new production technologies and not in the least by the new informational technologies.

Key words: *costs, management of cost, managerial process, structure of the costs*

The information regarding the costs is useful for the enterprises' managers for the following reasons:

- certain decisions such as: acquisition or production of a product can be taken based on the costs' information;
- the costs may represent a base for prices' substantiate and, at the same time, for the periodical revise of them ;
- based on the costs' analysis one can estimate the profitability and viability of a production line or can estimate the replacing of the equipments and installations;

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- costs represent an important element in planning the budget;
- costs hold an important role in optimal usage of the lacking of resources;
- analysing the relations with the clients and the distributors;
- eliminating non-quality through hidden costs' analysis; it's known that, presently, the quality is like a key competition trump. Starting from here it goes the whole theory of the quality's costs;
- costs' determination and the in-time providing of relevant information represents the grounds of the financial control; one of the management foremost functions is planning, implementation and operating some organizational control systems, as premises of a financial control.

Because the cost represent different significations for each technological faze or operation, for each costs generating place and for each product a detailed understanding is compulsory, at every management level.

To this aim it has to be taken in account the fact that information provided by the costs' calculation ensures, among others, premises necessary for the following: costs' analysis and control for each costs generating place; operative management of each costs generating place, production and envisaged costs'estimation and their fulfilment's control; the fair estimation of the products' stocks; determination of the taken decisions' efficiency;

The cost is a universal accepted economical category and it appears in all the economical and social activities.

It's study has been centred on two aspects: a theoretical approach , according to it's essence, and a practical approach, as an appreciation revealing for the undertaken efforts-therefore, integrated in the used resources' indicators category.

In the theoretical point of view, cost can be defined as being the valuable expression of all the production agents used for producing and distributing the materials goods, for the works' fulfilment or the carried out services.

The production the cost represents the money expression of the production's agents (materials and human) usage that an enterprise makes for producing and selling it's services and goods

In the accountable point of view the cost is a sum of spending made for obtaining and/or selling a certain utility ; the cost of an utility is equal to the resources usage's value.

As mentioned above, the costs' study has also a practical side, the production cost being analysed as quality-economical indicator used for measuring and appreciating the economical development; the cost holds a central position in the indicators' system at the micro economical level.

Generally, the efficiency can be evaluated according to the correspondence between the economic activities' results and the social needs, the assigned resources being spent according to the market standards.

Although efficiency is given by many elements, an important one is the amount of spending necessary for acquiring the results.

The production cost's level illustrates the absolute amount of spending that forms it. Being an effort indicator, the analysis of its dynamics enables the representation of its economic efficiency (or inefficiency) which is appreciated according to the effort/effect unity balance.

The production cost represents basic element in elaborating an enterprise's strategy. In this regard it has certain functions such as:

- Knowing the real materials, financial and human consumption used for producing each good in the whole production;
- The account and control due to the fact that it measures the materials and human consumption ;
- Reckoning some important indicators based on which the activity's efficiency is expressed;
- Influencing the profitability's level, because it expresses on the money form the level of occasional expenditures for acquire each product unity or the whole production.

The above mentioned functions indicate the role and importance of the production cost as a stimulation key factor for carrying on an efficient activity.

In order to substantiate the decisions, four related to costs problems become important and they are:

- The costs reached through a taken decision?
- If a certain decision is chosen despite another one what is that is given up to? (In other words, to decide means to give up?).

- How do the costs react to the made choice? What laws and logics do the costs follow?
- How can the costs been operated upon?

In the following lines we'll approach in a detailed manner these problems.

1. Costs related to the assumed decision

In the analysis made for taking a decision important is the change brought by the undertaken choice. A good manager should ask himself in what way that choice will modify the present situation and to compare, from this regard, the possible options, leaving besides what doesn't depends on the assumed solution.

This leads to the unimportant costs concept, or, after the American expression of Michel Lebas, "*sunk costs*"**.** The unimportant costs are past or historical costs, upon which you can't act no more for supporting future decisions. These costs have already been sacrificed in a wasting resources activity.

Opposite these unimportant costs are the justified costs which are future evaluated costs, used in the analysis of the alternatives and possible solutions and upon which you can act according to the plans of the enterprise's management.

Another difficulty is reached- the distinction between the short and the long term –which is essential in the economic costs' analysis because the costs' evolution depends on this.

Regarding this problem we specify that the long term (long period) and the short term (short period) , in the economical point of view, are not defined according to the calendar ; the distinction between these terms is conventional.

In conclusion, the evolution of the short term costs is based upon maintenance of the same production capacity, respectively, of the same technical conditions (same buildings, equipments, plants, etc). The production that depends on this production capacity can record changes in accordance with the other variable production agents (circulator assets and productive forces).

In exchange, on long term, the production can be modified by the alterations appeared in the structure and volume of the equipments, plants, etc.

As the majority of the administration decisions represent, in reality, an adjustment related to the previous situation, the enterprises' managers often rely on a limited judgement.

The economy theory reveals that a justified cost (which corresponds to the entire elements capable of being modified by the decision) for deciding upon the production level is the edge cost; it is defined as the valuable equivalent of the consumption of the resources generated by acquiring the latest series/ production batch, extra realized in order to reach a given level of production.

The edge cost's concept is defined by the speciality literature through the analysis point of view which is subordinated to it more than through it's constitutive parts.

The edge cost's definition may be applied in both the increasing and reduction of the production. In the increasing production case, there is a "developing" edge cost, in the reduction production there is a "regressive" edge cost.

In conclusion, the edge cost represents the variation of the total cost given by the production's oscillation and also called by P. Mauton şi P. Baranger „differential cost".

Identifying the costs reached by a decision is easier if those costs are according to the object (product, process, entity) for which that decision is taken; his means that those are direct costs. In an accountable vision, the direct costs are those costs that are not engaged but for only one product.

For instance, if we examine a decision related to a product (changing the production volume, modifying the means of delivering, the type of production , the delivering deadline promised to the customers etc.) and if this product involves costs which are not specific to it , but common to other products (using the same machines, a common distribution way) , the analysis of the modifications, that the decision involves in these common or indirect costs case, is certainly more difficult than that of the product's own costs.

The indirect cost term is sometimes used in a less different sense which is: in some enterprises, the indirect costs are those that don't interfere upon the product during one stage or another of its fabrication process- the selling or from it's life period.

But, from an accountable point of view, indirect are those costs which can't be made for a product without an eventual reckoning.

2. Considerations upon the opportunity cost

The theory, according to which any choice implies a renouncing to another possible choice, occurred to the opportunity cost concept; Hugues calls it the renouncing cost which means the lack of earnings or the return to the second choice

According to the teacher Raymond Baree's definition the opportunity cost is "the sacrifice in real terms of an economical subject that makes a choice among more possible actions: when this subject is involved in a production activity, the undertaken cost consists of the value of the unused opportunities; it means the value of the goods and services which couldn't be created because the consumed resources are no longer available for other uses."

We can drag the conclusion that the cost concept shouldn't be understood only in the consumption of agents in order to produce something point of view, but the renouncing cost or the "do something else" cost ,too.

In this context, the opportunity cost represents the option's cost of an alternative against another. The opportunity cost concept creates accountability problems. Due to the fact that it records what it is and not what it could be, in practical activity less attention is awarded to this concept. In these regards, we assume that, presently, the cost can't be approached in accountably terms only but it must be seen as the cost of other goods and services that might be obtained with the same resources.

On the other hand (and this point of view is not independent from the previous one), the opportunity cost restores the justified cause of the traditional accountability's evaluation to the historical cost.

From the above ideas we can drag the conclusion that using this concept is of utmost importance for substantiate the orientation decisions of the enterprise's strategy towards those alternatives of using the resources which ensures the maximum capitalization taking into account that the resources may have diverse destinations.

In this context, in our opinion , the opportunity cost gains a special signification in a limited resources economy or a lack of some resources one, where the options' problem is more keen and the cost appears as an alternative measure , as a basic indicator with the help of which certain production and using the resources choices can be made.

Therefore, a good/service's production cost must be regard in direct connection to other goods/services' costs which might be gained from the same resources.

3. The costs' behaviour regarding the assumed decision

Before assuming a certain solution the involved costs' behaviour must be tested. Therefore, it's important to know what will happen if, for instance, the sells grow up more than predicted; if the enterprise has to invoice extremely various orders; if there are partial deliveries or which will be the consequence of the products' computerizing; which is the critical volume of that must be commercialized in order to reach a certain net annual result.

These are only a few examples that indicate the fact that for these men of decision knowing the costs' dynamics and their rules is important.

A sustaining argument for this statement might be the existence of the two categories of decisions: one is based upon the enterprise's strategy and implicitly upon it's available means; this generates structural costs (invariable ones); and the other is based on the usage level of the available means, generating operational costs (variable ones).

The costs' behaviouristic structures are influenced by a series of agents which generates their fluctuation, among which: the spending characteristics; the period of time; the shorter it is the more the costs gain the invariable costs' characteristics; he activity level; the entrances' prices; the costs' assigning; management; unexpected agents;

In other words, the production's volume is not the only agent that determines the costs variation, but, in practical activity, this has received the most importance due to it's abilities and role in the cost-volume (at the activity level)-profit interdependence's analysis.

The distinction between the variable costs and the invariable costs is not always easy to make due to the discretionary costs which depend on the responsibility centres' managers and which are between the two limits (the variable costs and the invariable costs).

The discretionary costs have a more vague relation regarding the reached result, unlike the determined costs which are in clear relation with the result (for instance- the material's cost is directly connected to the production level)

4. Possibilities to act upon the costs

Technique speaking, the managers can act upon the costs relying on the laws the costs respect, laws imposed by their behaviour. It's important to know for those who decide to release that specific law. In this case, a more complex concept is used –the verifiable costs-those upon which one can act.

This, directly, relates administration accountability to the phenomenon appeared in the organization process because it leads to researching and analysis of the way the decisions are taken, decisions that determines the costs in the enterprise.

The verifiable costs are, therefore, in the direct area of the decisional process having determined responsibilities.

On their turn, unverifiable of administrative costs are imposed to whom decides, not being able to be directly influenced by him. In this category are external causes generated costs (local administration, public services-, financial, dues, rents, social expenditures etc.).

As for that who decides point of view, the costs can be reversible when the return upon the engagement's prediction is possible and irreversible , on the contrary.

In the administration accountability specific domain this problem represents a real coercion because the released information, for being justified, must be delivered in time. In other words, it is necessary to connect the speed and viability of this information.

In conclusion, we consider of utmost importance for the costs reached through a decision' analysis to know their dynamics , that of the phenomenon or actions which modifies their evolution, as well as knowing the generating causes; the aim is to adapt the costs and their laws.

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GOVERNMENT INVOLVEMENT IN COMPENSATING AGRICULTURISTS DAMAGED BY CALAMITIES

IMPLICAREA STATULUI IN DESPĂGUBIREA AGRICULTORILOR AFECTAȚI DE CALAMITATI

T. MATEOC [*], VICTORIA SEULEAN [**]

The role of the State in the field of insurance in general and agricultural insurance in particular acts in two main directions: on one hand, as an authority in the regulation and monitoring of the insurance activity of the operators in that State and, on the other hand, as an insurer, mainly against those risks and events that, through their size and force, generate negative effects for a large number of persons and for their goods. The State also intervenes as an insurer for calamity risks, which, as a general rule, private insurers exclude from their insurance, compensating damage to physical and legal persons. This paper presents the analysis carried out in both directions, analysing the role of the State both as a regulating authority and as compensator of calamities (i.e. of the effects of calamities).

***Key words**: compensating, calamities*

1. General outlook concerning the State involvement in insurance

The insurance activity is monitored at the level of each State either by a distinct public entity or by a department with specific attributions and organised within a central public institution.

The main objectives of regulating and monitoring insurance activities are to maintain insurer's liability, to protect the interests of the insurers, and to avoid disloyal competition. Through regulation insurance activities at State level, we should take into account the following:

- establishing equitable premium quotas in relation with the protection offered;

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- applying properly regulations concerning the insurance activity;
- informing the public properly on insurance matters.

The fields of regulation in insurance activities also include:

- developing and authorising insurers;
- licensing insurance intermediaries;
- regulating liability marges necessary for the insurers;
- developing premium technical reserves;
- regulating premium quotas;
- regulating contracts and market policy.

Governmental institutions also offer, besides the regulating activity of private insurers, a wide range of insurance services. Thus, Governmental insurers can play an exclusive role, can be business partners, or they may compete private insurers. Through re-insurance activities, through direct competition with private insurance companies, or through replacing them on the market, the State can act in the direction of diminishing price and increasing insurance availability.

The Government can offer insurance plans in cooperation with private insurers. There can be partnership in the situation in which the State develops a re-insurance plan (for example, to insure crops), overtaking in the re-insurance certain risky situations or a certain volume of the responsibility that private insurers cannot take. In other cases, public insurers cover the so-called “hard risks” that private insurers exclude from their insurance offer.

The types of insurance Governmental insurers offer at present can be classified in three categories, as follows:

- social insurance;
- asset and civil responsibility insurance;
- financial assistance insurance.

The plans of social insurance are destined to solve some social cases of physical persons in need, but lacking resources. Social insurance has the following features: (1) a system based on compulsory contributions from the members of the group insured or from other persons (employers), which, on behalf of the group insured and of himself, pay the contributions; and (2) the distribution of the resources from mobilised contributions is done according to the principle of re-distributivity intra- and inter-generations: in other words, resources are mobilised from active people

(people that get incomes) and are directed to non-active, resourceless people.

Another type of programmes of Governmental insurance is **asset and civil responsibility insurance**. They include in this category programmes such as those of compensating serious cases of labour accidents of the workers, insurance programmes against floods, strong seismic movements, land slides, etc., and other types of insurance. The national programme of insurance against floods is an important one, as it compensates the owners of goods damaged by floods and alluviums. Flood insurance in the State's name and on its account is practiced in many countries, aiming at making accessible to the interested ones flood insurance at acceptable premium quotas.

In some states, private insurers sell flood insurance policies in their own name, retain a certain percentage from the premiums representing commissions and other expenses, and pay compensations. If the damage of private insurers are not covered from premiums and from the income from investments from mobilised premiums, the difference is subsidised by the State. In the USA, for example, 83% of the total flood insurance policies has been concluded by private insurers and the rest has been concluded on the ground of a national flood insurance programme by public insurers.

State crop insurance offers coverage against such dangers as drought, pest insects, diseases, excessive rainfall, and hailstone. The goal is to make crop insurance accessible to diminish financial losses. They can conclude crop insurance also through private insurers. The national programme for crop insurance has resulted in large losses these years in the USA. Premium quotas are relatively low because of the general opinion that insurance is not necessary since the government will anyway offer financial aid in case of natural disaster or drought.

The third group of Governmental insurance programmes involve situations in which the Government guarantees that the sums, investments, or deposits, i.e. the so-called **financial assistance insurance**, will be returned. The State acts in this case as a linking authority that guarantees and supports business developed by private enterprisers.

2. Regulating and monitoring insurance activities in Romania

In insurance activities, the State role is that of regulating and monitoring authority.

From this point of view, Romania does not differ from other nations. Regulating insurance and re-insurance activity is ensured at present by the **Law no. 32/2000 concerning insurance and the development and functioning of an Insurance Monitoring Commission**, that replaced Law no. 47/1991 concerning the development, organising, and functioning of commercial firms in the field of insurance. In order to harmonise Romanian and European Community legislation, Law no. 23/2000 has been the object of several amendments these years.

Law no. 32/2000 regulates the organisation and functioning of commercial firms of insurance and re-insurance, of insurance intermediaries, as well as the organisation and functioning of the Commission for Insurance Monitoring that represents the national authority in the matter of prudential monitoring of the sector. The latter acts in the following fields:

- monitoring authorised insurers and re-insurers that operate in Romania;
- monitoring intermediaries' activity in the field of insurance and re-insurance.

Insurers should operate with respect for specific prudential norms in accordance with insurance practices, and include:

- organising and developing activities honestly and professionally, in accordance with the nature and size of the social capital subscribed and paid;
- employing a sufficient number of people that are skilled and professionally competent.

As for elective insurance, insurers should develop the following:

- their own insurance conditions with respect for legal stipulations in the insurance contract that represent the "law of the parties";
- their own insurance clauses that can change insurance conditions depending on the insurer's own option or on that of the insured;
- their own insurance premium calculus criteria;
- their own regulations and instructions of identification and liquidation of damages in strict accordance with the stipulations mentioned under insurance conditions and clauses;
- internal regulations concerning the constitution and maintenance of technical reserves depending on one's own operative evidence system with respect for the norms issued by the Commission for

Insurance Monitoring.

The role played by the Romanian Authority of Monitoring is very clear. Thus, if as a result of financial report analysis and of controls of an insurer's activity the Commission for Insurance Monitoring sees that, because of disrespect for legislation, endangers the obligations to the insured, can take the following measures:

- limiting the volume of gross or net premiums subscribed for a certain period of time, so that they will not exceed certain values;
- prohibiting the sale or renewal of insurance contracts of a certain type;
- prohibiting certain risky investment operations by the insurer;
- majoring the social capital paid or the free reserve fund paid;
- taking any other measure that the Commission will think fit in order to re-establish the insurer.

A positive thing is that the Commission for Insurance Monitoring observes the confidentiality on the information obtained during the exercise of its monitoring and control activity. But there are also cases in which confidentiality does not apply. The following cases could be given as an example:

- if the information are supplied by the Commission for Insurance Monitoring upon written agreement from the insurer;
- if the information are supplied upon request from judicial courts;
- if the information are supplied in the insured interest.

The Commission for Insurance Monitoring issues decisions through which:

- it enforces prohibitions or requests, and awards, suspends, or withdraws insurer's licence;
- it approves the division or fusion of insurers;
- if it approves the transfer of insurance portfolio;
- it approves the persons that will examine life insurance activity;
- it approves significant shareholders and insurer's significant persons;
- it approves the membership of the expert Body in insurance, which operates beside it and acknowledges its status;
- it orders analysis, control, and guidance actions within companies in the field of regulation and monitoring;
- it identifies and applies sanctions to operators in the field for

having not observed legal norm stipulations and application decisions.

3. Involvement of the State in agricultural insurance in Romania

In this context, we think it proper that Governmental institutions in Romania get involved more actively in agricultural insurance in particular, since the agricultural sector plays an important role in economy and in the process of integration in European Union structures. With its 14.8 ha of agricultural land (i.e. 62.20%) of the total land), Romania is the second great agricultural producer in central and Eastern Europe after Poland, and a medium-size one in Europe. Both its soil and climate could result in an efficient agricultural production, but the evolution of some indices such as share of agriculture of the GDP, the share of agriculture in GAV, and the share of the population employed in agriculture show major unbalances in Romania's agriculture.

After December 1989, Romania's agriculture represented one of the main economic sectors of the country, with over 40% of the active population. Romania started an asymmetric process compared to other European Union member nations, in which restructuring industry led to an increase of the active population in agriculture. Agriculture has become a buffer zone for the people affected by the impact of the transition.

In the summer of 2000, Romania's Government, aware of the importance of its involvement in supporting the agricultural sector, issued the **Law no. 381/2000 concerning the compensations in case of calamities in agriculture**. On the ground of this normative document, the State involves in the agricultural sector as insurer, compensating the losses suffered by agricultural producers and animal breeders in case of natural calamity that has negative effects on agriculturists.

Risks that can be insured

On the ground of the law mentioned above, they consider natural calamities are quantitative and qualitative crop losses, mortality, and/or necessary slaughter of livestock produced by a destructive expression of natural phenomena and diseases over wide areas.

Natural phenomena and diseases taken into account that generate natural calamity are diverse. Among them:

- excessive rainfall, persisting in time, and that affects non-irrigated lands;
- floods from rivers or other water bodies and dam breaks;

- abundant and long-lasting rainfall;
- excessively low temperatures, below the biological plant resistance limit;
- thick snow layer that results in damage in the plant and animal sector;
- sudden snow thaw that results in floods, over-flooding, and marshing;
- hurricanes, as well as other disasters and calamities over wide areas.

Listing and classifying of diseases that generate natural calamities in plants and livestock is done by the Ministry of Agriculture, Forests, and Rural Development, and is approved by Government's Decision.

The payment for damages suffered by agricultural producers, physical or legal persons, for natural calamities is done only for agricultural crops, livestock, and poultry that have also been insured by insurance companies.

Agricultural producers, physical or legal persons that insure themselves at insurance companies acknowledged by the Ministry of Agriculture, Forests, and Rural Development benefit from double support for the insurance from the State, i.e.:

- financial compensations for agricultural producers that suffered from damages produced by natural phenomena and diseases (epizooty) that generate natural calamity;
- subsidising insurance premiums with 20% of the level of the total premium for the risk factors insured for agricultural crops, livestock, poultry, bee families, and fish as listed by the Ministry's Order.

Administering, using, and managing the compensations for agricultural producers is done by the Ministry of Agriculture, Forests, and Rural Development. Compensations are given to agricultural producers in the following conditions:

- for crops and plantations affected by natural calamities, but only for damage above 30% of the production, the maximum level of compensation being 70% of the expenses by the time of the insured phenomenon;
- for livestock, poultry, bee families, and fish the compensation represents maximum 80% of the insurance value, diminished by

the value of the by-products that can be valorised in accordance with legal stipulations.

Identifying and assessing damage

Identifying damage and assessing it as a result of insured event is done in the presence of the agricultural producer and of a commission nominated by the county's prefect, upon the suggestion of the general manager of the Agricultural Office: the commission is made up of the mayor, of one or two specialists of the agricultural centre or from the sanitary-veterinary circumscription, and a delegate from the county's office of the Ministry of Public Finance.

The result of the investigation and the documents drawn in this purpose, signed by the persons involved in identifying damage, is centralised at the General direction for agriculture and food industry and at the county's prefecture.

The county general directions for agriculture and food industry are bound to send the documents within 3 days to the Ministry of Agriculture, Forests, and Rural Development. The county general directions for agriculture and food industry and the county sanitary-veterinary direction are also bound to take over and centralise damage identification papers in order to establish the necessary compensations.

After checking the damage identification papers, the Ministry of Agriculture, Forests, and Rural Development acknowledges the amounts to compensate the agricultural producers per counties, that are sent to the county general directions for agriculture and food industry and to the county sanitary-veterinary directions. The Ministry of Agriculture, Forests, and Rural Development addresses Romania's Government that, depending on natural calamity, as well as on the size of the areas affected, declares natural calamity state by Government's Decision.

The county general directions for agriculture and food industry and to the county sanitary-veterinary directions are bound to observe the destination of these sums and their distribution among agricultural producers, physical or legal persons.

Rights and obligations of agricultural producers

Agricultural producers, according to Law no. 381/2002, are physical or legal persons that administer or exploit agricultural lands, livestock, poultry, bee families, and fish.

Physical or legal persons benefit from the stipulations of the Law no. 381/2002 concerning compensations in case of damage caused by natural calamities in agriculture if they are affected by natural phenomena and diseases stipulated by the law and are in the calamity area acknowledged as such by Government's decision, and that have an insurance policy from insurance companies agreed by the Ministry of Agriculture, Forests, and Rural Development.

Agricultural producers get compensations the year the damage occurs.

When the damage resulted from natural calamities are total and produced the moment the crops should be established (proper climate and equipment), compensations are given immediately, after identification and assessment, to ensure a new production cycle.

In order to benefit from compensations, agricultural producers have the following obligations:

- to declare and register agricultural crops, livestock, poultry, bee families, and fish, and granting and lending contracts in local agricultural records;
- to maintain agricultural crops, livestock, poultry, bee families, and fish in accordance with technologies existing in the field and take measures to prevent disease and animal pest attacks;
- to inform in writing the mayor within 48 hours from the time the event occurs in case of destruction or damage of the agricultural crops, fruit tree plantations, and no later then 24 hours from the time the event occurred in the case of livestock, poultry, bee families, and fish death. In this latter case, the information should be accompanied by a medico-legal document issued by the sanitary-veterinary circumscription to which the producer belongs, in which it must be mentioned that the death was caused by natural phenomena as stipulated by the law;
- to present, in good will and in accordance with the real situation, the probable level of damages.

Agricultural producers that, through their attitude contribute to the production or increase of damage shall not benefit from compensations. Likewise, agricultural producers that consciously make false declarations in order to get compensations they do not deserve shall have to pay civilly, materially, administratively, or criminally.

Making up identification or compensation documents with unreal data constitute a crime and is punished in accordance with the criminal law. The sums cashed in illegally shall be returned to the State budget, indexed with the inflation index.

No doubt, issuing and applying such a normative document through which the State intervenes in the field of agricultural insurance and as insurer and not only as a regulation authority, has beneficial effects for the development of this branch and constitutes an incentive for agricultural insurers. Because the law maker conditions the compensations for those who recorded losses on the existence of an insurance policy concluded with agricultural insurers agreed by the Ministry of Agriculture, Forests, and Rural Development, this will surely contribute to the development of agricultural insurance.

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PENSION RENTS FOR AGRICULTURISTS

RENTE DE PENSII DESTINATE AGRICULTORILOR

VICTORIA SEULEAN*, T. MATEOC **

At present, pensions in the public system for Romanian agriculturists calculated on the ground of the Law 19/2000 concerning the public pension system ensures an unearned income of about 18% of the average gross salary. In these conditions, it is necessary to supplement public system pension on the ground of private pension system. In this paper we try to answer some questions concerning the size of the contribution to private pension funds, to the period of accumulation, and to the size of the benefit for insured ones in the decumulation period.

Key words: *pension rents, average gross salary*

Historic background

Starting from 1992, Romania has known a series of changes in the system of pension social insurance for agriculturists, without changing its basic principles. Thus, they have developed a series of norms that have changed, completed, and updated previous stipulations, among which, the integration in the public system social insurance of the private pension system for agriculturists. This was dictated by the changes after December 1989, concerning the removal of the cooperative system in agriculture and the institutional and economic structures of the system. Until 1992, financing sources of pensions for agriculturists used to come from contributions paid by production agricultural cooperatives and were collected by the Pension House of the Production Agricultural Cooperatives, an institution that also dealt with calculating the rights of the beneficiaries.

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Ever since 1990, agricultural cooperatives started to disintegrate resulting in a pension system for agriculturists with no resource. Naturally, the next step was to integrate this system into the public one.

Financing sources for agriculturists' pensions come from the contribution of the insured, of economic agents, and from public resources from the State budget, when the first two sources do not cover the payment of the pensions and of other social insurance rights.

A true reform in the field of pensions occurred in 2000 by the promulgation of the Law 19 concerning the public pension system and other rights with social character. This law introduced a new methodology for the calculus of pensions, according to which the share of the pension one can get depends on the value of the contributions paid for the insured during the payment period. Contributions paid monthly are turned into points that are accumulated during the payment period and then reported to the complete period asked by the law to get a pension, in order to get an average annual score. The share of the pensions is finally got by multiplying the average score of the insured with the legal value of a pension point. Here the law has certain limitations. Thus, the legal value of a pension point related to the gross average salary established by the Law of the budget of social insurance is now 30%. In these conditions, the pension one gets from the public system means really "social protection".

For agriculturists, things get even more complicated, since the income from practicing agriculture on the ground of which they calculated the average score was even smaller than the income of an employee.

The conclusion is that in order to get a decent income at an old age, a person that has worked in cooperative agriculture is somehow compelled to contribute to a private pension system as an alternative to getting supplementary income when aged.

2. Accumulation and decumulation of pension funds

The need for completing the unearned income of agriculturists from the public pension system has been argued for above. The problem is that, taking into account that during the contribution period pension funds accumulate in individual accounts, we should know the unearned income a beneficiary can expect and the period of time during which there is decumulation or the period of time during which accumulated funds are consumed. It is necessary to operate a major differentiation between men and women. Supposing that incomes on which the contribution is calculated

during the accumulation period are equal for the two sexes, the standard contribution period, and life expectancy at the time of the retirement are different. Thus, the standard contribution period in the public system is 30 years in women and 35 years in men, which naturally has an impact on the funds during the contribution period. As for average life expectancy upon retirement, if we start from the standard retirement age of 60 years in women and 65 years in men, the difference is even more striking, i.e. 13 years in women (from 60 to 73 years) and of about 2 years in men (from 60 to 73 years). These data have a considerable impact on the duration of the decumulation period and, implicitly, on the annual pension that can be thus obtained in this system.

For this reason, in this paper we made distinct calculus for men and women.

To calculate the insurance fund obtained during the accumulation period (Fa) we have used the formula of the series of equal contributions in future values:

$$S_{VV} = (1+i)^n \cdot X_1 \cdot \sum_{t=1}^{n} \frac{1}{(1+i)^t} \qquad (1)$$

and to determine the value of annual pension rents obtained in the decumulation period we have used the formula of a series of equal contributions in present values:

$$S_{VA} = X_2 \cdot \sum_{t=1}^{n} \frac{1}{(1+i)^t} \qquad (2)$$

where the notations have the following values:

X_1 – the value of the contribution to the system in the accumulation period, considered as an annual payment made at the beginning of the period: we started from a monthly average income of 150 Euro and from a contribution share of 10%;

X_2 – the value of the annual pension possible to get, taking into account the average life expectancy which is different between men and women upon retirement: the calculus formula of the series of equal contributions shows that:

$$X_2 = \frac{S_{VA}}{\sum_{t=1}^{n} \frac{1}{(1+i)^t}} \qquad (3)$$

t – the period of accumulation or decumulation, if the case, i.e. the contribution period or the period during which one gets a pension;
I – the level of the interest during the accumulation period, i.e. the updating factor during the accumulation period.

To ease the calculus, we took factor I as a constant over the entire period, assimilating it to the real positive interest rate, i.e. not influenced by inflation. We considered I = 4%.

Other premises:

1) We considered a gross average value of the contribution to the universal pension fund system of 180 Euro of which the net contribution is 150 Euro, and 30 Euro is the marge of expenses of the institution administrating the pension fund.
2) We made distinct calculus for men and women, simulating a time factor that increases during the accumulation period every five years, t having values of 5, 10, 15, 20, 25, and 30 years for women and 5, 10, 15, 20, 25, 30, and 30 years for men.
3) The other factors in the calculus were not changed.

The scenarios for the accumulation period in both men and women taking into account these premises are as follows:

Men

SC1	t=5 years	X_1=150 EURO	i=4%	Fa_1 = 844.5 EURO
SC2	t=10 years	X_2=150 EURO	i=4%	Fa_2 = 1873.5 EURO
SC3	t=15 years	X_3=150 EURO	i=4%	Fa_3 = 3123 EURO
SC4	t=20 years	X_4=150 EURO	i=4%	Fa_4 = 4645.5 EURO
SC5	t=25 years	X_5=150 EURO	i=4%	Fa_5 = 6496.5 EURO
SC6	t=30 years	X_6=150 EURO	i=4%	Fa_6 = 8749.5 EURO
SC7	t=35 years	X_7=150 EURO	i=4%	Fa_7 = 11490 EURO

Women

SC1	t=5 years	X_1=150 EURO	i=4%	Fa_1 = 844.5 EURO
SC2	t=10 years	X_2=150 EURO	i=4%	Fa_2 = 1873.5 EURO
SC3	t=15 years	X_3=150 EURO	i=4%	Fa_3 = 3123 EURO
SC4	t=20 years	X_4=150 EURO	i=4%	Fa_4 = 4645.5 EURO
SC5	t=25 years	X_5=150 EURO	i=4%	Fa_5 = 6496.5 EURO
SC6	t=30 years	X_6=150 EURO	i=4%	Fa_6 = 8749.5 EURO

Of course, calculus can be detailed by increasing the factor successive time with just one year or even calculating after each month of contribution, but this cannot change significantly the conclusions: they only supply some extra rigour. We can notice that in the conditions of a smaller contribution period to the system in the case of women, if we keep all the other factors that influence the value of the accumulated fund, the latter will have a smaller value at the end of the contribution period.

Then there is the problem of calculating annual pension rent depending the funds accumulated during the contribution period and taking into account life expectancy E(X) upon retirement, which is different in men and women, i.e. 2 years for men and 13 years for women. Supposing the rent, $Pa=X_2$, is paid annually, at the end of the period, and is calculated, as shown above, by using the formula of a series of contributions at the updated value.

Scenarios for the decumulation period for the two categories of beneficiaries have the following configuration:

Men

SC1	t_a=5 years	Fa_1=844.5 EURO	E(X)= 2 years	Pa_1= 430.9 EURO
SC2	t_a=10 years	Fa_2= 1873.5 EURO	E(X)= 2 years	Pa_2= 955.9 EURO
SC3	t_a=15 years	Fa_3 = 3123 EURO	E(X)= 2 years	Pa_3= 1593.4 EURO
SC4	t_a=20 years	Fa_4= 4645.5 EURO	E(X)= 2 years	Pa_4=2370.1 EURO
SC5	t_a=25 years	Fa_5= 6496.5 EURO	E(X)= 2 years	Pa_5= 3314.5 EURO
SC6	t_a=30 years	Fa_6= 8749.5 EURO	E(X)= 2 years	Pa_6= 4464.0 EURO
SC7	t_a=35 years	Fa_7 = 11490 EURO	E(X)= 2 years	Pa_7=5862.2 EURO

Women

SC1	t_a=5 years	Fa_1 = 844.5 EURO	E(X)= 13 years	Pa_1= 81.28 EURO
SC2	t_a=10 years	Fa_2 = 1873.5 EURO	E(X)= 13 years	Pa_2= 180.3 EURO
SC3	t_a=15 years	Fa_3 = 3123 EURO	E(X)= 13 years	Pa_3=286.5 EURO
SC4	t_a=20 years	Fa_4 = 4645.5 EURO	E(X)= 13 years	Pa_4=447.1 EURO
SC5	t_a=25 years	Fa_5 = 6496.5 EURO	E(X)= 13 years	Pa_5=625.2 EURO
SC6	t_a=30 years	Fa_6 = 8749.5 EURO	E(X)= 13 years	Pa_6= 842.1 EURO

Of course, calculus results are based on a series of factors whose evolution can change in time making our extrapolations slightly different from reality. But, beyond this, taking into account that data used in the calculus are valid at the time of the study, we can draw a few **conclusions**.

The first conclusion is that differences between pensions from contributions to universal pension funds by men and by women, respectively, are sensible. The causes, for short, are related to the accumulation period which is shorter in women and to the difference in life expectancy upon retirement between men and women (73 to 67 years), while the principles of constituting the funds and the way they are used are the same.

The second conclusion is that, if in the public system based on the principle of redistributing funds inter- and intra-generations, 5-year earlier retirement of women compared to men does not materialise in a smaller pension in women, in the case of accumulating funds in individual accounts of the insured, each insured, be it a man or a woman, can expect a pension that depends only on the share of the individual contribution to the system and on the contribution period. When, upon retirement, they make an option for the annual pension, its size also depends on the life expectancy of the insured upon retirement.

The third conclusion, which is in fact a corollary of the two previous ones, is that, based on present data concerning eligibility conditions of pensioners in the public system and life expectancy upon retirement (higher in women than in men), we can expect in the future to an equalising of the contribution period and standard retirement age for the two categories of beneficiaries. Such a decision would be the first premise of equalising unearned incomes in the private pension fund system. Thus, it is not random

that more and more countries, be they developed or developing, have changed standard retirement age and contribution periods in men and women. As an alternative to the variants presented above, we present a scenario whose premises are as follows:

- a net annual contribution to the system of 200 Euro;
- a period of accumulation of 35 years for both men and women, increasing every 5 years;
- a constant fructification factor (positive real interest) of 4%;
- a decumulation period and life expectancy upon retirement of 7 years in men (72 years – 65 years) and of 11 years in women (76 years – 65 years) respectively, closer to that in European Union member nations.

In these conditions, the scenario will have the following configuration:

Accumulated fund for men and women

SC1	ta= 5 years	Fa_1= 1126 EURO
SC2	ta= 10 years	Fa_2= 2498 EURO
SC3	ta= 15 years	Fa_3= 4164 EURO
SC4	ta= 20 years	Fa_4= 6194 EURO
SC5	ta= 25 years	Fa_5= 8662 EURO
SC6	ta= 30 years	Fa_6= 11,666 EURO
SC7	ta= 35 years	Fa_7= 15320 EURO

Pension rent in the decumulation period

	Men		Women	
SC1	E(x)= 7 years	Pa_1= 180.4 EURO	E(X)= 11 years	Pa_1= 123.6 EURO
SC2	E(x)= 7 years	Pa_2= 400.3 EURO	E(X)= 11 years	Pa_2= 274.2 EURO
SC3	E(x)= 7 years	Pa_3= 667.3 EURO	E(X)= 11 years	Pa_3= 457.0 EURO
SC4	E(x)= 7 years	Pa_4= 992.6 EURO	E(X)= 11 years	Pa_4= 679.9 EURO
SC5	E(x)= 7 years	Pa_5= 1388.1 EURO	E(X)= 11 years	Pa_5= 950.8 EURO
SC6	E(x)= 7 years	Pa_6= 1869.5 EURO	E(X)= 11 years	Pa_6= 1280.5 EURO
SC7	E(x)= 7 years	Pa_7= 2455.1 EURO	E(X)= 11 years	Pa_7= 1681.6 EURO

We can see that, in the conditions of equalising eligibility conditions of pensions in the private universal fund system for both men and women, the difference in income decreases, the only factor making a difference between the two categories of pensioners being life expectancy different in men and women.

Beyond the scenarios imagined by the authors, the most difficult problem that has to be solved is that of the sources from which the contributions to the agriculturists' pension system will be paid. If their incomes do not increase, the possibility of contributing to such a system as well as the hope of completing their small pensions from the public system will only be part of a scenario.

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ECOLOGICAL AGRICULTURE – PRESENT TIME AND PERSPECTIVES

AGRICULTURA ECOLOGICĂ PREZENT ŞI PERSPECTIVE

IOANA ANDA MILIN[*] NICOLETA BUZILĂ[**]

In the past years the consumers from our country (mostly those with higher incomes but not only them) direct their attention toward ecological products, refusing to acquire non-ecological products. The number of these consumers is increasing continuously.

***Key words**: ecological agriculture, ecological products, legislation, labeling, quality*.

The organic food market is in development in EU, registering a sales increase of 30%/year. Only 3.6% of the EU agricultural fields are used to produce thi0s type of products. In Central and Eastern Europe the development of these cultures started few years ago.

This organic product is that product which grows without fertilisers or pesticides, respecting the integrity of the environment, the animal breeding must be in open spaces and their food should not contain hormones and antibiotics.

The European Parliament favours the creation of a European logo for the ecological products which will be applied to those food products containing 95% organic ingredients. Also the certified organic food products can not contain genetically modified organisms (GMO).

The companies from the agroalimentary market, producers and distributors have to take into consideration this type of consumers too.

In these conditions the ecological marketing faces new challenges:

- A different approach of the consumers and the necessity to communicate in an adequate way;
- A new concept concerning the consumers satisfaction – in order protect their health and even their life, these consumers are willing to

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pay a higher price for the products they acquire, these products being ecological;

- An open view of change – "green marketing" suppose to give up to many traditional concepts;
- A large view of the product concept;
- Focusing on opportunities.

Country those pay higher prices (%)

COUNTRY	% of those willing to pay higher prices for ecological products
England	70
Brazil	53
Canada	61
Denmark	78
Switzerland	70
Philippine Islands	Minim30
Germany	59
Norway	Maxim 70
Netherlands	65
Poland	49
Hungary	49
Turkey	44

Source: "Communication – challenge and ecological products price"– Marketing-Management magazine 6/2003

In these conditions, the Romanian legislation from this field had to harmonized with the legislation of the European Union, some legislative documents were established for this purpose:

- Promotion actions intensification for ecological agriculture concept;

- Information improvement considering the ecological agriculture and the qualification of the participant from this department;
- Growth of experimental modules surfaces ("ecological micro-farms");
- Ecological areas delimitation;
- Providing support to the producers during the conversion period;
- Creation of an informational system accessible to the producers.

The provisions of these documents are referring to:

- Romanian ecological agriculture development priorities;
- General rules and principles of ecological agriculture;
- Inspection and certification organizations and system;
- Specific rules for labeling, packing and promotion both for ecological and processed products;
- Registration system for these products producers;
- Rules concerning the importation and exportation of these products etc.

In Romania, in the last few years, the evolution concerning these products was spectacular.

The surface with ecological culture increased from 17438 ha in 2000 to 170000 ha in 2006.

The number of milk cows raised ecologically increased from 2100 heads in 2000 to 9900 heads in 2006 and the sheep and goats from 1700 heads in 2000 to 76100 heads in 2006, this is due to the fact that almost all the animals are raised in family farms or in small farms.

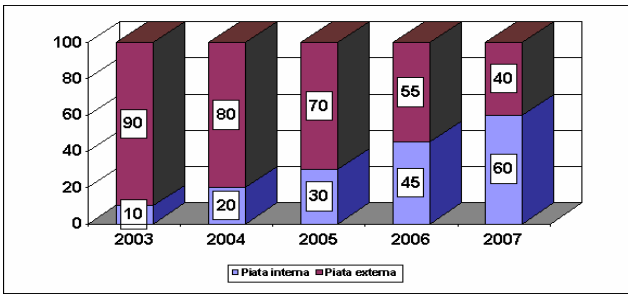
The ecological products from Romania are requested also in foreign countries.

The ecological vegetable exportation increased from 600 tons in 2000 to 7200 tons in 2005.

The Romanian honey is also requested by foreign countries, the Money exportation increased from 6 tons to 509 tons in the period 2000 – 2006.

The destination of the ecological products starting 2003 until 2007 is the following:

Destination of ecological production (2003-2007)



Source: Agriculture, Forest and Rural development Ministry Site

The Romanian producer's interest for this kind of products is due to the EU support for this type of activities:

- Compensatory bonuses for surfaces and cultures in order to cover the income losses for the conversion period starting with 2007;
- The EU support for the promotion of ecological products, using co-financing programs, with 50% financing from European Commission, 20% financing from professional organizations and 30% from the Romanian government.

Those responsible for accomplishing the objectives of ecological agriculture are MAPAM, ANCA, Research institutions and stations, ecological agriculture associations and foundations, agriculture professional associations, etc.

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STUDY ABOUT THE STRUCTURAL FUNDS AND THE NATIONAL DEVELOPMENT PROGRAM 2007-2013

STUDIU PRIVIND FONDURILE STRUCTURALE ŞI PROGRAMUL NAŢIONAL DE DEZVOLTARE 2007-2013

IOANA ANDA MILIN*

The economical and social cohesion policy of EU will be focused, during 2007 – 2013, on the economical development and on the creation of new jobs; the sum of the investments from this field is about 308 billion Euros. From this amount almost 82% will be destined for the objective Convergence, meaning for the poorly developed members countries and regions. Romania will receive, during 2007 -2013, structural funds of about 30 billion Euros, funds which will be managed by the European Commission.

Key words: *economical development, occupation, Structural funds, and Operational funds*

INTRODUCTION

EU elaborated in 2005 a economic program for long and medium term which establishes:the integrated guiding rules of EU during 2005 – 2008 for economical development and creation of new jobs, and the Community strategic orientations (OSC) concerning the Cohesion Policy 2007 -213, the necessary activities and the funds for their fulfillment.

MATERIALS AND METHOD

The principles of the EU Cohesion policy are:

- The investments for the fields with economical development potential and also the fields the national funds are insufficient;
- Investments in human capital, information and telecommunication technology;
- The promotion of the lasting developments for rural and urban environment.

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The national programs, which will be co-financed via European funds during 2007 – 2013, have as objective only those fields that act on the economical development and the human resources market.Romania also was asked (by the European Commission) to elaborate the National plan for Development (PND) in order to have access to the pre-joining Funds and to the Structural funds, each of them covering a certain field:

- **The European Fund for regional development (FEDER**)- supports the infrastructure creation, the investments for employment, local development projects and small enterprises assistance;
- **The Social European fund (FSE)-** promotes the reintegration of the unemployed people and of the some groups on the human resources market by financing the training and employment assistance systems;
- **The cohesion fund (FC)** – supports the investments from transport infrastructure, energy and environment. This does not co-finance programs but it directly supports the individual projects, clearly identified.

RESULTS AND DISCUSSIONS

Total of 30 billion Euros destined for Romania will be divided as follows:agriculture and rural development – about 11 billions,structural instruments – over 17 billiard Euros.**The main objective** of the PND is to reduce as fast as possible the social and economic differences between Romania and the neighbor EU countries, and is focused on three specific objectives:the long term economical development from competition point of view,basic infrastructure development to reach the European standards,improvement and more efficient usage of the native human capital.

The effective implementation of Structural funds will be realized based on some Operational programs (approved by the European Commission).

Operational programs for 2007-2013

Table 1

Operational program	Management authority	Intermediary organisms	Fund
Economical development from competition point of view	The Ministry of economy and commerce	- the National agency for small, medium and cooperative enterprises; - the Ministry of education and research, - The Ministry of communication and information technology - The Ministry of economy and commerce – energy department - the National authority for tourism	FEDR
Transport Infrastructure	The Ministry of transportation, constructions and tourism	-	FEDR+ FC
Environment protection	The environment and water management Ministry	Regional agencies for environment protection	FEDR+ FC
Regional development	European integration Ministry	Regional development agencies	FEDR
Human resources development	Labor, social solidarity and family Ministry	- the National agency for employment; - the Ministry of education and research – education department	FSE
Administrative capacity development	Administration and internal affaires Ministry	To be designated	FSE
Technical assistance	Public finances Ministry	-	FEDR
Border Cooperation	European integration Ministry	-	FDR

Source: PND 2007-2013

The PND strategy will be financed from multiple sources:internal – state budget, local budgets, private sources and external – structural instruments and funds, external loans.The Community funds will cover 43% of the financing, the central and local public sources will cover around 48% and the private sources 9%.

The National Strategic Reference Frame (CSNR) – is the link between the national development priorities established by PND and those established at European level.**CNSR** represents the global strategy for the usage of the Community Structural funds and the Operational programs are the tools for the application of the CSNR provisions.To increase the convergence with EU, PND established a realistic plan of the financing amounts and resources; the global estimated value is 58.7 billion Euros.

Financial planning – PND 2007-2013

Table 2

PND priorities	2007	2008	2009	2010	2011	2012	2013	Total
Competition	651,48	620,72	793,14	882,76	842,95	761,25	682,12	**5234,43**
Transport infrastructure	2.094,99	2.517,48	2.465,25	2.071,29	1.819,84	1.832,20	1.853,75	**14.654,79**
Environment	753,18	898,70	1.099,11	1.160,45	1.069,54	810,78	806,23	**6.597,98**
Human resources	711,65	912,51	1.297,08	1.317,59	1.313,22	1.115,85	940,72	**7.608,60**
Rural development	1.585,56	1.757,72	2.200,96	2.335,49	2.395,08	2.455,15	5.517,37	**15.237,32**
Regional development	1.294,79	1.280,99	1.397,96	1.336,37	1.342,35	1.344,55	1.342,97	**9.339,98**
Total	**7.091,65**	**7.988,12**	**9.253,50**	**9.103,95**	**8.782,98**	**8.309,78**	**8.143,16**	**58.673,10**

Source: PND 2007-1013

CONCLUSION

In conclusion, it is estimated that CSNR will contribute to the general objective established by PND by accelerating the increase rhythm of the Gross internal product and by generating a supplementary increase of 15% of the Gross internal product till 2015, as a direct result of the usage of Structural and Cohesion funds.

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THE ECONOMIC DEVELOPMENT OF JIMBOLIA IN ORDER TO ACHIEVE AN INTEGRATED SYSTEM OF TURNING TO ACCOUNT OF LOCAL RESSOURCES

DEZVOLTAREA ECONOMICĂ A ORAŞULUI JIMBOLIA ÎN SCOPUL REALIZĂRII UNUI SISTEM INTEGRAT DE VALORIFICARE A RESURSELOR LOCALE

OANA MARIA MURG*

More and more communities begin to identify new instruments to induce collaboration between citizens, institutions and representatives of different fields of activity to plan and solve the problems of different microregions. The Microregional Association Banat Ripensis is concerned with this aspect, by initiating for Jimbolia several directions of development, as part of the Medium Term Development Strategy of the town, which encompasses five Development Directions, which in their turn refer to a series of goals to be achieved.

Key words: *development , goals, human resources, microregion, financing*.

There are five main directions of development for Jimbolia as a multiethnic, multicultural integrating microregional centre in order to enhance the living quality of its citizens up to European standards, and namely:

The 1st Direction - to create an accomodation which will improve the living standard by developing a healthy ecosystem and facilities at European standards.

The 2nd Direction - to support the economic development of Jimbolia in order to achieve an integrated system of turning to account the local microregional resources.

The 3rd Direction - to create a healthy community milieu for all social categories

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The 4th Direction - to develop Jimbolia so as to become the social, cultural and educational centre of the microregion in order to enhance the economic, social and cultural integration.

The 5th Direction - to develop a modern and diverse cultural environment observing tradition and the multicultural and multiethnic background of the city which will allow the town to connect to the regional, national and international circuit.

In this paper I am concerned with the second direction of development – to support the economic development of Jimbolia in order to achieve an integrated system of turning to account the local microregional resources, encompassing seven goals.

The first goal – to improve the local business milieu by streamlining of the business sustaining infrastucture – requires the following intervention measures:

- Informatization of the public local services in order to raise the efficiency of the administrative services and to shorten the time between application and resolution;
- To create complete data basis, which could be available for potential investors;
- To draw up promotional material (monographs, guide books, folders, booklets, web site) of the town, on county, regional and international level in order to attract investors
- To found a Ressource and Consulting Centre for the business millieu, connected the European and international information and Business Consulting networks;
- Promotion of business associations in order to improve the quality of concentrated actions in favour of these.

The second goal - to increase the competitvity of the local human ressources by developing public and private partnerships in order to prevent the migration of highly qualified labor force – requires the following intervention measures:

- To establish on the grounds of a solid partnership between local and county actors a Microregional Centre of Professional Training in the field of Agriculture,
- Working out of an educational programme to integrate the local human ressources on the labour market;

- Training of the local human ressources engaged in business management.

The third goal – development of short distance tourism (entertainment and cultural tourism), Timişoara, Novi Sad, Szeged as a source of economic development – requires the following intervention measures:

- Founding of an modern entertainment zone in the pond area to attract the population of the neighbouring localities, including that of Timisoara to spend their spare time;
- To include Jimbolia in the regional cultural circuit adressing those interested in learning more about the history of this region;
- To promote the service offering and tourism business .

The fourth goal – the establishing of a sustainable modern and stable industrial and commercial centre, with socially aware businessmen – requires the following intervention measures:

- To mentain the importance of industrial activities of the town, by supporting the local productive business;
- To support the development of the financial and banking network, to encourage the use of modern payment instruments, of banking products and services;
- To promote different real estate insurance systems, as well as for goods, fields and crops, etc.;
- Working out of informational and educational programmes for the costumers regarding the quality of goods and services, the businessmen's rights and duties when selling the products, through information campiagns, partnerships between local authorities, local organizations and institutions for the customer's protection and health.

The fifth goal – a better acces to informations of economic interest – encompasses the following intervention measures:

- Free information on the programms of non-refundable EU crediting and financing programms or of other international financial institutions through the Community Development Centre for the business milieu;
- Establishing of a fund of periodicals for the business mileu;
- Training programms for the use of modern information media;
- Promotion of the European legislation.

The intervention measures for the sixth goal – the development of an agriculture based on efficient technologies, observing the rules of environmental protection, adapted to demands of the markets – are:

- To encourage the partnerships between the farmers to found medium size agricultural associations in order to increase the efficiency of agricultural activities;
- To support local farmers who wish to found an agricultural products processing business;
- To encourage the microregional farmers to attract non-refundable financing through SAPARD programmes to introduce advanced technologies, to purchase efficient agricultural equipments or to introduce acknowledged quality assuring systems;
- To support rural tourism by turning to account the multiethnic, multicultural and historical traditions;
- To promote ecological tourism;
- To establish a common market to render the microregional agricultural products profitable.

The last goal, the seventh goal – to promote financing programmes specific to towns with a prevalent agricultural economy requires the following intervention measures:

- To establish a platform for the the agricultural towns and an association of the agricultural towns;
- To work out advocacy programmes besides the Romanian Gouvernment and the Delegation of the European Commission to insert small towns in the SAPARD programme.

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SUSTAINABLE DEVELOPMENT STRATEGIES FOR JIMBOLIA/ TIMIS COUNTY

STRATEGII DE DEZVOLTARE SUSTENABILĂ A ORAŞULUI JIMBOLIA, JUDEŢUL TIMIŞ

OANA MARIA MURG[*], ANA MARIANA DINCU*, CAMELIA OBOROCEA*

This study has in view the actual rural development level in the district of Jimbolia, the economic structure of the area, the study of the agricultural operations, the study of the SMEs (Small and Medium Sized Enterprises, the rural population, the touristic potential etc.To assure the constant development of the area it is necessary to introduce hydrological land management and soil improvement systems, to establish the financial and fiscal systems for supporting the agricultural operations, the SMEs, agrotourism, the stimulative systems for the rural environment, crops, the rehabilitation of the area.

Key words: *Jimbolia, development strategy, Local Partnership Group (LPG), SWOT Analysis*

INTRODUCTION

Jimbolia lies in the Western part of Romania, at a distance of 572 from Bucharest on the railroad and 600 km on the road, on the 20°38' meridian and the 45°46' parallel, North latitude. Within the Timis County Jimbolia lies in the Western extremity at 39 km on the railroad from Timisoara. It lies in the Banat Plain at the confluence of the Timis and the Mures Plain.

The soils are generally very fertile and make part of the category of mollisoils. The soils range from brown over dark brown to black. There are two main types: gleized chernozem and levigated (cambic) chernozem, often associated with psamosoils.

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The structure on activity sectors, the 3 sectors of activity – primary (agriculture) secondary (industry, construction) and tertiary (services) had a different evolution depending on the economic development of the city.

The LPG has achieved the evaluation of the economic, social, educational, infrastructural milieu, starting from the pre-requirement, that any development policy should start from the natural resources and the opportunities of the economy, as well as it should meet the needs of the citizen of Jimbolia.

The primary sector (agriculture) is of great importance for the city. The city has 9,778 ha, out of which 92% represent tillable land and only 8% represent meadows. The soils are very fertile and belong greatly to the category of chernozems, which have a great production potential. Maize growing prevails, followed by wheat growing with crops that exceed the national average. Swine breeding is most reprezentative for animal breeding in Jimbolia. In the domain of food industry the milling and bakery industry ("S.C. CAN – LEO" S.R.L) is representative as well as the meat processing industry.

The agricultural surface of Jimbolia is of 9778 ha, out of which:

- 736 ha meadows
- 9042 ha tillable land
- 234 ha lakes

Vineyards and woods do not make part of the familiar landscape of Jimbolia. The agricultural property is distributed as it follows:

- 10% state property
- 90% private property

The size of the agricultural properties:

- over 1000 ha – 1 agricultural property
- beween 100 and 1000 ha – 4 agricultural properties
- between 50 and 100 ha – 3 agricultural properties
- between 10 and 50 ha – 102 agricultural properties
- between 1 and 10 ha – 1203 agricultural properties
- under 1 ha – 750 agricultural properties.

The evolution of the fertile surfaces during the years:

- year 2001 – 7030 ha
- year 2002 – 7500 ha
- year 2003 – 8050 ha.

In Jimbolia there are 120 economic units. The industrial profile of the town is dominated by light industry (shoe factories, ready-made clothes, textile mills) followed by eletrotechnics and electronics (VOGT Romania SRL) mechanics (CRH SRL, Richard Halm SRL) and plastics (VENUS S.A.) 48% of the active population works in the industry.

THE CONCEPT OF STRATEGIC DEVELOPMENT

The Concept of Strategic Development of Jimbolia has been elaborated by the Microregional Association Banat – Ripensis Associatin for the development of the region's localities together with the Mayoralty of Jimbolia within the project "The Plan of Local Development of Jimbolia – an Instrument of Dialogue between the members of the Local Partnership Group". This progamme has been financed by the World Bank within the Programme of Small Grants and by the two other partners.

The elaboration activity of the strategic concept was carried out by working commitees on different items of activity, as well as during the conferences held by the Local Partnership Group. During this activity there were identified the strategic directions of development, the goals as well as the measures to be taken in order to achieve the goals.

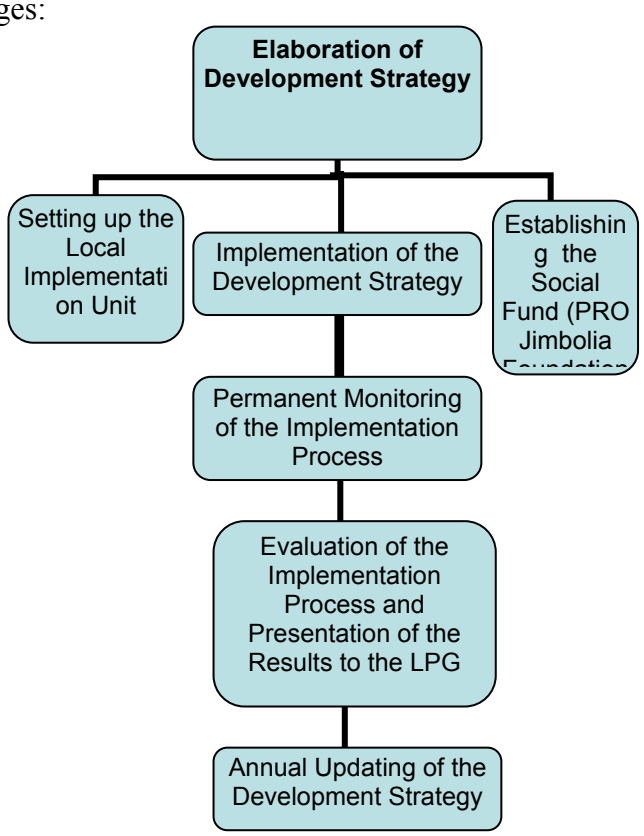
The strategy is intended to be used as a necessary instrument in the process of harmonous development of the town, to meet the integration requirements into the EU, to improve the living standard of the population up to European standards, so as to create a prosperous and participative environment, which will diminish the problems connected to the integration process.

The elaboration of the Development Strategy observed four essential principles:

1) work within the Group of Local Partnership and its broadening by inviting as many representatives as possible of all activity domains
2) the Concept of Strategic Development should meet the acceptance of the GLP, political forces and citizen
3) the presentation, validation and amendment of the obtained results should be carried out by specialists, politicians and citizen of Jimbolia

4) a new modern methodology should be applied and all specific elaboration stages of a strategy of development should be run through.

The Development Strategy for Jimbolia will run through the following stages:



The strategic planning has a systematical character, which will provide the LPG the opportunity to create on the grounds of the analysis of the local potentials and resources a coherent and realistic vision upon the development of Jimbolia during the next ten years but also the mechanisms which will make this vision come true.

The methodology used during the process of elaboration:

1) evaluation of the economic and social potential and the outcarrying of the diagnosis analysis
2) elaboration of a sustainable development strategy for Jimbolia
    a. elaboration of the coming to an agreement of the mission of the strategy, of the directions of development
    b. elaboration of a system of targets and intervention measures
    c. validation of the strategy
3) implementation of the strategy
    a. the selection of the strategic alternative
    b. creation of manegement mechanisms of the implementation
    c. implementation of the action schedule
    d. monitoring and evaluating of the implementation process and its results
    e. periodical updating of the strategy

SWOT ANALYSIS

The SWOT Analysis is an efficient method in identifying the strenghts and weaknesses, threats and opportunities when elaborating a realistic strategy.

The SWOT Analysis finds out the actual situation, implying the analysis of the internal and external environment.

STRENGTHS	WEAKNESSES
After reducing activity in the area there are multiple production spaces and grounds available	Jimbolia is situated on an old marshfield and special foundations are necessary to erect heavy buildings
Natural environment suitable to tourism and other alternative forms of tourism (lakes, rare birds)	There is no girdle road
Integration in the EU, which creates the opportunity of attracting non-refundable funds for different domains	As the grounds situated in the S-E part of the town are alloted exclusively for agricultural purposes, there are no tree curtains, which has a negative influence upon the air and soil quality
The cross-border setting, which facilitates the cooperation in all domains with Hungaria and	The loss of traditional industry (ceramics, primary hemp processing etc.)

Serbia	
International cooperation, partnership programmes between cities and external financing programmes	The absence of a Resource Centre to support the SMEs
An increased interest on behalf of foreign entrepreneurs for the Jimbolia area	The undiversified bank offer
The EU integration provides unrefundable funds for culture	The lack of social solidarity
Creation of workplaces for young people, thus keeping them in town and giving them the opportunity to take part in the social activity of the town	The lack of specialist physicians
A decrease of teacher migration	The migration of the population to economically more developed areas
An increase of investments in the rehabilitation of school facilities	The lack of training in school management
Fertile soil with medium texture and longer optimum working time	There is no land market
The existence of a considerable rural space of great potential, human and socio-cultural material	The lack of rural credit and the appropiate establishments
The climate, the soil and the natural conditions offer a favourable frame for a diversified agriculture	The lack of a capital market and of a system of specialized credits
The high productive potential of the agricultural surfaces	The lack of sales chanels for agricultural and food produces and of an informational market system
A great surface of water on the grounds where clay has been excavated	A low level of agricultural labour productivity, caused by the precarious technical endowment, the fragmentation of the agricultural grounds and by the lack of management in the private exploitations
The existence of thermal water sources, which can potentially made profitable	The weak structure of tourism plolicy
The presence of an expert in local economic development – a local promotor, assisted by ADETIM	The lack of programmes to stimulate business in agriculture for the beneficiaries resident in urban localities
	The lack of the necessary funds for modernization, tehnological updating and leverage of the production sectors that register demands on the market

OPPORTUNITIES	THREATS
The implementation of the rural developing policies and that of defining the problem of a sustainable development is being carried out	The lack of understanding of the concept of rural development
The natural potential could become profitable by promoting investments in agricultural and forestry operations and in improving the marketing of agricultural and piscicultural produces observing the rules of environment protection.	The existence of natural disturbing phenomena which can cause calamities: droughts, floods etc.
To direct the young investors towards the agriculturul exploitations and to found producers' groups, so that the potential labour force could be employed and at the same time property and management within this group of population could be enforced	The fluctution of crops especially due to the climatic conditions, the use of chemical products and the appropiate technologies
There is a high potential of diversifying the crops, but there is need of broadening measures and to direct the farmers towards those crops and breeds which require a higher degree of technology as well as a new direction of the crops	The most important problem is that of soil erosion which affects large agricultural surfaces and which tends to intensify and to extend
The rural economic potential and its diversification should be enforced by law, the introduction of the preferential loan system should also be supported by specific promotional activities	The fact that this area was not elected by the Romanian Government priority development area
The intention of the "Eurosturio" Foundation from Germany to invest in sturgeon breeding in the anthropic lakes with mesothermal waters in the proximity of the town.	

The goals of the developing directions of this programm are:

1st direction

To create an accomodation which will improve the living standard by developing an healthy ecosystem and facilities at European standards.

2nd direction

To support the economic development of Jimbolia in order to achieve an integrated system of turning to account the local microregional resources in a competive and prosperous economic environment.

3rd direction

To create a healthy community milieu for all social categories

4th direction

To develop Jimbolia so as to become the social, cultural and educational centre of the microregion in order to enhance the economic, social and cultural integration.

5th direction

To develop a modern and diverse cultural environment observing tradition and the multicultural and multiethnic background of the city which will allow the town to connect to the regionel, national and international circuit.

THE IMPLEMENTATION STRATEGY

The Implemtation of the Sustainable Development Strategy is a complex process which requires an adequate management and supervision, an organization structure which will provide an unitary implementation process and an evaluation of the results.

The basic elements of the organizatoric structure are: the Local Partnership Group (LPG), the Local Implementation Unit (LIU), the Local Partnership Conference (LPC) and the PROJimbolia Foundation.

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A STUDY CONCERNING THE FINANCING PROJECTS OF THE TOWN OF FAGET (TIMIS COUNTY) BETWEEN 2000 AND 2006

STUDIU PRIVIND PROIECTELE DE FINANȚARE ÎN ORAŞUL FĂGET ÎN PERIOADA 2000-2006

C. BERAR *

Between 2000 and 2006, the town of Faget benefited from numerous projects and investments due to the cooperation between the Faget Town Hall, the Local Council, and different partners. Most projects are still waiting for finance, while the welfare of the locals and the improvement of their standard of living depend on the speed with which these projects are going to be put into practice.

Key words*: financing, counselling, infrastructure, developing*

The town of Faget has benefited from numerous projects and investments, such as:

- the multifunctional social centre and the achievement of domicile social and medical assistance

The beneficiary of the financing is the Faget Local Council and its partners are the Traian Vuia High School and the Town Hospital. The project is still waiting for another financing source. Its objectives are to ensure the putting into practice at local level of policies and strategies of social assistance and to identify and solve the community's social problems in the field of family, lonely people, elderly people, disabled people protection, as well as of other people in need.

- the Project "Your Chance"

The beneficiary of the financing is the Faget Local Council and its partner is the Rudolph Walter Foundation (the Timisoara branch). The project is still waiting for financing. It aims at ensuring support and assistance for the children and families in need in Faget:

- accommodation in boarding houses for the children and youth;
- optimal education conditions;

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- educational and professional guidance;
- sports and leisure activities;
- specialty support (social, psycho-pedagogical, medical, and judicial assistance);
- counselling and moral and material support for the families in need.

The objectives of the project are to avoid school abandonment, getting people responsible, and guiding educationally and professionally the children exposed to this social and pathological phenomenon; to supply support and assistance for the children and families in need through specialised services of social, psychological, and judicial assistance; to develop the institutional ability of local authority. This objective is essential for the organisations involved, since it will ensure an efficient implementation of some social projects.

- rehabilitating the country road DC 98 between the villages of Bichigi and Povergina

The beneficiary of the financing is the poor rural community of Povergina, (Făget, Timiş County), and its partner is the Făget Local County. The project is being carried out starting from September 13, 2004. There has been an auction for the employment of a project executor, of the fore master, of the accountant, and of the contractor. The road to be rehabilitated measures 3.2 km between the villages of Bichigi and Povergina. The village of Povergina is 6.2 km from Făget. The country road DC 98, linking Făget and the village of Bunea Mare is asphalted up to the village of Bichigi: between Bichigi, Povergina, and Bunea Mare, the road is paved with stones, which is partially degraded preventing the traffic from functioning normally. The objective of the project is to improve road quality, to ensure the access on rainy weather or on heavy winters to the village of Povergina.

- getting the citizens informed through info-kiosks

The beneficiary is the Faget Local Council. The project is still waiting for financing. Its objectives are:

- to increase quality and accessibility of public services, whose beneficiaries are the citizens, the institutions, and the business environment, and whose employees are public administration clerks;
- to ensure a high-quality public service through an efficient information basis within the Faget Town Hall so that all the applications within the system to ensure fluent activities and their coherent development;

- to start a modernisation process that allows public administration to adapt to Romanian economical and social realities, preparing administrative structure to better adapt to a European administration;

- developing IT infrastructure at the Faget Town Hall

The beneficiary is the Faget Local Council. The project is still waiting financing.

The project aims at:

- developing public administration capacity of managing efficiently the relationships with its community by developing IT infrastructure that solves the problems identified through internal and external analysis;

- ensuring a high-quality public service through efficient IT basis within the Faget Town Hall so that all applications in the system ensure fluent activities within the local institution and their coherent developing;

- developing a fluent modernisation process so that public administration can better adapt to the economic and social realities in Romania, preparing administrative structures for a better adaptation to the European requirements ;

- increasing public administration service quality and transparency in its relationships with the local population;

- using new mechanisms and procedures integrated within the IT systems that allow better monitoring of the collection and use of any resource;

- diminishing costs by eliminating office resources (paper, files, etc.);

- diminishing costs by eliminating archive storage areas and by developing exceeding areas for the activities specific to the local organisation;

- diminishing costs caused by dead times while looking for different archive information;

- diminishing costs caused by possible errors in transmitting different documents;

- diminishing costs by improving communication between Town Hall employees through IT network;

- diminishing wage costs as a result of freeing employees from supplying information continuously and of the possible reorientation to other professional duties.

- water supply for the village of Jupâneşti

The beneficiary is the poor rural community of Jupâneşti (Făget, Timiş County). The partner of the project is the Faget Local Council. The village of Jupâneşti is 15 km from Făget. There is no running water network, few fountains 10 m deep, and with low flow during dry summers. There are no surface water sources to be used in supplying with running water.

- water supply for the village of Bunea Mare

The beneficiary is the poor rural community of Bunea Mare (Făget, Timiş County). The partner of the project is the Faget Local Council. The partner of the project is the Faget Local Council. The project is still waiting for financing. The village of Bunea Mare is 12 km from Făget. There is no running water supply network, wells are scarce, and about 10 m deep, and during hot summers, their supply is low. There are no surface waters that could be used as a source of running water. The objectives are to ensure a ground water supply through deep drilling and to ensure the permanent access for the locals to a drinking water source.

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RURAL DEVELOPMENT PROGRAMMES IN GREECE BETWEEN 2000 AND 2006

CERCETĂRI ASUPRA PROGRAMELOR DE DEZVOLTARE RURALĂ DIN GRECIA ÎN PERIOADA 2000-2006

C. BERAR[*], N. VERINDEANU[*]

Between 2000 and 2006, Greece benefited from an aid of about 25 billion Euros compared to 19,271 billion Euros between 1994 and 1999. Between the two periods, there was an increase of 1.1%. Between 2000 and 2006 all the regions of Greece were eligible for Objective 1. The funds allocated for Objective 1 for the period 2000-2006 were 21 billion Euros, compared to 15,326 billion Euros between 1995 and 1999. Each region of Greece was the object of a regional development programme adapted to its economic and social situation. Within its rural development policy, Greece was allocated an annual sum of 131 billion Euros, i.e. 3% of the total sum.

***Key words**: rural development policy, eligible area, Structural Funds*

Between 2000 and 2006, in Greece they carried out the following regional development programmes:

- The "North Aegean" regional operational programme;
- The "South Aegean" regional operational programme;
- The "Ionian Isles" regional operational programme;
- The "Crete" regional operational programme;
- The "Peloponnesus" regional operational programme;
- The "Western Greece" regional operational programme;
- The "Thessaly" regional operational programme;
- The "Oriental Macedonia – Thracia" regional operational programme;
- The "Western Macedonia" regional operational programme;
- The "Central Macedonia" regional operational programme;
- The "Epirus" regional operational programme;

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- The "Continental Greece" regional operational programme.

THE "NORTH AEGEAN" REGIONAL OPERATIONAL PROGRAMME

The European Commission approved the regional development programme for the region Northern Aegean. Financing rose to 547.90 million Euros for a period of 7 years (2000-2006), of which 361.59 million Euros from the European Union, 120 million Euros from the public sector, and 65.78 million Euros from the private sector.

Priorities

The programme aimed at aiding the use of IT and of informatics as a way to remove the area from isolation and to develop urban and rural areas. Structural funds were to help the area escape from geographical isolation and demographic decline.

The programme had the following priorities:

- **putting an end to demographic decline and to isles isolation through IT and local advantages**, taking into account the exploitation of the geographical position and of the natural environment;
- **developing urban areas** through special efforts to modernise tourism and services;
- **diversifying isles economy and increasing competitiveness through IT society and innovation development**: they aimed at modernising existing infrastructure and developing new links, while the development of services was to develop new employment opportunities;
- **developing rural areas** through modernising rural infrastructure and adapting agricultural production to supporting rural areas : it was necessary to diminish differences between regions, and to take advantage of the exceptional relief of the area with a view to sustainable development;
- **ensuring technical support**: financial support covers the management, monitoring, and control of the funds.

Description of the eligible areas

Northern Aegean is one of the poorest regions of the European Union; it suffers from delays from the point of view of its development. It has a GDP of about 62% per capita of the European Community average. The main handicap of the area is its peripheral geographical setting and its isle character. Another handicap is the low tourism development.

The programmes helped the region develop and exploit local advantages.

Table 1 Fund distribution per priorities (in millions of Euro)

Type of priority	Total cost	EURO contribution	Public aid
1. Putting an end to demographic decline and to isles isolation through IT and local advantages	212.591	158.321	211.094
2. Developing urban areas	101.364	73.712	98.283
3. Diversifying isles economy and increasing competitiveness through IT society and innovation development	128.056	64.42	85.894
4. Developing rural areas	99.317	60.206	80.275
5. Technical assistance	6.577	4.933	6.577
Total	**547.905**	**361.592**	**482.123**

Table 2 Fund distribution per funds (in millions of Euro)

EU contribution	FEDR	FSE	FEOGA
Total : 361.592	283.2	33.992	44.4
100.00 %	**78.32%**	**9.40%**	**12.28%**

THE "SOUTH AEGEAN" REGIONAL OPERATIONAL PROGRAMME

The European Commission approved a regional development programme for the Southern Aegean isles of about 609.51 million Euros. Of this, 372.21 million Euros (62% of the total sum) were granted through the Structural Funds, the rest coming from the public sector (24.07 million Euros) and from the private sector (113.21 million Euros).

Priorities

The strategies and priorities of this operational programme helped exploit the potential of this poorly developed region relying mainly on tourism (62% of the work force) through substantial investments in infrastructure to diminish isles isolation; ensure environmental protection; manage natural resources (the percentage of purified water increased from 57.7% in 1999 to 81% at the end of the programme); speed up tourism development; and develop the economy of the islands with a low development potential.

The objectives of the operational programme for Southern Aegean isles could be reached taking into account the following priorities:

- **solving the problems caused by the isle character of the region – the basic infrastructure**: the main problems of the area occur

because of its character, because of the large number of isles (79 of which 48 not inhabited), and of the great differences between the level of development of the isles;

- **protecting the environment and managing natural resources**: in Southern Aegean isles alternative energy resources can contribute to the development of the area;
- **speeding up tourism development**: economy relies on tourism, as 62% of the employed population works in tourism;
- **strengthening isles dynamics** to make them autonomous in relation to the main continent; aids focused on the productivity of investments and went hand in hand with measures for the increase of the MSEs capacities (including farms) with IT and export development, particularly to Balkan countries; they had in view the improvement of the conditions by the development of new jobs;

Description of eligible areas

One of the poorest areas of the European Union, Southern Aegean suffers from a serious structural problem caused mainly by its peripheral setting within the Community, by the isle nature of the area, by the large number of isles, and by the differences in development between the different isles of the area. Compared to other Greek regions, the population of Southern Aegean (270.115 inhabitants in 1999) increased steadily (with 24% between 1971 and 1991), turning it into one of the most dynamic regions of Greece.

Table 3 Fund distribution per priorities (in millions of Euro)

Type of priority	Total cost	EU contribution	Public aid
1. Solving the problems caused by the isle character of the region – the basic infrastructure	172	129	172
2. Protecting the environment and managing natural resources	66.928	49.612	66.15
3. Speeding up tourism development	126.95	58.65	78.2
4. Strengthening isles dynamics	124.24	59.888	79.85
5. Developing low development potential isles rural area	112.3	69.75	93
6. Ensuring technical assistance	7.092	5.319	7.092
Total	**609.510**	**372.219**	**496.292**

Table 4 Fund distribution per funds (in millions of Euro)

EU contribution	FEDR	FSE	FEOGA
Total : 372.219	300.2	36.081	35.938
100.00 %	**80.65%**	**9.69%**	**9.66%**

THE "IONIAS ISLE" REGIONAL OPERATIONAL PROGRAMME

The European Commission approved the programme for economic and social development for the Ionian Isles region for the period 2000-2006. The total sum allotted is 375.14 million Euro, of which 244.68 million Euro (65% of the total budget) were from Structural Funds.
The public sector contributed with 81.56 million Euros and the private sector contributed with about 48.9 million Euros.

Priorities

The programme aimed at enhancing the development of the Ionian Isles long-term, focussing on environmental protection, and on diminishing the differences between the regions. Structural Funds supported a strategy for cooperation in regional matters of interest. The priorities of the operational programme were as follows:

- **investing in infrastructure to improve quality and diversity in tourism**: a structural problem of the area is the high level of tourism development, so that regional economy is based on a single branch; they needed large investments in infrastructure: the long-run tourism tradition of the area, its profitable development, its very varied culture, its geographical position, and infrastructure projects already put into practice recently in the area show its development potential;
- **protecting the environment**: this has a crucial importance for the main economic activity – tourism and inhabitants life quality;
- **diminishing economic differences between the regions**: inter-regional differences are important in this region of Greece; the programme focussed on the smallest and less developed isles to help them overcome the difficulties and to develop economically, which developed new jobs and stopped migration to urban areas;

- **developing urban and semi-urban areas**: in this context, the programme provided aid in health, and in environmental infrastructure, with a view to help hotels through road development;

- **fighting unemployment**: the programme aimed at developing new jobs during the implementation of the programme: developing training opportunities led to a continuous training of the population;

- **developing and protecting small isles**: Structural Funds helped the region overcome geographical isolation: they needed to monitor rural infrastructure and to better adapt agriculture to European Union standards;

- **ensuring technical assistance**: financial aid was meant to cover the management, monitoring, and control of the funds.

Description of eligible areas

The Ionian Isles have a number of structural problems caused by a wide variety of factors, among which the long distance to the centre of Europe, isolation from Continental Greece, lack of infrastructure; the extremely developed tourism sector is, in fact, the only economic branch.

Table 5 **Fund distribution per priorities (in millions of Euro)**

Type of priority	Total cost	EU contribution	Public aid
1. Investing in infrastructure to improve quality and diversity in tourism	110.12	63.435	84.58
2. Protecting the environment	110.06	81.045	108.06
3. Diminishing economic differences between the regions	39.62	28.47	37.96
4. Developing urban and semi-urban areas	67.162	36.347	48.462
5. Fighting unemployment	28.95	21.712	28.95
6. Developing and protecting small isles	16.43	11.573	15.43
7. Ensuring technical assistance	2.804	2.103	2.804
Total	**375.146**	**244.685**	**326.246**

Table 6 **Fund distribution per funds (in millions of Euro)**

EU contribution	FEDR	FSE	FEOGA
Total : 244.685	195	23.4	26.285
100.00 %	**79.69%**	**9.56%**	**10.74%**

THE "CRETE" REGIONAL OPERATIONAL PROGRAMME

The European Commission approved the programme for economic and social development of Crete for the period 2000-2006. Funds rose to about 730.31 million Euros, of which 467.74 million Euro (64% of the budget) come from the Structural Funds.

Priorities

The support granted to Crete helped it develop: its priorities were transports, communications, innovations, and rural development:

- **strengthening the role of the region as a centre for technological development and research**: the financial support contributed to the increase of the region's competitiveness; the main objective was international recognition of Crete as a centre of technological development;
- **protecting the environment and eliminating differences between regions**: there are numerous differences between the coastal area and the inner area of Crete: the programme helped diversifying and improving tourism offer, promoting mountain and cultural activities;
- **promoting the role of access gate to the area within international transport**: Crete's geo-political position offers many possibilities in this respect;
- **developing trade and life standards in the main urban centres**: the most important town of the region, Heraklion, has to deal with the problems of any city;
- **developing mountain and rural areas**: rural development should take into account the exceptional natural landscape of the area, in which eco-tourism is an important opportunity;
- **developing new jobs**;
- **ensuring technical assistance**: financial support covered the management, monitoring, and control of the funds.

Description of eligible areas

Crete has structural problems, most of which are reminiscences of Central Europe. Compared to other regions of Greece, Crete's population

(562,276 inhabitants in 1998) increased steadily (2.58% between 1993 and 1998, compared to the increase of entire Greece of 1.56%). The service sector plays in Crete a fundamental role (50% of the labour force and 56% of the GDP).

Table 7 **Fund distribution per priorities (in millions of Euro)**

Type of priority	Total cost	EU contribution	Public aid
1. Strengthening the role of the region as a centre for technological development and research	97.662	38.244	50.992
2. Protecting the environment and eliminating differences between regions	208.603	156.452	208.603
3. Promoting the role of access gate to the area within international transport	42.492	21.246	28.328
4. Developing trade and life standards in the main urban centres	109.675	71.633	95.511
5. Developing mountain and rural areas	221.551	142.425	189.9
6. Developing new jobs	41.667	31.25	41.667
7. Ensuring technical assistance	8.66	6.495	8.66
Total	**730.310**	**467.745**	**623.661**

Table 8 Fund distribution per funds (in millions of Euro)

EU contribution	FEDR	FSE	FEOGA
Total : 467.746	337.295	42.46	87.991
100.00 %	**72.11%**	**9.08%**	**18.81%**

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A STUDY ON TOURISM DEVELOPMENT IN THE TOMEŞTI AREA

STUDIU PRIVIND DEZVOLTAREA TURISMULUI ÎN REGIUNEA TOMEŞTI

C. BERAR*

The tourism potential of the village of Tomeşti is extremely high due to its natural conditions. In spite of this, the degree of development of tourism is low and it is influenced by several factors such as poor infrastructure, lack of optimum accommodation conditions, lack of substantial investments in existing tourism objectives, lack of information, and lack of interest from both the authorities and the locals.

Key words: *tourism, caves, monasteries, development*

The village of Tomeşti located on the northern slope of the Piano Rusk Mountains, at the foothills of the Paden (1377.5 m) and Rascal (1356.1 m) peaks, upstream the river Began, in a particularly picturesque area with a rich tourism potential.

South from the village of Tomeşti, 2 km from Colonial Fabric, in an exceptional natural, wonderful landscape, bordered by the Piano Rusk Mountains and crossed by the crystal-like waters of the river Began, is the **Valea lui Liman Complex**. The way up there, along the tumultuous river Began, crosses a narrow gorge sector with abrupt rocks and wild landscape (Stânca lui Florian, Stânca periculoasă).

The Valea lui Liman Complex is the optimal variant for those who:

- wish to hide from the crowd and tumult of the cities and spend some days in a fairy-tale landscape, in a quiet and isolated place;
- like hiking.
- wish to organize business trips, trainings, and seminars (this is the fittest place to do it).

Built in 1972, the complex is now the property of the S.N.P. Petrom - O.M.V. Group Austria - the Timişoara Branch, which purchased it in 1993.

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The Valea lui Liman Complex contains:

- A two-star motel with terrace, parking, and car wash; the motel has 2 suites, 19 double rooms, 2 rooms with 2+1 beds, and 2 rooms with 4 beds; satellite TV, bathroom, hot water; the suites also have a fridge. Laundry and ironing is also available.
- A chalet with one suite, six double rooms with bathroom, 4 double rooms with common bathroom, and three triple rooms with bathroom.
- A 2nd class restaurant with 110 places at the motel, 40 places at the chalet, and a separate room with 20 places, a terrace with 48 places, a suspended balcony with 24 places, and 1 bar. One can organise festive meetings, wedding parties, christening parties, name-day parties, symposia and other scientific events (there is a conference room with 20 places fully equipped). The restaurant offers a varied menu composed of 30 dishes on top of which is the "trout-polenta", six types of soup, different cocktails, desserts, and a wide range of alcoholic and soft drinks.
- The villa Violeta, made up of two bedrooms with king-size bed, living, and bathroom.
- The villa Sfânta Ana made up of two bedrooms with king-size beds and bathrooms, and a bar living.
- A camping site with 30 small houses of two beds each, equipped with bathrooms and hot water.
- The strand with hot water and an American bar during summer, mountain-bike rental, and bowling and football ground to come.

The total accommodation capacity of the Complex is about 150 places. Every first Sunday of August, there is the *Nedeia românilor de pretutindeni*, a festival with folk music and disco at night.

The beauty of the place is a good opportunity for the hikers to go along the off-road paths around the Complex: to the Căpriorul chalet (over 1200 m altitude), to the Padeş (1378 m) and Rusca (1359 m) peaks, or to the wild areas of the Poiana Ruscă Mountains.

Upon demand, they can organise trips by bus to the Ulpia Traiana Sarmisegetuza fortress in the Orăştie Mountains, to the Hunyadyi Castle in Hunedoara, to the fortress of Deva, and many other places of tourism interest.

In Tomesti Sat there is also a service complex called La Sandu, where there is food and accommodation for the tourists. Rural tourism is practiced in the rural pensions in the villages of Româneşti (five places each) and Luncanii de Jos (five places each) where, besides services and accommodation, there is also food for the tourists represented by vegetal and animal produce traditional in the mountain area.

Table 1 Evolution of tourism in the village of Tomesti between 2000 and 2004

Name	2000	2001	2002	2003	2004
Beds – (total) number	2	7	7	7	7
Beds in accommodation facilities – (total) number	93	111	133	216	217
Inns and motels – number	1	1	1	1	1
Beds in inns and motels – number	44	44	66	142	142
Chalets - number	1	1	1	1	1
Chalets - number	49	49	49	56	57

Source: Direcția Județeană de Statistică Timiş, 2006

CHURCHES AND MONASTERIES

Taking the county road D.I.28 from Coşava, the first locality belonging to the village of Tomeşti you meet is the village of Romăneşti. Entering this village, on the left, on a road 100 m broad, there is the Izvorul lui Miron Monastery, built in 1912 de by Miron Cristea. The church of the Monastery was built under the traditional shape of the Eastern Byzantium church. The building is located in a beautiful clearing surrounded by fruit trees and by basins populated with beautiful trout and white water lilies.

CAVES

Another tourism site is the Colțu Cave from Româneşti, a place in which nature built over thousands of years true masterpieces of art. Inside the cave, there is an alternance of large halls with vault and narrow passages, from the ceiling of which fall drops of water that made up in time beautiful lateral curtains – stalactites and stalagmites. The most beautiful area is a high hall resembling a church whose ceiling is supported by two twin columns formed by the union of stalactites and stalagmites, called La cruce.

In this room, geologists, together with the Philharmonic in Timişoara organise, on October 13 of each year, concerts embellished by the phonic resonance of the grotto. One should mention that there are traces of man in this grotto dating from the Neolithic (4500 BC) and even from the upper Palaeolithic, if we take into account the fact that on the terrace of the river Bega nearby, they discovered silex tools and fragments of ceramics from the same period. They have also found here fossils of the cave bear (Ursus spaelaeus).

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THE ANALYSIS CONCERNING THE ABSORPTION CAPACITY OF THE COMMUNITY FUNDS IN ROMANIA

ANALIZA CAPACITĂȚII DE ABSOBȚIE A FONDURILOR COMUNITARE ÎN ROMÂNIA

N. VERINDEANU [*], C. BERAR *

The cohesion policy is defined by its purpose and specifically by underpinning the diminishing process with regard with the differences existing between member regions and well-developed member states of the European Community and those less developed. The cohesion policy presents its primary legal base in the EU Treaty (Title XVII "Economical and Social Cohesion" and Art. 148 referring to European Social Fund). The main objective to enforce the economical and social cohesion is explicitly mentioned in Article 2, Treaty of Amsterdam, this representing a major objective of The European Union. More specifically, in the Article 158 is mentioned the importance of cohesion as a precondition for a thriving development of the European Union and emphasizes the will of "reducing the disparities between different levels of development of various regions and the leave behind of less favored regions or islets including rural areas".

Key words: *Structural Funds, cohesion policy, acquis,eligibility*

The importance of cohesion policy for Romania

The 25+ 2 member states and candidate countries of the European Union are divided into three categories of development using as indicator PIB (Internal Brut Product) per resident:

1. first group consists of 12 old Member States and has a PIB/resident exceeding the UE 25 average (10% and over);
2. second group with 7 Member states shows a PIB /resident between 68% and 94% of UE 25 average;
3. third group including 8 countries (6 new member states plus Bulgaria and Romania) with PIB / resident below 60% of the community average.

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Considering the first three years of joining (2007 - 2009) the cohesion policy will bring for Romania 6 billion Euros representing funds that must be invested according to some well-defined principles:

a. programming (assistance planning for a time period of seven years);
b. partnership (all programming and operational stages must be achieved in close collaboration between the Commission and Member States, involving regional, local and other relevant authorities);
c. Subsidy (community interventions and the institutional structure of the member state, respectively).
d. additive principle (structural funds must not replace national public expenditure);
e. concentration of assistance in the regions and domains that may need solid support and advising;

Reformation of cohesion policy; restructuring of the community funding system and its implications in Romania

In the new architecture, Romania must be eligible considering the following two objectives: Convergence and European Territorial Cooperation.

In order to simplify things, funds that are aiming agriculture and fishing were transferred towards the afferent politics, Common Agricultural Policy and Policy concerning Fishing domain, respectively. Moreover, Cohesion Fund will follow rules similar with that of Structural Funds (ex. multi-annual scheduling, project approval, etc.)

Romania will benefit of all three funds: FEDER, FSE and Cohesion Funds

If the new structures afferent to the objective Convergence were already taken over by the Romanian authorities, this generates a significant delay in creating new structures afferent to the objective – European Territorial Cooperation

Dimensions of the absorption capacity

In our paper we have considered two important aspects related to absorption capacity concerning the supply.

The absorption capacity concerning the supply is determined by three main factors:

A. *Macroeconomical absorption capacity* - this can be measured in terms of Internal Brut Product (PIB). Thus, the Council Regulation no. 1260/ 1999 stipulates that the annual amount for each member state, allotted from Structural Funds and provided assistance from Cohesion Fund – *must not exceed 4% from PIB*. Macroeconomical capacity relates with *the necessity to increase budget expenditure as a consequence of European joining*. Therefore, there is a consensus concerning the need, that after 2007, Romania should cover budgetary costs with at least 2% from PIB, the costs being strictly determined by the obligations assigned in the context of European integration: Romania's contribution to EU budget (1% of PIB) and national budget amounts that are demanded for priorities and measures that will be co-financed by community funds (approx. 0.8 – 1% from PIB).

B. *Financial absorption capacity* This represents the capacity of the central and local authorities to co-finance programs and projects supported by EU, to plan and to guarantee the internal contributions in the multi-annual budgets and to collect them from various partners involved in a project or program. The present scientific paper represents an introduction into analysis of financial absorption capacity, with specific reference at the level of local authorities.

C. *Administrative absorption capacity*. This refers to the capacity of central and local authorities to prepare plans, projects and programs in due time and to select the most eligible and to organize an efficient partnership environment, to follow the administrative and reporting obligations as well as to finance and supervise the implementation process, by avoiding any infringement. The administrative absorption capacity represents the main issue of the present paper.

There are three main steps considered for administration of the Structural Funds:

- **projection (design) –** regarded as an inlet variable. The elements that define this step create the conditions requested by an effective and efficient management of the structural funds. The designing capacity should be

evaluated in accordance with requirements that rise from regulations concerning the structural funds (Regulations no. 12609/ 99 and 438/ 2001).

- **functioning –** the measure that estimates if the structural funds are effectively and efficiently administered. *This step can not be evaluated in a candidate country, such the case of Romania.* However, some data relating to the functionality of the future system may be obtained from the analysis of the functioning mode of some pre-joining instruments (Phare, ISPA, SAPARD).
- **performance,** the measure that estimates if the structural funds were effectively and efficiently administered. This represents an outlet variable that is designed to measure the results. *The performance can not be evaluated only ex-post,* by the end of scheduling period. Consequently, this step can not be evaluated in case of Romania.

The above mentioned aspects show that the steps that can be evaluated prior to the possible joining date are: way of projection or the institutional system design that has the assignment to implement the priorities and measures financed from Structural Funds.

The measurement of the administrative capacity involves the evaluation of three elements: structure, human resources, systems and instruments.

Therefore, it results a system with 9 key indicators that must be quantified.

a. Management

The mentioned methodology presents three key indicators (structure, human resources, systems and instruments):

1. Designation of management authorities (8 points)

a. there is a consensus and it has been designated the Management Authority for Community Support Framework (AMCSC)

b. the positioning of AMCSC corresponds to the existent administrative structure

c. there is a consensus and it has been designated the Management Authority for Sector Operational Programs

d. the positioning of AMPOS corresponds to the existent administrative structure

e. there is a consensus and it has been designated the Management Authority (MA) for the Regional Operational Program (ROP)
f. the positioning of AMPOR corresponds to the existent administrative structure
g. there is a consensus and it has been designated the Management Authority (MA) for the Cohesion Fund (CF)
h. the positioning of AMFC corresponds to the existent administrative structure

2. Employment with staff members of the Management Authorities (7 points)

a. it exists an estimation of the requested staff
b. this takes into account the dimensions of the program, the characteristics and assignments that may be accomplished
c. responsibilities and assignments were defined to the level of each employee record
d. the levels of payments for the staff members of MA are previously established
e. the attraction extent in terms of salary levels (in comparison with the private sector)
f. there are sufficient candidates to occupy the vacant posts
g. efforts were made to use the experience and know-how acquired during the pre-joining period (including training for Structural Funds)

3. The delegation of the assignments (3 points)

a. delegation of specific assignments (evaluation, monitoring, informing)
b. delegation of the implementation assignments was performed according to the detailed terms (as it is described in the art. 34 of the Regulation 1260/ 1999).
c. it is a consensus concerning the delegation of the assignments between the main involved parts

b. Scheduling (Programming)

All three indicators are defined from the point of view scheduling:

1. *it has been already established a partnership for development of economical policies (4 points)*

a. an effective and systematic inter-ministerial coordination is requested for the economic and social policies

b. the social partners are systematically involved in projecting the economical and social politics

c. regional partners are being systematically involved in projecting the economical and social policies

d. non- government organizations are being systematically involved in projecting the social and economical policies.

2. it exists the capacity to attain qualitative and quantitative programming (4 points)

a. analytical abilities

b. processing abilities

c. expertise in designing the systems of indicators

d. skills and experience in programming activity

4. Instructions regarding the programming are available and they have been disseminated (2 points)

a. the description of methodology/ national programming process

b. establishing the methods of signing partnerships

c. Implementation

1. Designation of intermediate organs (IO)(7 points)

(a) The list of the IO is available

(b) IB are positively accepted within their field of activity

(c) allocation of IO depending on individual measures is already attained

(d) the agreement from IO is already obtained

(e) allocation was done in accordance with the main responsibilities of the IO

(f) MA Authority on the implementation organisms is in accordance with national hierarchy

(g) relationships of good collaboration were established between MA and IO.

2. Staff employment of IO (6 points)

(a) the need of employed staff was determined

(b) staff employment was insured

(c) evidence concerning the efforts to use the experience and know-how previously obtained from pre-joining funds

(d) experience is available for project elaboration and implementation

(e) experience is available concerning project selection and evaluation

(f) knowledge regarding the EU legislation at operational level is available (rules concerning the state support, public acquisitions and environment, etc.)

4. The existence of project operational development systems and management of project processes (5 points)

(a) there is a coherent set of criteria used for project selection

(b) the existence of a standardized form

(c) a manual for cost –benefit analysis available for large projects

(d) there are some references with respect to national policy, existent gridlines, solid instruments and projects within the programming documents for the Structural Funds (PND, PO).

(e) the existence of a manual in conformity with EU legislation.

In conclusion, the key indicators used for evaluation of Structural Funds administration are:

	Structure	Human resources	Systems and instruments
Management	Designation of management authority	Staff employment of the management authority	Assignment delegation
Scheduling	Already existent partnerships	Capacity to achieve programs	The existence of instructions necessary for programming
Implementation	Designation of international bodies	Staff employment of the international bodies	Existence of systems for project operational development and process management

In the "monitoring report of Romania" published on 25 October 2005, the European Commission exposed the state of the administrative capacity of our country in the field of regional politics and coordination of Structural Instruments (Chapter 21). Some important conclusions comprised in the *Report* are:

- some measures are necessary to strengthen the administrative capacity in all important ministries and other relevant bodies;

- the staff number and the employment rate must be increased in order to catch up with the registered delays;

- the cooperation between central and local levels requires solid enforcement;

- co-financing mechanisms especially at local level, must be clarified and established;

- in the programming activity – the principle of partnership must be factually implemented;

General evaluation data for absorption capacity are presented in the table below:

Design (Projection)

	Structure (max 19 points)	Human resources (max 17 points)	Systems and instruments (max. 10 points)	Total
Management	7.6 (8)	3.8 (7)	1.5 (3)	12.9
Programming	2.0 (4)	2.0 (4)	1.2 (2)	5.2
Implementation	4.8 (7)	2.9 (6)	1.8 (5)	9.5
Total	4.4	8.7	4.5	

Source: Authority evaluation

The obtained results indicate the fact that Romania situates in a relatively initial phase to construct its absorption capacity. As it can be noticed and considering all 9 primary indicators, Romania obtained only one point close to the maximum and this was registered for the institutional structure of the management authorities, where points are attributed for the fact that these authorities were established.

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PRESENT ASPECTS OF THE MECHANISMES OF COMMON AGRICULTURAL POLICY

ASPECTE ACTUALE ALE MECANISMELOR POLITICII AGRICOLE COMUNITARE

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The new status of our country, as full-member of European Union brings a serious impact upon the agriculture, as first and most important sector of the economy. The European Agriculture Policy is obvious in a permanent adjustment pressure, coming from the weight of allocated founds in this activities, out of the total common budget (45%), as well as from the changing structure of expenses inside the sector. This increases the mobility of planning an economic activity in Romanian agriculture too, especially targeting the goal of developing a convergent featured society with E.U. Unsolved yet challenges arise from the European financing system versus the Romanian farming tradition, small or dual farming being non-sustainable and a critical social-problem of the economy.

Key words: *convergence, agriculture policy, budget.*

INTRODUCTION

The 21st Century is dominated by the change from an agricultural majority to an urban majority of population: 3.2 billion people of the world-population are living today in cities. In New York, London, Johannesburg, Mexico-City and Shanghai, Berlin there have been organized meetings for mayors, town-planners, researchers from all domains, with the label "Urban Age Summit". Such facts raise financial support to accompany, under the pressure of the agglomeration and the different socio-economic risks in towns which are about to become more intensively. Not only for specialists, but also for the wide public is important to debate the diversity of new appropriate problems springing from an obvious competition between the resource-consuming cities, versus basic agricultural development, under

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historical, economical or political aspects; in other words, the authorities face a hard decision: the same funds would serve the pressure of urgent urbanization needs, or, more likely the requirements of a long lasting process of primary economic sector updating.

Romania, as a recent member-state of European Union, is confronted with even higher challenges regarding its alignment to the western civilization models concerning development, in all sectors, and it takes joint efforts to consolidate the assets we owe and to properly administrate all the potential sources of high-speed growth, performance-grounded.

DEBATE

The theory of convergence regarding the economies turns nowadays into a doctrine of catching-up the gap between the performances of western countries and the other ones, which do not owe for the moment the technologic and organizational dowry required by the highest efficiency, within the competition and confrontation of the market forces.

The European Union must shape the present changes in a manner consistent with concepts of an enlarged society. These changes are affecting every aspect of people's lives and require a radical transformation of the macro-economy. The rapid and accelerating pace of change means it is urgent for the Union to act now to harness the full benefits of the geo-politic situation.

Hence the need for the Union to identify a clear strategic goal, to agree and set up a challenging program for building knowledge infrastructures, enhancing innovation and economic reform, and modernizing social welfare and education systems.

The Lisbon Agreement, 2000, set a huge challenge for the European Union with its objective of raising spend in Research and Development to 3% of GDP by 2010. This ambitious goal was fostered in the belief that this was a key requirement in order to catch up with Japan and the USA in creating a truly dynamic and innovative society.

Growth, long lasting development and job creation have resumed in the enlarged Europe, on the basis of very steady performances showed by the macro-economic statistic index of stability: as a result of stability-oriented monetary policy supported by sound fiscal policies in a context of wage moderation, inflation and interest rates are low, public sector deficits

have been reduced remarkably and the balance of payments of EU is healthy.

The warranty of the economic safety is the successfully introducing the euro in most European countries and is delivering the expected benefits for the European economy, for each citizen in the mean time.

The internal market is largely complete and is yielding tangible benefits for consumers and businesses alike. The enlargement creates new opportunities for growth and employment.

The European Union possesses a generally well-educated workforce as well as social protection systems able to provide, beyond their intrinsic value, the stable framework required for managing the structural changes involved in moving towards a knowledge-based society.

For the new member states of the United Europe, Romania and Bulgaria, the task of meeting the expectations of the European strategies becomes a honor-duty, as their joining the U.E. is connected to the symbolic celebration of 50 years from the Rome-Agreement, 1957, a time-frame of consolidating the European common values of diversity and empowering the old blue continent.

In the general effort involved by the structural convergence aim shape agriculture in a modern way is an important issue: its weight is obviously showed by the 2007 European budget, where sustainable growth owes 54,9 billion EURO, raising 15.4% from 2006, and natural resources (agriculture) owes 56,3 billion EURO, raising 1% from 2006.

Moreover, deepen examining the growth-budget, we figure the European intention to stress the competitiveness demands, allocating 9.4.billion EURO in 2007, raising 18,6% from 2006, while for cohesion, the 45.5 billion represents a raising of 14,8% from 2006.

Table 1: European Budget per 2007 (fragment)

-Billion EURO-

Year:	2007 (Billion EUR)	dif2006 (%)
Sustainable growth:	54,9	15,4%
• Competitiveness	9,4	18,6
• Cohesion	45,5	14,8
Natural resources	56,3	1,0

Source: ec.europa.eu/budget/index_en.htm

How to join the European agriculture interests and the local Romanian tradition remains a negotiation issue for the coming time-frame.

The current agriculture is characterized by globalization and capital concentration but also by turbulent changes in technologies, markets and environment. It is obvious that each country will try to support single parts of agriculture within the framework of a compact system of subsidies both own-funded and from funds offered by the form of EU subsidy programs. The question still remains, what the effectiveness of this subsidy is going to be.

After 2002, The European Commission presented and applied the directions of the agriculture reform, *towards a sustainable agriculture*, where we include:

- eliminating the link between the production and direct payments, replaced by a sole subvention per farm;
- a mandatory standard for all farmers for environment, food-safety, vegetable and animal-health;
- supplementing the resources for rural development, financial-resource transfer crossing from market measures to rural development measures, which means the annual diminishing of 3-5% from the direct payments, no small or peripheral farms included;
- the stabilization of the agriculture expenses maintaining a strict financial discipline, not to surpass the existing budgets 2007-2013.
- to review the market policy for wheat, oat, cereals, energetically cultures, fodders, dairy produce, mainly through reducing the intervention price and subventions;
- the consolidation and empowering the rural development using measures targeting the product-quality, meeting the priority standards, raising the conditions for the animals, supporting young farmers, implementing the *Nature 2000* directives, supporting investments to afforest;

To instrument such tools create positive effects, like a stronger connection of the farmers to the market requirements, fact that contracts the offer and gives way to diminishing the intervention measures, and the competition pressure on the European and global market as well.

Still, it is not possible for this phase to eliminate the stimulants for excess-production. Another embarrassment would be the complexity of applying the unique payment per farm, as well as the non-applying it for sugar, olive-oil, tobacco, cotton.

There are arguments upon the question of custom-taxes, aiming the protection of European market and non-facilitating this way the imports access.

An important option is that one concerning the intervention price for cereals, maintaining the system of export subventions for cereals, and the restriction for applying such financial measures for new member states until 2013.

For Romania, there are specific problems remained unsolved: the small dimension of the agriculture-unit of production, because vegetable cultures are suited for most expanded areas; low capital investments; a slow re-structuring process together with re-organizing the agriculture management; the modernization of the agriculture infrastructure: the physical one, consisting of roads, railways, communication-nets serving this sector, and human infrastructure- qualification, long live training, information administration in agriculture sector.

We expect in the light of the European directives for 2007-2013, that farmers will have more flexibility in taking decisions, but to bring success and steady incomes, those should meet the market requirements.

CONCLUSION AND REMARQUES

European Union goes for eliminating the subsidies for the farmers up to 2013. This is an even higher challenge for our country, because in 2014 we hope to meet also the criteria allowing entering the EURO-zone.

The Romanian Agency for payments and intervention in agriculture will have an important role in handling the relations with the farmers, starting from this year.

The *National Strategic Plan for Rural Development 2007-2013* includes as directions: increasing competitiveness in agriculture and forestry; environmental issues in rural space; quality of life in rural areas; diversification of the rural economy. These domains will get 8.022 billion Euro as co-financing from UE, which bring a huge responsibility of how efficient this effort will be used.

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THE IMPACT OF THE OUTSOUCING STRATEGIES IN AGRICULTURE

IMPACTUL STRATEGIILOR DE OUTSOURCING IN AGRICULTURĂ

MARINA SARBOVAN*

The present markets develop a mechanism that includes all types of enterprises based on the core-activity relying on externalization of services to independent providers located abroad. This mechanism allows firms to exploit the lower cost and specialization advantages of a certain location and suppliers, while giving the operational control. This global trend induces adjustments of the demand and supply sides and it is most important for the authorities to secure the mutual benefits of the international specialization, of the competition, facilitating appropriate legislation, employment of affected workers, local development gains. Agriculture, the first and most important sector of the economy follows the general objective of increasing the efficiency of the activities.

Key words: *lower costs, outsourcing, increasing efficiency.*

INTRODUCTION

The lasting development in agriculture sector, as part of the macro-economy, requires a permanent control of undesired effects such as unemployment, inflation, prices fluctuation, allowing the dominating trend of growth, and sustainable development to have inside determinations and forces.

The consequences of stability, referring of those of static nature, even if the long term macro-equilibrium is targeted, are supported by the interdependence of all markets. They are ruled by the equilibrium-prices and by some skeptics, they are far from bringing to the new EU members a spectacular economic success, even if it takes to deal with the intervention of the authorities (state, private, companies, global institutions).

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DEBATE

In Romanian agriculture, alike other sectors, setting up strategies aims to a development where the human capital is the main spring of fortune; this means to administrate costly objectives, essentially oriented by the general rules of European and international competition, and try to answer to the priorities which solve the most of the burdening tasks in the perpetual struggle for progress.

The agriculture market system, grounded on stability, as a component of the general economic systems, plays a major part in the geo-economic plans concerning European continent, having a definite importance in shaping the supply as well as the demand of integrated or global economic parties.

Under the globalizing impact, smaller areas of market act similarly, as if the integrated market would demand the same objective rules of motion, labor-market in general and especially in agriculture having defining particularities.

Thus, we observe a quasi-instantly spreading of the organization-types in economy, no matter the national territory.

This phenomenon is objectively needed, required by the special technologies, which generates lay-offs and creates new jobs, or modifies the domestic demand, unable to synchronize with the national supply. The feeding with resources process from off-shore, out of local, regional, national markets, can be done in the case of different options concerning the labor contracts, as well: through a comparative advantage, a certain area of labor-market is cheaper and more efficient in the meantime.

Within the wide-frame expansion of the human resources market, outsourcing activities could be extremely beneficial for the global interest, for both parties if the outsourcing partners are competent and the expectations are clearly defined. In agriculture, this phenomenon is mostly observable.

The ideal tactic of supporting the outsourcing strategy by activities would be to administrate carefully such a contribution, aiming that it becomes able to raise efficiency and provide a range of advantages, such as:

- To reduce and control operating costs : the operating costs associated with fluctuating staffing needs and various infrastructure costs could be expensed rather than amortized.
- To obtain high level of capabilities, competencies and expertise, this means to expand access to technical capabilities and tools through specialized outsourcing firms having strategic partnerships on monde-market.
- To focus the internal resources; this is reached by leveraging up the internal resources with domain knowledge on core business activities by utilizing outsourcing for technical expertise.
- To accelerate re-engineering profits is an advantage springing from those outsourcing techniques which enable the companies to reduce the innovation cycle and decrease investments and risks by equal amounts, in the mean time.
- To mitigate risk**:** this is allowing an outsourcing partner to absorb a portion of the risk involved with staffing, especially if we deal with multiple synchronized projects having a variety of requirements, mile-stones and timelines.

From the doctrinaire point of view, the development of the outsourcing activities in Europe can not be connected with the unemployment evolution on the market areas watched by the employers, because outsourcing is in its essence a mechanism of a more flexibility of the labor supply, of adapting to the requirements asking for maximum economic efficiency, a mechanism of diminishing the negative effects of the imperfections of the market segments, mainly through under-engagements and contracts, detouring the custom barriers.

Activities of human resources, exploitable in economy marketing contribute to the out-put optimization and trade, in the field of harmonization of the production factors, and in the end of the analysis it serves the client, who will be in the position of buying a product manufactured in the most favorable conditions.

Apparently weaknesses in the outsourcing partnership, depending on the quality standards and the difficulty of ensuring the security standards is in fact a general economic upraising of the standard at the European level, and the promo tore of the competitively of this partnership, for all the involved members.

The access at technical special know-how, eliminating the re-structuring costs of manufacturing are all elements of controlling the final costing and implicit of stabilizing the process at the offered to sale goods.

The de-localization of the activities, on the ground of a *win-win*-strategy, is a global trend, an on-going process linked to the development of the labor market.

CONCLUSION AND REMARQUES

The identification of low-cost sources will bring changes in rural development having the first impact on labor, human-development features in rural areas, rural structural changes according to those in Western Europe.

The European enlargement produces a re-distribution of labor among industries and among member-states (close regions included), bringing a new trend in the reform of the macro-market system.

In our view, the legislative frame is still weak and it is most important that it fulfills not only the allowance of new activities, but a permanent adaptation of the taxes that equilibrates the profits of all involved countries: this would eliminate the possibility of speculating legislation in the direction of escaping taxes in the global environment, abandoning the national constrains.

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A STUDY ON THE RURAL DEVELOPMENT OF THE COMMUNE OF DUDEŞTII-VECHI

STUDII CU PRIVIRE LA DEZVOLTAREA RURALĂ A COMUNEI DUDEŞTII-VECHI

CAMELIA OBOROCEA*

Rural problems, i.e. the knowledge, research, development, and improvement are complex activities of vital importance to the country (due to the size of the rural area, to its productive activities, and to its cultural social, habitat, and tourism services) whose solution is only possible if approached short-term. This is why it is necessary to have successive integrated programmes with long-term effects, that result in the improvement of the institutional and human condition. The final goal of rural development is to make rural areas sustainable apt and to fulfil their social functions. The notion of rural development covers all the activities directed to the improvement of life quality of the population living in the rural area, to the preservation of the natural and cultural landscape, and that ensures sustainable development of rural areas in accordance with the conditions and the specificities of the lands.

Located in the western part of the country, the commune of Dudeştii-Vechi is by the river of Aranca, neighbouring:

- north – Hungary;
- west – the village of Beba Veche;
- south – Serbia and Montenegro, the village of Teremia Mare and the commune of Valcani;
- east – the town of Sânnicolau Mare and the commune of Cenad.

The locality Dudeştii-Vechi is a commune containing the villages of Dudeştii-Vechi, Cheglevici, and Colonia Bulgară, with a number of over 5,000 inhabitants. The total area of the locality is 21,062 ha, of which 18,002 ha represent extra-vilaneous area and 3,060 ha intra-vilaneous area.

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The first inhabitants of the commune of Dudeştii-Vechi after the liberation of the Banat from the Ottomans were catholic Bulgarians, who have their own language, writing, and culture.

According to the census in 2002, the commune of Dudeştii-Vechi is inhabited mainly by Bulgarians, the commune being also the cultural and social centre of the Bulgarians in the Banat area.

The commune of Dudeştii-Vechi covers an area of 3,060 ha and has 1,375 houses and 5,807 inhabitants (according to the census in 2002):

- Bulgarians - 2,987 (51.44%);
- Romanians - 2,368 (40.78%);
- Hungarians - 330 (5.68%);
- Rroma - 62;
- Germans - 44;
- Serbians - 16.

Table 1

Evolution of the population per ethnic groups

Census		**Ethnic structure**								
Year	**Population**	**Romanians**	**Bulgarians**	**Germans**	**Hungarians**	**Rroma**	**Serbians**	**Jews**	**Slovaks**	**Others**
1930	11,620	2,754	5,771	1,327	1,415	232	53	34	20	-
1956	9,653	2,340	5,610	478	995	210	6	5	7	-
1977	8,030	2,221	4,669	319	694	109	6	2	5	9
1992	6,409	1,996	3,633	57	379	305	11	1	9	17
2002	5,807	2,368	2,987	44	330	62	16	-	-	-

Source: Recensământul agricol, 2002

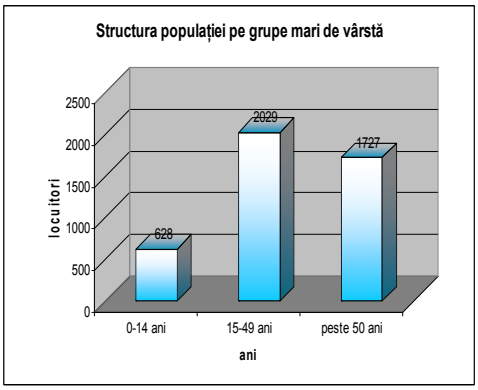

Fig. 1 Population structure per aged groups

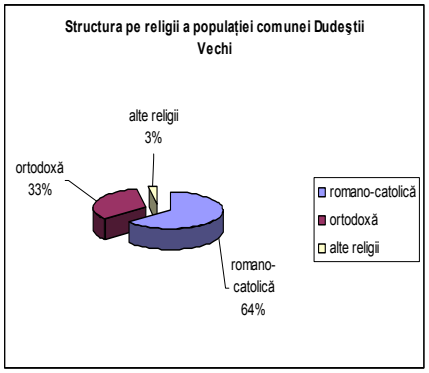

Fig. 2 Population structure per aged groups

In 2005, 63 children were born, of which 33 girls and 30 boys, while death rate was 33.

Some of the active population works outside the commune, in the town of Sânnicolau Mare. The active population of the locality is represented by 58% of the inhabitants. The distribution of the active population per economic branches is as follows:

- agriculture - 52%;
- industry - 28%;
- services - 20%.

From an economic point of view, due to the location of the commune in a plain area, the economic typology of the locality is mainly agricultural, with a share of 80% of the commune area.

The agricultural land of the commune of Dudeştii-Vechi has the following uses:

- arable (91.3%);
- pastures (6.6%);
- hayfields (1.5%);
- orchards (0.1%);
- non-productive (0.5%).

There are 53 economic agents in the commune, most of the firms being trade and catering units. Exploitation of agricultural lands is done individually by landowners and very little by family associations.

The quality of the agricultural lands in Dudeştii-Vechi has suffered suffered a lot the last decades because of almost total deforestation of the bushes and flooding meadows by the canals and water courses, because of the irrational application of fertilisers and chemical substances (which resulted in the destruction of micro-organisms in the soil that contributed to the turning of organic matter into humus), because of the pollution by different substances, and because of improper cultivation technologies (soft tillage, pressure irrigation resulting in the crushing of the soil structure etc.).

The locality of Dudeştii-Vechi is within the typology of clustered localities, with straight and long streets, with farmsteads with nice houses and gardens. Its functional areas are as follows:

- the central area concentrating most public institutions;
- the residential area made up generally of traditional dwellings with a single floor;
- the agricultural unit area, scattered all over the commune;
- the sports area, made up of a sports ground in the southern part of the commune;
- the infra-structure area, represented by little modernised roads;
- the non-productive area (garbage pit, marshes etc.).

Cultural activities are carried out at the House of culture in the centre of the commune. There are in the commune two Bulgarian folk dance ensembles and a men choir. Every year, on August 15, the celebration of the saint patron of the roman-catholic church is doubled by the Festival of Banat's Bulgarian song, dance, and costume.

As a result of research and of applying the SWOT analysis, we can see the following strong and weak points, opportunities and risks in the commune of Dudeştii-Vechi.

Table 2
SWOT analysis of the locality Dudeştii-Vechi

STRENGHTS	**WEAKNESSES**
- good geographical position - plain area - available work force - water supply network (51.2 km) - electricity - cable TV - modern communications - fuel supply - customs and traditions	- low rainfall regime - local conditions that do not attract skilled work force (doctors, lawyers, notaries) - subsistence agriculture - lack of public services - age of dwellings - lack of modernised roads
OPPORTUNITIES	**THREATS**
- guiding and initiating youth in agricultural investments - investments in accommodation - introducing gas supply - ecologising the river Aranca - good geographical position - opening to Europe, trans-border area	- drought - youth migration to other areas - decreasing demographics - frequent dwelling damaging storms - low financial means

Conclusions

We can say that in order to relaunch the commune of Dudeştii-Vechi developing infrastructure is a must.

They should also modernise low-tension electricity network and public lighting in the commune and other localities.

Besides agricultural activity in the area, they should develop small and medium firms that could create jobs for the inhabitants of the commune.

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LUCRĂRI ŞTIINŢIFICE, SERIA I, VOL IX(2)

THE EXAMINATION OF BIOMASS POTENTIAL FOR ENERGY PURPOSES IN THE HÓDMEZŐVÁSÁRHELY MICRO-REGION

EXAMINAREA POTENTIALULUI BIOMASEI DE PRODUCERE A ENERGIEI IN MICROREGIUNEA HÓDMEZŐVÁSÁRHELY

K. KIS[*]

The social, economic and ecological changes of the past few years have favourable effects on the spread of the energy-purpose biomass utilisation. Biomass potential for energy purposes has double meaning: on the one hand it stands for the measure of the efficiency and performance of biomass as renewable energy resource, on the other hand the possibility of energetic usage. The total of the biomass stock of the Hódmezővásárhely micro-region, considering the primary, secondary and tertiary biomass production adds up to 1.2 million tons, out of which the annual recyclable (regenerating, reproducible) biomass amount is approximately 800.000 ton/year.

Keywords: *biomass, biomass potential, micro-region, rural resources*

INTRODUCTION

The purpose of this paper is to determine the biomass potential of the micro-region, which can be the base of the determination of the actually recommended amount of the biomass for energy purposes. The biomass stock for energy purposes means a renewable natural resource for the micro-region. Its integration into the economic processes can form a new, socially useful, economically reasonable and ecologically also accepted combination of resources that might have a favourable effect on the development of the micro-region. The energy-usage of biomass is not a novel activity, although the volume of such utilisation currently (still!) is at low level, but it has ever increasing importance considering the future. The social, economic and ecological changes of the past few years have opened new dimension for the

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energy-usage of biomass, which are favourable for its spread and force out the necessary changes.

BIOMASS AS A RENEWABLE NATURAL RESOURCE

The biomass is the total of the organic materials and living creatures present in some habitat in a given moment. The amount of biomass can be given by number, weight or energy content etc. Biomass is present in biological systems in the ecosystem. The ecosystem as a part of the biosphere makes a symbiotic system where the co-existence of the biotop (the total of biotic and abiotic conditions of life – ecological environment) and the biocenosis (the community of animals and plants) as well as their dynamic unity is fulfilled beside certain material and energy circulation (Barótfi, 1998). The biomass stock in this way includes all the biotic and abiotic organic materials: the fauna, the flora and the abiotic organisms as well as organic waste. Man itself does not belong to the range of biomass but the by-products and waste produced by man, human communities and society do. Depending on the place the given biomass-type can be found in the biomass production-utilisation chain we can speak of primary, secondary and tertiary biomass.

Primary biomass is the natural vegetation, arable crops, forests, woods, grasslands, garden plants and water plants. Secondary biomass is made up of fauna, farm animals as well as the main and secondary products of animal husbandry. Tertiary biomass includes the products, secondary products and waste of industries based on biologic-originated materials (food industry, feed industry, other) and also the organic communal waste (Láng et al., 1985).

The Hódmezővásárhely micro-region as rural economy is a specific and complex natural, economic and social spatial unit including the structures, actors and organisations operating in the given rural area and also covers the different internal and external relation systems with their activities and the resources used or useable(!) for them. According to Fehér (2005) „resources of rural economy mean the utilisable human, natural, financial, economic and other factors and the relationships between them, which serve socially useful, economically reasonable and ecologically accepted purposes varying over time and space.” The resources of rural economy, according to Fehér (2005) can be classified as follows: human

resources, natural resources, landscape resources, settlements and other resources.

Based on the natural resources definition of Bora and Korompai (2003) we can say that such biotic and abiotic natural endowments can be considered as resources, about which man and society have knowledge and needs, they have the appropriate technology for the utilisation and which are the conditions of producing goods and providing service. If the endowments lack all these they cannot be considered resources.

In connection with the above mentioned, we can speak of the energy potential of the biomass as renewable natural resource in two ways: on the one hand it stands for the measure of the efficiency and performance of biomass as renewable energy resource, on the other hand the possibility of energetic usage.

To evaluate the biomass potential for energy-purposes of the micro-region it is important that the biomass as energy resource can originate from five sectors or industries. Based on the works of Bai (2002) we can regard the following fields. Beside the secondary (by-)products produced in plant production and forestry – the total amount of which can be converted to some form of energy – the main products – forest and arable plants – produced exclusively for energy production have an ever-increasing significance. In animal husbandry and food industry only by-products can be taken into account for energy production. Beside the basic materials for energy purposes in food economy the communal and industrial by-products and waste make a significant part of biomass as well.

The energetic utilisation of the biomass can be decided only by a thorough evaluation and analysis of the biomass production and usage (Barótfi, 1998). Accordingly the question of the energetic utilisation of biomass from the part of possibilities is a multi-factoral compromise depending on the decision of the settlements or a region.

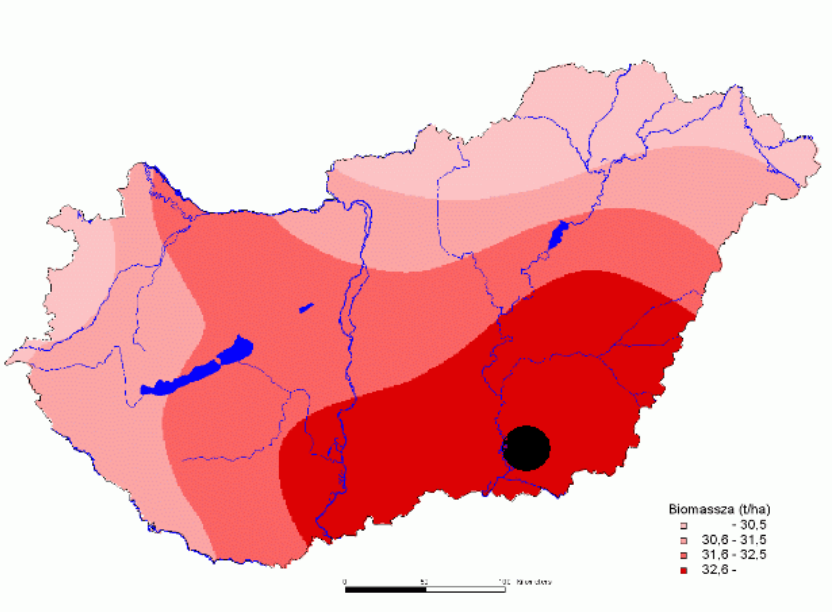
BIOMASS POTENTIAL FOR ENERGY PURPOSES IN THE HÓDMEZŐVÁSÁRHELY MICRO-REGION

Adjusted to the place of the certain products in the biomass production-utilisation chain I deal with the determination of the biomass potential according to the already known classification. The natural-geographical characteristics of a region determine the milieu where we can

count on a given amount of organic material production. With regard to the biomass potential – especially the primary, the phytomass production – the soil, the topographic and climate parameters are crucial.

From the biomass-potential evaluation point of view the climate parameter the so-called agricultural potential for energy is important. It classifies the regions by the biomass production per hectare. According to this parameter the Hódmezővásárhely micro-region is among the most favourable regions of Hungary (Figure 1).

Figure 1: Agricultural potential for energy in Hungary*



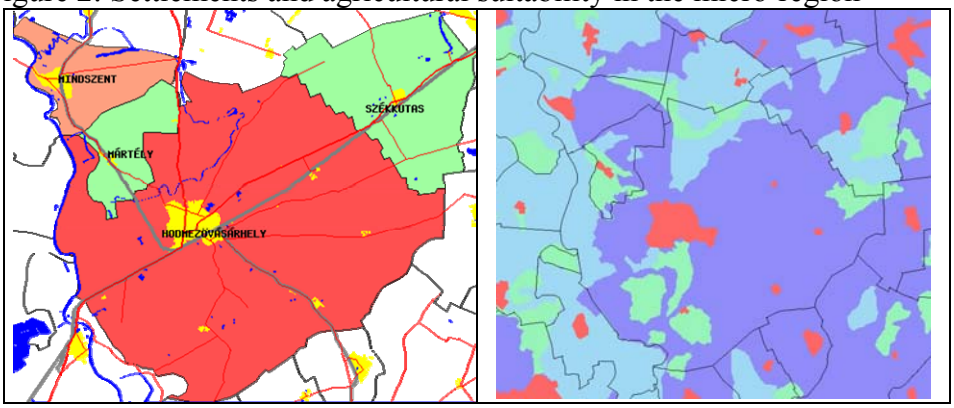
Source: www.ktg.gau.hu, 2007

*Hódmezővásárhely micro-region is marked with black circle

The agricultural suitability of the micro-region is expressed in a complex way – with regard to the topographic and soil parameters as well as climate parameters – by the so-called agricultural suitability index (Figure 2). According to this index 78% of the territory of the micro-region (marked with purple on the second map) belongs to the highest quality category, thus surpassing the average of the similar territories of Csongrád County (50,3%) and Hungary (33,45%).

As a result we can state that the Hódmezővásárhely micro-region has excellent natural-geographical characteristics for agricultural and forestry activities, which mean outstandingly favourable conditions for biomass production.

Figure 2: Settlements and agricultural suitability in the micro-region



Source: TEIR, 2007

Primary biomass production is basically determined by the method of land use (land-use category). As the data of Table 1 show the highest rate of land-use – in connection with the favourable agro-ecological parameters – is the arable land. All these can provide the base for a significant biomass production of arable crop production. Phytomass production is also influenced considerably by the vegetation compound (crop structure, tree species, etc.) and the amount of the annual yields – main products and secondary products as well.

I summed up the biomass production of the various land-use methods in Table 3.

Only 4.03% of the territory of the micro-region is covered by forest (Figure 3), at the same time almost the half of the primary biomass production is the stock of forest (678.300 m^3, 406.980 t). Considering the demands of sustainable forestry only the average annual increment can be lumber (11.410 m^3, 6.800-6.900 t).

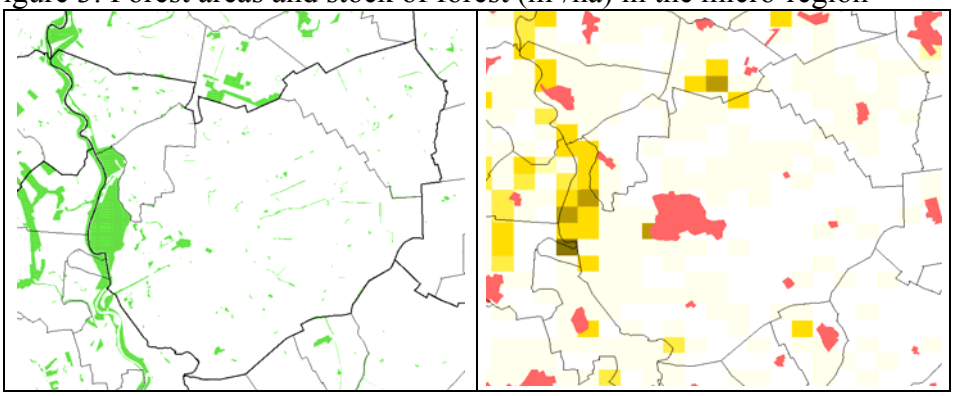
Table 1: Land area by land-use category in the micro-region

Denomination	*Hódmezővásárhely, ha*	*Mártély, ha*	*Mindszent, ha*	*Székkutas, ha*	*Hódmezővásárhely micro-region*	*Distribution of total land area, %*
Arable land	35353,2	3290,6	3569,8	8939,0	***51152,6***	***72,3***
Garden	157,6	16,9	57,9	2,8	***235,3***	0,3
Orchard	244,1	4,9	36,5	40,3	***325,7***	0,5
Vineyard	82,9	–	9,6	0,5	***93,0***	0,1
Grassland	4279,7	388,8	638,0	2434,8	***7741,4***	10,9
Agricultural area	***40117,5***	***3701,2***	***4311,8***	***11417,5***	***59548,0***	***84,1***
Forest	2166,9	42,1	523,9	119,9	***2852,8***	4,0
Reed	91,4	4,5	21,4	19,8	***137,1***	0,2
Fishpond	4,6	–	119,1	–	***123,7***	0,2
Productive land area	***42380,4***	***3747,7***	***4976,2***	***11557,2***	***62661,6***	***88,5***
Uncultivated land area	5941,3	373,7	962,6	842,0	***8119,6***	11,5
Total land area	***48321,7***	***4121,4***	***5938,8***	***12399,2***	***70781,2***	***100,0***

Source: TEIR, 2007

As we can see in Figure 3 continuous natural forests can be found only along the River Tisa and its backwaters the oxbow lakes (floodplain forests). Forests on other territories of the micro-region are scattered and do not represent a significant amount of timber.

Figure 3: Forest areas and stock of forest (m^3/ha) in the micro-region



Source: TEIR, 2007

Animal husbandry produces a significant part of the whole amount of agricultural biomass. The secondary biomass produced by the primary animal husbandry includes animal stock as well as the main and by-products of the production processes. However, from the biomass mentioned above only the by-products (manure) can be considered for energy utilisation.

Biomass production of animal husbandry is basically determined by productive capacity that is the measure of the animal stock (Table 2).

Table 2: Estimated livestock in the micro-region

Denomination	*Pig stock, heads*	*Cattle stock, heads*	*Hens, cocks and chickens, heads*	*Other poulty stock, heads*	*Sheep stock, heads*	*Horse stock, heads*	*Total livestock, heads*
Hódmezővásárhely	*43355*	*12730*	*72149*	*115337*	*8691*	*584*	*252847*
Mártély	*1558*	*146*	*4686*	*16125*	*1517*	*28*	*24061*
Mindszent	*6242*	*1555*	*64704*	*7197*	*677*	*101*	*80475*
Székkutas	*14939*	*1624*	*12162*	*2972*	*2058*	*229*	*33984*
Hódmezővásárhely micro-region	***66094***	***16055***	***153701***	***141630***	***12944***	***942***	***391367***

Source: Own calculations based on data from General Agricultural Census (ÁMÖ) 2000.

Using the stock data and the production parameters we can estimate the amount of the annually produced animal products. Accordingly – based on the specific manure yields – the amount of organic manure produced as secondary or by-product in animal husbandry can be also estimated.

The amount of biomass produced and generated in animal husbandry is summed up in Table 3 by species and products.

Based on the work of Barna et al. (2007) we consider five types of products when determining the amount of the tertiary biomass potential: solid communal waste (53% of the amount collected by the service providers is biologically degradable so that is a part of the biomass potential of the micro-region); communal sewage (slurry generated in wastewater treatment plants); green waste from public areas (grass, wood chippings, foliage), animal originated waste (60-100% of the animal originated waste in the micro-region and also in the region is collected, neutralised and processed selectively by the ATEV Zrt. (ATEV Co., Ltd.). Out of their products the compost and the biogas basic material can be regarded relevant from biomass point of view) and food originated waste.

According to the data of Table 3 the total biomass supply of the micro-region adds up to 1.2 million tons, out of which the recyclable (regenerating, reproducible) biomass amount is approximately 800.000 ton/year.

Table 3: Biomass potential in the Hódmezővásárhely micro-region

Primary production	tons	Secondary production	Livestock unit, head	tons	Tertiary production*	tons
Cereals	152588,5	Cattle stock	12843,6	6421,8	Solid communal waste	7654,2
Of which: wheat	61383,2	Pig stock	7534,7	3767,4	Fluid communal waste	2839,0
maize	71613,7	Sheep stock	924,2	462,1	Public green waste	1500,0
Oil crops	9412,1	Horse stock	753,6	376,8	Waste of animal origin	37000,0
Root and tuber crops	22404,9	Poultry stock	1747,8	873,9	Food waste	54,2
Pulses (peas)	1278,8	Total livestock	23804,0	11902,0		
Forage plants	42200,9	Animal products	–	67392,0		
Of which: silage maize	31970,4	Cattle breeding	–	48800,0		
lucerne	10230,5	Milk	–	46500,0		
Grass (hay)	30000	Cattle for slaughter	–	2300,0		
Reed, fishpond (reed)	700	Pigbreeding (pig for slaughter)	–	13892,0		
Forest (annual increment)	6860	Poultry breeding	–	4500,0		
Secondary products	171849	Egg	–	795,0		
Cereals (straw)	56683	Poultry for slaughter	–	3705,0		
Maize (stalk, cob)	65251	Sheep breeding (lamb for slaughter)	–	200,0		
Sunflower (stem, head)	24570	Secondary product (manure)	–	244137,0		
Rape seed (straw-stalk)	2455					
Peas (pea straw)	1280					
Sugar beet (leaf and crown)	19335					
Orchard (trimmings, loppings)	1625					
Vineyard (trimmings, green waste, marc)	650					
Subtotal	***437294,2***	***Total***	***23804,0***	***323431,0***	***Total***	***49047,4***
Total stock of forest	406980					
Total	***844274,2***					

Source: Own calculations, *Barna et al., 2007

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ENERGY COST REDUCTION OF FIELD IRRIGATION

REDUCEREA COSTULUI ENERGIEI IN IRIGATIA IN CAMP

D. FODOR*

With the growing of the price of energy sources the cost of field irrigation increased considerably in the last few decades. Energy costs are basicaly detemined by the selected energy source.In my examinations I determined the specific energy costs of one of the most up-to-date irrgation techniques, the multipillar travelling irrigation equipment, both in diesel and in electric drive.In my experiments I examined the specific enegy consumption of the linear move irrigation equipment. I obtained my conclusions by processing data from the repeated series of measurements. The results of the examinations prove clearly that significant energy cost saving can be achieved in electric drive.

INTRODUCTION

With the growing of the price of energy sources the cost of field irrigation increased considerably in the last few decades. Urgent tasks of environment protection has stimulated both the constructors and the users of irrigation equipment to plan energy saving and environment friendly irrigation techniques.

In the period after the energy crisis the intensive examination of energy consumption began in order to carry out research to solve economic and environmental problems.

Due to the energy crisis and the environmental pollution a fundamental change can be seen in the approach to the field of irrigation. The first publications on the issue began in the USA. A scientific work called the 'Energy Inputs to Irrigation' by Batty et al. published in the USA gives a comprehensive insight to contemporary energy consumption. The authors say that basically the energy consumption of various irrigation systems range on a large scale. From an energy point of view, it is most advisable to use an energy system which needs little specific energy. Knowing the energy consumption of the various irrigation methods it will

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be possible to select the less energy demanding one from all the technologies for the same purpose.

Numerous researchers (Gilley, 1980; Larson, 1978; Longenbaugh, 1981) have dealt with the possibilities of lowering the energy consumption of irrigation equipment. They found that irrigation equipment use energy in two domains: in transporting water and increasing water pressure, and in transferring irrigation equipment.

Batty (1975) and Gilley et al. (1977) similarly solve the problem of reaching the necessary pressure for a given water covering. To determine the possibilities of reducing the energy demand Gilley (1983) introduced PES (Potential Energy Savings) and gave the method for calculation as well. Longenbaugh (1981) carried out detailed examinations into the effect of the potential of the pump unit on the energy consumption. Both in the case of electric and internal combustion drive engines he determined the maximum values of potential that can be reached, that is 72-76% and 22-26% respectively.

Szász (1981) gave a full description of the relation between the pump and the pipe having an effect on energy consumption. He found that energy consumption is largely affected by the situation of the workpoint. Füzy (1978), Szász (1981) and Jánosi (1997) examined the connections of the energy demand and the amount of water transported. They claim that the least energy waste can be achieved with variable revolution electric drive system.

Lyle and Bordovsky (1979), Rawlings (1974), and from the Hungarian researchers, Lelkes et al. (1988) dealt with the issue of the energy consumption of up-to-date self-propelled irrigation equipment (linear-move and center-pivot). Marjai et al. (1989) of the Irrigation Research Institute in Szarvas have developed a multi-pillar self-propelled irrigation equipment called Kőrös 2000. The equipment brings water to the surface of the soil with the help of a plastic hose. Ágoston et al. (1985) carried out research comparing the energy consumption of the various irrigation systems. They say that the energy demand of the various irrigation systems is significantly different, the energy demand in declining order is hose reel, multi-pillar, surface and dropping (micro) irrigation.

MATERIAL AND METHOD

To obtain practical experience for developing energy saving, environment friendly field irrigation technologies I carried out research into the conversion of multi-pillar self propelled equipment using different kinds of fuels in the territory of the State Stud Farm of Mezőhegyes.

I carried out my examinations in the territory of the State Stud Farm of Mezőhegyes with the support of the State Stud Farm, the Irrigation Research Institute and the South Hungarian Electricity Board.

Figure 1 : The Bauer Linestar 168 LL irrigation equipment

With the help of the expediently formed measuring points I measured the following characteristics:

- way (m)
- period of duty (s)
- volume of water flowed out (m^3)
- total energy consumption of the equipment (kWh)
- energy consumption of the carriage (kWh)
- fuel consumption (kg/h)

- With numerical calculation I determined the following: velocity (m/h)
- energy consumption of the pump (kWh)
- specific energy consumption of the irrigation equipment (kWh/m^3)
- water covering (mm)
- specific fuel consumption (kg/m^3)

A measured the characteristics repeatedly, with different velocities and different fuels. A put down the results of the measuring in a report.

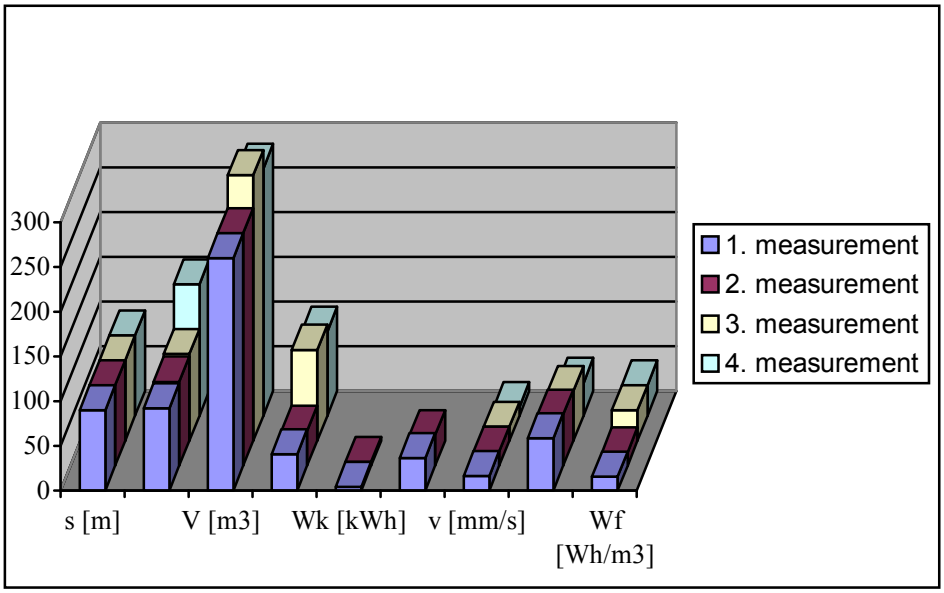

Figure 2: Exploitation parameters

I examined the following connections with statistical data processing:

- the effect of the irrigated water volume on the total energy consumption
- the effect of the irrigated water volume on the energy consumption of the carriage
- the effect of velocity on the energy consumption of the carriage
- the effect of velocity on the total energy consumption
- the effect of velocity on the rate of the total energy consumption and the energy consumption of the carriage
- the effect of velocity on the specific energy consumption
- the effect of velocity on the water covering

1. RESULTS

I also examined the specific energy consumption with various kinds of fuels. My main findings based on the measuring are:

With various velocities, I determined the connection between the amount of the irrigated water and the total energy consumption. I found, that the specific energy consumption of a diesel propelled engine is more than twice as much as that of an electric engine.

I determined the energy consumption of the carriage depending on the irrigated water. I found, that the quantity of water does not affect the energy consumption of the carriage. I found no connection between the velocity and the energy consumption of the carriage. The latter depends on the length of way, but does not depend on the velocity.

The total energy consumption on a given way is decreasing, depending on the velocity.

I found, that the ratio of the energy consumption of the carriage and the total energy consumption depends on the velocity, and is growing with the growth of the velocity.

I found, that the specific energy consumption is increasing with the increase of the velocity. Its average value in diesel engines is 0.371 kWh/m^3, while it is 0.154 kWh/m^3 in electric engines. Energy Costs are: 8,15 Ft/m^3 and 2,77 Ft/ m^3 respectively.

I determined the water covering values depending on the velocity. I made a function from the figures. I found, that the water covering is hyperbolically decreasing with the decrease of the velocity.

Table 1: Specific energy consumption

Specific energy consumption [kWh/m^3]						
No.of measurm.	Electric			Diesel		
	1.	2.	Mean	1.	2.	Mean
1.	0,1577	0,1500	0,15385	0,3428	0,3410	0,34190
2.	0,1577	0,1628	0,16025	0,4133	0,3948	0,40405
3.	0,1617	0,1576	0,15965	0,4188	0,3690	0,39390
4.	0,1409	0,0000	0,14090	0,3445	0,0000	0,34450
Means			0,15366			0,37108
Energy Costs:	2,77 Ft/m^3				8,15 Ft/m^3	

CONCLUSIONS

Environmental and economic interests are not necessarily in contradiction. Production technologies have to be developed to an environment friendly direction. Electricity makes it possible to use alternative energy sources by photo energy conversion. Developing low pressure systems using electricity from renewing energy sources can be the direction of development. From an energy point of view, flowing out the largest possible amount of water is beneficial.

Energy cost savings and environment friendly operation can be achieved by converting the existing diesel engines. I suggest taking into consideration the above results when planning new equipment. My research establish an electrification program making it possible to use alternative energy sources.

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EXEMPLARY FARMS FOR VEGETABLE GROWING IN BULGARIA

FERME LEGUMICOLE EXEMPLARE IN BULGARIA

P. PASKALEV*, NELLY BENCHEVA*

The article offers exemplary models of family owned farms for vegetable growing with a corresponding estimation of their return on investment, income potential and efficiency. They can serve as a prototype of contemporary family owned farm for vegetable growing. The income they generate is sufficient for the statistically average Bulgraian family, provided that all of its members /3 to 4/ are occupied with the farm. The existing main problem is the necessity of initial investment, which usually requires low percent bank crediting.

***Key words**: farms, model, capital, costs, income*

INTRODUCTION

The transition to market economy and the restoration of land ownership create new economic realtions in agriculture. Private ownership and market liberalization create unlimited opportunities for looking for alternative solutions in production. The only required condition for the producers is the effective utilization of the limited production resources – land, labor, capital.

Vegetable growing is characterized with a number of cultures and production directions. This allows for numerous types production structuring depending on the market infrastructure, the interests and the possibilities of the producer. Together with the economic factors, there is an influence from a number of biological, technological end technical factors and production conditions. To these are related the biological bearance to each other of the vegetable cultures, their correct rotation, the choice of the most favorable crop-rotations, the fertilizing systems and weed defences applied, the existing diseases and pests, the rational utilization of unified agricultural technique and the available labor force. That is why the

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effectiveness in contemporary production requires an optimal combination of professional experience, economic knowledge and management skills.

The main goal of this article is to suggest exemplary models for family owned farms of vegetable growing with an estimation of their possibilities for return on investment, income potential and effectiveness.

The article analyzes and suggests 8 modls of vegetable growing farms with cultivated land from 10 to 50 da and with different structures of the grown cultures. The article pays attention to a diversity of existing factors and production conditions. Thus, it tries to offer numerous suggestions that can be of help to the private farmers in their striving to create effective companies.

MODELS OF VEGETABLE FARMS

The size of these model farms is not chosen by chance. Previous researches prove that small farms with an area of 10 da cannot provide an all year round living to its owners and can only exist as a means of additional income /1,2/. On the other hand, the historic reference shows that up to 2nd World War the farms with a size of 10 to 50 da constitute half /49.7%/ of the agricultural farms in the country, with an average size of 28.5 da /3/. When opposing available land to the number of heirs in our days, an average size of 20 da per family is received. This allows us to reckon that the biggest share of the agricultural farms will be these with a land size between 10 and 50 da.

The main methodological specifics in creating these models of vegetable growing farms are the following:

Production structure is based on typical sorts and technologies for vegetable growing.

Mainly vegetable crop-rotations in which optimal utilization of land resources with culture rotations are used; these cultures are with different vegetation periods and production directions.

The cultivated land is either totally private, totally hired or in different ratios between these two.

Production mechanization is mainly tractors, type 9kN /30-50 horse powers/ with the corresponding arrangement of owned work machines and outsourced work machines.

The labor resource requirements are satisfied by the owners and temporarily by hired labor based on the wok load schedules.

Constant and variable production costs exist.

The financial and the economic conditions of production are determined by the size of the owned capital , the size of the existing bank credits and interests, the rent, the insurance and taxes, the prices of the output and the utilized resources, the legal structure.

Farmer income includes labor remuneration and profit in the specific circumstances and it reflects the real participation of the owners in the formation of the economic results of the farm.

The suggested models of vegetable growing farms have the following production structure:

Model 1, Vegetable Farm of 15 da

Cultures and Types	Area, da	Output, t
Tomatoes	5	22,5
Late Potatoes	5	12,5
Garlic	3	2,7
Vegetables, Marrows	2	6
Green Peas	2	1,2
Total	17	44,9

Model 2, Vegetable Farm of 20 da

Cultures and Types	Area, da	Output, t
Potatoes -early	3	4,5
Cabbage	2	2
Water melons	10	30
Musk melons	5	7,5
Carrots -II k.	3	7,5
Cucumbers	2	3
Total	25	54,5

Model 2, Vegetable Farm of 20 da

Cultures and Types	Area, da	Output, t
Potatoes -early	3	4,5
Cabbage	2	2
Water melons	10	30
Musk melons	5	7,5
Carrots -II k.	3	7,5
Cucumbers	2	3
Total	25	54,5

Model 3, Vegetable Farm of 25 da

Cultures and Types	Area, da	Output, t
Red Pepper	10	16
Eggplant	5	20
Garlic	5	4,5
Cabbage	5	10
Cauliflower	5	6
Total	30	56,5
Coefficient of land usage		1,2

Model 4, Vegetable Farm of 30 da

Cultures and Types	Area, da	Output, t
Green Pepper	10	30
Onion	10	20
Wheat	10	4
Total:	30	54
Coefficient of land usage		1

Model 5, Vegetable Farm of 35 da

Cultures and Types	Area, da	Output, t
Potatoes - early	10	15
Onion	10	20
Spinach	5	4
Green Pea	10	4
Carrots - 2k.	10	25
Cabbage -1 k.	10	35
Cucumbers	5	7,5
Total	60	110,5
Coefficient of land usage		1,71

Model 6, Vegetable Farm of 40 da

Cultures and Types	Area, da	Output, t
Tomatoes	20	90
green Pepper	10	30
Potatoes	10	15
Cabbage.	10	35
Total	50	170
Coefficient of land usage		1,25

Model 7, Vegetable Farm of 45 da

Cultures and Types	Area, da	Output, t
Tomatoes	15	60
Potatoes Late	15	27
Green Peas - 1 k.	15	7,5
Green Peas - 2 k.	15	6
Total	60	100,5
Coefficient of land usage		1,33

Model 8, Vegetable Farm of 50 da

Cultures and Types	Area, da	Output, t
Onion	20	40
Green peas	20	8
Watermelons	10	30
Total	50	78
Coefficient of land usage		1

The expected economic results and the level of effectiveness are determined to a considerable extent by the size and the structure of the production resources, which form the value of the fixed, and the variable costs and incomes of the farms.

The absolute size of planned income varies in broad limits (table 1). The smallest farms /with sizes of 15 to 20 da/, these are correspondingly 32.8 thousands of BGN and 30.2 thousands of BGN. The relative incomes per unit of land are almost equal – about 1.2 to 1.9 thousands of BGL per 1 da of crop-rotation area.

Economic results of the model farms

Table 1

Indicators, thousands of BGN	Area Size in the model Farms, da							
	15	20	25	30	35	40	45	50
Income	32,8	30,2	47,9	49,7	84,6	75,5	59,4	72,4
Variable Costs	12,6	11,8	16,4	15,3	23,6	22,3	27,1	21,4
Fixed Costs	9,2	8,7	12,4	19	32,5	28,9	14,6	29,2
All Costs	21,8	20,5	28,8	34,3	56,1	51,2	41,7	50,6
Return On Investment	11	9,7	19,1	15,4	28,5	24,3	17,7	21,8
Income of 1 person /regular employee/	5,5	4,9	6,4	5,1	9,5	3,5	8,9	21,8
Yearly number of days per person	210	180	218	228	242	210	217	214
Income per 1 person per day /BGN/day/	26	27	29	22	39	17	41	102

The analysis on the effectiveness and on the return on investment in the model farms reflect the specific combination of production factors and the degree to which they are used /table 2/. For this purpose, a system of indicators which characterize income potential and profitability of production is applied.

Effectiveness and return on investment in the model farms

Table 2

Indicators	Area size in the model farms							
	15	20	25	30	35	40	45	50
Income Coefficient	1.5	1.6	1.7	1.5	1.5	1.5	1.4	1
Profitability,%	50.4	47.3	66.3	44.9	50.8	47.5	42.4	43
Net Present Value,	-19.9	-82.0	32.8	33.8	46.3	59.1	4.8	139
Inner Rate of Return,%	-1.4	-40.3	51.1	62.9	49.1	70.5	24.0	410
Profitability of Capital,%	9.9	6.0	15.1	16.3	14.9	17.1	12.4	511
Buyback Period, years	10.1	16.7	6.6	6.1	6.7	5.9	8.1	1.9

Vegetable growing is traditionally a high income and high return on investment sector.

In spite of the differences in the production structure, the income coefficient is relatively steady around the value of 1.5, i.e. – the investment allows for 1.5 higher incomes. The profitability norm shows the high extent of return on production expenses. Its average size of 45-50% is a serious argument in favor of developing vegetable growing.

The investment evaluation of the models is based on net present value, inner norm of return on investment and the term of buying back the invested capital. Discounting the cash flows and comparing them to the size of the necessary investments reveals serious differences in the model farms. In two of them /1 and 2/ future cash flows cannot guarantee a minimum return on investment and the net present value is negative, while for model 7 it is highly insufficient in determining this model as effective. The level neither of the inner nor of return on investment outlines two groups within

the models. The first encompasses the already pointed out models, while the second one includes the remaining 5 models, all with a high inner norm of return on investment.

A serious exception again is model 8 for a farm of 50 da due to the high income, achieved with a relatively low investment. The same applies to the norm of profitability of capital – 51.1%, which guarantees its buy back for less than 2 years. The model is also indicative of the high opportunities, which vegetable growing can offer even without owning the land and or the agricultural machines.

CONCLUSION

The main conclusion from the shown analyses of the model farms for up to 50 da is that they can serve as a prototype *for a contemporary family farm for vegetable growing*. The incomes they generate are sufficient for the average Bulgarian family, provided that all of its members /3 to 4/ are occupied with the farm. The problem lies within the relatively high necessity of initial investment. A prerequisite for development and enlargement of these farms is the use of bank loans, but the high interest rates drive away the producers. Accepting this risk through not insuring the production is a way to get around it but it is uncertain. For the time being, it is still most useful to start without own land, and with hired labor, which requires not a big liquid capital, and allows for a pretty good income to be generated.

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STUDY REGARDING THE EVOLUTION OF THE FORESTRY FUND SURFACE IN CLUJ COUNTY FROM THE POINT OF VIEW OF PROPERTY

STUDIU PRIVIND EVOLUȚIA SUPRAFEȚEI DE FOND FORESTIER DIN JUDEȚUL CLUJ SUB ASPECTUL PROPRIETĂȚII

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The aim of the paper is to analyze the effects of the reconstruction laws of the right to property on afforested areas, laws that appeared after the communist regime was overthrown in Romania (December 1989). In brief, it presents the situation of forests on categories of proprietors, on the country level, with a special emphasis on the Forestry District of Cluj- Napoca, as a result of applying each landed law, as well as the prognosis regarding the future evolution of this situation.

***Key words**:* private property, landed laws, right to property

INTRODUCTION

At present, the surface of the Romanian Forestry Fund is of 6.320 thousand hectares, representing an average forestation percentage of 27,0%, close to the European average (of 29,3%), but very much below the normal values for this area (of about 34 -40%).

Throughout time, the climate, natural features and soil type have been extremely favorable to the development of forestry vegetation. This determined, at the beginning of the first millennium of our era, according to the existing data (Milescu, 2002), about 60-70% of the entire surface of the country to be covered with forests.

The forestry environment had a plentiful contribution to the formation, protection and development of the Romanian people, with major positive influences from the point of view of robustness and even spirituality. While the society evolved, there was an ever-greater need for timber and agricultural areas, this the surface of the forestry fund decreased systematically until 1948, when all forests became state property.

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Between 1948 and 1990 there were still reductions in the forest surfaces- especially where afforested meadows were concerned (covering about 300.000 hectares), by applying studies aimed at transforming these into meadows.

After 1990, one of the causes of deforestation and illegal tree cutting was the fragmentation of the forestry fund as an effect of the reconstruction of the right to property over forestry terrains.

MATERIAL AND METHOD

So as to have a general view upon the evolution of the forestry fund surfaces in Cluj County on owner categories (judicial persons, cult units, natural persons etc) we used the statistic data from the Forestry District of Cluj- Napoca and at the cadastre units in the county.

These were centralized, interpreted and compared to the situation on a national level, using the data taken from the Resort Ministry statistics and those of the sub-units.

RESULTS AND DISCUSSIONS

In 1990, the entire national forestry fund was state property, as an effect of the nationalization in 1948.

As a result of the application of the reconstitution of the landed property right laws (Law No.18/1991 and Law No.1/2000), on 31.12.2004 (table 1.) the forestry fund, public state property was of 4.227,7 thousand hectares, representing 66,3 % of the national forestry fund. On basis of Law No. 18/1991 355,10 thousand hectares were returned by the state to their owners (5,6%) and 1.723,60 thousand hectares were returned on basis of Law No. 1/2000.

Subsequently, by applying Law 247/2005, this reconstitution process was accelerated, in October 2006 the returned surface being 2.226,61 thousand hectares; the process is currently going on.

The big number of proprietors is to be remarked (828.138), thus an average of about 2,68 hectares/owner. From the above mentioned laws, Law 18/1991 brought most prejudice to the forestry fund by limiting the surface to be reconstituted to 1,0 hectares (for natural persons) and, to be remarked, the reconstitution was done without respecting the initial placement.

Table 1.

Structure of the national forestry fund on categories of owners, between 2000-2004, in Romania

Year	TOTAL	Public property				Private property	
		State		Administrative-territorial units			
	Thousands of hectares	Thousands of hectares	%	Thousands of hectares	%	Thousands of hectares	%
2000	6366,7	5873,3	92,2	137,7	2,2	355,7	5,6
2001	6366,7	5483,5	86,1	384,0	6,0	499,2	7,9
2002	6373,5	4694,9	73,7	702,5	11,0	976,1	15,3
2003	6384,7	4443,7	69,6	756,7	11,9	1184,3	18,5
2004	6382,2	4127,7	66,3	806,1	12,6	1348,4	21,1

Thus, 600 000 persons regained their statute of owners, and the surface concerned is of only 359.573 hectares, this having major effects upon the fragmentation of the forestry fund (since an owner will only be given back 0,60 hectares on average). In many cases, this small surface was fragmented in many places, because of the different descending lines.

The situation was almost similar in the case of the Forestry Direction Cluj, where, in 1989, the entire forestry fund surface of 153.501 hectares is property of the Romanian State (table 2.). By applying the landed laws, the surface owned by the state was reduced to 90.000 ha, with the process still continuing.

Table 2.

The situation of the reconstitution of the right to property in the case of the Forestry District Cluj, between 1989-2006

Year	Forestry fund surface				
	total	State property	Administrative units	Judicial persons (associations, cult units, schools)	Natural persons
0	1	2	3	4	5
1989	153501	153501	0	0	0
1995	153499	144703	0	0	8581
2000	153502	144053	178	11	9260
2005	153.497	93.916	31.285	9.281	19.015
2006	153.497	90.000	32.660	11.482	19.355

If the local administrative units own relatively significant surfaces (tens and even hundreds of hectares), natural persons own much more limited surfaces of up to one hectare (the average being of about 0,72 ha per owner).

In the category of judicial persons, other than the local communities, we included owner associations, cult units (Orthodox, Greek- Catholic, Roman- Catholic churches), schools, military units, research centers etc.

CONCLUSIONS

As a result of the presented data, of the findings regarding the effects of the application of the law regarding forest ownership reconstruction, the following may be concluded:

There were three legislative steps which determined and influenced the type of property over forested areas: Law 18/1991, Law 1/2000 and Law 247/2005. Of these, Law 18/1991 led to fragmentation of properties, by limiting the returned surface to 1,0 hectare and by failing to respect the principle of reconstitution in the former places. Furthermore, Law 1/2000 did not have the expected effects because of maintaining a return limit of a maximum of 30 hectares for natural and judicial persons, regardless of the surface they had previously owned. Thus, only 178 hectares were given back from the administrative surface of the Forestry District of Cluj-Napoca to the local administrative units, 11 hectares to cult units and 679 hectares to natural persons. Law 247/2005 was the first to order the reconstitution of the right to property without any surface limitation, on the previous spots. It should be remarked that all property vests based on the previous laws were respected and the state was to compensate for the cases in which it could not vest the owners in nature. Thus, in the year 2006 (in September), 41,37% of the surface of the forestry fund is found in the ownership of natural persons, administrative units or other cult units. The process is still going on and it is expected that the percentage be around 65 when it has ended. It is of utmost importance that a consistent set of laws be issued, that would support the correct administration of these surfaces with the purpose of durable administration and assuring the forest's continuity.

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THE ANALYSIS OF THE SUITABILITY FOR THE FOUNDATION OF PRIVATE FOREST STRUCTURES TOWARDS DURABLE ECOSYSTEM ADMINISTRATION

ANALIZA OPORTUNITĂȚII INFIINȚĂRII UNOR STRUCTURI SILVICE PRIVATE IN SCOPUL GESTIONĂRII DURABILE A ECOSISTEMELOR

MARIOARA ILEA*, L. HOLONEC*

The aim of this paper is to analyze the suitability of setting up private forest structures with a view to durable ecosystem administration. We used the SWOT technique as analysis method in order to highlight the role of durable administration criteria to be applied in order to obtain the desired effect and at the same time, of a series of quantitative and qualitative indicators which would reveal the durability of the administration. The case study was carried out in Cluj County.

***Key words**: private forest structures, durable ecosystem administration, SWOT analysis*

INTRODUCTION

Romania stands out as a country with a rich and varied forestry fund, 27% of its territory being covered with forests, which constitute themselves in diverse systems, and the forestry fund represents a true natural patrimony, which needs to be conserved.

Durable development represents a desiderate of the current world economy, set against the tendency towards globalization.

The principles of durable administration also stand out from the first definition given to the concept in the H1 resolution at the Helsinki Conference: „durable administration consists in administering and using forests and terrains covered in forests in such a way and with such density that their biologic activity, their productivity, regeneration capacity, vitality and their capacity to satisfy pertinent present and future ecologic, economic and social functions be maintained, on a local, national and world level,

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without causing any prejudice to other ecosystems." As such, durable forest administration encompasses all principles of arrangement, preserving the forest patrimony and ensuring a constant production in time.As part of the forestry strategies, a set of durable administration criteria were established, which would be applied in order to obtain the desired effect and a series of indicators that should reveal the durability of the administration.

These indicators can be grouped into two major categories:

- Quantitative indicators:
  - The forestation percentage,
  - Forest surface/ inhabitant,
  - Timber mass volume/ foot,
  - Possibility, accessibility, quantity of timber put on the market
  - Quantity of accessory products offered to the industry
  - Turnover
  - Public receipt capacity etc.
- Qualitative indicators
  - Health and vitality of forest ecosystems,
  - Quality of enhanced factors through forest eco-protection,
  - Impact of intensive treatment,
  - Origin and provenience of brushes,
  - Occurrence of pests/ damaging factors,
  - Fertility of forestry soil,
  - Indicators of biodiversity (the presence of natural or non- natural secular virgin forests, the proportion of the mixed brushes, the volume of dead wood in the forest, the degree of natural regeneration, the proportion of indigenous species, as well as of exotic species introduced, rare species or species on the verge of extinction),
  - Preservation of valuable genetic forest resources, etc.

By carefully analyzing the categories of indicators for durable management which were presented, we can observe the differentiation of the two concepts: of conservation (which find their expression through qualitative indicators above all) and of development (expressed through quantitative indicators); both concepts are outlined by the principle of durable evolution;

MATERIAL AND METHOD

This work sets out to analyze the necessity of setting up private forest structures with a view to the durable management of the eco-systems.

We used the SWOT technique as a method for analysis, and by it we aimed at underlining the role of durable management indicators.

Thus, in Cluj County, we tried to identify the strong and weak points, the opportunities and threats relating to the current situation of the existing forestry fund. The analyzed data base was taken from the statistic situations of the Forestry Department of Cluj- Napoca.

RESULTS AND DISCUSSIONS

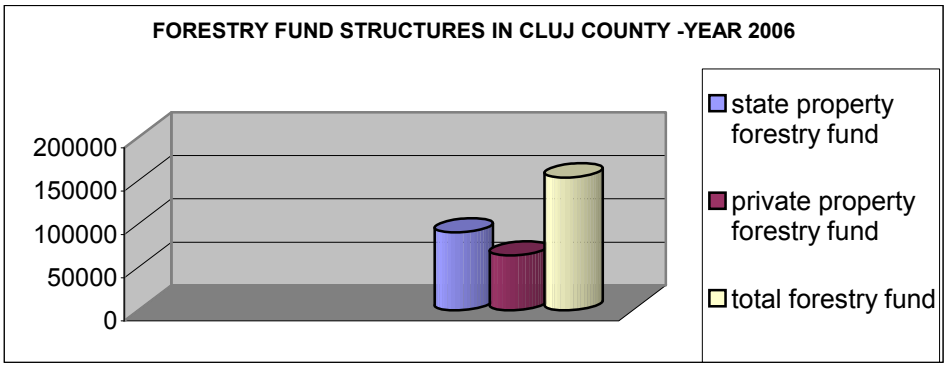
Strong points	**Weak points**
•Forestry- main component of the national economy • The existence of a management system based on the durable development principle •Existence of protected areas- The Apuseni National Park • Genetic patrimony (reservations, seeds, plantations) • Research system- competitive education system • Existence of mountainous population • Panorama, biodiversity • Traditions, crafts, arts • Lack of polluting agents • Natural products • Waters • Historical and cultural monuments • Underground riches • Forestry school	• Non- uniform distribution in the county and on the main forms of relief • Lack of uniformity in the production fund per age groups • Low afforestation coefficient 26,2% • Reduced density of the road network (6,5 m / ha) • Reconstructing the propriety without any specific structures • Capitalization of standing trees • Lack of infrastructure at the storage and administration locations • Fragmentation of property • Restrictive pedo-climatic conditions in the hilly zones and in the mountainous region (peat bogs) • Ageing of population with effects upon work force assurance • Lack of mechanization and specific technologies • Weak capitalization of all forest products • Lack of research financing • Deforestation of afforested

	meadows (about 25.000 ha in the whole of the county)
Opportunities • Allineated, harmonious legislative and institutional frame • Expansion of terrains covered in forests through the ecologic reconstruction of terrains presenting degradation tendencies • The existence of a system of statistic indicators which needs to be implemented • International cooperation • Bio products- local product certification • Development of rural tourism (forest-tourism) • Capitalization of local traditions • Conservation of valuable (animal and vegetative) genetic resources • Conservation of biodiversity and ensuring the continuity of durable management • Enhancing the role of the local community, Agenda 2000 • Accessing financing programs	**Threats** • The de-structuring of the landed fund, a consequence of the propriety right reconstruction • The reduction of afforested areas from The Transylvanian Plateau (Ceanu Mare, Mociu) • Illegal deforestation with the direct effect of uprooting and breaking of trees as a result of wind and snow. • The reduction of funds allotted to forestry research and education • The lack of specific legislation (Law of the Mountain)

CONCLUSIONS

The fragmentation of property with direct effects on the forest administration, the failure to perform the deforestation according to the forestry plan, the failure to assure continuity through afforestation, to enforce an appropriate guarding system, these all require the necessity for forest owners to join into partnership in order to set up private forestry structures of the same kind as the Forestry Department.In Cluj county, as a result of applying the laws of the landed fund, the surface of the forestry

fund in 2006 (a fund of 153.497 ha) is structured in the following way: 58,64 % (90.000 ha) state property, respectively 41,36 %(63.497 ha) private property, of which 30% (19.355 ha) property of natural persons.



The analysis of this data clearly shows the necessity of private owners to go into partnership so as to form private forestry systems.

In the county there are two private structures of the Forestry Department type:

- The Forestry District Mărgău, which administers a surface of 3500 ha, the property of Mărgău Village;
- The Forestry District Valea Ierii, which administers a surface of 8000 ha, the property of 16 city halls, member of the Association of owners of private forests Soimul-Aries;
- The association of the city halls has been made precisely with the aim of founding a forestry structure of its own that would maintain and manage the forests of private and public ownership.

This kind of association in a private structure would allow a better conservation of the biodiversity and would assure the continuity of a durable maintenance, accessibility to development programs, assurance of a logistic base and the support of local authorities. Experience and the obtained results in the activity have by these two private structures underlined their roles in the long-lasting maintenance of ecosystems at the level of the county.

By making an analysis of the aforementioned, it can be concluded that:

- The surface of the forestry fund from Cluj county is extremely fragmented, especially in the case of private individual owners (under 1.0ha/owner);

- Currently there are two forestry structures of their own that represent only 18% of the whole amount of re-ceded surfaces, very little compared to the neighbor counties and even with the others nationwide
- The difference of 82% from the private surfaces are some under guard contract or administered with the forestry units of the government, others expected to be given actual ownership, after the ending of some contracts with other private structures
- Starting from the fact that the state is, usually, the poorest administrator, the founding of as many forestry structures similar to the district is compulsory
- The necessity of starting such structures clearly results from the previously presented SWOT analysis;
- The main condition to be fulfilled in order to achieve this goal is to determine a great number of owners (judicial, but mostly natural persons) with a view to set up private forestry structures.

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MAINTAINING THE BUILDINGS AND LANDS THAT BELONG TO COMPANIES WITH A VIEW OF DIMINISHING THE IMPACT UPON THE ENVIRONMENT

ASPECTE PRIVIND AMENAJAREA CLĂDIRILOR ŞI TERENURILOR DEŢINUTE DE FIRME ÎN VEDEREA REDUCERII IMPACTULUI ASUPRA MEDIULUI

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The way lands and buildings are used has a strong impact upon the environment. The activities connected to constructions, maintenance, and landscape architecture may have a positive or negative effect upon the world; there are few circumstances when such activities are neutral. Unused buildings should not be neglected so that they become a ruin as they quickly are going to spoil the landscape. Buildings should be constantly used whenever possible. In case a company does not immediately need them, other ways of using them might be envisaged. Lots of the old industrial buildings may change into short term small business units. When the decision of selling a building has been taken then it should be sold as quickly as possible.

Key words: *buildings, environment, lands, company*

INTRODUCTION

The manner of exploiting lands and buildings has a powerful impact upon the environment. The activities connected to the building field, maintenance, and landscape architecture may both help and endanger the world; they seldom are neutral activities.

This work is going to analyze the way old buildings are maintained. Then we are going to exhibit the use of lands and external appearance before analyzing the new tendencies.

WHEN RENOVATION IS BETTER THAN CONSTRUCTING NEW BUILDINGS

In order to renovate an existent building one needs fewer resources than in case of demolishing and re-building them. Those buildings

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constructed before 1945 are frequently solid buildings, constructed at a human scale, and being more charming than the modern ones.

Although they have not been built in order to face nowadays modern services, older buildings may be adapted so as to exhibit a more interesting working environment. To renovate is never as simple as to build from foundations; nevertheless the proper and intelligent adaptation of old buildings may offer major advantages regarding the cost and the life style.
Certain British companies buy at present Georgian villas and transform them in offices. Accordingly the staff benefits from a tranquil and spaciously enough space, with a lot of verdure, a clean environment and enough parking places. Yet, such buildings are frequently far from transport stops, a fact that determines the increase of private cars use.

MAINTENANCE MATERIAL

In order to fight against rain, humidity, and destroying insects, people resort to a whole killing arsenal of substances that sometimes are exaggerated when compared with the gravity of the problem. This may be clearly noticed when examining the equipment of those from sanitation services, who are rather dressed for a walk on the moon than for killing beetles, a fact that intensifies the use of private cars.

In order to renovate an existent building, especially one of a certain epoch, we should have in view the use of second hand building materials. Such materials better adapts to the building, are recycled raw materials, and their aged aspect is often pleasant to the eye. An agency of architecture preservation should be contacted for the doors, gates, windows, rails, and other objects.

Don't throw away architectural objects: give them to an agency of architecture protection. By doing this you won't lose such valuable materials and moreover you'll receive money in their exchange.

Although you dislike rooms separation of the '50s, the offices of the '60s, the fireplaces of the '30s, and the doors of the '20s, all these things may be appreciated by someone else. Twenty years ago, one could frequently see Victorian bathrooms in England. Nowadays they are very expensive and in great demand.

The development and maintenance of the buildings should observe the ecological criteria.

Give a special attention to extracting the original windows with multiple sashes as well as to their replacement with flat windows. Although such a change may be done, the style of the building can be altered. Certain buildings belonging to the 20th century, especially those of the '30s are, at present, too modern for us in order to be able to appreciate their real architectural value.

In case the windows are solid enough, you better not change them for another decade and let the next generation of managers to estimate their esthetic value. One thing is sure: once they have been thrown away, such old characteristics can never be replaced. At the same time, useless modernizing costs more than simple maintenance.

The substances that preserve the wood as well as those that kill wood worms frequently contain toxins which are scarcely degradable, for which man lacks experience that accumulates in time and for which nature has no equivalent. One of the substances employed in order to prevent the appearance of fungi, penicillin, may cause liver cirrhosis while Lynden is a poisonous insecticide. More than 100,000 buildings in the Great Britain are yearly treated with deadly chemical substances.

Fungi cannot live in the wood whose humidity is below 20 %. In case there are fungi, it is more important to find out the cause than to treat the effect. That is by maintaining the wood dry, one can prevent fungi attack. Wood can be protected against humidity by checking out whether the building is healthy. At the same time, the building may be protected against humidity by applying a layer of varnish or bee wax.

Insects may live in relatively dry wood, though dryness and warmth in excess kill them. Make sure you don't fight against old infections. The signs of an active infection are the recent dust traces on the wood.

In order to prevent the appearance of insects, wood can be treated with solutions that contain borax, acetic acid and sodium bicarbonate. According to the studies done by a certain company that manufactures organic paints as well as solutions for wood treatment, hot air is better than chemical treatment as it does not damage the environment and guarantees total elimination. At the same time, the company manufactures a solution against insects that does not contain chemical fungi killers or insecticides. Its destroying effect is due to the pine ether oil.

One can also use synthetic insecticides that are less toxic for mammals. Yet, everything that attacks in sects, attack human beings as well

as the other forms of life. Such a thing should determine you to use toxic substances only under extreme circumstances.

Pay a special attention to the treatment of the space under the roof in order not to destroy the habitat of the bat. The European legislation of 1981 punishes bats killing, hurting or destroying or the destroying of their shelters. A single bat can eat thousands of flies and mosquitoes every summer night.

A lot of paints, varnishes and glue employ organic solvents. Such a thing may determine difficult breathing, eye irritation, etc. At the same time, certain paints contain titanium dioxide, a white pigment whose manufacturing determines a whole series of secondary unpleasant products (including heavy metals and chlorate hydrocarbons).These substances often reach the rivers having a negative effect upon the wild environment.

In Denmark, 90 % of the paint used in constructions is water based. ICI Paint Company gradually diminishes the use of organic solvents and intends to replace them, soon, with water based paints.

Wallpaper paste contains a fungi killer; other wallpapers that do not contain fungi killers are to be found.

Agglomerated panels and isolating foam in the walls' cavities may contain formic aldehyde that emanates a gas that is able to determine malfunctions of the nervous system and serious losses of memory at adults. Canada forbids isolating foam that contains formic aldehyde.

Paint solvents and diluents contain solvents and hydrocarbons. They quickly evaporate and produce ozone, at the level of the soil, which is extremely polluting.

People talk nowadays about "gentle chemistry". As an example, organic paints base upon natural raw materials, such as pine resin, flax seeds oil, chalk, rubber, and ether oils. Their remainders are made of compost and oxygen. Plants pigments fade in time, but people are going to see more and more powerful colors artificially obtained.

Try to avoid artificial materials without pores as often as possible. Natural products, such as wool, wood, and cotton have been used for thousands of years. At the same time, they are non-polluting and re-usable. Porous materials maintain humidity and allow air dissemination, a fact that determines air circulation inside the buildings.

The doors should be made of wood, not of wood panels that contain formic aldehyde. Floors should be covered by linoleum which is a product made of flax seeds oil and not of vinyl.

Natural materials are frequently more expensive than their artificial homologues, but last longer. That's why they harmlessly bio-decompose.

WHAT ABOUT BUILDINGS MAINTENANCE?

- Renovate old buildings rather than constructing new ones.
- Use second hand materials in case of renovations.
- Avoid useless modernizing in case this destroys enduring architectural characteristics.
- Check out what substances are used when executing maintenance works.
- Find out what those substances contain.
- Avoid the use of toxic substances whenever they can be replaced.
- Check out whether bats and birds have their nest in the building and protect their habitat.
- Use materials such as wood and wool and not their artificial homologues.

LAND APPEARANCE AND THA EXTERIOR OF THE BUILDINGS

Examine attentively the environment. Can you find old, broken shovels or rotten equipment at your work place? Can you see used paper all over the place? Are the windows well painted and varnished?

Apply a plan of land cleaning. Decide what to do in the future with the old shovels. Try to introduce a better program of cleaning the buildings.

Unused buildings shouldn't be neglected: they quickly become a spot in the landscape. Buildings should be used whenever possible. In case the company does not immediately need them, other ways of using them might be envisaged. Many of the old industrial buildings may be changed into small business centers for short term. Whenever a decision of selling a building has been taken, the selling should take place as soon as possible.

Decomposing relics of industry do not represent a positive or charming view; in fact they diminish the region's qualities. Although a long time may pass until decisional factors agree upon a certain plan and get the approval, try not to wait a decade, as quite often happens in case of certain buildings.

Demolish the useless sheet iron storehouses and cut the grass; plant trees and bushes. Encourage the staff to be proud of the area.

It is important to be sure that the equipment, the land, and the buildings are correctly maintained. This thing will determine the prevention of futile pollution and accidents.

Built 60 years before, Ford Company in Dagenham, extended over 700 acres, detained at first its own forge, a furnace and even its own electric power plant. During the time, a large part of the lands became a "thorn in the eye". During the last 15 years, Ford changed large surfaces of its lands into a park for wild animals and recreation.

At the beginning the company took care of cutting the grass, but they soon noticed that more time was needed in order to move the grass cutting machine to faraway places than to cut the grass. The suppliers even paid the company to put soil over the existent foundations. The company put fish in the lakes, set 300 birdcages and built wood shelters along the lakes in order to encourage seagulls to nest there. They planted 1,500 bushes and 2,000 trees. As a result of such activities, the region looks better, comfort increased and 57 species of birds have been noticed.

LAND USE

Offices and factories usually possess clean grassy grounds. Yet, shortly cut grass treated with pesticides and artificial fertilizers looks lifeless. A good-looking flower bed is sometimes placed in the center of the grassy ground, but, due to its insecticide treatment, its benefic effect upon the environment is diminished.

Bio-diversity is an important ecologic concept. It means that a green zone is more precious from an ecologic point of view in case it shelters plants and animals.

In the past, gardeners considered that berries and nettle are to be rejected. At present, people realize that such plants are important from an ecologic point of view and that a weed is only a plant that exists in an un-proper place. Here are several ideas to create a more interesting and varied landscape:

- Plant varied vegetation: grass, flowers, bushes, and trees. Add a pond. Each of these elements has its own important and attractive function.
- Let the grass grow high in order to give shelter to wild life. Owls need a high grass ground in order to hunt. Don't worry because of the clover

that grows in the grass; the mare varied it is the better. Try a variety of traditional grass that is to be cut only after wild flowers grew.

- Don't use toxic sprays. Chemicals kill not only unwanted insects but also harmless creatures and will lastly end in our food. Extract the roots manually; the staff may do this thing, at turns. You can draw a list of ecologic suppliers. The European Community has a black list and Great Britain a red list containing the pesticides that should be avoided.
- Think before using a poison. It may kill the owls and other useful birds.
- Plant bushes that attract wild life and offer shelter at a small height. Use plants that already exist in the area.
- Plant decorative bushes replacing usual fences and walls. Such bushes shelter about 65 species of birds beside 600 species of plants, hundred of insects and a lot of mammals, reptiles and amphibians. Wild bushes support wild life.
- Plant wide leaves trees that are specific to the region, such as oak-tree, birch trees, willows, apple-trees, and elm trees; give priority to the above-mentioned trees instead of pine species. Falling leaves trees specific to the area shelter a series of wild species as compared to those brought from other regions. Conifers have non-eatable seeds that do not favor wild nature. Don't plant trees that will grow too high and that will have to be cut down within the next decade. Hollow trees are important for a lot of species. Don't cut them because they look old and knotty.
- Leave some dead or decayed timber on the ground. It offers food and shelter for a lot of creatures.
- Plant brightly colored wild flowers in order to attract bees and butterflies. Arrange a pond. It will attract water beetles, frogs, and dragon lies. Make sure that frogs can enter and come out of the pond easily.
- Build a table for birds and put bread crumbs on it in order to attract birds.
- Let nettles grow: they are a shelter for 15 species of night butterflies and represent food for butterflies and lady birds. People don't get closer to nettles so they are a good habitat, but don't let them grow exaggeratedly.
- Plant blackberries as they are food for 40 species of butterflies and moths. They offer shelter to birds and their fruit are an important source of food for thrushes and blackbirds.

- Plant a vegetable garden and fruit trees. Use the harvest as such a thing attracts customers due to the fact that they become more interested in case they know the food comes from your own garden.
- Plant climbing plants that will offer shelter, food and a place to rest for wild beasts.
- Exterior window sashes give the building a welcoming air, especially in the urban environment. They also attract birds, butterflies, and bees. Yet, their maintenance may take some time.

Don't let gardening distract you from the company's problems. Choose those plants that grow without much work and attention in order to diminish the time necessary for their growing. Write on a panel:

WILD NATURE AREA

This green area is a natural habitat for wild nature. In order to take care of it you should not use chemical substances.

The panel will certify the visitors that there is a certain goal behind your slightly disorderly garden.

Within the mould plant at Swindom, the company arranged a picnic area for employees. Trees have also been planted and land hillocks have been raised in order to protect the neighboring houses against the noise and industrial landscape.

THE LANDS DETAINED BY THE COMPANY

The company may detain lands throughout the country or abroad. Under such circumstances, the lands detained should be analyzed with a view of finding out important habitats; besides they should also evaluate the way land can be used for the benefit of nature.

In case the company is placed near a habitat with wild creatures, such as a damp land, a river, an estuary or a coast, a research should be done in order to know what kind of beasts or fish live there. The research should be yearly repeated in order to notice the changes.

Even common areas may become a shelter for some odd or rare species, such a thing being discovered only by researching nature. Contacts with ecologists may determine the measures to be taken in order to help wild species to better grow or re-settle.

Certain lichens and ferns are pollution sensitive, and their presence or absence are good pollution indices. Don't hurry and scrape the lichens and moss that cover stones: consider them a proof of environmental purity.

In the green houses of the Durham University, the larvae of the red spiders are at present destroyed with the help of other predators instead of insecticides. The University reduced the using of chemical substances; on the grounds and in the woods detained by the University trees have been preserved and wild life has been protected.

CONTAMINATED GROUNDS

Certain grounds can be contaminated by the chemical substances spread during the previous years when environment has not been properly protected and hasn't been given too much attention. The companies that take care of environment should remove the previous contamination as soon as possible. The extension of contamination both in surface and depth should be professionally examined and the contaminated materials should be neutralized or taken to a rubbish pit.

As legislation becomes more severe, it is better to eliminate polluting materials immediately instead of waiting in order to do this: such a thing will become more and more difficult and the costs will be more important.

WHAT CAN BE DONE IN ORDER TO DIMINISH THE IMPACT UPON THE ENVIRONMENT?

The following list contains other methods of reducing the ecological impact of the new constructions:

- Development should begin immediately after archeological diggings. Area grounds are going to be financed.
- Constructing on a ground where no other buildings existed. Such a thing helps preserving green areas.
- In developing the area you should introduce any superfluous building of a good quality.
- Important buildings from a historic and architectural point of view should be preserved.
- Buildings should not bear ornaments or strident signs. The natural need of modernizing should be moderated by the care for environment. In an ugly area or in a lifeless region, a building should help improving the quality of neighboring area.

- The building should be situated in an area well provided with trains and means of transport in order to diminish at a minimum the need of using private cars.

- The appearance of the building should harmonize with the image of the area. It should also preserve natural elements, such as ponds or old trees.

- Trees should be planted as a protection screen against noise and badly looking deposits.
- Bushes and other types of vegetation will help bringing back wild life within the area. The building should include shelters for bats and owls.
- New industrial areas should contain their own de-polluting stations whenever necessary.
- Those buildings connected to shopping and recreation outside the town should be restricted due to their inaccessibility, loss of space in open air or traffic.
- The new building zones should include green areas in the open air and/or recreation grounds in the open air.

Many of the above mentioned ideas are not directly profitable for the company. Nevertheless, the next three reasons should be taken into consideration before beginning any activity of developing an area. They might have an important significance regarding the company's profit.

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CHANGES IN EMPLOYMENT CAPACITY OF THE RURAL AREAS IN THE EXAMPLE OF BÉKÉS COUNTY

STUDIU PRIVIND ANALIZA FORTEI DE MUNCA IN SPATIUL RURAL CU REFERIRE SPECIA LA JUDETUL BÉKÉS

J. PAPP*

The few months befoer joining the Europian Union were called „waiting for wonder" by the analysts. Our EU membership was regarded as the only, unsubstitutable alternative to gain prosperity for our country. It was three years ago; since then Hungary has been the member of the EU with full rights. The question is: has this „wonder" been realized? Is it what we expected? After analysing the facts and the data the author of this essay is seeking for the answer for this question: how did the employment capacity of Békés county change in the last few years? I am presenting the change in population, lining up the economical sectors, the result of the production, and change of the labour power both in number and quality.

INTRODUCTION

Since joining the EU (01 May 2004) no analysis has been carried out in Békés county to examine the employment capacity of the economy in the mirror of our EU membership.

This essay is aiming to show how the economical and social situation of the county have changed from the aspects of local and regional trends. The main object is the employment, I am examining what the joining gave to this country from this point of view.

During research work I examined documents, and analyzed the data of statisctical, employment and trade publications with the reference to Békés county, besides I studied the reports of local and regional statistics. I am writing about the geographical situation of the county, changes in its population, economical results, employment and the changes in the unemployment rata in the first part of the essay. In the second part I

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summarize the experiences of the research and make conclusions, give suggestions.

RESULTS

CHANGES IN POPULATION

Békés county is situated in the South-Eastern corner of Hungary, on the alluvial deposit of the rivers Körös and Maros. Its South-Eastern border is the Hungarian-Romanian border which is 140 kms long, besides it is bordering on Hajdú-Bihar and Jász-Nagykun-Szolnok counties on the North, and on Csongrád county on the West. Its territory is 631 km², its population was 393.000 persons in 2004 which is 6,1 % of the country's territory and 3,9 % of the country's population.

The population of the county has been decreasing constantly for the last 25 years. From 1980 to 2005 it decreased with 48.000 persons. The reduction is about three-fourth of Békéscsaba population, and much more than the number of inhabitants in Gyula or Orosháza.

On 1 January 2006 the population in this county was 385.847 persons, with 7153 persons less than two years earlier. Today 3,8% of the total population live here.

Regarding the natural reproduction the facts give us an account of reduction if we consider the data of the last three years. The change in population is demonstrated in Table1.

Table1 Reduction in population in Békés county between 2004 and 2006

Period	**First half of 2004**	**2004 total**	**First half of 2005**	**2005 total**	**First half of 2006**
Born alive	1498	3178	1599	3287	1546
Mortality	2951		2986		2883
Natural reproduction or reduction (-)	-1453		-1387		-1337

Source: KSH data

In the first half of 2006 there were 534 marriages altogether that with 10% less than in the same period of 2005- 1546 babies were born (535 boys, 1011 girls) with 3% less than in the first half of 2005.

THE PRODUCTIVITY OF THE COUNTY

In Békés county the bruttó home oroduct per capita (GDP) was 1.235,000Fts in 2004, which was the equivalent of 61% of the country average. Considering the economical productivity of the country we can state that it is constantly below the average. (Table2)

Table2 Changes in GDP in 2000 and 2004

Area	**GDP in thousand Fts**		**Backwardness comparing to the country average in %**		**Placing in the ranking list of the counties (regions)**	
	2000	**2004**	**2000**	**2004**	**2000**	**2004**
Bács-Kiskun county	870	1380	33.0	31.7	15.	15.
Békés county	**856**	**1235**	**34.1**	**38.9**	**17.**	**18.**
Csongrád county	1072	1563	17.5	22.7	8.	9.
Southern Plain	**929**	**1395**	**28.5**	**31.0**	**V.**	**V.**
Country altogether	1300	2021	-	-	-	-

Source: KSH

EMPLOYMENT

During the fifteen years from the change of the political system the number of unemployed per a hundred employed has increased to its sixfold, the number of inactive earners increased to its 150%; and the number of dependants increased with more than 10 %.

The proportion of agricultural workers fell back to its third between 1990 and 2005. The employment capacity of the industry has hardly changed, the fall-back was caused by the constant closure in the food-processing industry. (Table 3)

Table 3 Economical activity, employment 1980-2005

Year	**1980**	**1990**	**2001**	**2005**
per a hundred employed				
unemployed	-	3	16	19
Inactive earner	47	64	117	101
dependant	71	71	85	79
Proportion of employed, %				
In agriculture, and silviculture	31.7	27.2	11.5	9.7
In industry and in the building industry	36.3	34.5	33.4	32.0
In the service	32.0	38.3	55.1	58.3

Number of employed, the proportion of the economically active population has been decreasing since joining the EU. The number of unemployed in 2004: 87.513, in 2005: 76.500, in 2006: 75.100. Inspite of the good agricultural conditions the biggest employers are: the public administration (12.171), the education (8.064) and the public health (7.953). As a brief conclusion: what had been α sectors, remained α sectors in 2006, too.

The unemployment rata is gradually increasing in Békés county. (Table 4)

Table 4 Unemployment in the last five years

May	2001	2002	2003	2004	2005
Percentage	12.2	10.9	11.5	11.3	12.6

Source: On the basis of „Mikrocenzus 2005”

In the year of entering the EU there were 17.064 registrated unemployed. This number increased in 2005 and in 2006, too. In May 2006 the number of unemployed was 19.117, the number of young people starting out on their career was 1769, fifty or more year-old people were represented

with 3.487 persons. Most of those who are looking for a job are skilled or semi-skilled workers whose qualification does not coincide with the market demands.

Nowadays with 437 persons more school-leaver start their lives without having a job. Those who are more than fifty years old and -are looking for a job- are not in a good situation.

EMPLOYMENT CAPACITY OF THE SECTORS IN THE NATIONAL ECONOMY

AGRICULTURE

The participants in agriculture are in a disadvantagous situation comparing to the ones in the EU, though they get a significant financial support. The reasons are: on one hand they have access to the quarter of the support the farmers in the EU get; on the other hand their capital force cannot be compared to their partners' abroad. The application sources remain unexploited for most of them because it is very difficult to provide the own expense. Only the wealthy farmers with strong capital force can develop their estates.

Today less and less people live on the agriculture, they would rather try to find job in the towns (Table 5) or choose migration.

Table 5 Change in the population of towns and the countryside between 1990 and 2005

Year	**Number of towns**	**Population in towns in thousand person**	**Number of bigger villages**	**Population in bigger villages in thousand person**	**Population altogether in thousand person**
1990	12	247.7	62	161.5	409.2
2000	14	262.5	61	129.2	391.7
2005	17	268.0	58	117.8	385.8

Source: Békés Megyei Hírlap

INDUSTRY

In 2004 the industrial production value per person was 844.000 Fts in the Southern Plain, which runs to the 55% of the national average. This proportion is worse in Békés (48,7%) than in the two other counties (Bács-Kiskun: 57,6%, Csongrád: 57,4%).

More food-processing factories with significance were closed down that caused a large-scale staff reduction. Examining the reasons of this phenomenon it is worth emphasising two elements. One of them is that these factories were not able to sell their products with profit and it was due to the imported, cheap products. The other one is that the food-security demands of the EU were enforced by the Hungarian authorities „with tooth and nail". The food-processing businesses did not dare to meet its extra expenses, and they gave up production.

THE TOURIST INDUSTRY

In Békés county the number of guests increased with its tenth, and the number of nights with 6% in the first half of 2005 –after a fall-back in 2004. Only 9% of the 52.000 guests was foreigner which is less than in 2004. Comparing to 2005 the number of guests dicreased with 2,5% and the number of nights hardly changed in the first half of 2006.

Demand for given destinations entails establishment of new work places. There will be a labour power demand in the fields of catering industry and other services that can have a positive demographical effect on retainment of the local population.

SUMMARY

The population of Békés county has decreased with more than 7.000 persons since entering the EU. Less people marry and less children are born. The migration loss is significant, young people leave the county in the hope for a new work place.

The industrial production value shows an annual 10% fall back comparing to the year of joining. The capacity of the county has stopped, the GDP falls behind with 40% from the national average.

The number of unemployed decreased with 12.000 persons within two years. The activity proportion and the employment rata have lessened comparing to 2004.

The proportion of the unemployed has been increasing constantly since 2002. Its composition shows the worsening situation of the young and the elder age group.

The situation of the agricultural workers grew worse.

The tourism brought about 50.000 guests which was less than in the two years earlier.

CONCLUSIONS

Decrease in population has not ceased in Békés county. The young mobile population leaves the county.

The capacity of the county has fallen back. Few people have access to an additional source, their own capital source is not enough.

The results of the traditional sectors (agriculture, industry) falls behind the expectations. The sectors of the service industry: banking and financial services, the social services: administration, local governments, educational system, medical supply developed more, they have become the most important employers where salaries are the highest, too.

Tourism is developing but its efect on employment is small, the village tourism may improve the localpatriotism of the local, and periodically may generate purchasingpower in the rural areas.

SUGGESTIONS

a)"*The regional system of the public administration should enter our objects' service –if necessary with thorough correction"* (Tóth J. 1980) This statement istrue even today. The public service do not accord with the economical process of the region. The National Development Project (Nemzeti Fejlesztési Terv) is built on the basic units of small regions but its realization is hindered by the hierarchy of the public administration. In the net of different fighting powers the economy cannot find the right direction towards development. A new power system should be developed which is built on the real union of different regions.

b)The rural area cannot be a place for recreation or a kind of touristic Paradise. There should be agricultural production there because the county has the natural (and social) conditions for it. We can protect the vilage

population only with a well thought-out regional development policy, change in the agricultural production structure, and with building new food-processing factories.

c)Békés county does not exploit its possiblities on the Hungarian-Romanian border, though the neighbouring Romania is EU member in 2007. It would be worth opening a channel of innovation on the Eastern side of the border.

d)Hungarian farmers, businesses and their products should be protected by the state. Otherwise we will be only a market that accepts all kind of products – instead of being an equal partner.

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THE REVIEW OF SOCIAL GEOGRAPHIC CHARACTERISTICS OF MAGYARCSANÁD

RECENZIA CARACTERISTICILOR SOCIO-GEOGRAFICE DIN MAGYARCSANÁD

G. HEGEDŰS [*], ANETT VASS[**]

Magyarcsanád (in Romanian Cenadul Unguresc, in Serbian: Чанад) is located in Hungary, near to the Hungarian-Romanian border. We made an analysis based on various methods in this multicultural (Hungarian, Romanian, Serbian and Roma) settlement. After 1920 Magyarcsanád became border-situated, and the space connections of its inhabitants with the Banat region got restricted. The development of the village could be helped by the renewal of the cross-border connections, and with utilizing the circumstances arising from the advantageous inner (cultural and natural values) and outer factors (the EU-membership of Romania, regionalism). The spatial isolation of Magyarcsanád could be lessened with the rebuilding of the nearby border bridge(s). The village tourism of Magyarcsanád should be established which does not exist there, yet.

***Key worlds**: Magyarcsanád rural geography social geography rural development*

Our study was made in the framework of an university project work. Magyarcsanád is a multicultural (Hungarian-Romanian-Serbian-Roma spoken) village with 1560 (2005) population which is situated in Hungary, in the southeast part of Csongrád county, at the right-river bank of the river Mureş (in Hungarian: Maros), in the microregion of Makó, directly near to the Hungarian-Romanian border (Fig. 1).

The physical geographical conditions of Magyarcsanád are good. The settlement was a station among merchant roads for centuries. (MARJANUCZ, L. 2002). The favourable natural conditions ensure good

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conditions for agriculture. The village is situated 14 kms away from Makó, 40 kms from Szeged, 65 kms from Arad, 103 kms from Timişoara. Southwards from Magyarcsanád Cenad (in Hungarian: Nagycsanád) is located.

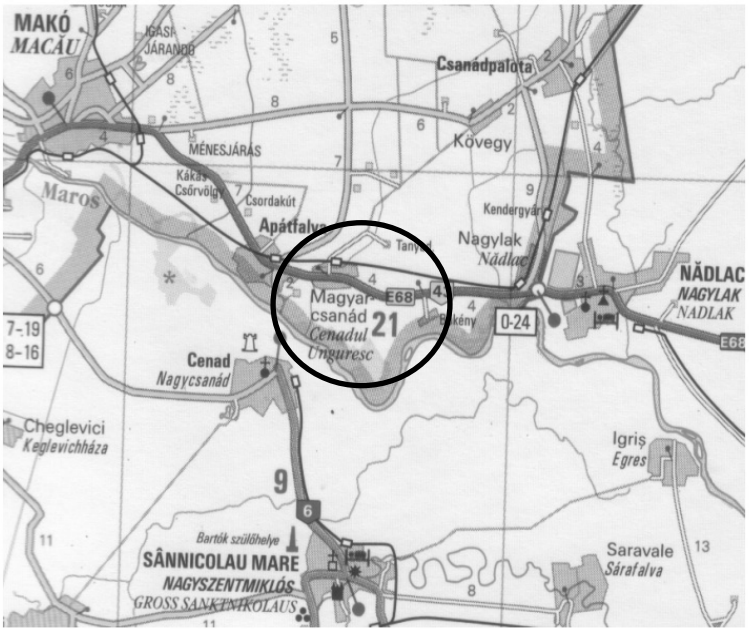

Fig. 1. The surrounding of Magyarcsanád
Source: Erdély autótérkép. Dimap Bt, 2003

Magyarcsanád and its environment (the microregion of Makó) participated the radical changes shaking whole of Hungary. In addition, some changes previously mentioned (e. g. becoming border-situated) effected Magyarcsanád much more than in Hungary. But special, local phenomenons also effected and effect the development of the settlement: the multinational character, the function of point of transport junction (a main road bridge and a railway-bridge ensured the social and economic connection towards the Banat; to 1920), and the borderland situation (from 1920).

Magyarcsanád situated at the border of Csanád county and the Banat region. The multiethnic character and – e.g. the similar built-style of traditional dwelling-houses – relates to the closeness of Banat. The first

inhabitants of the village – after the ruin of medieval Magyarcsanád caused by Turkish rule – were Serbian border guards (from 1698). This time the Turkish-Habsburg border drew among the Mureş. Later (from 1718) the Banat became a part of the Habsburg Empire, and the need for border-guarding is ended. Many Serbians moved away and Romanians 8 and in smaller numbers) Hungarian were settled here from the second half of 18th century (MARJANUCZ, L. 2002). Magyarcsanád is also similar in inhabitation with settling to the settlements of Banat. Romanian people live here from 1756 to the 1930's in majority. But according to the geographical position, the village belonged for a long time to the historical Csanád county which is characteristically different from the other regions of Csongrád county and the Great Hungarian Plain. In the microregion of Csanád – in contrast with the other parts of Hungarian Plain - villages with small population and area are typical; the settlement network denser and the outskirt population proportion within the whole population of settlements is lower in the relation of the Hungarian Plain (BAJMÓCY, P. 1996).

The area of the former Csanád county was heavily affected by becoming peripheral situated. Because of this, Csanád county was merged with Csongrád county in 1950.

Magyarcsanád – according to its resident population – belongs to the smaller settlements of Makó microregion. The number of population have been decreasing since 1990, because – in the long run - both the natural increase and the migration balance are negative.

The minority nations of Magyarcsanád are continuously assimilating, the proportion of Hungarian nationality and Roma ethnic group is increasing. On the other hand, in Cenad, on the other side of the border, the same process takes place, but there e.g. the Hungarian and German minorities are assimilating. The proportion of Roma population is prominently high (2001: 7,6 %) not only in relation to Makó microregion but also in Csongrád county. The original Roma inhabitants speak Romanian. In 2001 54, 6 % of the residents confess oneself to Roman Catholic, 16, 4 % to Romanian Orthodox, 8, 2 % to Calvinist, 8, 2 % to Greek Catholic, 1,2 % to Serb Orthodox and 0,4 % to Baptist. Some Romanian residents believe in Baptism, and the original Roma inhabitants believe in Romanian Orthodox religion. It is important that the various nations and religions lived and live in peace with each other here;

intolerance – apart from some little event in the past - has been never appeared.

The activity of the population of the village has significantly changed in the past decades. The number of economically actives culminated in 1990, after it – under the growing unemployment – decreased. Unfortunately the unemployment rate is in Magyarcsanád the highest at the present (18,2 % in 2004; the same index was 8,7 % in the Makó microregion, 6,2 % in Csongrád county). We do not know how much inhabitants worked really during the state socialism. But very many workers commuted to the surrounding cities, workplaces (e.g. to Makó, to the hemp factory of Nagylak or the sugar factory of Mezőhegyes. The commuters were mainly physical and not intellectual workers. After 1990 lots of workplaces (especially in the industry) in Makó microregion and its neighbourhoods were closed, and many former commuters were dismissed from the ones still functioning.

12 % of the employed worked in the primer sector (this number is very high not only in Makó microregion, but in Csongrád county), 37 % of them in the industry, 51 % of them in the delivery sector. Many local residents work by the day in from spring to autumn in the agriculture which means for many inhabitants the only working opportunity.

We analyzed also that what kind of problems seems to the more heaviest to the local residents. We came to the following conlusions by the results of our interviews and quastionarries: The mose serious problem mentioned by the inhabitants was (ranking):

1. unemployment (correlation with statistical data).
2. bad public safety
3. the immigration of „foreigns" (mainly Roma people and people from abroad)
4. lacknesses of social infrastucture (e. g. pharmacy, more amusement ablities)
5. poverty
6. too heavy passing (transit) traffic

„Only" the unemployment, poverty and the heavy traffic seems so hard as stated by citizens to us. Maybe the public safety, immigration, and the lack of social infrastructure are a bit overstressed by the inhabitants.

The immigrants move to Magyarcsanád can divide into two groups: the migrants coming from abroad and migrants coming from Hungary.

According to local residents, most of the problems are connected with the Roma people immigrating from other settlements of Hungary.

Their social and ecological situation is even worse than the original Roma inhabitants, they buy old, bad-looked buildings, and some of them do not work, turn to crime and endanger public safety.

We asked the residents of Magyarcsanád about the advantages / disadvantages of borderland-situation. The borderland-situation is mostly neutral considered by them. Advantages of border-location mentioned were the easier crossing to Romania, the refuelling possibilities in the neighbourhood country, and the more shopping tourist arriving from abroad. Disadvantages were: the heavy passing transit traffic, the supposed presence of Romanian (sometimes illegal employed) guest-workers (they sad to „deprive" local residents from work), and the alleged increase of crime.

We were interested in how relates the municipal council of the village to the borderland-situation, and what are they intention in respect of fit. The most important purpose of them is the rebuilding of the Mureş bridges blowing up by German army in 1944 (Fig. 2.). Maybe only one combined (road and railway) bridge would be rebuilt. When this purpose came true (with rebuilding the railway bridge and only 2-3 kms railway course), a faster railway connection would been restored between Timişoara and Szeged.

The biggest obstacle to execute this plane is not only the costs of rebuilding of bridge(s), but the cost of operating the border-crossing station(s). Because of this, presumably the project(s) will be done only after the Romanian joining to the European Union (app. 2007). But the prospect seems to be very good after this date (e.g. in the common Hungarian-Slovakia border river called Ipoly (in Slovakian: Ipel') many ruined bridges are rebuilt at the present.

The council cultivate friendly relationship with Banat, Romania. Magyarcsanád has a sister village called Comloşu Mare (in Hungarian: Nagykomlós) located near Timisoara. The purposes of the council (rebuilding bridges) are well-known and respected in Banat, as well.

We find the council's purposes very good, but we would suggest the developing of tourism, too.

The unique multicultural character (e. g. four churches, old Romanian and Serbian farmer's houses on the main road, the Museum of Magyarcsanád called Banat), other attractions (e. g. a Cumanian medieval stone cross, the unregulated Mureş river with an isle belonging to neither Romania nor Hungary), the bird nestling on the Nobody's Isle, the nearly intact forests belonging to the Körös-Maros (Criş-Mureş) National Park of Hungary, the hunting possibilities near the village, the ancient tumulus (Cumanian hill) near the outskirt settlement called Bökény near the Mureş, etc. would mean a great tourist attraction both in Hungary and abroad.

Fig. 2. The end of the former Sânnicolau Mare – Magyarcsanád railway course at Cenad (Source: Hegedus, G. 2004)

But the council can't take part in very much tourist applications, tenders because of its financial difficulties (so the financing of own-part in applications is hard nowadays).

Unfortunately, despite of the many attractions, nobody accommodate tourists in the village. And most of the passing – many of them Romanian - travelling through the settlement without getting information about it, stopping, and viewing the amazing place of interests.

In summary, Magyarcsanád considered an accumulated disadvantageous border-situated village that differ especially in its multicultural feature from other border-situated Hungarian settlements. The most difficult local problem is unemployment, followed by poverty and heavy passing transit traffic (and partly worse public safety and immigration). The first two problems mentioned are caused both internal (local) and external (country-wide) factors. One of the main exciting factors is the worse utilization of border-location and tourist attractions. The development of Magyarcsanád were greatly promoted by expanding the advantages of border-location, (e. g. the following join of Romania to the EU, strengthening regionalism) rebuilding bridges, more contacts with Banat, Romania), capitalizing the tourist-attractions and lessening the disadvantages. In this way as well, the main purpose: getting acquainted and understanding with each other's culture, being tolerant and acting against discrimination, (historical) prejudices, and (e.g. political) extremities, and peaceful co-operation and together-living was completely fulfilled both in Magyarcsanád and in the whole Duna-Cris-Mures-Tisza Euroregion, in the beginning of the 21st century.

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OVERALL CONDITION AND PROBLEMS OF VEGETABLE GROWING IN BULGARIA

CATEVA CONDITII SI PROBLEME ALE DEZVOLTARII SECTORULUI VEGETAL DIN BULGARIA

G. BOGOEV*, P. PASKALEV [*]

The general economic crisis in our country during the transition to market economy had an effect on vegetable growing in the open as well. Among the most important factors for reducing the volume of production were the decreased size of agricultural fields used for vegetable growing, the lowered technology requirements, the lack of large scale specialized production machines, the can industry crisis, the crooked and dictatorship-like behavior of the intermediaries, the impoverished population, the consumption shrinkage, and others. That is why it is important to create new organizational structures – farms and cooperatives, which, when equipped with the necessary capital, will be able to conduct the most effective and efficient utilization of the land, the human, and the technology resources.

***Key words*:** *production, output, area size, farms, cooperatives*.

INTRODUCTION

Bulgaria is a country with immense capabilities and traditions in vegetable growing. The favorable soil and climate conditions allow for the growing of almost all kinds of vegetables. This represents an important share in the overall structure of the food balance in the country.

Bulgaria occupies one of the top places in the production per capita with over 200 kg per year per person, together with countries like Greece, Turkey, Spain, Italy and the Netherlands. This applies especially to the production of pepper, tomatoes, cucumbers, and other main types of vegetables.

PROBLEMS OF VEGETABLE GROWING IN BULGARIA

The general economic crisis in our country during the transition to market economy had an effect on vegetable growing in the open as well. The overall size of the open areas for the main vegetable types had

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diminished from 15000-1600 hectares in 1999 to 11000-12000 hectares in 2004. This is a 25% decrease, which is by all means a negative tendency.

There is a double decrease of the areas used for the growing of onion, watermelons, musk-melons, and cucumbers. This decrease for the tomato areas is 30 %, for the green pepper ones it is 20%, for the cabbage ones – 13%, and for the potato areas – 12 %.

The second main factor of the production volume, the average output level, diminishes only slightly for the tomatoes /5%/, and it is even 2% for the green pepper and 3 % for the onion. With the other vegetable cultures there is a strong positive trend – an increase of 23% for potatoes, 22% for cucumbers, 17% for watermelons, and 11% for musk melons. It should, however, be kept in mind that this average output level is low and it does not correspond to the existing potential.

From Table 1 it can be seen that the overall deviation of the production of tomatoes in the ratio index to basis period /2000-2004 to 1995-1999/ is negative /correspondingly -110.3 and -13.9/ Tons per hectare /H.T./. What is dominating here is the influence of the first factor – area size, which has diminished with 7.3 thousands of hectares. The same tendency is present with the production of green pepper, onion, where the common deviation is also with a negative sign – correspondingly -43.2 H.T. and -55.5 H.T. Again, the determining cause here is the negative influence of the first factor – area size /correspondingly -43.2 H.T., and -55.5 H.T./ With cucumbers, watermelons and musk-melons, the overall deviation of the production is with a negative sign – correspondingly -39.1 H.T., and -124. H/T., again mainly due to the negative influence of area size. The influence of the 2nd factor, average output level, is positive, but this influence is insignificant and it is not capable of compensating the production reduction resulting from the diminished area size. With cabbage and potatoes there is a positive trend – the output volume during the index period has increased, correspondingly with 34.5 H.T. and 10.0 H.T.

The determining cause here is the positive influence of the second factor, average output level from a unit production area; it is correspondingly 93.8 and 25.1 H.T. This influence has managed to compensate the negative effect of the reduced area size.

The combination of the two main factors, area size and average output, leads to a decrease in the volume of production of vegetables, and what is

determining is the negative effect of the first factor. For the index period, this decrease is 19 %.

The most important reasons for this decline are of a different nature, but almost all of them are related with the economic reforms and with the overall worsened economic conditions in the sector. In a technological aspect, one of the main factors is the reduced care for the crop done in order to save from the production resources. Not all of the necessary, according to the modern agricultural technological requirements, land cultivation is carried out. Due to the high cost of the chemicals for plant protection, the fight against the diseases, the weeds, and the wreckers is strongly limited. Similar problems exist with fertilizing of the vegetable cultures. There not enough /and even none at all/ agricultural machines for vegetable growing, which lowers the quality of the applied technologies, and kills the biological potential of the sorts. In an economical aspect, there are also a few main factors that exist – problems of the agrarian reform, and the slow ownership restoration rates, the crisis in the can industry, and the difficulties associated with the process of product buying and, most of all, product paying; the blackmailing and the dictatorship-like behavior of the intermediate companies, the overall impoverishment of the population and the resulting from that shrinkage in demand, the competition of the imported products from Turkey, Greece, Macedonia, as well as many others.

What is a precedent in world practice is the fact that the strong desire to tear off with the state ownership results in a transition from large agricultural cooperatives into relatively small farms. It is important that new forms of ownership and new organizational structures be created. It cannot happen at once, but it will be a long and complicated process. It has to start with the creation of small farms, in which the farmer and his family will obtain part of their income from activities not linked to the farm.

In the near future, a considerable amount of vegetable growing will be done in agricultural production formations, created on the principle of private ownership of the land and ownership of the means of production. Solely the separate owner members of the different elements will determine their sizes; these members will own, cultivate and control the formation.

Changes in the volume of production in the main vegetable cultures due to factors size and average output in the period 1995-2004 in Bulgaria

Table 1

Cultures	Periods						Total Deviation	Factors	
	Basis 1995-1999			Index 2000-20004					
	Area, ha	Output t/ha	Production t	Area, ha	Output t/ha	Production t		Area	Average Output
Tomatoes	24.6	15.2	374.7	17.3	14.5	250.5	-124.2	-110.3	-13.9
Cucumbers	9.1	12.4	112.7	5.1	14.4	73.6	-39.1	-49.7	+10.6
Green Pepper	18.7	11.3	211.8	14.9	11.1	165.7	-46.1	-43.2	-2.9
Onion	13.9	7.4	102.7	63	7.2	45.4	-57.3	-55.5	-1.8
Cabbage	7.3	17.2	125.2	6.4	21.1	135.2	+10.0	-15.1	+25.1
Potatoes	48.5	10.2	495.0	42.7	12.4	529.5	+34.5	-59.3	+93.8
Water, Melons	27.6	11.3	312.8	15.0	12.5	188.0	-124.8	-142.8	+18.0

Vegetable growing is a specific agricultural activity, and its improvement has to be one of the priorities of the Bulgarian agricultural strategy. The creation of specialized farms and cooperatives will be a step-by-step process due to the following reasons: a huge variety of the cultures and the existence of many different methods for their growing, the highly labor consuming nature of the business together with the fact that most of the work is manual, the resulting from that necessity of hired labor and its most rational utilization, the high cost of all the ameliorative work, machines and equipment, the high necessity of large cash flows; the fact that the possibilities for even distribution of the levels of mechanization among the different labor process are not equal for all.

ORGANIZATIONAL FORMS OF VEGETABLE GROWING

The organization of production and labor in the contemporary conditions is becoming more and more a main factor in the striving to create the most favorable environment for the coexistence of the three related elements of production – land, technology and workforce. For the effectiveness of one or another form of production and labor organization can be judged by end result, but this is by far not the only criteria in the process of decision making. The economic result depends on many other factors, like the degree of specialization and concentration of production, the number of the growing cultures, the extent to which labor is evenly distributed, the existing opportunities for hiring auxiliary labor during the process of crop gathering, This determines in a very high proportion the attitude of the individual producers, the farmers, the specialists, and the agronomists towards labor organization. On its hand, this increases or decreases the efficiency of labor organization.

In order to achieve the best combination of production factors, the labor organization in vegetable growing needs to take into consideration the scientifically proven practices of methodically changing the types of cultures to be grown on the land. The farm or the agricultural cooperative has got to have the necessary equipment and capital to do so. The selection and the match between the different cultures need to allow for at least 75-85% of the work to be done with the existing means of production. These requirements determine the complexity of the analysis, the estimation and the construction of the work process in field vegetable growing.

It is of especially high importance that scientific norms be used to determine the separate elements as well as labor costs – both for the whole

project and for its separate stages. These norms are to be created on the basis of main existing technologies. They are important determinants and their application can do the difference between increasing and decreasing the production cost as compared to the average production costs. The norms serve as a starting stage for the production elements – cooperatives, farms, alliances, and individual producers. They help create the specific planning given the existing soil and climate conditions. They can also be used to calculate the costs of the economic indicators of efficiency in vegetable growing.

The more important specifics in the process of using the norms are:

- Schemes for sowing – it is done according to the culture particular characteristics, the established distance between the rows, the technology and the production direction, the soil condition, the irrigating system, the way of crop gathering, etc.
- Number of plants in a da - it is used for calculating the biological output necessary to determine the irrigating norm, for calculating the machine productivity, etc.
- Average date of sowing, the term of coming up, the number of plants per da, the average date of first and last harvest, - all of them have a vast application in calendar scheduling, in the conduction of specific technological activities, in determining the tension of the work load, in signing contracts, in product realization, in product marketing, in culture rotation, in determining the needs from specific materials and techniques, in determining the parameters of the cash flow, etc.
- Out of all norms for technological costs, the ones with the most importance are those for seed, fertilizers, water and chemical substances. In its nature these are variable costs, and they are the ones with the most importance in determining the average output per area unit.

When structuring their farms, vegetable growers have to solve a number of problems that arise from the peculiarities of growing vegetable cultures in the open. The basic methodological elements are the following:

- Choice of an achievable goal
- Marketing
- Existing possibilities to maintain an acceptable standard of living
- Creation of a rational size and structure of production and determining the necessary resources, materials, labor, technique

- Procuring a considerably high average personal income

Together with the existence of family owned farms for vegetable growing, in the near future in Bulgaria will also start the process of creating vegetable growing cooperatives - organizations that will take into account to a higher degree the specifics of vegetable growing. Several methodological elements need to be considered in that process:

- The land used needs to be of the same type and fertility, it has to be well nurtured, not salted, and without acid reactions. Of importance for the leveling and for the ameliorative work is its relief, which has to be of a similar type. The cultivated areas need to be situated close to water sources, to populated areas, and to can industry factories.
- In choosing types of structuring, the cultures need to procure an optimum biological efficiency in their rotation. This is necessary for maintaining constant soil fertility. The chosen cultures need to be with different vegetation period duration in order to allow an evenly spread work load of labor.
- A main prerequisite for the efficient land utilization in a given production structure is the chosen crop-rotation. It has to be in accordance with the specific soil and climate conditions and with the production direction. A high coefficient of land utilization can be achieved with a reduced number of rows /from 3 to 6/; the area field differences need not exceed 50-100 da; and last but not least, an evenly spread income inputs need to be procured for a prolonged time period.
- Vegetable growing can be effective when done on areas that are leveled in advance and that are weeded in advance. Contemporary irrigation techniques need to be used. This preliminary period takes at least three years.
- The specialized farm for vegetable growing needs to be of a constant size, and it needs to encompass all cultures within the limits of the
- used crop-rotations. These need to include not only the vegetable cultures, but also the other crop-rotation cultures. The processes of specialization and concentration need to include 1 to 2 main, and 2 to 4 additional vegetable cultures. The total size of the area with vegetables need not exceed 60% the total size of the farm.
- The production structure, and the culture selection need to allow for 75-85% of the work to be done with own workforce and machines.

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MODERNISATION OF HUNGARIAN AGRICULTURE AND SUSTAINABLE GROWTH

MODERNIYAREA AGRICULTURII UNGARE SI DEZVOLTAREA SUSTENABILA

M. IVICZ*

The author – in connection with the conference – wants to call the attention of the professional audience on the importance of EU preferred common research topics. These topics are well known but the author wants to define them furthermore in order to achieve an even better cooperation between the researchers of the two states.

Key word*:"the organic farming" "biodiversity" „traditional communities" „high incomes"*

PROBLEMS:

The biggest problem of our age is the challenge of the international competition. Two models are competing with each other: the non-European, latifundial, and the multifunctional European agrarian model.

What do we mean by the traditional European farming? The characteristics of it are the following: *"It is based on family connections and resources. The capital is the property of the family. The family leads the farm and actually does the production process."* Alvincz et al.[1994]

The multifunctional European model is losing against the latifundial model which is quite common in South America. The reason for this is that the *latifundium*s did not communicate properly and truthfully the disadvantages of the so called "green revolution".

The "green revolution" dicreased the number of raised species. It lead to the degradation of the ecosystem. Al Gore called the "genetical erosion" the biggest threat on the global food-industry.

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The exploitation of the natural environment leads to the extinction of hundreds or even thousands of species a day. So we might call the side effect of the green revolution a genetical holocaust.

Educated people has a special role in stopping this process. What is this exactly? To call the attention of the public on the European values, like the advantages of the multifunctional European agrarian model with this common research.

THE PROPOSED DIRECTION OF THE EU FINANCED ROMANIAN AND HUNGARIAN COMMON RESEARCH PROGRAM BASED ON THE FP7 FRAMEWORK-PROGRAM

A) International talks on supporting research
A/1. Analysis of the global and European agrarian market
A/2. Trade and agrarian policies – China
B) CAP-reform
B/1. Analysis of the sustainableship of farms
C) Cross compliances
C/1. Analysis of the effects of cross compliances
D) Expansion of rural development
D/1. Sustainable and integrated rural development
D/2. New methods of disbursement used in rural development
D/3. Analysis of the rural areas of the EU
D/4. Changes in the structure of agriculture in the new member states
D/5. The effect of agriculture on rural areas in Europe
E) Sustainable production systems in the agriculture
E/1. Social advantages of the organic farming

BRIEF DESCRIPTION OF COMMON TASKS

A/1. Analysis of the global and European agrarian market

The continually liberalising world market means a constant challenge for the agriculture of the EU. The EU is constantly criticised for its the high agrarian financial aids.

- external: WTO
- internal: England etc.

However the current financial aid system made the farmers of the old member states lazy and scandalized the farmers of the new member states so it needs to be reconsidered. The reconsideration can be based on the new member states' agrarian financial aid systems.

We also have to reconsider the agricultural areas in Europe because of the global warming. Thünen's economy can help very much on this.

A/2. Trade and agrarian policies – China

The biggest agricultural producer and consumer in the world is China. China has been WTO member since 2001 and this affects its trade and agricultural policies. China has a significant commercial connection with Europe and could be a potential market of our stocks.

B/1. Analysis of the sustainableship of farms

Agriculture was always more than simply production of goods. It actually created the environment and gave job to rural people so they could make a living in their communities. These are extremely important (ecosocial) services for the society so farmers should be payed for it. This lead to the idea of the above mentioned multifunctional European agrarian model.

Economical dimension:

If efficiency depends only on profit, we cannot measure the efficiency of those who want something else than profit.

Social/ecological dimension:

Strengthen the power of rural areas: *„Talking about biodiversity, we should mean cultures beside genes, species, diversity of ecosystems. These things are interdependent. The decrease of biodiversity eventually leads to the break-up of traditional communities."* Boda [1999]

C/1. Analysis of the effects of cross compliance

An important element of the CAP reform is the cross compliance. It means that farmers have to follow 18 guidelines in order to be entitled to financial aid from 2007. These guidelines contain animal and plant health, animal welfare, public health, and environment protection requirements. These guidelines are binding throughout the whole farm. How will it affect the competitiveness of European economies? It's a big question-mark since in the South American model no production factor is expensive.

D/1. Sustainable and integrated rural development

We can find the principle of subsidiarity in agriculture as well as among the principles of the EU and christianity. We all care about the microenvironment. In the country, everydays and natural environment can be so easily pieced together. Subsidiarity should be even more emphasized in agriculture. The idea that human necessities should be satisfied on the lowest cost and with the lowest risk. The goals of the multifunctional European agrarian model are these.

D/2. New methods of disbursement used in rural development

Currently incomes are compensated from annual disbursement. It occassionally leads to under or over compensation. We could check the incomes in agriculture much better by developing a new system of disbursement.

D/3. Analysis of the rural areas of the EU

We have to analyze the long term trends. We have to work out a provident regional policy and agrarian policy should be an integrated part of it. On agrarian policy we mean not only economical policy but social and environmental policy as well. The subsidy of different cooperations is particularly important. The diversity of local conditions should be even better emphasized also (region of origin as brandname etc.).

D/4. Changes in the structure of agriculture in the new member states.

Although workers in the first sector are only 2-3% of the entire active society in the EU, they have great social importance because the activity rate in the poor and less developed regions depends very much on agriculture.

More than 40% of the families own agricultural lands in Hungary. It's really hard to decide how important these estates are to the families but one thing is sure that these estates are the only incomes, except for social aids, of several families. This fact shows how important agriculture could be in the reintegration of these poor country people.

D/5. The effect of agriculture on rural areas in Europe

90% of EU citizens live in rural areas and rural areas are in danger. Without appropriate policies, the survival of these areas is questionable. Even though a considerable part of the common budget goes to agriculture, it is still not enough according to the challenges that agriculture must face. We ought to find new ways to use our funds more effectively.

E/1. Social advantages of the organic farming

Organic farming has a positive effect on environment. This is a scientifically proved fact but nobody knows the exact costs of it. Interactions among the sectors of agriculture in the EU was not studied either. Multifunctionality provided by organic agriculture is crucially important to the EU. The EU has to use it well. Multifunctionality is however also a historical root of the EU. We have to set up a common method to esteem the costs and the profits in order to use the opportunities given by CAP well.

Producing more and more is not the only goal of agriculture. *„Big companies want high profit, small businesses and national economy want high incomes."* Dobos [2000] The goal of agriculture should be to improve living standards in the rural areas because still in our days more people live in the country than in cities.

FINAL PROPOSAL

Common researches can of course move on to different directions but the research of these common non-country specific funds could lead the Brussels bureaucracy to pay more attention on the interests of the new memberstates beside the sustenance of the multifunctional European agrarian model (agrarian financial support not to old member states *versus* new member states but to old member states *et* new member states).

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THE IMPACT OF BIOAGAS FROM DEPONIA FOR ECONOMICAL PROPERTIES OF ELEKTRITICAL PRODUCTION

IMPACTUL BIOGAZULUI DIN DEPONEU ASUPRA PROPRIETATILOR ECONOMICE ALE PRODUCTIEI ELECTRICE

T. MOLNÁR[*], L. SALLAI, D. FODOR*****

The refuse dump of Hódmezővásárhely will provide up-to-date storage and neutralisation for the refuse of the town for 50 years. The storage of the refuse takes place in deponia by adequate compression. During the storage gases, mainly methane and carbon dioxide, are developed due to the biological decomposition. We must prevent these gases to get into the atmosphere as they are involved in the global warming of the Earth and so they may cause changes in the environment. With the regulations getting stricter in the EU where we are going to be members soon it is essential that a refuse dump should have a biogas deflector system in order to protect our environment. A compressor drains gases from the waste material, while another compressor is used for taking the gases to the place where they are used. From utilisation point of view a considerable quantity is developed, which can be diversely utilised

Keywords: *refuse dump* **,***biogas,* renewable energy, *regulations getting*

INTRODUCTION

With the growing number of man and with the development of technology the amount of waste is increasing. We must take care of waste management in order to protect the environment. When storing waste material there are two harmful factors. One is the fluid (percolating water) coming out of the waste and pollute the soil and the other is the methane gases from decomposed organic materials, which cases glasshouse effect

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and thus global warming. The problem of biogas from the decomposition of communal waste got into the focus of attention since it was proved that on the Earth the natural and antopogen methane and the carbo-dioxide emmission contribute to the so-called glass-house effect. As fossile fuels are finite and environment pollutant the attention turned to the exploration and exploitation of other alternative energy sources like for instance the bio-gas. Through the exploitation, collection and utilisation of the deponia gas obtained this way we can create an environment-frienly position. There would be a demand for the optimal utilisation of biogas on the refuse dump where both thermal and electric energy production might be possible. The electric energy law offers a favourable possibility, which can enhance the development in this field.

MATERAL AND METHOD

Place of egzamination

The Hódmezővásárhely refuse Ltd.'s communal solid refuse unloading place works in the outskirts of Hódmezővásárhely on the area No. 01957/1 (Figure 1). The Bekefi homstead 1100 m is situated the nearest to the refuse unloading place. The nearest dwelling house is far away (2500m). The refuse dump of Hódmezővásárhely is situated 20 ha and the top height of deponias are 30m.

The elements of deponia gas extracting system (Figure 1)

Gas well⇒Gas collecting pipes⇒Gas controller unit⇒Compressor unit⇒Torch

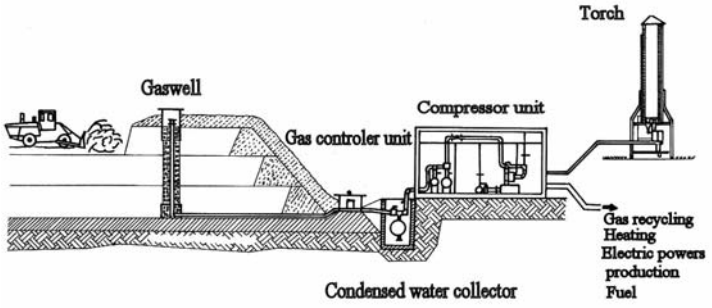


Figure 1: Process figure of gas production[2]

2.2 The way egzamination

To carry out the examinations on the biogas quality and quantity on the refuse dump I have a computer data collection system, container measuring equipment and a gas-motor container. (Figure 2)

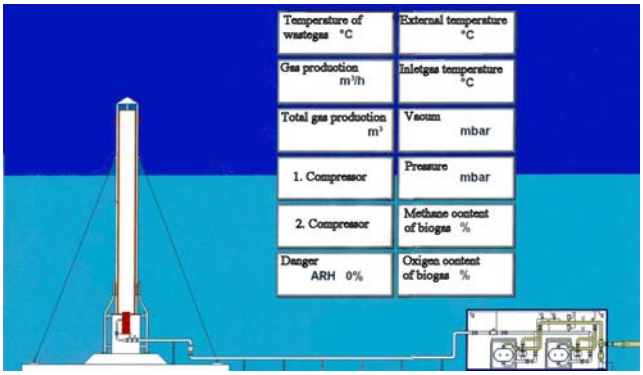


Figure 2: The examined parameters during gas production

During the examination I plan to measure the following parameters:

Vacum [mbar]

- Pressure[mbar]
- Methane content of biogas [%]
- Oxigen content of biogas [%]
- External temperature [^{o}C]
- Inletgas temperature [^{o}C]
- Momentary gasproduction [m^3/h]
- Total gasproduction[m^3/h]
- Tempeature of waste gas [^{o}C]
- 1 Compressor [operation time]
- 2. Compressor [operation time]
- Danger register [%]

3. RESULTS

Communal waste biomass potential in the Hódmezővásárhely micro-region

According tho the analysis based on the MSZ 21976 standard to determine the biologically degradable organic-material-content of the communal waste we can state that 53% of the collected total amount (14.441,965 tons) of solid communal waste that is **7.654,24 tons** can be considered biologically degradable and in this way it is biomass potential.

Table 1: Energy utilisation of the communal waste

Settlements	Biomass potencial [t]	Utilisable biogas quantity [m^3/t]	Produced biogas [m^3]	Biogas calorific value [MJ/m^3]	Potential thermal energy [MJ] **
Hmvhely	6488,5	256	1.661.056	21,5	35.712.704
Mindszent	826,36	256	211.456	21,5	4.546.304
Mártély	151,04	256	38.666,24	21,5	831.324,16
Székkutas	188,34	256	48.215,04	21,5	1.036.623,36
Micro-region **	1500	190	285.000	21,5	6.127.500
Összesen	**7.654,24**	**256**	**2.244.424**		**48.255.116**

**biogas quantity of the organic communal waste 256l/kg=256dm^3/kg=0.256 m^3/kg=256 m^3/t*

total of green waste from the territory of the micro-region, approx.* ***1500 t

The above table shows the communal waste produced and generated in Hódmezővásárhely and in the micro-region and the biomass potential and biogas yield produced from it in the year of 2006. According to the table the amount of biogas produced from the wase is 2.244.424m^3. In my calculation I took into account the most favourable biogas yield. From these values we can see that the estimated gas yields in the literature are different from the measured data [Table 2.].

Table 2: The results of one measurement as an example

The time of the measuring **2005.06.24**	Volume [%]	**On the basis of the mesured data the biogas**
methane	60%	88 m^3/hour
carbon-dioxid	26,2%	2112 m^3/day
oxygen	2,4%	770880 m^3/year
nitrogen	11,4%	

*ASA Hódmezővásárhely Scavenger Ltd.

As for the energetic utilisation, the produced biogas can be used for the heating and also the hot water supply of the social building. As for the electric energy utilisation it can be used in the cogeneration power plant.

CONCLUSIONS

On the refuse dump of Hódmezővásárhely originating biogas can be recycled for heat production and energy production.

Heat energy recycling

We have to take these into consideration at calculation of quantity of annual fuel

- On the basis of meterological statistics of the annual heating hours (4200 h/year)
- The rate of heating hours per day 60 %

The number of hour of heating: 4320 h

The need of heat per year: Q = 169601,74 MJ/year

The efficiency of the placed boiler in the building is 85 %/GB-Ganz type/

Thermal value of biogas :

$H_{biogas} = 5,5 - 6,5$ kWh/Nm^3

$H_{biogas} = 23,4$ MJ/Nm^3

The quantity of burnt fuel at 85 % efficiency

$$m = \frac{Q}{\eta_k \cdot H_{biogas}} = \frac{169601,74\ \text{MJ/year}}{0,85 \cdot 23,4\ \text{MJ/m}^3} = 8526,9854\ \text{m}^3\text{/year}$$

Thermal value of naturalgas:

$H_{naturalgas} = 7,5 - 7,8k$ Wh/Nm^3

$H_{naturalgas} = 28,08$ MJ/Nm^3

The quantity of burnt fuel at 85 % efficiency

$$m = \frac{Q}{\eta_k \cdot H_{naturalgas}} \frac{169601,74\ \text{MJ/year}}{0,85 \cdot 28,08\ \text{MJ/year}} = 7105,8211\ \text{m}^3\text{/year}$$

The recycling of the electritical energy

The orinating biogas in the refuse dump of Hódmezővásárhely is burnt up in gas engine. Because of this heat energy and electritic energy originate (Figure 3)

- We have to choose whether we will produce as much power as we can use for our own aim or we will produce as much as we can do and we can install the plus power into the electrical system.
- The islands works have some advantages that we are indepedent of the national electric power system. The operation isn't influenced by neither a rise in prices nor quantity regulations.,
- In case of parallel works we can produce as much power as the biogas can make possible and we can sell the surplus for the energy service.

The surplus eletric power:

- We can use this for the public lighting on the works or building electrical aim as interior use.
- Local electric service called DEMÁSZ Ltd. has to buy the energy power which we can't use inside the works.

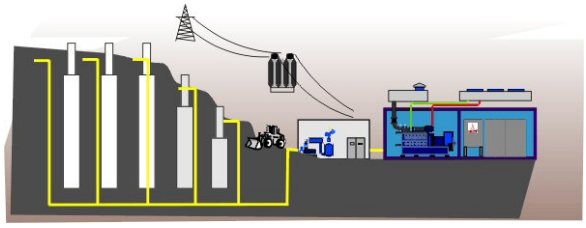
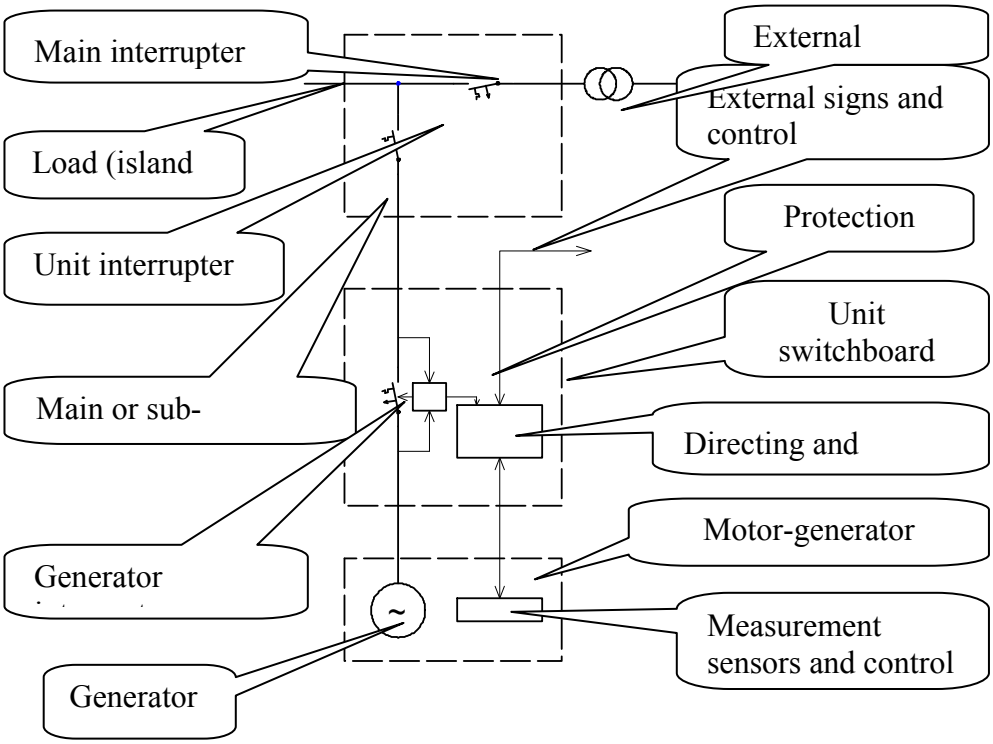


Figure 3. The production of the electric power

Table 3. The data of the cogeneration power plant

The electric power of a block			160 kW
Rated voltage of the generators			400 V
2 blocks to be built in the first step			320 kW
1 block to be built in the second step			160 kW
Produced electric power in full establishment			480 kW [3 blocks]
Produced electric power used up by the branch work			max. 10 kW.
Electric power in the first step			300 kW
Electric power in the second step			450 kW
Self consumption at standstill			10 kW
The data of the cogeneration power plant			Yearly
Gas consumption	m^3/óra	45,5	
Total efficiency	%	85	
Calculated annual length of time	%	95	350 days
Calculated daily length of time	hours	24	8400 hours
Gas consumption	m^3/day	165	57750 m3
Gross electric power	kWh/day	3840	1.344000 kWh
Electric power for sale	kWh/day	3450	1.207500 kWh



4. Figure Instalation of cogenerational power station

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LUCRĂRI ŞTIINŢIFICE, SERIA I, VOL. IX(2)

ROMANIAN AGRICULTURE NEEDS FOR CREDITS

NEVOIA DE CREDITARE A AGRICULTURII ROMÂNIEI

V. GOŞA*, ANDREA NAGY[*]

Although the Romanian banking system has recorded during the last years a remarkable progress concerning the consolidation of the banking performance indexes and the increase of the bank assets, the Romanian agriculture is still one of the economic activities with the lowest financing level. The difference between the crediting level of the Romanian agriculture and the crediting level of the agriculture from other European Union states is very big, and the measures applied at national level, concerning this problem, have not had any effects so far. In order to solve these deficiencies, it is a must to create the own financing system, through the institutionalization of the agricultural credit and through the creation of a bank for farmers.

***Key words**: agricultural credit, rural financial market, financial management, loan institution*

The Romanian banking system has recorded during the last years an ascendant course, the bank assets of the commercial banks, including the load cooperatives united into the CREDITCOOP, overtaking, at the end of 2005, 44.8% from the gross domestic product, compared to 36.6%, achieved in the previous year.

The performance of this system is reflected by the evolution of the indexes of solvability, liquidity, economic and financial profitableness (table 1).

The quality of the credit portfolio has improved substantially, and the amount of outstanding and dubitable credits within the total credit volume, specified in the balance, has remained at the remarkable level of 0.3%. The positive evolution of the indexes mentioned has occurred under the conditions in which the non-governmental credit volume has increase from one year to another, its quantity within GDP increasing from 10.6% in 1999 to 17.5% in 2004, and then to 19% in the middle of the year 2006.

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Table 1

Main indexes of banking system analysis (%)

Indexes	2000	2001	2002	2003	2004	2005
Solvability report 1 (more than 12%)	23.8	28.8	25.0	21.1	20.6	21.1
Outstanding and dubitable credits / total credit portfolio (net value)	0.6	0.7	0.4	0.3	0.3	0.3
General risk rate	38.7	39.7	42.9	50.6	47.0	47.6
ROA (Net profit / total asset)	1.5	3.1	2.6	2.2	2.0	1.6
ROE (Net profit / own assets)	12.5	21.8	18.3	15.6	15.6	12.7

Source: Romanian National Bank Yearbook, 2005

Credit risk, the major risk confronting the Romanian banking system, has a slight increasing tendency under conditions of expanding the crediting activity, especially during the last two years analyzed, when the credit reached more than 46% of the aggregated assets.

The situation of the credits offered by loan institutions, expressed in euro, per activity sectors, during 2000-2006, is processed in table 2.

Credit volume in Romania has increased during the seven years analyzed (2000-2006) for 6.3 times. Until 2004, industry has benefited on the biggest bank support, the financial resources directed towards this sector representing the highest percentage of the bank total credit portfolio. The credits offered for agriculture, forest industry and pisciculture financing have represented, in 2000, 4% of the total credits offered, decreasing then to the level of 2.6 in 2006. In absolute measures, the credit for agriculture, forest industry and pisciculture has increased during the interval analyzed for 4 times, but the increasing rhythm is much slower than in other economic sectors (services for 6 times, constructions for 8 times).

Although agriculture, forest industry and pisciculture contribute with 11.7% to GDP, they use only 2.6% of the total volume of credits offered by loan institutions. The low financing level of this sector is evident compared to industry and services. Taking into account the agricultural participation to GDP and its importance within the national economy structure, the financing of the agri-food sector through credit systems may be assessed as insignificant.

Table 2

Situation of the credits offered by loan institutions per activity sectors in Romania

Specifications	M.U.	2000	2002	2004	2005	2006*
Total credits, among which for:	mil. €	4060.6	6570.0	12057.2	17846.7	25654.6
	%	100	100	100	100	100
Industry	mil. €	2182.7	3206.4	4449.2	5160.0	6258.6
	%	53.7	48.8	36.9	28.9	24.4
Services	mil. €	1460.4	2445.3	4472.6	6121.7	8786.8
	%	36.0	37.2	37.1	34.3	34.3
Constructions	mil. €	159.6	262.3	570.3	837.3	1280.9
	%	3.9	4.0	4.7	4.7	5.0
Agriculture, forest industry, pisciculture	**mil. €**	**163.8**	**189.6**	**298.0**	**454.2**	**676.7**
	%	**4.0**	**2.9**	**2.5**	**2.5**	**2.6**

* August 2006

Source: Data processed according to the Romanian National Bank Yearbook, 2005

In comparison with our country, Hungary, although its agricultural land covers only 5866 thousand hectares (2.5 times smaller), orientates 1.7 times more credits towards agriculture. If we compare ourselves with the developed E.U.-member countries, France or Germany, we may notice that the differences are extraordinarily big, the level of the bank credits offered for agricultural financing in these states being much superior compared to Romania.

Table3

Crediting level of the Romanian agriculture compared to other European countries (August 2006)

Countries	Bank credits offered for agriculture	
	Mil. €	% of total credits
France	42100,0	2,8
Germany	32500,0	1,4
Hungary*	1166,9	5,4
Romania	**676,6**	**2,5**

*data 2004

Source: Data processed according to reports of the National Banks from these countries

Concerning the agricultural credit percentage within the total non-governmental bank credits, in Romania this index is approximately equal to that from France or Germany, but much below the agricultural credit recorded in Hungary.

The importance of these measures is even higher if we analyze the comparative situation concerning the economy financing level through bank credits, as report between the credit volume and GDP, which is 70% in France, 55% in Germany, 25% in Hungary and only 19% in Romania.

Table 4

Bank credits offered for agriculture in some European countries in 2006 (€/ha)

Countries	Agricultural land (thousand ha)	Total bank credits for agriculture (mil. €)	Bank credits per ha (€/ha)	Credit percentage within GDP (%)	RO:E.U. countries
France	29690	42100.0	1418	70	1:31
Germany	17008	32500.0	1911	55	1:42
Hungary	5866	1166.9	199	25	1:4
Romania	**14717**	**676.6**	**46**	**19**	**1:1**

Source: Own calculations

Compared to Romania, there is a 4-time bigger volume of credits offered per agricultural hectare in Hungary, 30-time bigger in France and 42-time bigger in Germany.

Leasing financing, an alternative for the financing process, may enhance this difference, taking into account that, in Romania, leasing-based financing is at the beginning, used rather fearfully only for equipment imports.

If we take into consideration that the level of direct payments destined for agriculture from irredeemable budgetary sources from the European Union and from the national budget will not be able to overtake, per arable hectare in Romania, 55.5% of the mean E.U.-15 level, we may become aware of the gravity of this situation and at the same time of the necessity to create our own agricultural crediting system.

Under the conditions specified, the lack of our own agricultural financing program, like Farmer credit in the U.S.A. or Co-operative agricultural credit in E.U. developed countries, maintains a precariousness state concerning the competitivity of this sector of activity.

Although the idea of agricultural credit particularity is not generally agreed, we insist on this issue because we consider it to be very important, due to the specificity of the agricultural production, taking into account the conditionality of the agricultural technology and the costs which must be financed according to plant and animal biology. This particularity makes the

delay or interruption of the financing process impossible, whatever the cause is. The agricultural operational cycle cannot be stopped, too, only a little, through technical activities, because of its biological particularities. Moreover, plant or animal life cycle is not the only element conditioning the financing system. Most agricultural products cropped (cereals, forage, fruit) must be stored for a gradual consumption in the following periods, some of them for more than one year.

These characteristics constitute, beside the deficiencies mentioned above, in arguments for the founding and supporting of one own agricultural crediting system, at least for the period of time necessary for agricultural consolidation. When performance recommends agriculture as a profitable activity, able to face the competition on the market and to control its specific risks, the crediting of the agricultural exploitations may be carried out under the general available conditions of the bank credit market.

The agricultural credit must be easy approachable and, even more, to have an institutional character, in order to be able to assure permanence and continuity for the financing process. In the absence of a coherent agricultural crediting system, after December 1989, the credit has not met these requirements only partially, determined by certain political, economic and social conjunctures, or by the pressure exerted by the agricultural sector through agricultural specific "campaigns".

Of course, agricultural credit evolution and the credit relationships, on the whole, cannot dissociate from the general economic and financial system development. The agricultural credits along time (1990-1996), especially the ones with a subsidized interest, and also the other sums allocated from budgetary sources for agricultural support have not been used properly; the assets destined for agriculture have been preponderantly directed toward the unreformed and inefficient agricultural sectors, neglecting the privatized agricultural sector, especially the family agricultural exploitation. This type of exploitation, specific for the European rural economy, should be supported effectively, in order to align it to the market economy coordinates.

The breaking between the property reform and the reform of the private agriculture financing system has represented the major cause which has led to agricultural stagnation, to the perpetuation of the improper rural area states, a situation reflected today on the agricultural result and performance.

The increase of the agricultural crediting volume is conditioned by legislation, too, which constrains the credit guarantee possibilities. Land, the major guarantee element from a judicial point of view, is still not the property of

the private farmers, and the real estate guarantees requested from credit beneficiaries are not sufficient, either due to their low circulation value or they are not used because of the farmer reticence to hypothecate his own house.

The assurance of the financial resources necessary for agricultural production has special valences determined by a series of characteristics specific to the agricultural productive process and also to the multitude of social and economic effects exerted by the agricultural development upon the rural area, in particular, and on the entire economy, on the whole.

The finding out of the financial resources necessary to cover the funds for investments represents a continuous preoccupation for farmers, because the contribution of the internal bank resources to the investment process is still low.

CONCLUSIONS

We may consider that a bank for farmers will contribute substantially to the removal of these deficiencies, to the support of the agricultural exploitation consolidation and to the increase of the capacity of supporting the Romanian agriculture, within a very dynamic competition system, like the agricultural product market.

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LUCRĂRI ŞTIINŢIFICE, SERIA I, VOL. IX(2)

ANALYSIS OF SOLVENCY, EFFICIENCY AND PROFITABILITY BASED ON BALANCE SHEET AND PROFIT AND LOSS ACCOUNT

ANALIZA SOLVABILITĂŢII, EFICIENŢEI ŞI PROFITABILITĂŢII PE BAZA BILANŢULUI CONTABIL ŞI A CONTULUI DE PROFIT ŞI PIERDERE

AGATHA POPESCU*

This study aimed to analyze solvency, efficiency and profitability based on Balance Sheet and Profit and Loss Account belonging to a Commercial Company dealing with Viticulture, during the period 2003-2005. The analysis based on Ratio Method has put in evidence a higher financial performances from a year to another. While solvency and profitability have continuously increased, the efficiency of total assets, inventory and equity have decreased. As a result, the company has to pay more attention to production diversification and product quality for increasing sales.

Key words: *analysis, solvency, efficiency, profitability*

INTRODUCTION

Agricultural companies are facing serious financial problems. For this reason, financial analysis can be successfully used for understanding the financial statements and the evolution of the mains specific indicators characterizing solvency, efficiency and profitability (1,2,3,4,5,6).

This paper presents a study case taking into account the financial performances achieved by a commercial company dealing with viticulture and vinification, in order to identify the possibilities to improve its records in the future.

MATERIAL AND METHOD

The financial statement ended at December 31, 2003, 2004 and 2005, represented by Balance Sheet and Profit and Loss Account were used.

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The Ratio Method was applied in order to determine the following indicators and indices:

a) ***Solvency:*** Current ratio, Quick ratio and Receivable turnover; b) ***Efficiency:*** Total asset turnover, Fixed asset turnover, Inventory turnover, Equity turnover, Debt Equity; c) ***Profitability:*** Gross profit margin, Operating profit margin, Net profit margin, Return on total Equity and Return on Owner's Equity.

RESULTS AND DISCUSSIONS

The Assets Statement. During the period 2003-2004, the company assets have increased by 70.52 % from Euro 645,238 in the year 2003 to Euro 1,100,276 in 2005. This happened mainly due to the spectacular increase of working assets which have registered almost a double value in 2005 compared to the level recorded in 2003. The weight of working assets in total assets has also grown up from 69.92 % in 2003 to 81 % in 2005. The fixed assets have recorded just a slight increase of 7.71 % during the last three years.

The Debts Statement was continuously improved, so that in the year 2005, the company had only Euro 83,402 debt compared to Euro 332,002 in the year 2003, meaning 3 times less. Another positive aspect is the fact that the debt is represented only by short-term obligations, the company did not apply for long-term or medium term credits or loans.

The Total Equity of the company is Euro 949,415 in 2005, 3.37 times higher compared to the level 2003 (Table 1).

The Statement of Income, Expense and Results is presented in Table 2. At the end of year 2005, the firm ***income*** was Euro 1,562,108, 1.81 times higher compared to the level recorded in the year 2003, reflecting an intensive selling activity and a more oriented policy to penetrate in new grape and wine markets. The main income source is the operating activity. At the mean time, the related ***expenses*** have continuously increased, but slowly compared to income rhythm. Therefore, in the year 2005, the company recorded Euro 1,296,576 total expenses, by 56.77 % more than in the year 2003. The main expense destination was operating activity.

As a result, a spectacular increase was noticed concerning gross profit. In the year 2005, the gross profit was 7.5 times higher than in 2003, reaching Euro 265,532. The operating profit has definitely influenced in a

positive way the gross profit in all the studied years, but mainly in 2003 and 2004, when it exceeded the gross profit, but the financial losses, have diminished the final results. The Net profit is similar to gross profit as the company has used it for new investments. (Table 2).

Table 1

Assets and Liabilities based on Balance Sheet

Euro

Balance Item	2003	2004	2005	2005/2003 %
Assets, of which:	645,238	778,238	1,100,276	170.52
- Tangible Assets	194,064	187,740	209,029	107,71
- Working Assets	451,174	590,498	891,247	197.54
- Inventory	236,406	451,837	484,102	204.78
- Receivables	151,559	66,979	159,689	105.36
- Liquid assets	63,209	71,627	247,400	391.40
- Other Assets	0	0	3,611	0
Debts, of which:	332,002	24,466	83,402	25.12
Short-term Debts	332,002	24,466	13,402	25.12
Net Current Debts	119,172	566,033	807,845	677.88
Total Assets minus – Current Debts	313,236	753,773	1,016,874	324.64
Long-term Debts	0	0	0	0
Total Equity	281,504	706,289	949,415	337.26

The Solvency was improved from a year to another, but the highest performance was recorded in the year 2004. However, in the year 2005, Current ratio was 13 times higher than in 2003, Quick ratio was 7.5 times higher and Receivables turnover was 1.56 times higher compared to the level of 2003.

The Current ratio recorded such a spectacular increase because of the reduction of total debts and the increase of total assets.

The Quick ratio was positively influenced by the cash and receivables increase, but also the diminishing of current liabilities. The Receivables turnover has been mainly influenced by the increased net annual sales and just in a slight measure by receivable.

The efficiency indicators do not reflect an improved statement on the contrary, from a year to another, they recorded lower and lower levels.

The total asset turnover is by 50 % lower in the year 2005 compared to the year 2003, because of the fact that the asset value have grown up more rapidly compared to turnover increase.

Table 2

Sales, Income, Expenses and Results from Profit and Loss Account

Euro

Specification	2003	2004	2005	2005/2003 %
Net Sales	925,823	1,167,000	1,520,834	164.27
Total Incomes, of which:	862,445	1,717,663	1,562,108	181.13
- Operating Incomes	862,050	1,716,804	1,561,829	181.18
- Financial Incomes	395	859	279	70.81
- Extraordinary Incomes	0	0	0	0
Total Expenses, of which:	827,077	1,413,274	1,296,576	156.77
- Operating Expenses	822,659	1,405,221	1,296,534	157.60
- Financial Expenses	4,129	8,333	42	1.02
- Extraordinary Expenses	259	280	0	0
Gross Profit, of which:	35,398	34,389	265,532	750.13
- Operating Profit	39,391	311,583	265,295	673.49
Profit Tax payable	0	0	0	0
Net Profit	35,398	304,389	265,532	750.13

The Inventory turnover was facing the same situation, as the average inventory has increased faster than net sales. *The net Fixed Asset turnover* is the only efficiency rate which has really increased during the last 3 years, because of the slight increase in the fixed asset value (7.31 %) compared to net sales, which have recorded by 64.27 % higher value in 2005 compared to the year 2003.

The Equity turnover is almost twice less in the year 2005 in comparison to the level of 2003, because the average equity has become 3.37 times higher in 2005 compared to the net sales which have increased just by 64.27 % (Table 3).

The profitability ratios reflect an improved statement from a year to another.

Gross profit margin was maintained at a constant level, ranking between 99.51 % in 2003 and 99.56 % in 2005. This was due to the substantial increase of net sales and the maintaining of the cost of sold goods almost at the similar value. *The Operating profit* margin was 17.44 % in the year 2005, 4.1 times higher in the year 2003, because of the spectacular increase of operating profit (6.73 times higher in 2005 compared

to the 2003 level). *The Net profit margin* is 17.45 %, meaning 4.57 times higher in 2005 compared to the level of 2003, because the net profit has reached Euro 265,532 in 2005, that is 7.5 times more than in the year 2003.

Table 3

Main Financial Ratios

Rate	2003	2004	2005	2005/2003 %
1. Internal Liquidity Ratios (Solvency)				
Current Ratio	0.94	30.80	12.23	1301.06
Quick Ratio	0.65	5.67	4.88	750.77
Receivables Turnover	6.11	17.42	9.52	155.81
2. Operating Performance Ratios ***2.1. Analysis of Efficiency***				
Total Asset Turnover	2.96	1.55	1.50	50.68
Fixed Asset Turnover	4.77	6.22	7.28	152.62
Inventory Turnover	3.92	2.58	3.14	80.10
Equity Turnover	3.29	1.65	1.60	48.63
Debt Equity Ratio	0	0	0	0
2.2. Analysis of Profitability				
Gross Profit Margin	99.51	99.53	99.56	100.10
Operating Profit Margin	4.25	26.70	17.44	410.35
Net Profit Margin	3.82	26.08	17.45	456.80
Return on Total Equity	12.57	43.09	27.96	222.43
Return on Owner's Equity	20.00	172.02	150.05	750.25

The Return on total capital was 27.96 % in 2005 reflecting that the weight of net profit in total capital is more than double compared to the level registered in the year 2003. *The Return on Owner's Equity* was 7.5 higher in the year 2005 in comparison to the rate level in 2003, because of the significant increase of net profit and the constant level maintained for the owner's equity across the studied years (Table 3).

CONCLUSIONS

1. The study shows that the financial statement of the commercial company has been improved from a year to another concerning income, gross and net profit, but also solvency and profitability.

2. During the period 2003-2005, the sales increased 1.64 times and net profit 6.73 times.

3. The significant increase of assets had badly influenced the level efficiency ratios, except Fixed asset Turnover.

4. As a final conclusion, the company has to pay more attention to the strategy for asset development but also to the production diversification and product quality in order to enlarge its penetration in the market and increase its sales in the future.

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THE ROLE OF RISK ANALYSIS IN BANKRUPTCY EVALUATION

ROLUL ANALIZEI RISCULUI ÎN EVALUAREA FALIMENTULUI

AGATHA POPESCU*

This study aimed to present a study case concerning risk analysis in order to establish if the company is facing banckruptcy or not. Based on Conan and Holder Model, the Z score function was determined for the period 2004-2006.The negative values of Z function recorded every year reflect that the commercial company is facing 80 % bankruptcy risk. Therefore, under these circumstances, there is no room for a financial recover.

Key words: *risk analysis, bankruptcy, prevention measures*

INTRODUCTION

Financial risk is the additional uncertainly of returns faced by equity owners. If the company did not derive any of its capital from debt obligations, (i.e., it was an all equity firm), the only uncertainty for the owner would be that during a period of adverse business, the earnings available to equity will experience a larger percentage decline than operating earnings (Bolten, D., Conn, R.I., 1981). For this reason, risk analysis is used for bankruptcy prevention.

This paper presents a study case using Conan, J. and Holder, M. Model (1968).

MATERIAL AND METHOD

The data used in this study are collected from the Financial Statement during the period 2004-2006 belonging to a Commercial Company dealing with Fruit Tree Growing.

Risk analysis is based on "Score Function symbolized by Z", which takes into account the business environment where the company is operating

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and its profile, selecting the ratios and joining to each of them a specific relative value, according to the function equation: $Z = \sum_{i=1}^{n} K_i R_i + C,$

Where K_i = each ratio weight, R_i = ratio value for a certain company, C – a constant variable. In this study, Conan, J. and Holder, M. Model was used, whose score function is the following one:

$$Z = 16R1 + 22R2 – 87R3 – 10R4 + 24R5$$

Where: R1 = Partial Liquidity, R2 – Financial Stability, R3 – Financial Expense, R4 – Personnel Salaries, R5 – Profit weight in value added.

The obtained Z value was compared to the known standards as follows:
Z < 4, 75 % high bankruptcy risk, 4<Z<9 – 35-50 % bankruptcy risk and Z >9, 10-35 % bankruptcy risk.

RESULTS AND DISCUSSIONS

The Working assets of the company increased by 30.27 % from Euro 685,928 in the year 2004 to Euro 893,581 in 2006. Also, ***The inventories*** recorded a similar increase of around 30.38 % while ***financial expenses*** were 10 times lower in the year 2006 compared to the level recorded in 2004, ***the personnel expenses*** increased by 13-12 %. At the end of 2006, the firm turnover was Euro 1,502,059 by 16.34 % higher than in 2004. The ***long term equity*** decreased by about 86 % during the last 3 years, reaching Euro 138,879 in the year 2006.

The current debts recorded 25 % decrease, while the ***total liabilities*** recorded a light increase of 2.06 %. ***Gross profit*** was 2.28 times higher in the year 2006 counting Euro 18,210, but ***value added*** was around 25 % less.

The Partial Liquidity increased by 69.56 %, but its level varied from a year to another.

The Financial Stability was diminished by around 86 %. ***The financial expenses*** recorded a spectacular decrease (around 92.50 %), while ***the personnel expenses*** increased by 50.92 %. ***The share of Gross Profit*** in

value added was 3 times higher in 2006 compared to the level recorded in 2004. (Table 1).

Table 1

Calculation of Specific Ratios for Risk Analysis, according to Canon and Holder Model

Specification	M.U.	2004	2005	2006	2006/2004 %
A. BASIC DATA					
Working assets	Euro	685,928	754,516	893,581	130.27
Inventories	Euro	545,645	522,330	711,407	130.38
Financial Expenses	Euro	5,165	4,840	557	10.78
Personnel Expenses	Euro	549,276	601,538	621,337	113.12
Turnover	Euro	1,291,061	1,533,885	1,502,059	116.34
Long term Equity	Euro	1,031,250	1,599,256	138,879	13.46
Current Debts	Euro	674,670	267,450	518,608	76.86
Total Liabilities	Euro	9,772,335	9,933,120	9,973,824	102.06
Gross Profit	Euro	7,986	18,338	18,210	228.02
Value Added	Euro	306,259	72,725	229,606	74.97
B. Risk Ratios					
Partial Liquidity	R1	0.207	0.868	0.351	169.56
Financial Stability	R2	0.105	0.161	0.014	13.33
Financial Expenses	R3	0.004	0.003	0.0003	7.50
Personnel Expenses	R4	1.793	8.271	2.706	150.92
Gross Profit Weight in Value added	R5	0.026	0.252	0.079	303.85

Table 2

Z function value

Function Item	2004	2005	2006
16 R1	3.312	13.888	5.616
22 R2	2.310	3.542	0.308
-87 R3	0.348	0.261	0.026
-10 R4	17.930	82.71	27.06
24 R5	0.624	6.048	1.896
Z	-12.032	-59.493	-19.266

Using the R1-R5 values in the score function formula for the studied years, Z value was determined and presented in Table 2. The data show negative values for score function every year, but the highest negative value was registered in the year 2005. This situation reflects that the company is facing 80 % bankruptcy risk, so that it is expecting to fail in the near future.

This is due to its bad financial statement, the lack of payment capacity and a very low profitability rate, practically at the lowest level.

CONCLUSIONS

1. The study based on Conan and Holder Model shows that the company has a bad financial situation, and it is facing a bankruptcy soon.

2. The negative values of Z score function recorded every year reflects that there is no room for a financial recover, as long as the risk coefficient is 80 %.

3. Such a risk analysis would have to be made a few years ago in order to be useful for identifying in time the factors with a negative influence on the financial statement and to take the corresponding measures for avoiding such a bankruptcy.

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NEW REGULATIONS CONCERNING THE FINANCIAL STATEMENTS IN ACCORDANCE WITH THE INTERNATIONAL ACCOUNTING STANDARDS

NOI REGLEMENTĂRI PRIVIND SITUAȚIILE FINANCIARE ÎN CONCORDANȚA CU STANDARDELE INTERNAȚIONALE DE CONTABILITATE

I. PARVUTOIU[*], AGATHA POPESCU[**]

The alignment of the Romanian Accounting System to the I.A.S. has determined, among other aspects, the establishment of a new financial evidence, concerning Balance Sheet, Profit and Loss Account, Cash Flow Statement, Owner's Equity Change and Explanatory Notes reflecting Financial Statement. All these forms issued by Ministry of Finance are available for all the economic agents, according to the regulations in force and are destined to create an unitary information system both at local, national and international level, to strengthen and develop trade and financial operations between various enterprises and countries. The paper presents some comments upon the new components of Financial Statement, principles and rules which have to be put in practice by every enterprise.

Key words: *financial statement, economic agents, alignment, International Accounting Standards*

INTRODUCTION

The alignment of the Romanian Accounting System to the I.A.S. imposed the setting up and implementation of new regulations concerning accounting, financial exercise, principles and rules, as well as financial statements (statement type, form, content, approval, signing and handling). Financial Statement represents a tool reflecting the financial performance of a company and an important source which covers various users' information needs (managers, suppliers, clients, creditors, investors, employees, share

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holders, accountants, tax institutions and public). It reflects the company wealth and financial results at a moment and from a period to another, designing a special picture upon the economic potential of company, its solvency, financial profitability, selffinancing capacity and risks (commercial, bankruptcy, business etc). It helps the managers to establish the future financial strategy of the company (1, 2, 3, 4).

Under these circumstances, all the interested bodies have to know the methodology for setting up and reporting of the financial statement, its characteristics and structure.

MATERIAL AND METHOD

In order to set up this paper, the actual Romanian accounting regulations issued by Ministry of Finance as well as the I.A.S. provided by European Accounting Directive were studied in order to identify the objectives, the characteristics, forms and content of financial statements as they are mentioned into the legislation in force.

RESULTS AND DISCUSSIONS

The objectives of Financial Statements are the following ones: to reflect and provide information upon the financial position and performance as well as about material, financial and human resource management, firm capacity to generate cash flow, to strengthen its payment capacity to suppliers (invoice payment), employees (salaries, incentives), shareholders (dividends), creditors (interest and loans), public budget (profit, tax, VAT, other taxes).The manner in which fixed, working and human capital are managed, financial structure, liquidity and solvency, flexibility to business environment change have a deep influence on firm financial position. Financial analysis is required to anticipate the change in financial resource, cash flow, self-financing , profitability, investing, crediting and, in general, business development.

The requirements that the financial statements have to cover are the following ones: ***a) understanding*** information provided by financial statement; ***b) relevance*** for covering the users' information needs; ***c) credibility,*** assured by *correct registration* of every operation, *the neutrality* of decisions and reasons for achieving certain results, *prudence* assurance

under uncertainty conditions (assets and incomes must not be over evaluated and debts and expenses under evaluated), the information *integrity* (complete records, no emissions or false data) and *comparison*, so that to enable the users to assess the firm financial performance and position; ***d) information opportuneness*** that is to deliver it at the right moment to the managerial bodies, creditors and other interested people; ***e) information efficiency,*** reflected by a favorable cost/benefit ratio.

All these characteristics have to be assured both separately and all together for achieving a balance between them and a real believable picture of the company financial statement.

The form and content of the Financial Statements is specific to each type of evidence: Balance Sheet, Profit and Loss Account, Cash Flow, Owner's Equity Change and Explanatory Notes.

a) ***Balance Sheet*** must systematically and synthetically present assets and liabilities, allowing equity calculation according to the formula:

Assets – Debts = Owner's Equity

The Balance Items are ranked according to various criteria such as: assets liquidity and destination, availability and origin, so that to assure an operational balance.

The regulations in force are referring to registration and evaluation methodology so that all the economic agents to apply the same evidence system.

b) ***Profit and Loss Account*** reflects net sales, income, expenses and results (by operating, financial and extraordinary activity), resulting to gross and net profit, based on the equation:

Results = Incomes - Expenses

The regulations in force are referring to the range of each item as well as to adjustments related to Profit and Loss Account.

c) ***Cash Flow Statement*** assures the evaluation of net assets, financial structure, cash flow registered and forecast, liquidity and solvency rate. Cash flow is put in evidence according to the activity profile (operating, investing, financing) and is determined both by direct and indirect method.

d) ***Owner's Equity Change*** provides additional information concerning capital increase and decrease, but also about current profit/loss, incomes and expenses directly recognized in owner's equity, the cumulated effect of the change in accounting policy and correction of basic errors, capital operations and distributions among various owners.

e) ***Explanatory Notes*** provide additional information referring to financial results and firm position. They consist of : Tangible assets, Provisions for risk and Expenses, Profit distribution, Analysis of operating Result, Accounting, principles and methods, Shares and bonds, Information about employees, administrators and managers, Examples for calculating and analyzing the main economic and financial indicators (liquidity, risk, profitability, efficiency, profit/share), Other information (firm seat, its subsidiaries in the territory, assets and liabilities expressed in natural currency, incomes and expenses expressed in other currencies, profit tax, turnover, rents, auditor's honorary, received and allotted engagements.

CONCLUSIONS

1. The Financial Statements have to be set up in accordance to the new regulations issued by Ministry of Finance in order to assure the alignment of the Romanian Accounting System to the I.A.S.

2. They have to reflect entirely, correctly and clearly firm financial position, its fixed, working and human capital management , its capacity to develop cash flow, liquidity, profitability, self financing and risk danger.

3. The Financial Statements have to offer high quality information to managers, suppliers, clients, creditors, shareholders, employees, tax bodies and public.

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STUDY UPON ECONOMIC EFFICIENCY AT PRODUCT LEVEL IN MEAT PROCESSING INDUSTRY

STUDIU ASUPRA EFICIENŢEI ECONOMICE LA NIVEL DE PRODUS ÎN INDUSTRIA PROCESĂRII CĂRNII

I. PÎRVUTOIU*, AGATHA POPESCU**

This study aimed to analyze economic efficiency in meat processing industry, presenting a study case at Agroindustrial Company Baneasa, Bucharest. Two meat preparations were compared concerning production cost, sale price, profit and profit rate.Production cost is determined by manufacturing technology. In the year 2005, in case of Olteneşti Extra sausages, production cost was Euro 2.43/kg, of which 79 % raw auxiliary materials and in case of Trandafiri sausages, production cost was Euro 1.69/kg, of which 73 % raw and auxiliary materials. The most effective product is Trandafiri sausages assuring Euro 0.29-0.34/kg and 20.13-23.76 % profit rate.

Key words: *economic efficiency, product level, meat processing*

INTRODUCTION

Meat processing companies are facing serious problems concerning the increased price for raw and auxiliary materials, energy and water, the lack of slaughter animals, the EU requirements related to HACCCP and quality management. Among the factors with a deep influence on business development are considered production structure, product cost and quality (1,2). The paper presents a study case at the Meat Processing Department of Agroindustrial Company Baneasa, Bucharest concerning economic efficiency at product level (3).

MATERIAL AND METHOD

The production and financial statement of Agroindustrial Company Baneasa, Bucharest was used in order to analyze economic efficiency in the

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Meat Processing Department and at product level, taking into account two meat preparations: Olteneşti Extra sausages (P1) and Trandafiri sausages (P2). For each product, cost, price, profit and profit rate were determined and analyzed during the period 2003-2005.

RESULTS AND DISCUSSIONS

At the Meat Processing Department of Agroindustrial Company Băneasa, Bucharest, the main raw material is represented by fattened pigs, steers, adult bovines and lambs and the slaughter output is delivered either as carcass or cut into parts or processed in specific meat preparations. In the year 2005, the company slaughtered 3,382 pigs, 95 fattened steers, 52 adult bovines and 132 lambs were slaughtered. (Table 1).

Table 1

Number of slaughtered animals and average slaughter live weight by species and category in the year 2005

Specification	MU	Pigs	Fattened steers	Adult bovines	Lambs
Number of slaughtered animals	Heads	3,382	95	52	132
Average slaughter live weight	Kg/head	106	388	500	12
Total live weight	Kg	358,492	36,860	26,000	1,588
Slaughter output	Kg	Scalded pork carcass with head and legs 284,120	Young beef carcass 19,535	Beef carcass 13,000	Lamb carcass 1,270
Carcass/Live weight ratio	%	79	53	50	80

The total live weight and slaughter output depends on average slaughter live weight by species and category. The carcass/live weight ratio registered by company was 79 % for pigs , 53 % for steers, 50 % for adult bovines and 80 % for lambs .

The Meat Processing Sector achieves a large variety of meat preparations (salami, sausages, smoked tenderloin, bacon, ham etc).

Production cost is directly determined by manufacturing technology, specific consumption according to the recipe, input and , labor cost etc.

Analyzing production cost for two meat preparations in the year 2005, we can see from Table 3 that , in case of Olteneşti Extra sausages, the company spent Euro 2.43/kg and in case of Trandafiri sausages Euro 1.69/kg. The raw and auxiliary material represents 79 % in case of P1 and 73 % in case of P2 of total production cost.In the period 2003-2005, production cost increased by 25.90 % in case of P1 and by 38.52 % in case of P2. In the year 2005, the sale price increased by 23.94 % in case of P1, from Euro 2.13/kg in 2003 to Euro 2.64/kg , while in case of P2 increased by 34.44 %, from Euro 1.51/kg in 2003 to Euro 2.03/kg .

Table 2

Contribution of production sectors to Department Turnover

Production Sector	2003		2004		2005		2005/2003 %
	Euro	%	Euro	%	Euro	%	Euro
Slaughtering sector	640,052	59.02	657,270	53.80	626,917	50.38	97.94
Meat Processing sector	444,263	40.98	564,378	46.20	617,417	49.62	138.97
Department	1,084,315	100.0	1,221,648	100.0	1,244,334	100.0	114.76

Table 3

Cost calculation for two preparations in the year 2005(Euro/kg)

Cost item	MEAT PREPARATIONS	
	Olteneşti Extra sausages	Trandafiri Sausages
Specific consumption	1 kg meat	0.930 kg
RAW MATERIALS, of which (Euro)	1.58	0.90
- Pork	1.58	0.29
- Fat	-	0.21
- Boiled skin	-	0.18
- Almigel	-	0.03
- 1st quality beef	-	0.19
AUXILIARY MATERIALS	0.39	0.33
Salaries and contributions	0.14	0.14
Direct cost	2.11	1.37
Indirect cost	0.32	0.32
Production cost	2.43	1.69

Taking into account marketable production, incomes and related expenses, profit/kg product was ranking between Euro 0.2-0.21 for P1 and

Euro 0.29-0.34 for P2, showing that, the most effective meat preparation is "Trandafiri sausages", assuring the highest profit rate. While profit/product has slightly increased from a year to another, profit rate decreased, because production costs increased more rapidly than incomes. Therefore, the analysis at product level reflects a reduction of economic efficiency taking into account profit rate (Table 4).

Table 4

Comparison concerning Economic Efficiency at product level

Indicator	MU	2003		2004		2005	
		Oltenești Extra sausages	Trandafiri Sausages	Oltenești Extra sausages	Trandafiri Sausages	Oltenești Extra sausages	Trandafiri Sausages
Marketable production	Kg	2,255	5,726	1,879	5,255	376	2,463
Production cost	Euro/kg	1.93	1.22	2.08	1.34	2.43	1.69
Sale Price	Euro/kg	2.13	1.51	2.28	1.64	2.64	2.03
Incomes	Euro	4,803	8,646	4,284	8,618	993	5,000
Expenses	Euro	4,352	6,986	3,908	7,042	914	4,162
Profit	Euro	451	1,660	376	1,576	79	838
Profit/product	Euro/kg	0.20	0.29	0.20	0.30	0.21	0.34
Profit rate	%	10.36	23.76	9.62	22.38	8.64	20.13

CONCLUSIONS

1. In meat processing industry, production cost is increasing more rapidly than meat preparation market price, affecting profitability both at product and firm level. Production cost is deeply influenced by raw and auxiliary materials cost, labor cost etc as well as production technology.

2.Comparing the two meat preparations, it is more effective to produce Trandafiri sausagesthan Olteneşti Extra sausages, because the profit rate is 20.13 % for P2 , 2.33 times higher than in case of P1.

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THE FUNDAMENTAL ANALYSIS OF STOCK HOLDINGS PLACED ON THE CAPITAL MARKET

ANALIZA FUNDAMENTALĂ A ACŢIUNILOR PLASATE PE PIAŢA DE CAPITAL

M. HERBEI[*], AURA COSTEA*

The fundamental analysis of stock holdings placed on the funds market has the objective to evaluate society actives and estimate the possible profits of the society in the next years, the analyst that handles fundamental problems studying in different stages of the activity cycle, the society's economical conditions – the fundamental factors that can determine a change in the value of stock holdings. The indicators utilized for the fundamental analysis of stock holdings are the dividend per stock holding, the efficiency of a stock holding, the distribution rate of dividends, the profit per stock holding, the capitalization coefficient, the recovery term.

Key words: *stock holdings, profit, dividend, capitalization coefficient*

The difference between the financial situation analysis and the corporate funds analysis differs due to the fact that the financial situation analysis rests at the base of a good corporate fund analysis, being more than the simple study of a society account value.An analyst has to always heed the activity branch from which the society takes part, of how periodic is the society's activity or if the society's management is suitable for the society's dimensions. He will ask himself if the society's management is competent and accurate, if the society is dominated by a single person, and if this person leaves, how will this influence the pace of the society, and also if the society is capable of managing itself, or the society's benefits are influenced by other factors (such as international prices/government policies) .The society strategy for the future will not be omitted, and neither who appears in the company register of stocks holdings, or if there is a possible take over of the society, and of course what are the strong and weak points of the

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society. In fact, if a society has a solid reputation, what is the secret to its success? In the opposite case, what is the cause of its weak results?

The term of fundamental analysis explains itself in many respects.This implies the analysis of the financial situation of the society, considering a lot of factors. The objectives of the fundamental analysis are either to evaluate the actives of a society, or to estimate the possible profits of the society in the next years.

The fundamental problems analyst studies the development conditions of certain activities in that direction and of certain societies. He researches costs, profit margins, management performance, production and financial situation. The analyst has to study all these characteristics in different stages of the society's activity cycle. The studies are the following: development, growth, stabilization and decline.

The majority of analysts are focusing on the study of future possible profits and focusing less on the current dividends or the actives, considering that the growth of profit determines the growth of the stock holdings price. Using this method, a wide space remains for interpretation and subjective judgment, and for this reason there will always be different opinions about the value of stock holding. The essence of the fundamental analysis of material values is that the stock holding's value reflects a great number of economical conditions. A change in these economical conditions, also known as fundamental factors, can determine a change in the value of stock holdings. The fundamental factors that determine the title values are numerous. In general, analysts try to identify these factors that influence the immovable's values. The fundamental approach might not indicate the value of stock holdings in a certain day, but indicates in what direction does the price of stock holdings head in the future.

At the end, the quoted societies publish an annual report that holds information referring to: the balance sheet in the last two years, the results of accounts in the last two years and the balance sheet appendages.

Starting from the results of accounts, the evolution of the turnover can be calculated, of the exploitation result, of the net benefice, cash-flow, these allowing the growth evaluation possibilities of the society and also the evaluation of the financial titles with a variable income.

The fundamental evaluation of stock holdings can be achieved starting form a series of indicators and measures: the dividend per action

DPA, the distribution rate of dividends, the benefit per action of the capitalization coefficient PER.

a) **The dividend per action** (DPA) *is the sum of money fell in by a society to each of its stockholder, which represents for their income*. In general, the dividends constitute a distribution of the benefits that are obtained due to the finalization of the financial exercise, but they can be also distributed through spreading the benefits that were incorporated in reserve. We can speak of the global dividend when the dividend is calculated before the excise tax and the net dividend, when we determine the dividend after its payment.

b) **The efficiency of a stock holding** (η) is given by the efficiency produced by the dividends and by the additional value of corporate funds, and it is calculated using the following formula:

$$\eta = \frac{D + C_1 - C_0}{C_0} * 100$$

where: D = is the dividend

C o ,C $_1$ = is the appreciation of the stock holding in moment t $_o$ and t $_1$

The efficiency is calculated, in reference to the financial value of the title (appreciation) and not in reference with the face value.

c) **The distribution rate of dividends** (d) represents the percentage obtained from the benefit of the exercise that is distributed to the stock holders. It is calculated using the proportion between the sums of net dividends with the net benefit. If an enterprise distributes 100% dividends, this suggests the fact that it doesn't incorporate in the reserve any monetary system from the obtained benefit; if it distributes more than 100%, this suggests the appeal to the accumulated reserves, for the purpose of distributing them as dividends.

d) **The profit per action** (BPA).Unlike the dividends, the profit per action is not a financier flux, but an essential element of stock hold value. BPA suggests the theoretical wealth of the stock holder during a year.

$$BPA = \frac{\text{Profit form the current exercise}}{\text{Number of stock holdings}}$$

e) **Capitalization coefficient** (PER) is expressed as a proportion between the stock holdings flow and the benefit per action, and it shows how many years are necessary to cover the market value of the enterprise

with the obtained benefits. In the absence of a real growth of an enterprise, mainly when an enterprise distributes the totality of its benefits without amelioration of the productivity, the benefits an the dividends are constant, and the action seems like a perpetual annuity. Then it can be expressed:

$$V=\frac{DPA}{K}=\frac{BPA}{K} \quad ; \quad K=\frac{BPA}{V}=\frac{1}{PER}$$

in which: V = rate of the stock holdings, K = the capitalization requested by the stock holder , BPA = benefit per action

f) **The recuperation term** (TR) that shows in how much time the price of a stock hold can be covered, theoretically on the count of future fluctuations produces by the benefit per action, updated in correlation with the efficiency rate on the market.

The fundamental analysis advantages consist of:

***Discipline*:** any try to estimate the inherent value leads to the minimization of the lack of clarity in making choices referring the opportunity of an investment. It forces the investor to quantify variables instead of relying on the quality of his judgment. Although the prognosis of the main variables can be ha venturous, this can make the specific problems that do not show up at a subjective approach, more obvious.

Risk: in determining the most suitable rate for the calculation of the inherent value, the implications of a risk associated with an ordinary action are revealed. Real difference will differ depending on the supply quality. The different tax and the different growth potential, influence the discount rate also.

***The relation between the current price of an action and the market performances*:** in some certain methods, the estimation of the proportion between price and benefit is the most important step in determining the inherent value. The analysis is applied to the proportion of price and past and present benefit, for the determination of the most suitable multiplier. If the proportion of a society is at a high level compared to the proportion recorded in the past or with the proportion of price per benefice of similar societies, then the analyst must study certain factors (e.g. future dividends) to see if the projects that were made justify the current multiplier. The proportion used is of a crucial importance and the analyst must not be influenced by the current psychology of the market, in choosing the right proportion.

The disadvantages of the fundamental analysis are:

The prognosis of the future profits obviously becomes a very difficult task, and with a lot of traps. That is why it is tempting to resort to extended analysis in the calculation of the constant profits. Even when the numbers of the beneficiary per action are known for the first year, the determination of the payment rate is necessary, so it can permit the calculation of dividend fluctuation and maintaining the profit for the next year. We have to bear in mind that the estimation of the income, dividends and profit can or can't be achieved because of the influences of external factors. Shortly, the inherent difficulties that tend to multiply must not be underestimated.

The transformation of the market pulse and market cycles. Due to these changes, often, the inherent value analysis becomes rather sterile, on a short period of time. A lot of evaluation methods of stock holdings consider that a direct relation between profit and the current value of the stock holdings exist. In practice, the decline of activity and/or the temporary psychological changes in market share could have an expanded effect upon the real price of stock holdings than the growth rate of the profit. The old saying that the value is "all that you can earn by selling" seems vailable only for short periods of time.

The macro factors can have a dramatic effect upon the analized value titles. There are a lot of types of macro factors. Some of them are of an internal nature, and others are of an external nature.The important macro factors are: economical (exchange rates, inflation, salaries, taxes), social and political (unenployment, social service, taxes), natural disasters (fire, floods, droughts, plagues).Any of these factors can influence the society's profit, the nature of the risk and development projects. That is why, it is urgently necessary for the analysts in the real estate branch to understand the way these factors influence the value of a title and, particularly, how vulnerable is the main activity of a macro factor society, that he cannot control. There are other riscs with which he faces in diverse activity fields. Technology is one of the greatest risks in the industry. The technological change can take out of circulation a certain field of activity. Changes in taste and public orientation represent other sources of risk. A sudden change in the taste and orientation of the public can affect the profitability of certain field of activity and to stagnate its

developement.Specific activity fields are divided in three categories: defensive activity, developement activity domains and cyclic activity domains .

The value of stock holdings reflect a large number of economical conditions.The analysts in general follow to predict the future movements of prices using data from periods of time from the past. The method has advantages (discipline, risk, benefit-price relationship), and also disadvantages(the difficulty of predicting fundamental variables, the changing of market pulse, the cycle of the market).

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TECHNICAL ANALYSYS OF STOCK HOLDINGS PLACED ON THE CAPITAL MARKET

ANALIZA TEHNICĂ A ACŢIUNILOR PLASATE PE PIAŢA DE CAPITAL

AURA COSTEA*, M. HERBEI*

The technical analysis studies the price modifications of stock holdings on short term, starting from a historical study of flows and from the influence of internal market upon the direction and variations of titles. The purpose of the technical analysis is to anticipate the movement of stock holding prices, and the pursuits of objectives through the technical analysis are the future projection of past and actual behavior of the title flow and also following the actual tendencies to settle upon when a price variation will indicate a return point. In this method graphic analysis and diagrams are used.

Key words**:** *stock holdings, technical analysis, index, capitalization, investment method*

The technical analysis studies the price modifications of stock holdings on short term, starting from a historical study of flows on a period of at least six months and from the influence of internal market factors upon the direction and variations of title flows in a past period and a present period, the volume of transactions, the number of stock holdings in growth or diminution. From the study of past and present evolutions of titles, result the main tendencies of a title or the whole market.

The pursuits of objectives through the technical analysis are the following:

1. Future projection of past and actual behavior of the flow for the title. In this case, the linear progression is utilized. If the future level is inferior to the calculated one, then the growing tendency of the market has changed its direction and vice versa.

2. The research and tracing of cyclical movements of the market. The starting hypothesis is based on the assurance that any title, which is in

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growth, will begin to diminish. For this it is necessary to calculate the frequency of the cycles and to analyze the evolution of prices in the period when the calculations showed that it approaches a point of return of the market.

3. Following the actual tendencies to settle upon when a price variation will indicate a return point.

The purpose of the technical analysis is to anticipate the movement of stock holding prices. Still, the analysts reject the probability that an important anticipation can be realized through the study of fundamental elements. Analysts concentrate on the market of title values and follow the price movements closely, presuming that any influence upon the prices is reflected in these movements. The analysts consider that there is no need to compare why the prices are moving, because patterns will appear through which the direction where the stock holdings will go are indicated. The analysts study and make diagrams for the price movement of value titles, in a past and present period, the volume of transactions and the number of actions in growth and diminution. Then they study the patterns and try to make a foresight upon the direction of price for stock holdings or the entire market.

The index of stock holding prices existing on a certain market of stock holdings is realized depending on capitalization, method that is accepted on an international scale. The compensation is realized in proportion with the ordinary emitted stock holdings by the societies shown on the list, evaluated at the current market price. In consequence, the societies that have a greater level of capitalization are more important than those that have a lower level of capitalization.

Beside the index of prices on all stock holdings, the index of sensitive price is realized in accordance to the fact that certain societies seem to be more sensitive than others regarding to the market conditions. In the selection of stock holdings for the index of sensitive price there are a lot of factors that are consulted: the volatility if price movements, the difference between the issue price and the market value, the situation of the society's dividends, the frequency of transactions and the profit per action in a period of three years. The index of sensitive price must be calculated in the same manner as the index of stock holding prices and a year of reference must be chose.

The technical analysis deals mainly with the study of market value title activity and in general, with the movement of stock holding prices of certain societies which they follow. Studying the market of value titles, in general, together with the movement of prices, the analyst will try to do a prognosis on price movement. The analyst is not interested if the society profit grows or if the society develops, he is interested only by the movement of stock holding prices. The analyst will use theories based on diagrams and numbers.The most spread theories are:

The decline developing theory*:* that measures the intensity of the growth or decrease of the value title market. Example: if 50 emissions are traded at the BVB in a certain day and 35 stock holdings grow, and 15 drop in value, then a the coefficient can be calculated through the proportion between the growing stock holdings and the total of stock holdings resulting 70%, which indicated a bullish position. The growing stock holdings are considered bulls, while the dropping stock holdings are considered bears.

The transactional volume*,* that has to do with the connection between the market price and the total volume that was traded. A growth or decrease of price at a high level means a movement of prices in the same direction. A growth or decrease of price at a low level means an inversion of price movement. The analysts hope in a very large transactional volume for the on growing market and in a very small transitional volume for the market in decrease. Also, for the decreasing marker, if the volume decreases, the trader considers that the sales will stop, and so the decline can be ended.

The technical analysis of individual real estate values. A "head and shoulders" type of diagram is one of the classic models and, it is an inversed image of the price orientation of an action. If the diagram appears in the upper part of a positive orientation that means that the price would be dropping, following the descent line of the shoulder, to the right part of the graphic. For example: if the price of a stock holding oscillates between 30,00 lei and 35,00 lei, the level of 30,00 lei represents the *support level (H & S, shoulder line)*. A diagram faced head down indicates the level of 30,00 as a low level (the shoulder line) at which the stock holding reached, so the vice versa of the situation will show us to what vale will the stock holding price be. The level of 35,00 lei represents the *resistance level (H & S the head line).* A diagram with the head orientated upwards indicates us the maximum point at which the price of a stock holding is, so the vice versa of

the situation will show us the value at which the price of the stock holding drops.

The graphic method

The market transactions have the tendency, in a certain period, to develop in a certain interval. In a certain period market stock holdings have the tendency to trade on the same interval. There are cases in which an increase is produced up to a resistance level that is reached when the value of the stock holdings drop because of the massive offer from the behalf of stock holders that have bought stock holdings before the decline and now wait the come back to this level. In the case of a decline –the support level – the investors will buy considering the low price. A lot of clients use this method to buy and sell stock holdings. The premise from which a good technician starts is that the direction in which the price of title values is heading can be determined studying the variation model of stock holding prices, on a past period of time, and the fundamental analysis is not a safe method.

The theory of efficient an market

This approach is relatively new in the market theory. The theory starts from the idea that investors consider that the price of stock holdings reflect in fact the real or inherent value of individual stock holdings. The efficient market theoreticians are not interested in the fundamental of technical analysis. Also, they do not believe in the overvaluation or the undervaluation of stock holdings. Whatever is the current price for a stock holding, this represents the real inherent value of stock holdings.

The Beta factors represents the volatility of a stock holding on the market in general. A stock holding that fluctuates up and down in the same way has a beta coefficient of 1,00. A stock holding that varies up-down is much less volatile than the market. The larger the beta factor is, the more the action is speculative.

The method of contrarian investing

The contrarian method is the method to succeed on the stock holdings market, reacting opposite than the rest. A lot of investors consider that the on who buys in the moment when all the others sell or that sells in

the moment when everyone buys, will be the most rewarded. Investors stay away from ideas or other particular activities that seem to be temporary. It is considered that it is impossible to realize a superior performance that to act differently than the majority of the investors.

The bottom – up investment method is probably the most used method that utilizes the study of fundamental characteristics of every stock holding – the proportion of price/win, the efficiency of dividends, and the net value of stock holdings – so that it can be decided if the stock holding is cheap or expensive. A lot of analysts concentrate upon the future profit, and less upon the dividends, considering that the size of the profit determines the growth of stock holdings.

The down – up investment method

The first step in this method is a wide view of the international market and of national economy so a prognosis can be made upon the orientation of interest rates, of uncut national product, of salaries, of inflation, of goods price and of other important economical factors.

The second step is to decide what sector of the stock holdings market should benefit more from the orientations of the prognosis. If the construction market is considered in decline, then stock holdings must be sold from this investment domain.

The third step in this process is to study the individual stock holdings from a certain sector and to choose those stock holdings that will benefit more because of the future orientations. A lot of analysts who prefer this method use these techniques for choosing the final value of stock holdings.

Both types of analysts - that use the fundamental analysis or the technical one – follow the same objective: to make a prognosis of future movement of prices using data from past periods.The analysts that use the fundamental method, study the economy, industry and society, while the analysts that prefer the technical method study the price of stock holdings, the volume of the trade and other data about the market. Both analysis methods offer marking points for the future, and complete each other.

The technical analysis of stock holdings placed on the market fund studies the price modifications of stock holdings on a short term and has the purpose to make a prognosis upon the movement of stock holding prices. The methods of technical analysis are diverse and the analysts that use the

technical method study the price of stock holdings, the volume of the trade and other data about the market.

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THE ANALYSIS OF FINANCIAL RESULTS AND FINANCIAL POSITION OF AGRICULTURAL IN VOJVODINA

ANALIZA REZULTATELOR FINANCIARE SI POZITIA AGRICULTURII DIN PUNCT DE VEDERE FINANCIAR IN VOIVODINA

V.VUKOJE*, V. ZEKIC*

The paper gives a comparative analysis of basic indicators of agricultural enterprises' financial result and position in the Province of Vojvodina over the six-year period of transition (2000-2005). Cumulative balances have been used as basic data sources. For the purpose of thorough assessment of the observed parameters the comparison is made not only in terms of chronology, but with food industry on the whole as well. The analysis shows very negative business results over the whole period. The paper points out to drastically disturbed financial balance, problems with liquidity maintaining, reproduction ability, adverse debt structure, and reduced net capital real value.

Key words: *analysis, agriculture, transition, financial results, liquidity.*

INTRODUCTION

Over the last few years our country has undergone a more intensive transformation process in agribusiness sector. The results of our analysis have, however, shown that both production and financial effects are far from the expected. Such a conclusion is also based on negative financial results of agriculture over the period observed, while food industry had positive results in only three of these six years. The question is inevitable why there are no expected positive results. Is it due to the fact that the transformation process hasn't actually progressed, or due to the very model of transformation being a bad one, based mainly on auction sale of enterprises? Or is it most probably due to both of these? Certain agricultural policy

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measures that have recently been undertaken are far from being sufficient in meeting the needs of deeply pauperised agricultural enterprises.

This paper's main objective is to give an assessment of Vojvodina's agribusiness performance efficiency, comparing it with food industry in this province in the 2000-2005. period. The assessment is based on the analysis of production and economic results achieved, which also suggests the direction in which necessary improvements should be made.

DATA SOURCES AND METHOD

The subjects of analysis are mainly agricultural enterprises performance results, compared with those of food industry companies and of economy on the whole, in the Province of Vojvodina. In the focus of the analysis is the six years long period (2000-2005), but in the certain cases data from longer time periods have been used. The analysis and assessment of agribusiness performance results are based on the data derived from annual balance sheets and cumulative balances for the 2000-2005. period, as collected and processed by the Narodna Banka Srbije (People's Bank of Serbia). It means only those economic subjects are included that have the obligation to submit their annual financial reports - which excludes all farm households. Methods of quantitative and qualitative analysis of balance were applied, the comparison of results for the given period, and the comparison of the data referring to agriculture and food industry.

RESULTS AND DISCUSSION

Over the period observed there were between 15.450 (1997) and 17.767 (2005) economic subjects operating in the Province of Vojvodina. The increase of around 2.300 enterprises in 2005. as compared to 1997. was due to both various disintegrative processes and newly founded companies. There was between 1.267 (2000) and 1.448 (2004) of agricultural enterprises, with the clearly shown tendency of growth *(graph. 1)*. Agricultural enterprises account for 7,2-8,4% of all the enterprises (companies) in Vojvodina, having shown a clear upward trend. The explanation is mostly in

a rather strong growth of new businesses, with small enterprises accounting for 85% of all the operating ones. The enterprises in the area of food industry made up 2,76-4,36% of all enterprises in Vojvodina (from 433 in 2000. to 774 in 2005).

In Vojvodina's economy, there were 359.060 employed in 1997, while by the year 2005. that number was 267.126 – a reduction by almost 20%. The reduction is even stronger in agricultural enterprise: from 53.725 in 1997. to 35.224 in 2005, or by 29%. In food industry, the number of the employed moved between 37.340 and 38.276 which was a growth by 2,5% in comparison to the first year. The employed in agriculture and food industry account for 27,5% of all the employed in Vojvodina's economy.

Graph. 1: Number of enterprises and employed in agriculture

The share of assets of agricultural enterprises in the assets of the whole economy of Vojvodina has grown in the observed period by 4,1% (10,3-14,4%). In the same period the share of the food industry has fallen by 2,1% (10,3-14,4%). The share of agricultural and food industries assets together has grown by 2% (24,1-26,1%). That share is very significant (around one quarter), but is far from being dominant, as is usually misperceived.

In the structure of gross income of agricultural enterprises (table 1) logically business incomes take a dominant position (over 90%). The exception is the

year 2000, in wich that share was smaller because of the unusually high share of irregular and other incomes, which is mostly due to the usage of a new way of treatment of revalorisation incomes and expenses. The relatively small share of financial incomes over the period observed (up until a few percents) may be considered to have been expected, in view of the facts that our enterprises have almost no free financial means for either long-term or short-term investments, and that consumer crediting is very limited. The exceptionally high share of irregular and other incomes in total income is the result of the lack of business operation regulations in the period of transition, which rather often causes the selling of some non-current assets, annulling of interests and debts (which anyway could not have been serviced) etc.

Table 1: The Structure of total income and its distribution (%)

	Position	Agriculture						Food industry					
		2000	**2001**	**2002**	**2003**	**2004**	**2005**	**2000**	**2001**	**2002**	**2003**	**2004**	**2005**
1.	Operating incomes	79,5	91,6	90,1	90,1	93,4	93,1	85,2	93,6	93,7	92,3	93,8	93,6
2.	Financial incomes	1,7	0,79	0,57	1,02	0,78	0,93	2,8	0,58	0,65	0,8	1,94	1,74
3.	Irregular and other incomes	18,8	7,7	9,3	8,9	5,79	5,97	11,9	5,84	5,7	6,9	4,23	4,65
I	**TOTAL IINCOME**	**100,0**	**100,0**	**100,0**	**100,0**	**100,0**	**100,0**	**100,0**	**100,0**	**100,0**	**100,0**	**100,0**	**100,0**
4.	Operating expenses	73,8	88,6	94,7	99,4	93,1	94,4	77,7	87,7	90,0	90,6	82,8	90,3
5.	**Financial expenses**	3,7	3,8	3,9	4,9	4,1	4,25	4,4	3,41	2,36	3,54	3,9	4,65
6.	Irregular and other expenses	24,7	8,0	5,6	7,0	4,7	3,22	26,4	7,81	6,29	6,82	5,0	4,87
I I	**TOTAL EXPENSES**	**102,3**	**100,4**	**104,1**	**111,4**	**101,9**	**101,9**	**108,5**	**98,9**	**98,7**	**101,0**	**99,5**	**99,8**
7.	Gross result (I–II)	-2,28	-0,39	-4,12	-11,39	-1,9	-1,92	-8,53	1,05	1,31	-0,96	0,46	0,19
8.	Taxes	0,07	0,11	0,13	0,08	0,14	0,09	0,17	0,29	0,4	0,28	0,31	0,22
9.	**Net result (7-8)**	**-2,35**	**-0,50**	**-4,25**	**-11,47**	**-2,03**	**-2,01**	**-8,70**	**0,76**	**0,91**	**-1,24**	**0,15**	**-0,03**

In the year 2005 as much as 94,4% of agricultural enterprises' total income was spent on covering only some of their operating expenses (in

food industry 90,3%). The operating income to expenses ratio was hence negative: -1.157,4 million dinars. Less than 5% of total agricultural income is spent on financial expenses. It is much the same in food industry and economy on the whole. This can be considered a relatively low share, and the explanation should be found in the fact that enterprises avoid taking loans and credits (avoid getting indebted) since the conditions in our capital market are highly unfavourable, and it is impossible to service the high interest rates when the low rentability is a persisting problem. On the coverage of the irregular and other expenses still a lot has been spent 3,23% (2005). The percentage is too high since it should be under 1% anyway, preferably as close to zero as possible. There are several various reasons: significant accounts receivable had to be written off (uncollectible debts, overdue loans) as well as some equipment; certain losses were due to disastrous draft and other adverse weather conditions, as well as to poorly managed business.

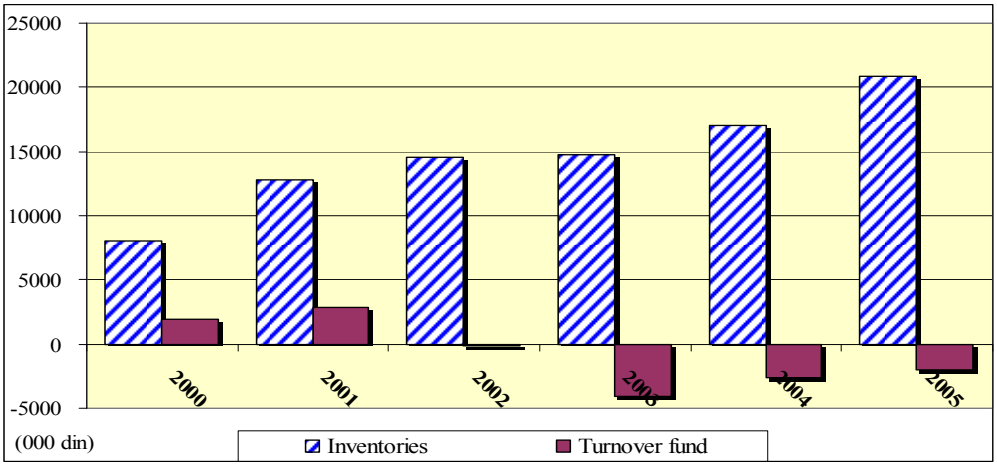
In all the years of the period observed agricultural production had negative gross and net financial results, while food industry managed to have positive results in only three of these six years. The net loss was exceptionally high in 2003. (6.683 million dinars, or 11,47% of total income). That was certainly due to extremely diverse weather conditions, in addition to other factors. It should be noted that cumulative balances were used in the analysis, so that the loss represents the net result of all the enterprises in Vojvodina, regardless of the fact that some of them had achieved positive results

The financial **results structure** shows that agricultural production, during the whole observed period (except in 2000), had negative results in view of regular business performance (the sum of the operating and the financial results). It should be considered a warning fact that in the last two years of that period agriculture had negative results in view of business revenues to expenses ratio, unlike food industry.

The assessment of **financial position** was based on the analysis of: financial balance, indebtedness, real capital value maintenance and reproduction ability. The analysis of financial balance basing on covering the fixed stocks by means of turnover fund *(graph. 2)* shows clearly a very unsatisfactory financial structure of agricultural enterprises, particularly in 2002 and 2003. Up to 2001. agriculture had somehow managed to finance

20,1% - 23,5% of fixed stocks, but in the last three years the turnover fund was even negative. In 2005, due to this extremely high negative turnover fund agriculture lacked 22.908 million dinars of long-term financing to merely establish its financial balance. It is by exactly that amount of money (or by 1,81) that the short-term bound means are under the short-term liabilities, which proves that agricultural enterprises have long been faced with liquidity problems.

Graph. 2: Inventories covered by turnover fund in agriculture



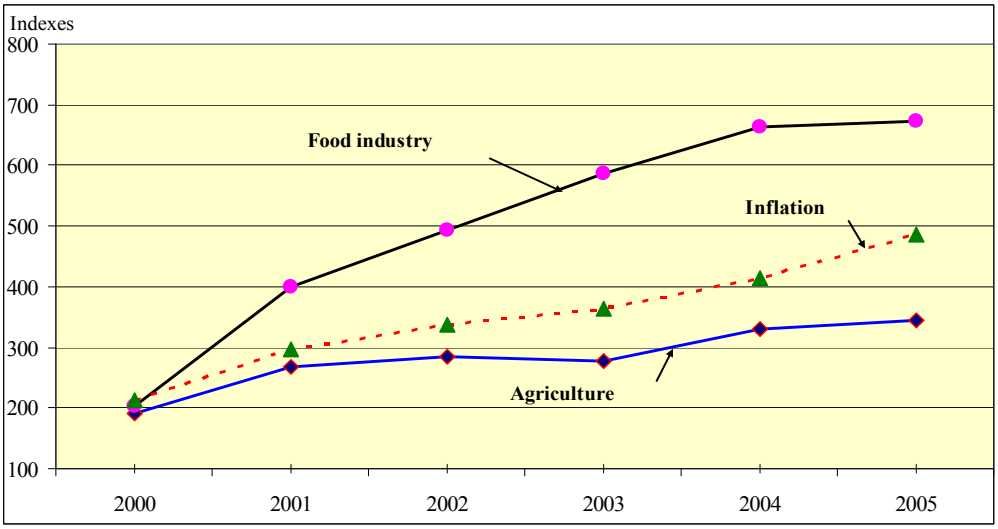
In food industry the turnover fund was positive in all these years, though in most years sufficient enough for financing only 25-43% of fixed stocks (with the exception of the year 2003. when 51,84% of them were covered).

The analysis of equity and liabilities from the aspect of ownership shows a relatively low rate of agricultural enterprises' **indebtedness,** but with a clearly shown tendency of permanent growth, from 22,8% (2000) to 43,2% (2005). During the same period the food industry had much higher growth (from 33,7% to 50.9%). With respect to terms of payment, however, the position of agriculture was highly unfavourable since its short-term debts account for 81% of all its debts (for the for food industry it is around 79%). Considering other factors like high share of non-current assets in agriculture capital (63% in 2005), highly amortized equipment (over 70% in 2005), significant inflation rate (17,7%) as well as extremely unprofitable

agricultural business performance, its indebtedness may be assessed as acceptable but by no means satisfactory.

In the period analysed agricultural enterprises had the net capital growth index of 344, while the inflation cumulative index was 486,4 – showing a actual decrease of net capital by 142,5 index points *(graph. 3)*. But the net capital was actually increased by 187,3 index points in food industry.

Graph. 3: Cumulative idexes of net capital and inflation growth (1999=100)



During the whole six years agriculture had a very low rate of **reproductive assets** (0,48-1,45%). In the year 2003. reproductive assets rate was negative (-2,74%) - as its loss was by 3,164 million dinars bigger than the sum of amortization and the long-term reserves. During the last two years this rate was positive (1,70-1,45%), but considering significant financial disbalance, high amortization of equipment (over 70%) and the low coefficient of total assets (0,63) there is no doubt that agriculture was incapable of plain reproduction.

CONCLUSION

The paper gives an analysis of financial results and financial position of Vojvodina Province's agriculture in the period 2000-2005, offering also the comparable data on food industry and economy as the whole. In the last years of the analysed period the ownership structure transformation was intensified, but the production and economic results analysed confirm no substantial change in agricultural business performance. Number of the employed was being reduced, particularly in agriculture, huge losses increasingly accumulated – resulting in financial disbalance, poor business efficiency, i.e. low rentability, accumulation and reproduction abilities.

Long-term and cheap capital, which can be provided through additional investment of the owner and/or by borrowing under favourable conditions is needed for the improvement of the agricultural enterprises financial position. But, that is not enough. Beside the raising of the efficiency of enterprises, which should be provided through the privatisation, a number of measures in the areas of agricultural, tax, customs and monetary policies are needed to be made.

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ACCOUNTING TREATMENT OF AQUIRED AND INTERNALLY GENERATED INTANGIBLE ASSETS

TRATAMENTUL CONTABIL AL IMOBILIZĂRILOR NECORPORALE ACHIZIŢIONATE SAU GENERATE INTERN

VICTORIA FIRESCU[*]

The intangible assets reported on a balance sheet are only those intangibles that have been purchased or manufactured in limited instances. Income statement discloses the amortization charge for each class of asset and the total amount of research and development costs recognized as an expense.

***Key words**: Recognition, reliably, identifiable, non-monetary, separable*

INTRODUCTION

An intangible asset is an identifiable non-monetary asset without physical substance that is capable of being separated from the entity and sold, transferred, licensed, rented or exchanged. Also, intangible assets arise from contractual or other legal rights. Recognition of an intangible asset does if it is probable that future economic benefits will flow to the entity and the cost of the asset can be measured reliably. Internally generated goodwill, publishing titles, customer lists, brands should not be recognized as assets.

Whether an intangible asset is acquired externally or generated internally, it is recognized at cost.

However, companies have intangible assets that are not reported on their balance sheets; these intangible assets include management skill, valuable trademarks and name recognition, good reputation, proprietary products etc. Such assets are valuable and would fetch their worth if a company were to be sold.

An entity that has acquired many of its intangible assets in mergers and acquisitions will typically have a significantly higher amount of such

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assets in its balance sheet than an equivalent entity that has developed most of its intangible assets internally.

Professional reasoning should be applied when deciding what type of journal entry to use for assets which incorporate both tangible and intangible elements in order to register them as tangible or intangible asset. An entity controls an asset if it has power to obtain economic benefits from the underlying asset and it can restrict access of others to those benefits.

1. ACQUIRED INTANGIBLE ASSETS

An intangible asset can be acquired or internally generated. In either case, it should be recognized only if:

- the asset is controlled as a result of a past event;
- future economic benefits are expected to flow to the company;
- the cost can be reliably measured;
- the asset is separable from all other assets, including goodwill.

● **separate acquisition of intangible assets**

In the case of a separate acquisition, the elements of the cost of an acquired intangible asset are:

- purchase price, where trade discounts and rebates are deducted;
- import duties and non-refundable purchase taxes;
- any directly attributable expenditure:
  - ♣ employee costs for preparing the asset for its intended use;
  - ♣ professional fees for legal services for preparing the asset for its intended use;
  - ♣ costs of testing the correct functioning of the asset.

The cost of an intangible asset doesn't include costs as:

- publicity and promotional services costs for a new product or service;
- administration costs and other general costs;
- costs incurred by unfolding the activity in a new location or with a new category of clients (including personnel training costs).

● **acquisition in a group of entities**

An intangible asset acquired in a group of entities is recognized based on the following:

- an intangible asset acquired in a business combination can be separable, but only in relation with another tangible or intangible asset;

- for example, a brand of mineral water cannot be sold without the corresponding spring; the title under which a magazine is sold cannot be separated from a database of subscribers.

- the acquirer recognizes the group of assets as an individual asset separated from good-will if the individual fair value of the group assets cannot be reliably evaluated.

An intangible asset obtained in a business combination is evaluated at its fair value which is estimated based on:

- the price that could be obtained on an active market;

- the price of the most recent similar acquisition when there isn't any active market for the intangible assets (for example for patents and trademarks there isn't any active market because they are unique assets)

● **acquisition through a public grant**

This situation arises when the public authority transfers or allocates intangible assets to an entity (the rights to land on an airport, radio or TV broadcasting licences, import licences, access rights to restricted resources).

According to IAS 20 *"Accounting for Government Grants and Disclosure of Government Assistance",* an entity can register the intangible asset at its fair value or at a nominal value, including any directly attributable expenditure for preparing the asset for its intended use.

2. INTERNALLY GENERATED INTANGIBLE ASSETS

To determine whether an internally generated intangible asset qualifies for recognition, the process of generating that asset is split in two phases: research phase, and development phase. If an entity cannot make a clear distinction between the research and the development phase of an internal project designed to create an intangible asset, the entity treats the expenditure incurred by that project as if it had been done only in the research phase.

Intangible assets resulted from research or from the research phase of an internal project will not qualify to be recognized as assets. Expenditure incurred on research or in the research phase of an internal project must be expensed as incurred

Research activities can be the following:

- obtaining new knowledge;

- evaluation and final selection of research applications or other knowledge;

- selecting alternative materials, devices, products, processes, systems or services;

- formulating, designing, evaluating and final selection of potential alternatives for new or improved materials, devices, products, processes, systems or services.

An intangible asset from research or from the research phase of an internal project can qualify to be recognized as asset only if the entity can demonstrate the following:

- the technical feasibility of finalizing the intangible assets so that they are available for use or sale;

- the intention to finalize the intangible asset for use or sale;

- its capacity to use or sell the intangible asset;

- the way the intangible asset will generate future probable economic benefits;

- the availability of technical, financial and other resources to finalize the development of the intangible asset for use or sale;

- the ability to reliably evaluate the expenditure attributable to the intangible asset during its development.

The cost of an internally generated intangible asset is the cost on the date when the asset first qualifies for recognition as an asset. Previously recognized and expensed costs should not be capitalized.

Example:

An entity develops a production method which generates a total expenditure of 5000: 4000 before Dec 1st 2006 and 1000 between Dec 1st 2006 and Dec 31st 2006. On Dec 1st 2006, the entity proves that the production method qualifies to be recognized as an intangible asset. In the 2007 exercise another 3500 is spent to protect the entity in a trial against recognizing the patent.

Determine the value of the intangible asset in the balance sheet at the end of the two financial exercises.

Solution:

- at the end of 2006, the production procedure is recognized as intangible asset for 1000, and the amount of 4000 is recorded as a cost as it doesn't meet the recognition criteria for intangible assets;

- at the end 2007, the amount of 3500 is recorded as loss in the income statement as it represents additional costs to maintain the actual level of previously estimated performances.

3. THE ALTERNATIVE ACCOUNTING TREATMENT OF INTANGIBLE ASSETS

According to the allowed accounting treatment, an intangible asset is carried at its revalued amount corresponding to the fair value (at revaluation) less the amount of depreciation and ulterior value losses.

Example:

At ALFA entity, intangible assets acquired before close of exercise N with an amount of 75.000 are depreciated monthly for 5 years, starting with Jan 1st N+1. On Dec 31st N+2, the fair value of the intangible assets is 22.500. On Dec 31st N+3, the management decides to revaluate the intangible assets estimating the fair value at 90.000.

Determine and carry out the accounting treatment of revaluation differences, using the net accounting value model (cancelling the cumulated depreciation and revaluating the net value) and the gross value model, and the accounting treatment of revaluation pluses included in the equity capital.

Solution:

The net accounting value model:

- **on 31.12. N+2:**

- Annual depreciation: 75.000/5 years = 15.000
- Net accounting value: 75.000 – 2.x 15.000 = 45.000
- Fair value: 22.500
- Unfavourable value difference: 45.000 - 22.500 = 22.500
- The unfavourable value difference of 22.500 is expensed as follows:

„Impairment losses on non-current assets" = „Impairment of intangible assets" = 22.500

- **on 31.12. N+3:**

- Annual depreciation on N+3 is 22.500/3 years = 7.500

- Net accounting value: 22.500 - 7.500 = 15.000
- Fair value: 90.000
- Favourable value difference is: 90.000- 15.000 = 75.000
- Journal entries:

♣ a revenue is recorded to compensate the recognized expense at 31.12.N+2:

*„***Impairment of intangible assets*”* = **„Reversal of impairment losses on non-current assets*”* = *22.500***

♣ the depreciation cumulated in the previous 3 financial exercises (N, N+1, N +2) is reversed and the entry value of assets is reduced:

„Amortisation of intangible assets” = „Intangible assets” = 37.500

♣ the net value of intangible assets is revalued:

„***Intangible assets” = „Revaluation reserve***” = **52.500**.

Gross accounting value model:

● on 31.12. N+2, the situation is similar to the one presented for the previous model

● on 31.12. N+3, after recording a revenue of 22.500, the treatment is as follows:

- The ratio between the fair value and the net accounting value is: 90000/(75.000- 37.500) = 2,4;
- Revaluating the entry value of the intangible depreciation: 75.000 x 2,4 = 180.000;
- Revaluating the cumulated depreciation: 37.500 x 2,4 = 90.000;
- The revaluated asset cost: 180.000 – 90.000 = 90.000
- The entries for the revaluation operation are as follows:

Intangible assets	%	90.000
	Amortisation of intangible assets	37.500
	Revaluation reserve	52.500

The accounting treatment of the revaluations plus included in the equity capital at 31. 12. N+4:

- Intangible assets depreciation is 90.000 /2 = 45.000 :

„ Depreciation of non-current assets"= „Intangible assets amortisation" *= 45.000*

- transferring a part of the revaluation reserve onto the carried over results 52.500/2 = 26.250:

„Revaluation reserve"="Other retained earnings" = 26.250

CONCLUSIONS

● intangible elements in the income statement

Here are some examples of intangible elements that can be recognized as costs:

- Research costs;
- Training costs;
- Publicity and new products costs;
- Partial or total entity restructuring costs;
- Costs of launching new activities;
- Ulterior costs referring to an intangible asset, if spent to maintain the initially defined level of performance;
- Intangible assets depreciation and impairment costs.

● intangible assets and the balance sheet

Only intangible assets that meet the recognition criteria are recorded in the balance sheet. Intangible assets which include managerial skills, valuable trademarks, and proprietary products are not recorded in the balance sheet.

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GROUNDS FOR AND ORDER OF LIMITTATION OF THE EXERCISE CAPACITY OF A NATURAL PERSON

TEMEIURILE ŞI ORDINEA LIMITĂRII CAPACITĂŢII DE EXERCIŢIU A PERSOANEI FIZICE

ELENA DOINA LEPĂDAT*

An analysis in its evolutionary aspect, of the possibility for a natural person to acquire the exercise capacity, depending on the age and the quality of the person's discernment, three situations of the natural person's exercise capacity have been found: the lack of the exercise capacity (minors under 14 years of age and the person under a legal ban), the restricted exercise capacity (minors between 14 and 18years), the full exercise capacity (those who have reached the age of 18 and the woman who got married before the age of 18 enjoy full exercise capacity)

Key words: *full exercise capacity, restricted exercise capacity, incapacity.*

1. THE DEFINITION, THE LEGAL SETTLEMENT AND THE TYPES OF EXERCISE CAPACITY

In our civil law, the legal definition of the natural person's exercise capacity is given in art.5, par.2, Decree no.31/*54 " The exercise capacity is the capacity of a person to exercise his/her rights and to take on obligations, by performing legal deeds*". The settlement of the exercise capacity of a natural person is found in Decree no.31/1954, part.5, par. 3, art.8 and 9, art.10 final par., art.11; The Family Code art.4, art.105 par.1 and 2, art. 124,129,133,147; The Civil Code art. 807, 950, 951, 952, et al.; Decree no.32/1954-aart.25-provisions that are applicable in this matter are to be found in other sources of civil law. The legislator in our civil law establishes the following principle: **capacity is the rule, incapacity is the exception.** Anyone is considered capable since the law does not admit or

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pronounce the incapacity, that is since he/she is not declared incapable by the law.

The provisions concerning the persons' capacity are of public order, of an imperative nature and the private persons cannot waive from them. Consequently, a capable person cannot partially waive or completely give up his/her capacity, becoming incapable of his/her free will, and, vice versa, an incapable person cannot, of his/her free will, give up his/her incapacity and the protection he/she enjoys as an incapable person and become capable or less capable..

The exercise capacity is based on the acquisition by a person of a certain maturity of judgment, which should enable him/her to be guided by his/her own judgment in legal life. The legislator, founding his decision on certain medical and social realities, considered that this full maturity is acquired when a person is 18. The persons who are not yet 14 are considered by the law to be totally lacking in the discernment necessary for concluding legal deeds. These persons are totally lacking in exercise capacity.

The law also includes in the same category of persons without exercise capacity the persons who, although of age, lack discernment because of mental alienation or deficiency, and have been put under a legal ban. Between these two categories of persons (with full exercise capacity and totally lacking this capacity) the law has created an intermediate category. It is the category of minors who have turned 14. They are presumed to have a conscious willpower, but lacking legal life experience have been granted a restricted exercise capacity.

Therefore, from the point of view of the **exercise capacity**, we can distinguish three categories of natural persons:

a) persons totally lacking the exercise capacity (minors under 14 and the legally banned persons)

b) persons with restricted exercise capacity (minors between 14 and 18)

c) persons with full exercise capacity (who have turned 18)

2. NATURAL PERSONS WHO LACK THE EXERCISE CAPACITY

In conformity with legal provisions, the persons who are not yet 14 and the persons under a legal ban are totally devoid of exercise capacity. To

this end, art. 11, par.1 of the Decree no. 31/54 shows that " The following persons have no exercise capacity:

a) the minor under 14:
b) the person placed under legal ban."

Denial of the exercise capacity to these persons is meant to protect them against their own lack of cleverness in concluding legal deeds. The person under 14 years of age does not have the discernment needed in concluding legal deeds. As to the **persons under legal ban**, they are thus protected as, because of their chronic alienation or mental deficiency, they are incapable of concluding legal deeds.

The characteristic feature of the persons without exercise capacity is that they cannot personally take part in concluding legal deeds and they can only act by representation.

Representation has been defined as a technical-legal procedure "through which a person called representative concludes a legal deed in the name and on behalf of another person, called represented person, in such a way that the effects of the concluded deed will be produced directly onto the represented person.[1] Representation can be conventional, legal and judiciary.

Here we are interested only in the legal representation.

The legal representation of these categories of persons is ensured by parents or tutor for the under 14 years old minors, and by tutors for the persons under legal ban. This results from art.11, par.2 of the Decree no. 31/54 that provides: "For those who have no exercise capacity, the legal deeds are done by their legal representatives."

The legal representation of persons without discernment is regulated by norms of the Family Code as well. Thus, according to art.105, par.2:"Parents have the right and obligation to administer the goods of their under aged child and represent their child in civil deeds, but only until he turns 14." Finally, art. 147, Family Code shows that: "The rules concerning the tutelage of the minor under 14 are also applied for the tutelage of the person under legal ban, unless otherwise disposed by the law."

Although the law forbids the under 14 minors and the persons under legal ban to conclude legal deeds in order to protect them, necessities arising from their daily life lead to the admission by the doctrine and jurisprudence of the validity of some legal deeds concluded by these persons.

It has been established that persons without exercise capacity may legally conclude:

- patrimony conservation deeds that are harmless to the minor and that have as their aim the preservation of certain rights in danger of being lost, such as: interruption of prescription, registration of a mortgage and the such;
- legal deeds of lesser importance that are necessary in the everyday life and activity, such as: booking show tickets, buying travel tickets, purchasing school supplies, etc.
- All these civil legal deeds can be legally concluded even by persons who have no exercise capacity, acting in person and unaided by their legal protector.

3. NATURAL PERSONS WITH RESTRICTED EXERCISE CAPACITY

As was shown before, between the under 14 persons who are **totally lacking in exercise capacity** and the **persons with full exercise capacity**, there is an intermediate category, that of **persons with restricted exercise capacity**. This category is characterized by a certain freedom concerning the participation in the legal life, in the sense that these persons can personally conclude legal deeds, but with the consent of their legal protectors (parent or tutor).

The specific feature of **the restricted exercise capacity** is the fact that the minor who has turned 14 is no longer represented, he/she personally concludes the legal deeds, only for their validity it is necessary that the protector give a preliminary consent. It is what results from art. 9, par. 2 Decree no. 31/54, according to which:" the legal deeds of the minor with a restricted exercise capacity are concluded by the minor, with the prior consent of the parents or tutor".

This transition period (14-18 years old) ensures a gradual passage of the minor from the **total lack of exercise capacity**, characteristic for the age under 14, to the **full exercise capacity** which is obtained on becoming of age. During this interval the minor is supervised and guided in the field of legal activity.

Legal literature justly shows that it is not enough to give a general consent, as this would practically lead to the annihilation of the role of the restricted exercise capacity. The consent should be specific, that is given for each separate legal deed.

4. LEGAL DEEDS THAT CAN BE CONCLUDED BY A PERSON WITH RESTRICTED EXERCISE CAPACITY

Depending on the conditions required by the law for the validity of legal deeds, the legal deeds that can be concluded by persons with restricted exercise capacity may be grouped in **four categories**:

1. Legal deeds the minor between 14 and 18 can conclude by himself and in person, without the need for consent.

In this category we include:

a) *Legal deeds that can be concluded by the minor under 14 (patrimony conservation deeds and petty legal deeds, imposed by the minor's everyday activity needs.)*

In juridical literature we find divergent opinions about this category of deeds. According to opinions of some prestigious authors, these legal deeds do not belong to the specific content of the restricted exercise capacity[2].

Another opinion,[3] exactly opposite to the previous one, brings arguments that are worth considering.

One must not exclude from the content of restricted exercise capacity those deeds that the 14 year old minor can conclude, **as art. 9, par. 2 of the Decree no.31/54** includes the provision according to which "the legal deeds of the minor with restricted exercise capacity are concluded by the minor", without any separation between them according to their nature. It follows that conservation deeds and the petty deeds have also been taken into account by the legislator. Secondly, the possibility of the under 14 minor to conclude legal deeds does not derive from the law, it is a creation of the juridical literature and the legal practice. Further on it is shown that the exclusion of these deeds from the content of the restricted exercise capacity is not justified by any reason.

As for our opinion, we deem this dispute of no practical interest. In truth, neither of these two opinions maintains that legal deeds that can be concluded by the under 14 minors could not be legally concluded by those over this age. We, too, fail to see the reason for which these deeds should be excluded from the content of the restricted exercise capacity.

b) Deeds of administering the minor's patrimony, on condition that they are not prejudicial.

The general rule is that administrative deeds are legally concluded only with the prior consent of the legal protector.

Art. 25, par. 1 of Decree no.32/54 shows that the deeds concluded without prior consent by the 14 year old minor can be annulled if the minor was prejudiced. Per a contrario, if through such administrative deeds, the minor with restricted exercise capacity was not prejudiced, they are legally concluded, even if the protector has not given his prior consent.

c) *Cash deposit deeds done in conformity with art.10, par.4 of Decree no.31/54 and the CEC statute.*

The testament. **According to art.802, Civil Code**, the testament is the legal, unilateral, personal and solemn deed, irrevocable in essence, through which a person disposes of a part or the totality of his/her goods for the time the person will no longer be alive.

From the point of view that is of interest to us, from the definition of the testament we heed its personal character, which means that it should be made by the testator himself, without a representative and without anyone's consent.

According to **art.806, Civil Code**, until he/she is 16, the minor does not enjoy the capacity to use for making a testament. After the age of 16, he/she may dispose of the personal goods through a testament, but only of half of the goods he/she could have disposed of, according to the law, had he/she been of age. The personal character of the testament, the fact that it should represent the uninfluenced will of the testator, leads to the conclusion that the 16 year old minor has full exercise capacity in what concerns the making of this legal deed.

2. Legal deeds which the minor between 14 and 18 can conclude personally, without the consent of the legal protector.

a) Deeds for administering certain individual goods. This category includes for example the insurance contract, the contract for repair, the house letting contract for a period of less than 3 years. This last contract is considered by the juridical literature as an act of disposal,[4] *if it is concluded for more than 3 years.*

b) Patrimony administration deeds. In our law the deed of administration is not defined and circumscribed. clearly enough.

If we refer to a certain individual possession, we understand by administrative deed that deed through which that possession is valued, without its alienation.. but if we consider a patrimony - the totality of rights

and obligations of a person - the distinction between the administrative deed and the disposing deed is no longer sufficient, as there may be deeds of disposition concerning goods individually, which from the point of view of patrimony appear as administrative deeds.

A certain utility in defining this notion more accurately is found in **art. 129 of the Family Code**, that enumerating the deeds that the tutor may conclude on behalf of the minor without the consent of the tutelaryy authority, shows that the tutor may alienate the perishable goods or those useless to the minor, should the value of these goods not be over 250 lei.

Accepting a free of encumbrances donation and accepting a devise or legacy free of any encumbrance or condition also fall in the category of administrative deeds. Note that accepting a donation with encumbrances or conditions, or accepting a general legacy that will cause obligations are not administrative but disposing deeds.

3. Legal deeds that the minor with restricted exercise capacity can conclude by himself, with the consent of his/her legal protector and of the tutelary authority.

In determining these legal deeds, **art. 133 and 129 of the Family Code** are very important.

According to art.133, par. 2 of the Family Code: ”If the deed the minor is about to conclude is one that can be concluded only with the consent of the tutelary authority, its prior consent will also be necessary.

The legal deeds that the tutor can conclude only with the consent of the tutelaryy authority are provided by **art. 129, the Family Code**, according to which: “Without the prior consent of the tutelaryy authority the tutor cannot legally alienate or pledge the minor’s goods, to waive the minor’s patrimonial rights, as well as to conclude any deeds that go beyond the right of administration.

In the juridical literature[5] the following legal deeds have been and are considered to be disposing deeds, going beyond the sphere of administrative deeds:

a) Letting/renting of a house for longer than three years;

b) Relinquishing a succession;

c) Accepting an inheritance. Most authors consider the acceptance of an inheritance to be a disposing deed. We share this opinion when the matter is the acceptance of a lawful inheritance. It is true that art. 19 of the Decree no.32/54 prescribes that the acceptance of a minor’s due inheritance,

regardless of the minor's age, is always considered to be an acceptance of estate without liability beyond the assets descendants and, therefore , responsibility for the succession liabilities are limited to the value of the net estate. But art. 751 and 752 Civil Code compels the descendants to blend in donations for equal division when they have equality of rank and rights with other persons. In such a case it is sometimes more convenient for the inheriting minor to relinquish rather than accept the succession. This deed of evaluation should be considered to be a disposing deed.

d) Accepting a donation or inheritance with charges or "provided that", as well as accepting a general legacy or a residuary legacy. If we can surely say that accepting a donation or legacy with charges or "provided that" may lead to some obligations on the part of the minor, we doubt such problems will arise in the case of accepting a general or a residuary legacy, too

4. **Legal deeds that the minor with restricted exercise capacity cannot conclude, even if he/she has the consent of the legal protector or the tutelary authority.**

According to **art.133, Family Code**, "The minor can neither make donations nor guarantee for another person's obligations, not even with consent." Such deeds are not necessary to the minor and are almost always prejudicial to him/her. That is the reason law forbids them.

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THE CORRELATION BETWEEN THE CIVIL CAPACITY AND OTHER JUDICIAL INSTITUTIONS

CORELAŢIA DINTRE CAPACITATEA CIVILĂ ŞI ALTE INSTITUŢII JURIDICE

ELENA DOINA LEPĂDAT*

In the process of studying the role of civil capacity within the mechanism of shaping judicial relationships of civil law, the judicial capacity represents a measure of the possibility of being a participant in the civil judicial rapports, it is important not only on the level of judicial institution, but also on that of law branch, which allows us to acknowledge that the civil judicial capacity is always a key body of the civil law.

Key words: *civil capacity, the capacity to utilise, the capacity to exercise, legal entity*

The complex legal nature of the civil capacity, and thusly, of the integral parts of it, has given rise to the many opinions, sometimes contrary, not only regarding the definition of this legal phenomenon, but also the correlation and interdependence of this judicial institution with those similar to it, and even with its integral parts.

It is important to mention that presently in the theory of civil law predominant is the opinion according to which the civil capacity is an institution of the civil law, standing for the unity of the capacity to utilise and the capacity to exercise.

Thus, **the capacity to utilise** and **the capacity to exercise** are components of the civil capacity, and between them appears a correlation like the one between a part of a whole and the whole itself. Also, the two components of the civil capacity find themselves in a correlation too: the capacity to utilise being, as was proven in the specialized literature[1], *"the necessary and mandatory premise of the capacity to exercise"*.

In the Russian literature this concept was formulated by the civil law attorney O.S. Ioffe. According to him, only two legal component elements -

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the capacity to utilise and the capacity to exercise - can give rise to the category that is named civil judicial capacity.[2]

The civil capacity, unlike the **legal norms** which govern this category of social relationships, does not represent the measure of conduct of all participants in social rapports, but is **a measure of the capacity of certain subjects to have these rights**. The legal content of the civil judicial capacity represents a measure, established by the legislation, of the person's capacity to participate in civil judicial rapports.

O.A. Crasavciov includes in the structure of the civil judicial capacity the following components: a) **the capacity to utilise**; b) **the capacity to exercise**; c) **the delictual capacity**; d) **the capacity of the person to crate rights and obligations for other persons, through their actions, and the capacity of the person to gain rights and obligations for themselves, following other persons' actions**. In the context of these opinions, the Russian authors report completely controversial opinions regarding the co-relationship of the notions of civil capacity and the capacity to utilise.[3]

I.C. Tolstoi shows that, to delimitate the notion of civil capacity from that of the capacity to utilise, there are no practical or theoretical grounds. **The capacity to utilise** can be defined as being **the capacity of being a subject of rights and obligations**, and **the civil capacity is the capacity to have the same rights and obligations**.[4]

In establishing *the co-relationship between the civil judicial capacity, the capacity to utilise* and *the capacity to exercise* we have to give answers to the following questions:

1) How does the notions of civil judicial capacity correlate to those of the capacity to utilise and the capacity to exercise?

2) Can we include in the notions of the civil capacity the notions of the capacity to utilise and the capacity to exercise?

To give a clear answer, we will reveal the opinion of the author A.I. Pergament[5], to which we subscribe. She underlines the impossibility of fusing the notions of *the civil capacity* and *the capacity to utilise*, arguing that the civil capacity is included in the essence itself of these two categories. **The capacity to utilise denotes statics only**, and **the civil capacity denotes** both **statics and the dynamic of the possible participation of a legal subject in some or other judicial rapports**.

The civil judicial capacity appears as a means of establishing the circle of subjects of civil law, who have the ability of being holders of subjective civil rights and of obligations. This is the answer to the question who can be acknowledged as a legal subject. But the capacity to utilise establishes the circle of possibilities of the subject of civil law, the limits of the content of these possibilities.

Therefore, *the civil capacity implies not only the abstract capacity of being a participant in the judicial rapports, but also the real possibility of accomplishing the prospect of being a subject of civil law*, which is the content of the capacity to exercise.

Speaking of **the co-relationship of the civil judicial capacity with the capacity to exercise**, we must mention the fact that the notion of the capacity to exercise is not applicable to all subjects of civil law, but only to those **capable** of effecting their rights and assuming obligations, for which, subsequently, in case of non-execution or inadequate execution, being responsible, they will be subject to civil accountability. **The minor** do not have these qualities on the grounds of their psychological, intellectual characteristics and their lack of life-experience, and the **incompetent/disabled** - based on their incapacity to fathom reality, to correctly discern taking adequate decisions. **For the legal entities and public administrative bodies** the delimitation of the capacity to utilise from that to exercise does not have any practical importance, given that the ability to have rights and obligations, as well as effecting these rights and assuming these obligations in this situation **appear concurrently**.

Still, the capacity to exercise of a legal entity is expressly reflected in the legislation of some nations, the Romanian legislative body defines in the Decree 31/1954 by Article 5 Paragraph 3 the capacity to exercise of the legal entity as "the capacity of the person to exercise their rights and assume obligations, performing judicial acts"[6], the Article 61 Civil Code of Switzerland establishes that the legal entities have at their disposal the capacity to exercise from the moment of setting up the bodies instituted by law or statute, etc.

Another problem of establishing the judicial nature of the civil capacity is its **correlation with the notion of judicial statute of the legal subject**. The common judicial nature and unique origin that generates these judicial phenomena have moved some authors to give different interpretations and to even mistake one for the other.

Hence, according to A.V. Mitkevici, **the civil capacity and the judicial statute** are identical notions, their content being summed up as the total of general rights and obligations, as well as special rights and obligations, which directly result from the legislation.[7]

Some authors regard the judicial statute as a component element which determines the content of the civil capacity, and others, in defining and establishing the content of the civil capacity, use the notion of judicial statute, and other times synthetise them.

The correlation between **the civil capacity** and **the subjective right** can be qualified through some categories like **possibility** and **reality**. The capacity expresses, for example, the possibility of being the holder of the right to ownership, etc. The capacity is not yet the subjective right of ownership itself, but the possibility of having this right. This possibility is effected through certain judicial acts - actions, events which, in accordance with the legislation, comprise the grounds for the appearance of civil subjective rights.

The civil capacity does not identify, neither with **the subjective right**, nor **the civil obligation**: *it is a general ability of the subject to adopt a certain conduct*, and *the civil obligation is a solid commitment of it* to carry out a determined service. With all these, the subjective right, as well as the civil obligation can exist only in the presence and the context of the civil judicial capacity and not outside of it.

In the context of delimitating the civil capacity from other similar institutions, we consider necessary the pointing out of its **judicial nature**. Widespread in the specialized literature is the opinion according to which the judicial capacity implies the lasting relationship between the holders of right and obligations and the State, meaning the category of judicial capacity reflects the co-relationship between persons as holders of the capacity and the State.

This reveals two aspects of the judicial nature of the civil capacity:

1) the presence of a generic quality, necessary for participating in judicial rapports;

2) the granting by the State of the possibility to be a participant in some or other judicial rapports.

The judicial statute of the State within the civil judicial rapports can have a double aspect.

1) – the first – that of the legislative body, authority that draws up executive normative acts.

2) - the second – its quality of subject of private rapports.

The civil capacity, in our opinion, entails two meanings: **first – from the viewing point of the objective right**, it represents the limit of possibilities, the measure of the ability of natural persons, legal entities and judicial-state formations to participate in civil law rapports, **and secondly it expresses the indispensable quality of the participating subjects in actual types of judicial rapports** (the individualized judicial capacity). Hence, we will perform our research on a large scale (*lato senso*) and a small scale (*stricto senso*).

From the viewing point of the civil law, man seen as a natural person must be observed in the perimeter of his actions as a subject of civil law, quality which, undoubtedly, gains consideration only if granted to him by way of civil capacity.[8]

In this context, the indissoluble relationship of the notion of *civil capacity* is consolidated with that of *civil law subject*. To discover and highlight the limits of the interference of these two notions, we shall begin by analysing the latter.

In the general theory of law by **subject of law** is understood the person and their organisations which act as holders of rights and obligations prescribed by law. There are also notions of the subject of law directly linked to the notion of capacity. Thus, a number of authors understand by **subjects of law** the **natural persons and legal entities whose special quality to have a judicial capacity is acknowledged**, which gives them the possibility to participate in different judicial rapports with other natural persons or legal entities.

Only people can be subjects of law because the human conduct is the only object of judicial regulating. based on this premise, in the specialized literature the subject of law being identified with the subject of the judicial rapport is designated: "The participants in judicial rapports, having at disposal a judicial capacity, can be holders of rights and obligations, which makes up the content of the judicial rapports".[9]

Exercising legally acknowledged rights and executing validly assumed obligations takes place within the judicial rapports. As a result, often times in the legal science the notions of **subject of law** and **subject of the judicial rapport are assimilated**.

We consider that these two notions are and remain distinct on from the other, each expressing a certain state of the one that participates in the legal life: the subject of law is, by its nature, a **virtual participant**, while the subject of the judicial rapport is an **actual participant**. "Any participant in a judicial rapport is mandatory a subject of law. On the other hand, it is not mandatory that any <subject of law> be at the same time also a <subject of the judicial rapport>".[10]

We demonstrated the fact that **the quality of subject of law**, as well as **the judicial capacity** are and remain, by their very nature, two **distinct concepts**, but which, being inseparably associated, mutually condition themselves; each of them suggest the other so that the notion of subject of law, although having a double meaning, still is used in the legal jargon with a single meaning – that of a participant in the legal life, equipped with the ability which makes his participation possible.

The holder of civil rights and obligations **is named subject of civil law**, and their vocation is to participate in civil judicial rapports is expressed through the technical-judicial notion of **civil capacity**.

Traditionally, in characterizing the participants in different legal rapports, in the civil law are used **the institutions of the capacity to utilise** and **the capacity to exercise**. Therefore, to be able to participate in a judicial rapport they (natural persons and legal entities) need to have civil capacity, this includes the capacity to utilise and the capacity to exercise. In this case, the civil judicial capacity is regarded as a general, universal category which gives the possibility to include in itself all subjects of civil law and becomes an indispensable prior condition of effecting subjective rights.

In the following part, it is imperative that we give some explanations regarding the relationship between the judicial capacity of civil law **and the judicial personality**. The term of judicial personality has been certified for the first time in the French judicial doctrine, expressing the idea of equality of all people in front of the law. Later this concept received a more philosophic character, being discussed by the great philosophers. Kelsen mentions that, legally, the personality is nothing but an ideal point of convergence of a series of judicial norms. Concluding, the Romanian author M. Djuvara remarks that the judicial personality is a rational reality which can be conceived as a logical point of convergence of judicial tendencies, represented by the rights and obligations attributed.

The judicial Romanian doctrine conceptually defines the judicial personality differently. The author I. Dogaru writes that "the judicial personality constitutes the ability to be a holder of subjective rights, ability acknowledged for any person by the objective law". Continuing this idea, the author remarks: *the judicial personality implies that the individual, equipped with a certain capacity, has also personality*.

This chapter is treated entirely particular in the French judicial literature. Thus, Francois Ameli, in his dissertation of *Civil Law* hypothesizes that the elements of personality are given by the name, residence and gender of the natural person, meaning the individualizing signs of a natural person.In this case, the author practically denies any interference of the judicial personality with the civil judicial capacity. We consider that the judicial personality is a wider notion than the civil judicial capacity, including the latter in the whole.

In conclusion we find that the civil capacity is a measure of the possibility of being a participant in civil rapports, this being necessary in establishing the circle of participants (the structure of the subjects) in the civil law rapports. The delimitation of the notions of **subject of law** and **subject of judicial rapport** must be done in this context, with the mention of the rule: Any participant in a judicial rapport is mandatory a subject of law as well. On the other hand, it is not mandatory that every subject of law be at the same time a subject of the judicial rapport.

The notion of civil capacity makes possible the complete characterization of **the judicial statute of the natural persons**, as regulated by law, including all rights and obligations a potential subject can benefit from and which he can apply only in their quality as participant in an actual civil judicial rapport. In the light of this fact, was the delimitation of the notions **subject of law** and **subject of the judicial rapport** possible, the latter ones revealing the character and content of the components of the civil capacity: **the capacity to utilise and the capacity to exercise**.

The civil capacity is made out of a multitude of statutes the natural person gains through the ability they hold on the grounds of law. This statement determines the clear **distinction** between the **civil capacity** and **the institution of the judicial statute**, the first being wider and including in itself a series of statutes the natural person gains throughout life in the virtue of owning the capacity to utilise and the capacity to exercise.

The civil judicial capacity is a very complex phenomenon, designated through its legal character, and still finds its place in the structure of the notion of **judicial personality**, which fully characterizes the subject of law – the natural person under all aspects of its possibilities to participate in the judicial life.

The capacity of civil law is an integral part of **the judicial capacity**. Often it is defined as "that part of the judicial capacity of man, which lies in his ability to have and exercise civil rights through closing judicial acts".

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TAXES AND FEES OWED FOR HOLDING TANGIBLE FIXED ASSETS

IMPOZITE ŞI TAXE DATORATE PENTRU DEȚINEREA IMOBILIZĂRILOR CORPORALE

MARCELA BENGESCU[*]

The coming into force of the new Fiscal Code marked modifications that envisage the field of taxes and fees owed for owning tangible fixed assets. Since any economic entity is equipped with tangible fixed assets, we deemed it necessary to highlight the significant aspects regarding the budgetary obligations generated by ownership over these assets.

***Key words**: tax, budget, local, buildings, land*

BUILDING TAX

• *Who owes the tax:*

Article 249 of the Fiscal Code generally provisions that owners of buildings located in Romania owe an annual tax for these buildings. Subsequently, the owner of the building owes the tax.

In case a building is jointly owned by two or more persons, each of the building owners owe tax for the spaces located in the part of the building under his respective property. In case it is not possible to establish the individual parts of the owners, each joint owner owes an equal part of the tax for the respective building.

The law states two exceptions from the rule according to which the tax is paid by the owner of the building.

The first exception refers to the case of buildings under public or private property of the state or of territorial administrative units, concessioned, lent, given under administration or use to legal persons.

In this case, the building tax, which represents the fiscal burden of the concessionary, the tenants, the owner of the right of administration or use, is established similarly to building tax.

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The second exception refers to the case of a building that is the object of a financial lease. In this circumstance, throughout the duration of the contract the following rules are applied:

a) the building tax is owed by the lessee;

b) the value which is taken into consideration when the building tax is calculated is the value written in the contract, the way it was recorded in the accounting of the lessor or the lessee, according to the valid legal provisions.

When the lease contract ceases in ways different from the expiration of the contract, the building tax is owed by the lessor.

• *Why it is considered a local tax:*

The building tax, as well as the building fee is owed to the local budget of the commune or city in which the building is located. In the case of Bucharest, the building tax and fee are owed to the local budget of the sector in which the building is located.

• *How it is calculated:*

According to art. 253, the building tax is calculated by applying a tax rate to the building's inventory value. The tax rate is established by the decision of the local council and is situated between 0.25% and 1.5%. In Bucharest, this attribution belongs to the General Council of Bucharest.

According to the definition, the inventory value of the building is the entry value recorded in the owner's accounting, in accordance with the valid legal provisions.

In case of reconstruction, consolidation, modernization, modification or extension works, performed by the lessee, the lessee has the fiscal obligation of communicating the lessor the value of the works performed for the deposition of a new fiscal declaration, within 30 days of the date the respective works were concluded.

In case of a building whose value was recuperated integrally through amortization, the taxable value is reduced by 15%.

In case of a building which was revalued, according to accounting regulations, the taxable value of the building is the accounting resulted from the revaluation, and recorded as such in the owner's (legal person) accounting.

In case of a building which has not been revalue in the lasts 3 years prior to the referential fiscal year, the tax rate for the building is established by the Local Council/General Council of Bucharest between 5% and 10%

and is applied to the inventory value of the building, as was recorded in the legal person's accounting, by the end of the month in which the first revaluation was performed.

Building tax is applied for any building owned by a legal person either functioning, in reserve or in conservation, even if its value had been recuperated entirely by way of amortization.

• Declarative obligations:

Art. 254, paragraph (5) states that any person obtaining, constructing, or estranging a building has the obligation of filing a fiscal declaration with the specialized compartment of the local public administration authority in whose jurisdiction the building is situated, within 30 days of the day it was obtained, constructed or estranged.

For buildings obtained or constructed during the year, the building tax is owed by the respective person come the 1st of the month subsequent to the one when the building was obtained or built.

For buildings that were estranged, demolished or destroyed during the year, the building tax ceases to be owed by the respective person come the 1st of the month subsequent to the one when the building was estranged, demolished or destroyed.

In case of extension, improvement, partial demolition or other modifications brought to an existent building, the building tax is recalculated come the 1st of the month subsequent to the one when the modification was finalized.

• Payment deadlines:

According to art.225 of the new Fiscal Code, building tax is paid annually, in two equal instalments, up to the March 31st and September 30th.

For early payments of building tax, owed for the entire year by the tax payer, up to the 31st of March of the respective year, a bonification of up to 10% is granted by decision of the local council. In the case of Bucharest, this attribution belongs to the General Council of Bucharest.

The annual building tax, owed to the local council by tax payers, legal or natural persons, of up to 50 RON, is paid entirely until the first payment deadline. In case the tax payer owns property over more buildings located in the jurisdiction of the same administrative unit, the amount of 50 RON refers to the cumulated building tax.

LAND TAX

Who owes the tax: The provisions of art. 256 have a general character and refer to the fact that any person who owns land in Romania owes an annual tax for it. From the contents of the legislative text, the following rule stems: the owner of the land is the person owing the tax.

In case land is jointly owned by two or more persons, each of the building owners owes tax for the part of the land under his respective property.

In case it is not possible to establish the individual parts of the owners, each joint owner owes an equal part of the tax for the respective land.

In this case also, the law states two exceptions from the rule according to which the tax is paid by the owner of the land.

The first exception refers to the case of land under public or private property of the state or of territorial administrative units, concessioned, lent, given under administration or use to legal persons.

In this case, the land tax, which represents the fiscal burden of the concessioner, the tenants, the owner of the right of administration or use, is established similarly to building tax.

The second exception refers to the case of land that is the object of a financial lease. In this circumstance, throughout the duration of the contract, the land tax is owed by the lessor. When the lease ends, other than from the expiration of the contract, the land tax is owed by the lessor.

• Why it is considered a local tax:

The land tax, as well as the land fee is owed to the local budget of the commune or city in which the land is located. In the case of Bucharest, the land tax and fee are owed to the local budget of the sector in which the land is located.

• How it is calculated:

According to art. 258, the land tax is calculated by taking into account the number of square metres of land, the rank of the city or commune in which the land is located and the zone and/or the category of use of the land, according to the classification established by the local council.

• Declarative obligations:

Art. 259 of the new Fiscal Code states that for land obtained by a person during the year, the tax is owed come the 1st of the month subsequent to the one when the land was obtained.

For any operation that has the effect of transferring the property rights over land, the person ceases to owe land tax come the 1st of the month subsequent to the one when the transfer of property rights was performed.

Any person obtaining land during the year has the obligation of filing a fiscal declaration regarding the purchase of the land with the specialized compartment of the local public administration authority, within 30 days of the day of the purchase.

Any person modifying the use of the land has the obligation of filing a fiscal declaration regarding the modification of the use of the land with the specialized compartment of the local public administration authority, within 30 days of the day of the modification.

• *Payment deadlines:*

According to art.260 of the new Fiscal Code, land tax is paid annually, in two equal instalments, up to the March 31st and September 30th.

For early payments of land tax, owed for the entire year by the tax payer, up to the 31st of March of the respective year, a bonification of up to 10% is granted by decision of the local council. In the case of Bucharest, this attribution belongs to the General Council of Bucharest.

The annual land tax, owed to the local council by tax payers, legal or natural persons, of up to 50 RON, is paid entirely until the first payment deadline.

In case the tax payer owns property over more pieces of land located in the jurisdiction of the same administrative unit, the amount of 50 RON refers to the cumulated land tax.

TAX ON TRANSPORTATION MEANS

Preliminaries: According to the new fiscal regulations, Law 343/2006, point 215, ”the fee on means of transport” will be named, starting with 2007, „the tax on means of transport”.

• *Who owes the tax*:

According to the general rules provisioned by art. 261 of the new Fiscal Code, any person owning a means of transport that must be registered in Romania owes an annual tax for the means of transport.

As an exception from the rule according to which the tax is paid by the owner of the means of transport, in case of a means of transport that is the object of a financial lease, throughout the duration of the contract, the tax on the means of transport is owed by the lessee. When the lease contract ceases in ways different from the expiration of the contract, the means of transport tax is owed by the lessor.

• *Why it is a local tax:*

The tax on means of transport is paid at the local budget of the administrative unit where the person lives, has its headquarters or work point, as the case may be.

• *How the tax is calculated:*

According to art. 263, tax is calculated according to the type of the means of transport, and in the case of those with mechanical traction, the cylindrical capacity is also taken into consideration.

According to the legislation, the cylindrical capacity or the authorized maximum total mass of a means of transport is established by the identity book of the means of transport, by the purchase invoice or by a similar document.

• Declarative obligations:

Art. 264 states that in case of a means of transport obtained by a person during the year, the tax on the means of transport is owed by the person starting from the first of the month subsequent to the one when the means of transport was purchased.

In case a means of transport is estranged by a person during the year or removed from the fiscal records of the specialized compartment of the local public administration authority, the tax on the means of transport ceases to be owed by that person come the first of the month subsequent to the one when the means of transport was estranged or removed from the fiscal records.

Any person obtaining/estranging a means of transport or changing his/her residence/headquarters/work point has the obligation of filing a fiscal declaration regarding the means of transport with the specialized

compartment of the local public administration authority, within 30 days of the day of the modification.

• *Payment deadlines:*

According to the new Fiscal Code, the tax on means of transport is paid annually, in two equal instalments, up to the March 31st and September 30th.

For early payments of the tax on means of transport, owed for the entire year by the tax payer, up to the 31st of March of the respective year, a bonification of up to 10% is granted by decision of the local council. In the case of Bucharest, this attribution belongs to the General Council of Bucharest.

SPECIAL TAXES

According to the fiscal legislation, valid until December 21st 2006, automobiles were included in the category of other products taxable with excise tax. (art. 207 of the Fiscal Code approved by Law 571/2003, modified by Law 163/June 1st2005).

Starting with the year 2007, from the new content of art.207, approved by Law 343 of July 17th 2006 for the modification and completion of Law no.571/2003 regarding the Fiscal Code, it results that excise tax is no longer owed for automobiles. However, the legislative text constituted special taxes for automobiles and auto vehicles, including commercial ones, with the exception of those especially equipped for handicapped persons.

According to the provisions of title VII, chapter 2^1 art.214^1 of the new Fiscal Code the special tax is calculated in RON, based on the pollution norm or the type of automobile/auto vehicle, the cylindrical capacity of the engine and the ”age of the automobile/auto vehicle”.

$$\text{Special tax} = A \times B \times C \times \frac{(100 - D)}{100}$$

legend:

A = engine capacity;

B = the tax in the 3rd column in the annex no. 4, Legea 343/2006;

C = the tax correlation ratio in the second column of the annex no. 5, Legea 343/2006;

D = the tax reduction ratio based on the vehicle’s depreciation, in the 3rd column of the annex no. 5, L. 343/2006.

The second hand vehicle's age is calculated based on it's fabrication date. The special tax is owed to the state budget on the vehicle's first registration in Romania.

According to art. 214^3, automobiles are exempted from the payment of special tax, when they are:

` a) classified under the category of historical vehicles, defined according to valid legal; provisions;

b) derived from donations or directly financed from unreturnable loans, as well as from technical and scientifical cooperation programs, granted to educational, health and cultural institutions, ministries, other public administration organs, nationally representative union structures, public associations and foundations, by foreign governments, international organisms and nonprofit or charitable organisations.

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ELEMENTS OF ACCOUNTING LEGISLATION REGARDING LOANS AND ASSIMILATED DEBTS

ELEMENTE DE LEGISLAȚIE CONTABILĂ PRIVIND SURSELE DE FINANȚARE PE TERMEN LUNG

MARCELA BENGESCU*, MIHALEA GÂDOIU*

Any economical entity can develop faster than its own resources allow it. Under these circumstances, management can report to financing ensured by persons outside the entity. We address significant aspects stemming from the accounting of long term debts.

***Key words**: loans, bonds, debts, assimilated.*

GENERAL ASPECTS REGARDING LONG TERM DEBTS

Loans and assimilated debts include long term financing obtained through loans. In all cases these represent external financing, insofar as sources come from outside the loaned entity. These sources can be obtained directly, i.e. economic agents with financing needs obtain a direct loan from those owning liquidities, as well as indirectly, when between those owning liquidities and those needing financing financial intermediaries appear, such as banks and other non-banking financial institutions.

Because of the maturity greater than a year, these financing sources are part of the permanent equity under the name of loaned capital.

Debts are valued at the nominal value corresponding to the solvability state, respectively the payable sum for the use value of the counterpart given by third parties. Borrowing costs include interest and other expenses incurred by the company regarding the loan. In case of borrowing by issuing bonds, the following are used: the par value, the reimbursement value, the reimbursement premium and the yield. The par value is the price that will be received from the subscriber (the buyer of the bond). The reimbursement value of the bond is the price at which bonds will be reimbursed. The reimbursement premium is the difference between the reimbursement value and the par value of a bond. The yield is the annual

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interest of the bond, calculated by applying the interest rates to the par value of the bond.

BORROWING THROUGH ISSUE OF BONDS

Preliminaries: The law of companies no. 31/1990, republished (M.O. no. 1,066/17.11.2004), Section V, states dispositions regarding the issue of bonds. According to these, public traded companies can issue bonds if they have been operating for at least two years, if they have at least two balance sheets approved by the fiscal authorities, if they offer warrants to the subscribers, either directly, through the patrimony, or indirectly, through banks, consortiums, etc.

The par value of a bond cannot be smaller than 2,5 lei. Bonds of the same issue must have an equal par value and grant their owners equal rights. Bonds can be issued in material form, on paper, or in dematerialized form, by writing in the account.

Bonds are reimbursed by the issuing company at maturity. Before maturity, bonds of the same issue and with the same value can be reimbursed, by the lottery method. Convertible bonds can be changed into shares, under the conditions established by the public offer prospect (art. 176).

The accounts used for recording issues of bonds are created in order to ensure the delineation regarding the currency used, such as: (1) foreign currency, in case of external debts; (2) national currency, in case of internal loans. Also, these accounts ensure the delineation based on the collateralization of the bond loan.

Example: A public traded company issues bonds nationally, warranted by the state, on June 1st N, with the maturity on December 31st N+1, comprised of 4,000 bonds, with a reimbursement value of 10 lei/bond and a par value of 9 lei/bond, annual interest rate of 10%. According to the issue prospect, the interest will be paid at the end of each year. For the reimbursement premiums, linear amortization is used throughout the duration of the loan. The issue and subscribing is done through BRD, who charges a 400 lei commission. The commission is considered an expense afferent to year N.

Records in year N:

1.1) Issue of the bonds, knowing the total reimbursement value (4.000 bonds x 10 RON/bond = 40.000 RON) and the total issue value (4.000 bonds x 9 RON/bond=36.000 RON):

%	=	1617 ”Internal loans from issues of state warranted bonds”	40.000.00 RON
461 ”Various debtors”			36.000.00 RON
169 „Premiums regarding the reimbursement of bonds”			4.000.00 RON

1.2) Receipt of sale value:

5121 “Bank accounts in lei”	=	461 ”Various debtors”	36.000.00 RON

1.3) Commission paid to the bank:

627 „Expenses with banking and assimilated services”	=	5121 “Bank accounts in RON”	400,00 RON

1.4) Interest owed for the period 01.06. N -31.12. N (36.000 x 10%: 12 months x 7 months = 2.100 RON):

666 ”Expenses regarding interest”	=	1681 ”Interest afferent to loans from bond issues”	2.100,00 RON

1.5) Payment of interest:

1681 ”Interest afferent to loans from bond issues”	=	5121 “Bank accounts in RON”	2.100,00 RON

1.6) Amortization of the premiums regarding the reimbursement of bonds afferent to year N (4.000 RON: 19 months x 7 months = 1473.68 RON):

6868 ”Financial expenses regarding the amortization of reimbursement premiums for bonds”	=	169 „Premiums regarding the reimbursement of bonds”	1.473,68 RON

In N+1 the following are recorded:

2.1) The interest afferent to the period 01.01 – 31.12 N+I (36.000 RON x 10% = 3.600 RON):

666 ”Expenses regarding interest”	=	1681”Interest afferent to loans from bond issues”	3.600, 00 RON

2.2) Payment of interest:

1681 ”Interest afferent to loans from bond issues”	=	5121 “Bank accounts in RON”	3.600,00 RON

2.3) Amortization of the premiums regarding the reimbursement of bonds afferent to year N +1 (4.000 RON: 19 months x 12 months = 2.526,32 RON) :

6868 ”Financial expenses regarding the amortization of reimbursement premiums for bonds”	=	169”Premiums regarding the reimbursement of bonds”	2.526,32 RON

2.4) The return of the internal loans from issues of state warranted bonds:

1617 ”Internal loans from issues of state warranted bonds”	=	5121 “Bank accounts in RON”	40.000.00 RON

Cost of borrowing:

Expenses with banking and assimilated services…… 400 RON
+ Expenses regarding interest…….. 5.700 RON
+ Financial expenses regarding the amortization of reimbursement premiums for bonds…….. 4.000 RON
Total…….. 10.100 RON.

LONG TERM BANK LOANS

Preliminaries*:* The bank loan is given to economic entities in the form of money by specialized institutions, also called banking institutions. It is the most widely spread form of loan. Bank loans with a maturity of over 1 year fall under this category.

Example: A company receives on May 1st N, a foreign bank loan warranted by the state of 28,000 Euro (1Euro = 3,5 RON), with the maturity on December 31st N+1. The exchange rate for December 31st N+1 is 3,57RONi/Euro.

The annual interest rate is 7% for foreign currency bank loans, payable on the last day of financial year N, and at maturity, when the entire loan is reimbursed, the exchange rate at this date being 3,55 RON/Euro. The following are recorded in financial year N:

1.1) Receipt of the foreign bank loan warranted by the state (28,000 Euro x 3.5 RON/Euro = 98.000 RON):

5124 ”Bank accounts in foreign currencies”	=	1624 ”Foreign bank loans warranted by the state”	98.000.00 RON

1.2) Payment of interest afferent to financial year N (28,000 Euro x 7%: 365 x 245 = 1.315,6164 Euro; 1.315.6164 Euro x 3.57 RON/Euro = 4,696.75 RON):

666 "Expenses regarding interest"	=	5124 "Bank accounts in foreign currencies"	4.696,75 RON

1.3) Actualization of the debt based on the exchange rate of December 31st N [28,000 Euro x (3. 57 lei/Euro – 3.50 lei/Euro) = 1,960 lei]:

665 "Expenses from exchange rate differences"	=	1624 "Foreign bank loans warranted by the state"	1.960.00 RON

Observation:

According to point 59 of Order 1752/2005, at each balance sheet date, debts in foreign currencies must be valued and reported using the exchange rate communicated by the National Bank of Romania and valid at the date the financial year is concluded.

The exchange rate differences, either favourable or unfavourable, between the exchange rate on the date the debt in foreign currencies was recorded or the exchange rate in which they were reported in previous financial statements and the exchange rate on the date the financial year is concluded, are recorded as revenues, or as expenses, as the case may be.

In year N the following are recorded:

2.1) The payment of interest afferent to financial year N+1 (28.000 Euro x 7% = 1.960 Euro; 1.960 Euro x 3,55 RON/Euro = 6.958 RON):

666 "Expenses regarding interest"	=	5124 "Bank accounts in foreign currencies"	6.958.00,RON

2.1) The reimbursement of the loan, considering its par value (98,000 RON + 1,960 RON= 99,960 RON) and the exchange rate on the date the payment is performed (28,000 Euro x 3.55 RON/Euro = 99.400 RON):

1624 ”Foreign bank loans warranted by the state”	=	5124 ”Bank accounts in foreign currencies”	99.400,00 RON
1624 ”Foreign bank loans warranted by the state”	=	765 ”Revenue from exchange rate differences”	560,00 RON

DEBTS REGARDING FIXED FINANCIAL ASSETS

Preliminaries: In market economy, companies can be connected through equity relationships. These sorts of relationships are established if a company owns shares or stocks of the social equity of other companies.

Companies can give returnable financial aid to related companies. This sort of financial aid, with a maturity larger than 1 year, represent debts related to joint ventures for the beneficiary companies.

Example: A subsidiary receives from the parent company, on September 1st N a loan of 18,000 lei, with an annual interest rate of 4%, with the maturity on December 31st N+1. The interest is paid on the date the loan is reimbursed.

In N, the following are recorded:

1.1) Receipt of the loaned on September 1st N:

5121 “Bank accounts in lei”	=	1661 „Debts to related parties”	18.000,00 RON

1.2) Interest owed for the period 01.08 -31.12 N (18,000 RON x 4%:365 days x 153 days = 301.81):

666 “Expenses regarding interest”	=	1685 „Interest afferent to the debts to related parties”	301,81 RON

Basically, long term debts are generated by the redistribution of inactive availabilities of banks or other economical entities.

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ACCOUNTING OPERATIONS CHARACTERISTIC OF ANIMAL FARMS

OPERAŢII CONTABILE SPECIFICE FERMELOR DE ANIMALE

MARCELA BENGESCU*

Livestock and poultry constitute a distinct category of tangible current assets. Throughout this paper, specific and relatively complex economic operations regarding the variations of livestock and poultry. Also, there are examples in which livestock is considered a fixed tangible asset.

***Key words**: assets, biological, livestock, cost, production.*

KEY CONCEPTS

According to IAS 41, agricultural activity refers to managing the transformation of biological assets by an entity, for sale, into agricultural produce or into additional biological assets. Agricultural production is the produce harvested from the entity's biological assets. A biological asset is a living animal or a plant. Harvesting is the separation of the produce from the biological asset or the cessation of the biological asset's life processes.

In this paper we will address the accounting aspects regarding living animals.

THE ACCOUTING TREATMENT OF BIOLOGICAL ASSETS

The recognition of a biological asset is conditioned by the simultaneous fulfilment of three terms: 1. the entity controls the asset as a result of prior events; 2.it is likely that the entity obtain future economic benefits associated to the asset; 3. the fair value or the cost of the asset can be valued in a credible manner. In accordance with IAS 41 "Agriculture" the initial valuation and the valuation for the balance sheet is done

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employing the fair value less the estimated point-of-sales costs. In case the fair value cannot be measured reliably, a biological asset should be measured at cost less accumulated depreciation and any accumulated impairment losses.

The criteria regarding the recognition and evaluation of biological assets are similar to those provisioned by the Romanian accounting standards. According to these standards, animals can be included either in the category of inventories or of tangible fixed assets.

The following are included in the inventories category: 1. new-born livestock of any kind (calves, lambs, piglets, etc.) which are going to be included in the category of fixed assets, as labour or reproduction livestock; 2. livestock for fattening, destined for slaughter or sale; 3. livestock raised for produce (wool, milk, fur, eggs); 4. bee colonies.

Fixed assets include adult livestock for traction and reproduction, such as: reproduction and labour horses; mules and donkeys; oxen and labour buffalo; dairy cows and bulls, for reproduction; sheep, goats and pigs for reproduction; poultry for reproduction; guard dogs and hounds.

ACCOUTING OPERATIONS REGARDING LIVESTOCK

Livestock accounting is held with the aid of group 36 ”Livestock and Poultry” which contains the following first degree synthetic accounts: 361: ”Livestock and Poultry”, 368 ” Price differences for livestock”. The reversible impairment of livestock is recorded in account 396 ”Adjustments for the impairment of livestock held by third parties”.

The debit of account 361 ”Livestock and Poultry” supplies information regarding entries of livestock and weight gain. The entry value is the purchase cost or the production cost, depending on the origin of the entries: purchase or production.

The records performed in the credit of account 361 ”Livestock and Poultry” have a regular character, insofar as they refer to exit of livestock.

The method of the permanent inventory is recommended for recording these inventories.

Example 1: Purchased livestock, valued at the purchase cost

Livestock is purchased from the suppliers with the purpose of fattening at the purchase cost of 5.700 RON, VAT 19%, which is later paid

through the bank. The monthly weight gain is recorded at the actual production cost.

The consumption of grain is 2,540 RON, the consumption of electricity and water is 500 RON plus VAT 19%. After four months the livestock is sold as living animals at the sale price of 12.000 RON, VAT 19%; the invoice is cashed by the bank.

1.) Purchase of livestock:

%	=	401 "Suppliers"	6.783 RON
361 "Livestock and Poultry"			5.700 RON
4426 "Deductible VAT"			1.083 RON

2.) Purchasing with a billing order:

401 "Suppliers"	=	5121 "Bank accounts in RON"	6.783 RON

3.) Recording the consumption of grain:

6026 "Expenses regarding grain"	=	3026 "Grain "	2.540 RON

4.) The consumption of electricity and water is recorded based on an invoice:

%	=	401"Suppliers"	595 RON
605 "Expenses regarding electricity and water"			500 RON
4426 "Deductible VAT"			95 RON

5.) Payment in cash of the utility invoices:

401 "Suppliers"	=	5311 "Cash in RON"	595 RON

6.) Recording the monthly weight gain, according to the actual production cost (2,540 +500 = 3,040 RON):

361 "Livestock and poultry"	=	711 "Variation of inventories"	3.040 RON

7.) Sale of livestock:

4111 "Clients"	=	%	14.280 RON
		701 "Revenue from the sale of finished products"	12.000 RON
		4427 "TVA collected"	2.280 RON

8.) The exit of the sold livestock is recorded (purchase cost: 5.700 RON; the total weight gain: 3.040 RON):

%	=	361 "Livestock and poultry"	8.740 RON
606 "Expenses regarding livestock and poultry"			5.700 RON
711 "Variation of inventories"			3.040 RON

9.) Cashing in the value of livestock sold:

5121 "Bank accounts in RON"	=	4111 "Clients"	14.280 RON

Example 2:

Livestock obtained from production, valued at standard cost.

On January 1st year N, 15 animals for fattening are obtained from the production of the entity, recorded at standard cost of 100 RON/piece.

The monthly weight gain is of 25 RON/piece at standard price and 26 RON/piece at actual cost.

After 12 months 10 animals are sold at the price of 700 RON/piece plus VAT 19%; the invoice is cashed in through a bank.

1.) The new-born livestock is recorded, knowing the standard cost (15 pieces x 100 RON = 1.500 RON), the actual production cost (15 pieces x 75 RON/piece = 1.125 RON):

%	=	711 "Variation of inventories"	1.125 RON
361 "Livestock and poultry"			1.500 RON
368 „Price differences for livestock and poultry"			- 375 RON

2) The monthly weight gain:

a. Standard cost: 15 pieces. x 25 RON/piece = 375 RON;
375 RON x 12 months = 4.500 RON

b. Actual cost: (15 pieces x 26 RON/piece= 390 RON;
390 RONx12 months = 4.680 RON

c. Price differences b.) –a.)……180 RON

%	=	711 "Variation of inventories"	4.680 RON
361 "Livestock and poultry"			4.500 RON
368 „Price differences for livestock and poultry"			180 RON

1.) Sale of livestock: (10 pieces x 700 RON/piece = 7.000 RON):

4111 "Clients"	=	%	8.330 RON
		701 "Revenue from the sale of finished products"	7.000 RON
		4427 "Collected VAT"	1.330 RON

4.) Livestock sold at standard cost are removed from accounting (standard cost 6.000 RON: 15 pieces x 10 pieces = 4,000 RON) :

711 "Variation of inventories"	=	361 "Livestock and poultry"	4.000 RON

The basis for calculus of the price differences afferent to the livestock removed from accounting:

D	Account 361	C	D	Ct. 368		C
	1.500		Si.	-375		
Rd. cumulated 4.500	Rc. cumulated 4.000		Rd.	180		
TSD cumulated 6.000	TSC cumulated	4.000	TSD	- 195	-130	

Price differences afferent to the livestock removed from accounting:

$$\frac{-195}{6000} x 4000 = -130$$

5.) Recording the price differences afferent to animals sold:

711 "Variation of inventories"	=	368 "Price differences for livestock and poultry"	-130 RON

6.) Receipt of the value of livestock sold:

5121 "Bank accounts in RON"	=	4111 "Clients"	8.330 RON

LIVESTOCK INCLUDED IN THE CATEGORY OF TANGIBLE FIXED ASSETS

Livestock included in the category of fixed assets is recorded using account 2134 "Livestock and Plantations".

Example: Adult livestock for labour is bought at the purchase price of 80.000 RON, transportation expenses 4.000 RON, cost of insurance throughout transportation 400 RON, cost of health certificate 150 RON. The seller and the transport service provider also invoice VAT 19%.

The following are recorded:

1) Invoice for the purchase of livestock (80.000 RON -8.000 RON) with VAT 19%:

%	=	404 „Fixed assets suppliers”	85.680 RON
2134 ”Livestock and plantations”			72.000 RON
4426 ”Deductible VAT”			13.680 RON

2) Invoice regarding transportation services:

%	=	404 „Fixed assets suppliers”	4.760 RON
2134 ”Livestock and plantations”			4.000 RON
4426 ”Deductible VAT”			760 RON

3) Cost of insurance and health certificate, considering the form of deducting through the cashier (400 RON +150 RON):

2134 ”Livestock and plantations”	=	5311 „Cash in RON”	550 RON

PRESENTATION IN ANUAL FINANCIAL STATEMENTS

IAS 41 „Agriculture” requests that the economic entity present the accounting value of its biological assets separately in the balance sheet.

Under these circumstances, the entity must offer information regarding each group of biological assets. This information must refer to: 1. the nature of the activities involved by each group of assets; 2. the quantities of biological assets and agricultural produce throughout the period.

Also, the entity must present, amongst others: 1. the methods applied for determining the fair value of each group of biological assets and agricultural produce at the harvesting point; 2. the accounting value of biological assets whose title is restricted (assets which constitute collateral

for loans); 3.the value of the commitments for development or purchase of biological assets; the strategies for managing risks related to agricultural activities; information regarding Government subsidies recognised in financial statements.

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ACCOUNTING AND FISCAL TREATMENT OF LEASING CONTRACTS

TRATAMENTUL CONTABIL ŞI FISCAL AL CONTRACTELOR DE LEASING

MIHAELA GÂDOIU*

Significant changes have been made in what concerns the real estate leasing which is VAT free. As a consequence of adapting the intern laws to the treaties regarding the avoidance of the double taxation, the dues are defined as payments of any nature made for the use or the grant of the use of a patent or of industrial, commercial or scientific equipment. In our opinion, this is the reason for which the new Fiscal code regulates that in the case of the financial leasing contracts that are signed after the 1st of January 2007 the interest is not VAT free anymore.

Key worlds: *the leasing company, the lease contract, the financial lease, the operational leasing*

THE LEASE CONTRACTS

From a legal point of view, leasing operations unfold based on contracts concluded for that purpose.

The contracting parties are: the leasing company called lessor/financer, as owner, which transfers for a determined period of time the rights of use over a certain good to another party called the lessee/user.

The object of the leasing contract can be represented by fixed goods and mobile goods with a longer period of use, within the civil circuit, with the exception of audio and video recordings, theatrical plays, manuscripts, patents and copyright.

The right to use computer programs, as a patrimonial right over computer software, can be the object of leasing operations, if the owner of the copyright has authorized this operation.

The values used within leasing operations are:

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- The entry value equivalent to the value at which the good was purchased by the lessor/financer;
- The residual value, equivalent to the value at which, when the lease contract expires, the transfer of the property rights is done;
- The total value is the sum of the lease instalments, to which the residual value is added.

Leasing can be financial and operational. Delineating the two forms is done based on the criteria provisioned by the fiscal legislation.

• According to these regulations, the financial lease contract is any leasing contract that meets at least one of the following conditions:

a) The risks and benefits of the property right over the object of the lease are transferred to the user at the moment when the lease contact produces effects;

b) The lease contract expressly states the transfer of the property right over the object of the lease when the contract expires;

c) the user has the option of buying the good when the contract expires, and the residual value, expressed as percentage, is smaller than or equal to the difference between the maximum normal functioning duration and the duration of the lease contract, reported to the maximum normal functioning duration, expressed as a percentage.

The synthesis of the regulations expressed in item c) may be outlined as follows:

$$Vr\% \leq \frac{DNFM - DCL}{DNFM}\%$$

Where: Vr % = the residual value expressed as a percentage;

DNFM = the maximum normal functioning duration;

DCL = duration of the lease contract.

d) the lease period is greater than 80% of the maximum normal functioning duration of the good which is the object of the lease; according to this definition, the lease period includes any period for which the lease contract can be prolonged;

e) the total value of the lease rates, less the accessory expenses, is larger or equal to the entry value of the respective good.

Example:

An installation has an entry value of 57,800 RON and a maximum normal functioning duration of 15 years (according to the Catalogue

regarding the classification and normal functioning duration of fixed assets, approved by Government Decision no. 2,139/11.30.2004). Calculate the residual value, considering that requirements from items c) and d) are fulfilled.

Solution:

1. The duration of the lease contract (DLC) must be greater than 12 years, i.e. DLC>15 years x 80%; DLC>12 years;
2. Under the hypothesis that the duration of the lease contract is 12 years and six months, the residual value (Vr) must be smaller or equal to 9,635.26 RON:

$$\frac{180 months - 150 months}{180 months} \% = 16.67\%$$

Vr. = 57,800 RON x 16,67%

Vr. = 9,635.26 RON

The operational lease contract is any lease contract concluded between lessor and lessee, which transfers the risks and benefits of the property to the lessees, less the valuation risk, at the residual value, and that does not fulfil any of the terms specified by items b) to e). The risk of valuing the good at its residual value exists when the option to buy is not executed at the start of the contract or when the leasing contract expressly states the returning of the good at the moment the contract expires.

THE EFFECTS OF THE FINANCIAL LEASE CONTRACT

In accounting**,** the financial lease contract has the following effects: the financer records:

- The handing in of the asset which is the object of the financial lease contract

The receivables regarding the recuperation of the capital rates and of the interest, using balance accounts, as well as special accounts: debit account 8038 ”Other values outside the balance” analytical ”Goods leased in financial leasing”; debit account 8052 ”Interest rates to collect” .

The user records:

- Receiving the asset which is the object of the leasing contract;
- Debts regarding the capital rates and the interest using balance accounts, as well as special accounts: Debit account 8036

”Royalties, rents and other assimilated debts”; 8051 ”Interest rates to pay”;

- Amortization.

Fiscally**,** in the case of financial leasing, the user is treated as the owner. The amortization of the object of a financial leasing contract is done by the user and represents a deductible expense upon the calculation of the taxable income. Also, in the case of financial leasing, the user deducts the interest.

As far as financial leasing contract accounting goes, the accounting norms in our country state dispositions similar to those of IAS 17 ”Leasing”. According to these, the user must record an asset and a long-time debt equal to the present value of all the leasing payments performed throughout the duration of the contract.

Financial leasing reflects certain characteristics, so that the operation is in many ways the same as a purchase with instalments. Similar to the way mortgage loans are treated, each financial leasing instalment partially represents an expense regarding interest, and partially represents a reimburse of the debt. In addition, the amortisation is calculated for assets and is recorded in the books of the user.

The financial leasing instalment contains the capital rate, equal to the percentage of the good’s entry value and the respective interest.

THE EFFECTS OF THE OPERATIONAL LEASING CONTRACT

In accounting**,** the operational leasing contract produces the following effects:

The lessor records:

- The good purchased for the purpose of the leasing contract;
- amortization;
- revenues from royalties.

Observation: According to the valid legal dispositions, the amortization of fixed assets that are the object of an operational leasing contract are calculated by the financer, with the possibility of the entire value of the fixed asset minus the residual value provisioned in the contract, throughout the duration of the contract, but no less than 3 years.

The lessee records:

- debts regarding royalties, in the debit of the account outside of the balance 8036 ”Royalties, rent and other assimilated debts”;
- expenses with royalties.

Fiscally, in the case of operational leasing, the lessor is treated as an owner. The amortization of the good which is the object of an operational leasing contract is done by the lessor and is an expense deductible from the calculation of the taxable income, and the lessee deducts the rent (the leasing instalment).

The operational leasing contract is similar to the rental contract. The asset which is the object of the leasing operations stays in the evidence of the lessor's balance accounts and the amortization is calculated and recorded by him.

The operational leasing instalment contains amortization rate, calculated in accordance with the legal dispositions and the profit margin.

ASPECTS REGARDING THE FISCALITY OF LEASING OPERATIONS

According to the legislation in our country, the revenue obtained by non-residential persons in the form of interest or royalty, established by the contracting parties, in the case of financial or operational leasing, is taxed by retainment at the source, according to the conventions of avoiding double taxation or internal legislation, as the case may be.

According to the new Fiscal Code, art. 116 (2) the tax owed is calculated is calculated by applying the following rates over gross revenue:

• 10% for the revenue from interest and royalties, if the actual beneficiary of this revenue is a legal person and a resident of a member state or a permanent headquarter of a company, situated in another member state. This taxation rate is applied in a transitionary period, from the date of the adherence of Romania to the European Union and until the 31st of December 2010, with the condition that the actual beneficiary of the interest and royalties hold a minimum of 25% of the value/number of shares with the Romanian legal person, over an uninterrupted period of at least 2 years, which ends when interest or royalties are paid.;

• 16% in the other cases, when the beneficiary is not a legal person resident of a member state, with the exception of income obtained from long

term deposits, current accounts and instruments obtained prior to January 1st 2007, for which the tax rate from the date they were constituted/obtained is applied.

In accordance with these regulations, tax is calculated and retained at the moment of the payment and is transferred to the state budget until the 25th of the month following the one in which the income was paid.

The tax is calculated, retained and transferred to the state budget, at the exchange rate communicated by the National Bank of Romania, valid for the day the tax was retained for non-residential persons.

In the case of financial leasing contracts, the recording of the tax on the income of non-residential persons is done as follows:

404 „Suppliers of fixed assets"	=	**446** "Other taxes, fees and assimilated transfers"	*The tax rate x gross revenue from interest/royalties*

In case of operational leasing contracts, the recording of taxes on the income of non-residential persons is done as follows:

401 "Suppliers "	=	**446** "Other taxes, fees and assimilated transfers"	*The tax rate x gross revenue from royalties*

Observation: According to art. 119 of the Fiscal Code: "Payers of income that have the obligation to retain at the source the tax for income obtained by taxpayers from Romania must forward a declaration to the competent fiscal authority until the 28th, respectively the 29th of February of the year following the one in which the tax was paid".

In case the financer/lessor is a resident of a country with which Romania has concluded a convention to avoid double taxation regarding taxes on income and capital, the tax rate which is applied to the taxable income obtained by that taxpayer in Romania cannot be greater than the tax rate established by the convention, which is applied to that income.

In the situation in which the tax rates established by the internal legislation are more favourable than those mentioned in the conventions to avoid double taxation, the more favourable tax rates are applied.

In order to benefit from the provisions of the convention to avoid double taxation, the non-residential person has to obligation to present the income payer with the certificate of fiscal residence.

• As regards VAT, art. 134^1 of the new Fiscal Code should be mentioned; according to it the generating act, in the case of rental, leasing operations intervenes at the date specified in the contract for the payment.

As regards real estate leasing, we remind the reader that this is an operation excused from VAT, according to art. 141(2) letter e.

NOTES AND COMMENTS

In accordance with the new Fiscal Code, art. 124^19, approved by Law 343/2006: ”payments for the use of or the right to use industrial, commercial or scientifical equipment will be considered royalties”.

According to these regulations only for leasing contracts, validly concluded prior to December 31st 2006, and that carry out after the date of adherence, the interest regarding rates that mature after January 1st are not part of the tax base.

In the Fiscal Code valid up to December 31st 2006, art. 137(3) letter c. Clearly stated that the following are not part of the tax base for VAT: ”interest for: deliveries paid for in instalments, leasing operations”.

The new contents of this article, applicable starting from January 1st the following are not included in the tax base: ”interest after the date of the delivery or execution of the service, for delayed payments”.

We can conclude that for financial leasing contracts, concluded after January 1st 2007, interest is included in the tax base for VAT.

According to the conventions for avoiding double taxation, the term royalty is defined as payments of any nature for use or concession of a patent, of industrial, commercial, scientifical equipment.

The new Fiscal Code has taken almost entirely the definition of royalties used in the conventions to avoid double taxation.

Sine the leasing contract is essentially a contract transmitting the use of a good, it inevitably follows the fiscal treatment of royalties and not of interest, regardless of the way internal law qualifies these payments.

The conclusion stems from art. 11 of the Constitution, according to which ”the treaties Romania has validated are part of the internal law” as well as from the prevalence of international treaties in case of disaccord with internal legislation.

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THE ANALYSE OF THE TREATY ESTEABLISHING A CONSTITUTION FOR EUROPE

ANALIZA TRATULUI PRIVIND O CONSTITUȚIE PENTRU EUROPA

S. STANCIU*

The Commission shall promote the general interest of the Union and take appropriate initiatives to that end. It shall ensure that the Constitution and the measures adopted by the Institutions pursuant thereto are applied. It shall oversee the application of Union law under the control of the Court of Justice of the European Union, implement the budget and manage programmes and it shall exercise coordinating, executive and management functions, as laid down in the Constitution.With the exception of the common foreign and security policy and other cases provided for in the Constitution, it shall ensure the Union's external representation. It shall initiate the Union's annual and multi-annual programming with a view to achieving inter-institutional agreements.

Key words: *security policy, Constitution, institution, measures, member states.*

The Commission retains its "right of initiative" so that legislative acts may be adopted only on the basis of a Commission proposal (although there are some exceptions, such as allowing the ECB to make economic proposals). Before looking at the changes, it is worth stopping here and looking at these roles and duties. By any measure, what are being described here are the duties of a government. This is the definition of a government of the European Union.

The Members of the Commission shall be chosen on the ground of their general competence and European commitment and their independence shall be beyond doubt. The first Commission appointed under the provisions of the Constitution shall consist of one national of each Member State,

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including its President and the Union Minister for Foreign Affairs who shall be one of its Vice-Presidents. After this Commission ends, the next one will have a number of commissioners corresponding to two thirds of the number of Member States.

The commissioners are to be selected from nationals of the Member States on the basis of a system of equal rotation between the Member States. This system has not yet been established but must apply the following principles:

(a) Member States shall be treated on a strictly equal footing as regards determination of the sequence of, and the time spent by, their nationals as Members of the Commission; consequently, the difference between the total number of terms of office held by nationals of any given pair of Member States may never be more than one;

(b) Subject to point (a), each successive Commission shall be so composed as to reflect satisfactorily the demographic and geographical range of all the Member States of the Union.

As before, the commissioners "shall be completely independent", it should neither seek nor take instructions from any government or other institution, body, office or agency. They shall refrain from any action incompatible with their duties or the performance of their tasks. The Commission, as a body, is responsible to the European Parliament (note, not the member states). Under the procedures set out in Article III-243, the European Parliament may vote on a censure motion on the Commission. If such a motion is carried, the Members of the Commission shall resign as a body and the Union Minister for Foreign Affairs shall resign from the Commission.

The President of the European Commission

This deals with the selection procedure, as set out Article I-26. At the outset, the constitution aims to inject a political element into the selection process, requiring that the European Council should "take into account" the elections to the European Parliament. This is behind some of the argument at the moment, with the EPP group in the European parliament demanding that the choice of president should reflect the political stance of the dominant group.

However, as we will find with so many things in the constitution, the wording is vague: what does "take into account" actually mean? Anyhow,

the European Council must have "appropriate consultations" with the Parliament – whatever that means – but then it makes its choice by qualified majority voting. This means that the UK – or any other country – can be over-ruled and a candidate to which it objects can be imposed. If the constitution comes in, this is the last time that the UK can actually block a candidate.

Once the European Council has made its choice, the final decision is up to the federal European parliament. It must elect the president by "a majority of its members". If the parliament cannot decide, however, there is no majority – then the candidate is not appointed. The European Council steps in again and, acting by a qualified majority, has one month to propose another candidate, who then has to be elected by the parliament, as before.

As to the rest of the Commission, the Council (it is not clear here whether the Constitution is referring to the European Council or the Council of Ministers) then adopts a list of "other persons" "by common accord with the President elect" – whatever that means. The Commission is then voted in as a body by the parliament, following which the European Council, again by QMV. As to resignations, a member of the Commission is required to resign if the President so requests. A slightly different procedure is set out for the Union Minister for Foreign Affairs.

Looking at this while article in the round, what the constitution effectively does is reduce substantially the right of any member state government to select and appoint the president of the Commission, and vest the ultimate choice in the Parliament which – by and large – shares the Commission's integrational ambitions. The system now favors, therefore, the appointment of a president dedicated to furthering European integration. In any event, this does not in any way strengthen the powers of the member states.

Qualified Majority Voting and European Parliament seats

The final agreement is set out in an amended Article I-24. To say that the procedure is mind-bogglingly complex is something of an understatement. The text actually does not make sense but, as far as I can work out, there are
two stages:

- A qualified majority shall be defined as at least 55 percent of the members of the Council.

- The majority must comprise at least fifteen member states which must collectively comprise at least 65 percent of the population of the Union (which is actually 60 percent of the member states).

Then, the "blocking minority" must include at least four Council members. However, just in case you thought you understood this, when the Council is not acting on a proposal from the Commission or from the Union Minister for Foreign Affairs, the qualified majority is 72 percent of the members of the Council, representing Member States comprising at least 65 percent of the population of the Union. Then, there are separate cases, where only some Council members have the right to vote, such as with enhanced co-operation or Euro zone.

In these cases, the percentages are applicable only to Council members who have the right to vote and to the population of the Member States which they represent. The blocking minority will be "the minimum number capable of constituting a blocking minority through the population criterion plus one".

The Article I-19 (2) sets out that the EU parliament should be composed of "representatives of the Union's citizens" and limits its size to 750 members. Crucially, it then requires that "representation… shall be digressively proportional", with a minimum threshold of six MEPs per Member State. No Member State can have more than 96 seats. This means that Malta, with a population of 380,000, and Luxembourg with 440,000 (approx) will each have six MEPs. On the other hand, the North East Region of England, with a population of 2.5 million, gets three. That is democracy, EU style.

Co-ordination of economic policy

The Articles I-11 (3) and I-14 (1) refer to the fact that the Member States shall co-ordinate their economic and employment policies "within arrangements as determined by Part III", which the Union shall have competence to provide, and that Member States shall co-ordinate their economic policies within the Union. We then have a situation where the Council shall adopt measures (proposed by the Commission) "in particular broad guidelines for these policies".

These must be taken together with "Part III" and in particular Article III-69 (1) which specifies that the "activities of the Member States and the Union" shall include "...the adoption of an economic policy which is based

on the close coordination of Member States' economic policies... and on the definition of common objectives".

These Articles, therefore, are of immense importance as they give the Commission direct power to interfere in and dictate the economic management of member states. And, because the voting method is not specified, the "default" applies, as per Article I-22 (3), making proposals subject to QMV. The Treasury – meaning Gordon Brown - was apparently unhappy about conceding the veto on economic policy but seems to have been convinced that the use of the word "co-ordinate" was so vague as to be "harmless". If that is truly the view, it grossly underestimates the power and persistence of the Commission. As we all know, if you give it an inch, it will take a kilometer. "Co-ordinate" can be interpreted very widely if there is inclination to do so.

Here, the construction of the wording in Art I-14 is interesting: the Council shall adopt measures "in particular broad guidelines…" While it may focus on those "broad guidelines", it should be noted that the wording does not confine the Council to them. By any measure, a major power has been ceded to the EU. The UK is, in effect, obliged to subsume its general economic management to the EU, and pursue the "common objectives" set by the EU. Given the vital nature of economic management, can it be said that any country which is not able to define its own economic policy is truly independent?

One of those famous "passarelle" clauses, which enable the European Council to turn a "unanimous" voting requirement into QMV – by a unanimous vote. The significance of this is that it amounts to making treaty changes – or changes which would have required treaty changes, if you catch my drift – without having to have an IGC, signing and that tiresome process of ratification. Thus, under Article I-54 the Council can lay down a multiannual financial framework, acting unanimously after obtaining the consent of the European Parliament. But, if it feels like it, the European Council "may adopt, by unanimity, a European decision allowing for the Council to act by a qualified majority when setting out the multiannual framework".

Charter of fundamental rights

This is one of Blair's "red line" issues, where he did not want the Charter to have direct application in British law. His idea was that the

principles should apply only to EU laws. To protect his "red line", the "colleagues" agreed to insert an amendment to the 5th paragraph of the Preamble of Part II, the whole of which is reproduced below with the crucial amendment in bold.

This Charter reaffirms, with due regard for the powers and tasks of the Union and the principle of subsidiarity, the rights as they result, in particular, from the constitutional traditions and international obligations common to the Member States, the European Convention for the Protection of Human Rights and Fundamental Freedoms, the Social Charters adopted by the Union and by the Council of Europe and the case law of the Court of Justice of the European Union and of the European Court of Human Rights.

In this context the Charter will be interpreted by the courts of the Union and the Member States with due regard to the explanations prepared under the authority of the Presidium of the Convention which drafted the Charter and updated under the responsibility of the Presidium of the European Convention. And just to make this watertight, they have added a new paragraph 7 to Article II-52: "Scope and interpretation of rights and principles". The explanations drawn up as a way of providing guidance in the interpretation of the Charter of Fundamental Rights shall be given due regard by the courts of the Union and of the Member States.

Then, to nail the lid down, there is the "Declaration for incorporation in the Final Act concerning the explanations relating to the Charter of Fundamental Rights". This reads: The Conference takes note of the explanations relating to the Charter of Fundamental Rights prepared under the authority of the Presidium of the Convention which drafted the Charter and updated under the responsibility of the Presidium of the European Convention, as set out below.

More provisions specific to euro members

This is an amendment to Article III-88 (1), which reads as follows: In order to ensure the proper functioning of economic and monetary union, and in accordance with the relevant provisions of the Constitution, the Council shall, in accordance with the relevant procedure from among those referred to in Articles III-71 and III-76, with the exception of the procedure set out in paragraph 13 thereof, adopt measures specific to those Member States whose currency is the euro.

However, on the basis of "consensus" rather than unanimity, the European Council can send the proposal straight back to the Council, whence it can be approved by QMV. Yet this is supposed to be one of the vetoes that Blair has preserved. But the only matter before the summit was one addition to Article III-174 (2). This Article permits the making of European laws to "determine Eurojust's structure, operation, field of action and tasks".

The tasks set out in the original version of the constitution were:

- the initiation of criminal investigations, as well as proposing the initiation of prosecutions, conducted by competent national authorities, particularly those relating to offences against the financial interests of the Union;

- the strengthening of judicial cooperation, including by resolution of conflicts of jurisdiction and by close cooperation with the European Judicial Network.

Energy

This is a very contentious area of the constitution, which has led to charges that the EU is intent on getting its hands on British North Sea oil – which it probably is. So contentious has it been that the UK government has been investing a great deal of political capital in neutralizing the offending Article (III-157) so much so that the Commission asked for the emasculated remnant to be removed, believing that it could use its Single Market powers to better effect.

Nevertheless, the Article reappeared in the final batch of Irish presidency amendments, the text of which was approved at the Brussels summit unchanged. Actually, there are two relevant Articles, the first is Article I-13, which sets out “Areas of shared competence”, in which “energy” is included. The substantive Article, though, remains Article III-157, which sets out the objectives of the Union’s energy policy. In establishing an internal market and with regard for the need to preserve and improve the environment, it aims to:

(a) ensure the functioning of the energy market;

(b) ensure security of energy supply in the Union;

(c) promote energy efficiency and saving and the development of new and renewable forms of energy.

CONCLUSIONS

The Article IV-10 new (2) comes to a conclusion that makes provision for the Treaty to be translated into any other languages as determined by Member States which, "in accordance with their constitutional order, enjoy official status…".

This is a sop to the Irish, who made getting Irish recognized as an official Community language one of their presidency objectives. The "Conference" considers that the possibility of producing official translations of the Treaty in these languages "contributes to fulfilling the objective of respecting the Union's rich cultural and linguistic diversity…".

As a conclusion, on the final page of the agreement there is a "Declaration by member states". This is a "Declaration by the Kingdom of Spain and the United Kingdom of Great Britain and Northern Ireland", noting that The Treaty establishing the Constitution applies to Gibraltar as a European territory for whose external relations a Member State is responsible. This shall not imply changes in the respective positions of the Member States concerned.

This is self-explanatory – the Spanish are not having Gibraltar… until Straw works out how to give it away.

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THE PERSPECTIVE OF THE RURAL DEVELOPMENT POLICY IN THE EUROPEAN UNION FOR 2007 - 2013

PERSPECTIVELE POLITICII DE DEZVOLTARE RURALĂ ÎN UNIUNEA EUROPEANĂ 2007 - 2013

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Community policy for the 2007-2013 period will focus on increasing growth, competitiveness, innovation and employment as indicated in the Lisbon Agenda. The new Community policy strives to be simpler and more transparent by requiring unified programming for Cohesion and Structural support and by reducing the number of financing tools for the Cohesion Fund (CF), the European Regional Development Fund (ERDF) and European Social Fund (ESF). It also promotes decentralization of responsibilities to national and regional levels and encourages partnerships and multi-level governance in order to involve the wider public into programme development and implementation.

Key words: *employment, development, implementation, training, environmental.*

Strategies developed at the local and regional levels should be integrated into national ones to effectively promote growth and jobs. This re-launch of the Lisbon Agenda requires the member states to target spending on achieving Lisbon's goals. Therefore, Community financial resources are earmarked for measures that support the goals. Sixty percent of expenditures under the convergence objective and 75 percent of expenditures under the competitiveness objective are earmarked for Lisbon priorities. These figures will be applied voluntarily by new member states.

Priority objectives include:

1. convergence (supported by ERDF, ESF, CF);
2. regional competitiveness and employment (supported by ERDF, ESF); and
3. European territorial cooperation (supported by ERDF).

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ERDF will concentrate on support for innovation, infrastructure and investments, while ESF is designed to focus on vocational training and employment. Member states with a gross national income (GNI) below 90 percent of the EU average will be eligible for Cohesion Fund support for environment, transport infrastructure and renewable energy and energy efficiency projects. In order to achieve the three Community objectives by 2013, EUR 308 billion will be made available from the Community budget. That amounts to 0.37 percent of the GNI of the EU27. New member states will receive 51.3 percent of this envelope. For the new programming period, environment-related activities will be part of all three objectives and will be eligible to receive support from all three instruments.

The new rural development policy of the European Union for 2007-2013 streamlines priorities according to the Lisbon Agenda on growth and jobs and the Gothenburg sustainability goals. The policy addresses a broader range of activities from innovation and restructuring to farming needs and places an increased focus on environmental protection. Following the tendency towards decentralization and simplification in EU policies, rural development is programmed within a single framework and will be supported from a single financial instrument: the European Agricultural Fund for Rural Development (EAFRD).

THE WAY FORWARD – CHALLENGES FOR THE NEW PROGRAMMING PERIOD ENVIRONMENTAL PROJECTS FINANCED BY THE EU FUNDS

The new Rural Development Policy runs along four axes denoting the four principal objectives for the 2007-2013 periods:

- Axis 1 represents the improvement of competitiveness in the farming and forestry sectors.

- Axis 2 has direct relevance to environment. This objective will support measures in the agri-environmental sphere, which is a compulsory component of the programme. In addition measures related to sustainable forestry, Natura 2000 payments, payments to farmers in less-favored areas and payments for animal welfare will be supported. A quarter of the national programme funding can be spent on this Axis. The EU will fund 55 percent of individual project costs and 80 percent in convergence regions,

- Axis 3 will account for 10 percent of the national allocation. The EU grant support would cover 50 percent of project costs and up to 75 percent in the convergence regions. This objective is to encourage economic diversification into non-agricultural activities such as tourism, village renewal and micro-enterprises.

A further 5 percent of the national envelope is allocated for assistance to bottom-up initiatives of local action groups under the framework of the LEADER programme.

NEW INITIATIVES OF THE EUROPEAN COMMISSION

In order to address the challenge of preparing mature projects and financing projects at the start-up phase, the European Commission launched three initiatives: JASPERS, JESSICA and JEREMIE.

JASPERS stands for Joint Assistance to Support Projects in the European Regions. This instrument is the result of cooperation between the EC, EIB and EBRD. Its office is located in the EIB headquarters; with regional office in CEE. JASPERS targets its support on the preparation of large scale projects in CEE for Structural and Cohesion Funds support under the Convergence objective. This means environmental projects of more than EUR 25 million and transport or other sectoral projects of more than EUR 50 million.

The technical assistance covers the full project cycle, including technical, economic and financial aspects. Key areas of support will include: trans-European networks (TENs); the transport sector outside of TENs, including rail, river and sea transport; inter-modal transport systems and their interoperability; management of road and air traffic; clean urban and public transport; environment, including energy efficiency and renewable energy; and private public partnerships. It is important to note that requesting assistance from JASPERS is voluntary and free for member states. It will not entail the obligation to borrow from either EIB or EBRD, and for their part, the banks are not obliged to finance projects prepared under JASPERS. Priorities and objectives will be drawn up within the framework of a country-specific annual action plan. The action plans will be developed in cooperation with the beneficiary country and the EC DG REGIO. In each beneficiary country the managing authority will take the

role of JASPER coordination and will have the right to request project preparation assistance.

SMEs will receive support under an instrument called **JEREMIE,** which stands for Joint European Resources for Micro-to-Medium Enterprises. JEREMIE was launched by the European Commission and European Investment Fund (EIF) within the EIB Group with the purpose of providing financial engineering assistance for micro to medium-sized enterprises. This initiative will enable easier access to finance and micro-credits for businesses engaged in innovative activities. The ultimate goals are to stimulate growth and jobs at the regional level by increasing the number of innovative and risk-taking SMEs. Through JEREMIE a portion of the Structural Funds grant available for regions will be transferred into financial products such as equity, venture capital, guarantees, loans and technical assistance.

EIF will not only utilise EIB lending capacity but will also channel capital from other sources such as international, national and local financial institutions, investment funds and micro-credit agencies. The portfolio will be developed in cooperation with national and local authorities and tailored to local needs, after assessing demand for financial products. From 2007 financial intermediaries will be selected who would on-lend to SMEs. It is envisaged that JEREMIE will be complementary to the Competitiveness and Innovation Programme by offering technical assistance, equity to microfinance providers or guarantee institutions, and regional venture capital fund investments.

The third initiative, the Joint European Support for Sustainable Investment in City Areas **(JESSICA)**, was created with the purpose of supporting sustainable development, growth and jobs in urban areas. This instrument is coordinated jointly by the European Commission, European Investment Bank and the Council of Europe Development Bank. JESSICA will provide access to expertise for Structural Funds managing authorities in order to receive loans for urban renewal and development. The grant contribution from the Structural Funds programmes will be used to finance loans in a revolving way.

Two approaches are available for project support from JESSICA:

- Direct relationship with urban development funds. In this case urban development funds will support pubic private partnerships (PPPs) and other projects with loans, equity or guarantees, but not grants. Other

operational programmes can also contribute to the selected projects or private banks or investors.

- Indirect relationship with urban development funds. This approach covers the support provision through holding funds. Such a holding fund would invest in urban development funds by providing loans, equity or guarantees. If authorities award a grant to the EIB, it can play the role of a holding fund. Urban development funds would invest in PPPs and other projects in the urban context provided the project is part of an integrated plan for sustainable urban development.

KEY CHALLENGES FOR NEW MEMBER STATES IN THE FUTURE

Allocating resources for environment

Ensuring a proper share for environmental projects will be a challenge for the future programming period as there are no set ratios for environmental priorities in the case of the CF. Several environmental activities are eligible for Cohesion Fund support, including those in the newly added categories of energy and sustainable transport. It falls to the member states to select national priorities. Due to the extended scale of activities, stronger competition between sectorial priorities is expected for the available resources.

Additional capacities for project preparation and management

The bigger financial envelope requires larger and more skilled staff at both the national and regional levels. Decentralized management demands better communication between all levels as well as flexible and fast decision making. With the new funding period new regulations are expected and changes in procedures and institutional setups are foreseen. This assumes the need to train public authorities and beneficiaries. Additionally, CF projects costing less than EUR 25 million in environment or EUR 50 million in transport sector will be fully managed in-country, which creates a need for additional administration capacities.

Ensuring co-financing

Securing co-financing for EU money remains one of the key challenges for the future. In the new programming period there will be more

financial resources available. Higher amounts of EU support require increased matching finance, but municipalities often lack financial resources and have limited ability to obtain loans. Under these circumstances financial support for beneficiaries such as loans, subsidies or some form of pre-financing would be needed.

Pre-financing

Pre-financing systems exist in several old member states to secure funding for the timely implementation of the projects. Similar schemes would be advisable for new member states in order to overcome delays in payments and to increase the absorption capacity.

Polluter-pays principle

The European Commission has stressed the need for increased application of polluter-pays principle. Most often, this includes an increase in utility tariffs for the population, and is therefore politically and socially sensitive. Politicians in general are reluctant to advocate tariff increases for fear of political fall-out in the next election. In addition, citizens often regard communal services such as drinking water supply as basic entitlements that should be available at a low cost or for free. The success of charging polluters also depends on collection rates and whether the polluters can afford to pay. Another limiting factor is the fear of receiving a reduced rate of assistance from EU funds in the event the proposed project yields profits.

Public-private partnerships

Involvement of the private sector in environmental projects is still at an early stage. New member states in general have little experience in this field, and often the legal environment is not fully developed. Other issues such as ownership of assets and rates of co-financing further complicate its application. PPP schemes mostly apply in transport projects, while examples of environmental infrastructure projects are rare and have clearly separated private and publicly financed components.

Coordination between Cohesion and Structural Funds

For the new funding period, the SF and CF will be programmed together. This provides an opportunity to use the two funds in a

complementary way, but it also creates a challenge to coordination. In most new member states the balance between CF and SF resources is unsettled.

Linking environment to Lisbon priorities

Resource allocation in the new period will be connected to the Lisbon priorities. Sixty percent of expenditures under the Convergence objective and 75 percent of expenditures under the Regional Competitiveness and Employment objective will be earmarked for supporting growth and jobs. None of the identified expenditure categories are specifically for the environment, although some are indirectly related, such as sustainable enterprises, clean urban transport, eco-technologies, etc.

This earmarking might create a danger of focusing overwhelmingly on projects with economic and employment benefits. One solution could be the clever integration of environmental concerns into these types of projects, as well as promoting environmenttargeted projects which have a strong, positive impact on growth or which create employment opportunities. It must be noted that such earmarking of expenditures is voluntary for new member states.

Extended application of partnership principle

The European Commission calls for increased implementation of the partnership principle in the new period. This implies the challenge of involving a broader range of environmental partners — not only public authorities — into programme preparation, monitoring, evaluation and financing. One tool for involving the public is the application of strategic environmental assessment (SEA). The launch of the SEA Directive gives an impetus to public participation as is stipulates consultations with environmental authorities and the public before programme adoption. Implementation of the SEA Directive constitutes another challenge, as it is not transposed yet in all member states, and they have to keep up with the race to conduct SEA in parallel with preparing operational programmes.

CONCLUSIONS

With the start of the new programming period, projects submitted under the conditions of the previous period will be implemented in parallel with new projects. This might create difficulties in management. For

countries such as Poland, projects under EUR 25 million still await EC approval, while in the new programming period 2007-2013 these projects must be appraised and selected on the country level. EU legislation regulating financial conditions came into effect rather late; some important rules, including that governing state aid, remain unclarified, which hinders the preparation of national regulations.

New member states anticipate a range of difficulties related to the programming for the new period. The identified obstacles relate to the fact that there are several new measures in the national rural development programmes, such as subsidies to agri-tourism and support for forestation. It was indicated that, in particular, support under Axis 3 for diversification of the rural economy will create a challenge to administer and implement activities, as there is little previous experience in putting it into practice.

Furthermore, it was noted in some countries that financial resources allocated for EAFRD are insufficient. Time constraints for preparing national regulations and programmes were highlighted by several countries. For instance, the Czech Republic still needs to establish a legal basis for matters such as direct payments and cross compliance. Preparations have not even begun for setting up a legal basis for integrated management. In general, this delay is partially due to the fact that the final decision on budget allocations came later than expected from the European Commission, and thus led to delays in the setting of national priorities. As a result, the paying agencies are expected to encounter difficulties in preparing all of the required documents in time.

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ORGANIZATION OF MANAGEMENT ACCOUNTING TROUGH ACTIVITY-BASED-COSTING METHOD IN FARMS

ORGANIZAREA CONTABILITĂȚII DE GESTIUNE PRIN METODA ABC LA EXPLOATAȚIILE AGRICOLE

A. MONEA[*], B. RĂVAŞ[*]

This paper presents some aspects regarding the management accounting and cost calculation of Activity Based Costing methods and the relevant aspects of their methodological stages in farms, according to the Romanian legislation. Studies had proves that managerial support are main factor in a successfully implementation of an accounting system, especially Activity Based Costing system. According to a study of „Cost Management Group" by Institute of Management Accountants, 62% of entities failed trying to reach the complete utilization of the ABC method because they were preoccupied to implement other systems which are in progress, like TQM, JIT etc.

Key words *managerial accounting, cost drivers, account, ABC method, costs calculation*

POSSIBILITIES OF ABC METHOD IMPLEMENTATION IN FARMS

The ABC method focuses on the activities of a production cycle, based on the premises that an output requires activities to produce, and activities consume resources. ABC systems use cost drivers to assign costs through activities to outputs.

There are many factors which has influences in the successfully implementation of ABC accounting method in farms. Based on a laborious study and opinions of many specialists had identified seven main factors:

- Employees training;

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- Managerial support;
- Knowledge sharing;
- Resources;
- The connection between compensation and assessment of the performances;
- Distort of the technological knowledge;
- Concern about other systems implementation.

Employees training help to understand the differences between Activity Based Costing and traditional cost calculation methods. Also employees training encourage knowledge sharing provides a superior economical measurement of information. Training of staff should be made on the horizontally and the vertically of management system from manager to farm worker. The training could be done by: reading, speeches, lectures done by specialists.

Studies had proves that managerial support are main factor in a successfully implementation of a accounting system, especially Activity Based Costing system. Why the main factor are employee training? The reason is simple, only employee makes perfect Activity Based Costing system implementation, because there are base of each pyramidal organization.

On the other hand, any innovation has to have a solid managerial support to be a successful one. Management must concentrate its efforts to establish the necessary resources, goals and implementation strategies of ABC method.

According to a study of „Cost Management Group" by Institute of Management Accountants, 62% of entities failed trying to reach the complete utilization of the ABC method because they were preoccupied to implement other systems which are in progress. Many experts agree the idea that this method needs many resources it is easy to implement other systems like TQM (Total Quality Management), JIT (Just-In-Time) etc.

The ABC method can be used in conjunction with job order costing or process costing.

Job order costing is a costing methodology that accumulates and assigns costs to discrete jobs. The word "jobs" refers to products, projects, assignments, or a group of similar outputs.

Each job has a number or code to accumulate costs. Resources spent are identified with the job code. Costs are traced to individual jobs to the

extent economically feasible. Costs that cannot be directly traced are assigned to jobs either on a cause-and-effect basis or allocation basis.

Process costing is a method that accumulates costs by individual processing divisions (organization divisions that perform production processes). These processing divisions are involved in a continuous production flow, with each division contributing towards the completion of the end products. The output of a processing division either becomes the input of the next processing division or becomes a part of the end product.

Each division accumulates costs, assigns the costs to its outputs, and calculates the unit cost of its output. For each period, divisions prepare a cost and production report, showing the costs, the completed units, and the work-in-process volume. When a certain number of completed units are transferred from a division to the next division, the costs of those units are also transferred and are eventually incorporated into the costs of the end product. Thus, the cost flow follows the physical flow of the production. The unit cost of the end product is the sum of the unit costs of all the divisions.

STAGES OF ACTIVITY BASED COSTING IN FARMS

At the beginning of a new accounting method implementation any manager wonders:

-How can I change an traditional method with an advanced accounting method such Activity Based Costing?

-How can I implement the method?

- What the implementation results are?

The answers of these questions are start point of ABC method implementation. The implementation of ABC method is made in four steps like:

Step 1. Identify and analysis the activities which are base of expenses allocation in farms

First the implementation team made the model on activities of the entity. A model on activities can be show like a tree which describe the entity's activities and relations between them. At each level of model are defined three to five activities which contain all functions at the level.

This stage is base of expenses distribution.

Step 2. Costs collect in farms

In this stage we are establishing which expenses are relevant for ABC method cost calculation. The scope is identifying and eliminated the useless costs. Before eliminated a cost we must recognized the process which are generated it.

So in this stage, peaks information must allow to identify the resource drivers. Also we must to determination the resource drivers before current administration period.

Step 3. Identification of factors which are determining activity costing, calls cost drivers and unit cost calculation on drivers

The activities which are identify and analyses at step 1 are regrouping at responsibility pools level by the same resource drivers in cost pools. A cost pool has a fundamental difference beside a traditional cost. The cost pool is focusing on activities not to compartments (production, services) like traditional costs.

So we determine cost drivers like that:

$$\text{cost drivers} = \frac{\text{resource costs of activities}}{\text{drivers level}}$$

Drivers' level is determining quantifying technical information of farm production made terms

Step 4. Allocating of activity costing on farm production

The base principle of ABC method is "activities generating costs". It is necessary to identifying each activity and makes a cost pool for it. The farm production costs must be allotting on farm production according with cost drivers and volume of production

A major advantage of using ABC is that it avoids or minimizes distortions in product costing that result from arbitrary allocations of indirect costs. By tracing costs through activities, ABC provides more accurate service or product costs. Experience in the private sector shows that by providing accurate cost measures, ABC has helped improve product costing, strategic pricing, and profit planning.

Also important is that ABC encourages management to evaluate the efficiency and cost-effectiveness of activities. Some ABC systems rank activities by the degree to which they add value to the organization or its outputs. Managers use such value rankings to focus their cost reduction programs. ABC encourages management to identify and examine:

- What activities are really needed (value-added activities) in order to accomplish a mission, deliver a service, or meet customer demand;
- How activities can be modified to achieve cost savings or product improvements;
- What activities do not actually add value to services or products (non-value-added activities)? ABC integrates with cycle time analysis and value-added analysis.

CRITICAL FACTORS OF ABC METHOD SUCCESSFULLY IMPLEMENTATION

Critical factors which are guaranteeing an ABC method successfully implementation is concentrating in two directions: internal one and external one. We can notice four main factors at internal level like:

- The ABC's method architectural design;
- The ABC's method implementation;
- Importance of ABC method delivery information;
- The internal support in ABC method implementation.

1. The ABC's method architectural design. The ABC method build suppose to choose a model which combine science, art and craftsmanship with whom manage its implementation. The transversal organizing of farms is an important component of this method implementation. Other important thing is farms divided on processes and these on activities. Also managerial accounting as economic science has a general accounting table which may be adapted at farms needs. Of course the actual general accounting table has possibility to bookkeeping each events, transactions or economical-financial operations.

The successfully ABC method implementation needs some accounting skills, solid knowledge and a perfect understanding of each activities in farms.

2. The ABC's method implementation. The most important problem in ABC method implementation is staff election, because we must choose only very good trained persons which have solid knowledge of accounting and management.

3. Importance of ABC method delivery information. We must ensure that all information get in ABC implementation method are useful for us. The information deliveries are justifying in many cases ABC method

implementation. The way of this information use by specialists helps to get board chart which include all the indicators useful for the analysis needed in the decision making process by farms management. For example dates delivered by each activity could be used for: profitability analysis, process value analysis, unused capacities management, benchmarking, activity budgeting, target costing, etc.

4. The internal support in ABC implementation method. This internal support helps managers and investors in ABC method implementation. Also staff has an important role because they are "main character" in ABC method implementation.

In ABC method implementation is very important to appeal for a consultancy firm which has experience in its application.

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SOME ASPECTS REGARDING AGRICULTURAL ENTITIES MERGING

ASPECTE PRIVIND FUZIUNEA ENTITĂŢILOR CU ACTIVITĂŢI AGRICOLE

A. MONEA*

This paper presents some aspects regarding merger of companies. Merging is operation which joins two or more companies in a new company or made absorption of one or more companies from one company. This paper presents some aspects regarding absorption merger like a particular type of merger.

Key words: *merger, absorbing merger, the acquirer, the acquiree, purchase method*

INTRODUCTION

Merger is considering one of capital concentration with scope of surviving and development for two or more entities on competition market.

An acquisition is a business combination in which one of the enterprises, the acquirer, obtains control over the net assets and operations of another enterprise, the acquiree, in exchange for the transfer of assets, incurrence of a liability or issue of equity.

In accounting for a business combination, an acquisition is in substance different from a uniting of interests and the substance of the transaction needs to be reflected in the financial statements.

The requirements for mergers differ among countries, but usually a merger between two companies in which either:

- The assets and liabilities of one company are transferred to the other company and the first company is dissolved;
- The assets and liabilities of both companies are transferred to a new company and both the original companies are dissolved.

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Many mergers arise as part of the restructuring or reorganization of a group and they are transaction among enterprises under common control. However, any business combination that resulted in the two companies becoming members of the same group is dealt with as an acquisition or as a uniting of interests in consolidated financial statements.

A business combination which is an acquisition should be accounted for by use of the purchase method of accounting. The use of the purchase method results in an acquisition of an enterprise being accounted for similarly to the purchase of other assets. This is appropriate since an acquisition involves a transaction in which assets are transferred, liabilities are incurred or capital is issued in exchange for control of the net assets and operations of another enterprise. The purchase method uses cost as the basis for recording the acquisition and relies on the exchange transaction underlying the acquisition for determination of the cost.

As from the date of acquisition, an acquirer should:

a) incorporate into the income statement the results of operations of the acquiree;

b) recognize in the balance sheet liabilities of the acquiree and any goodwill or negative goodwill arising on the acquisition.

An acquisition should be accounted for at its cost, being the amount of cash or cash equivalents paid or the fair value, at the date of exchange, of the other purchase consideration given by the acquirer in exchange for control over the net assets of the other enterprise, plus any costs directly attributable to the acquisition.

When an acquisition involves more than one exchange transaction the cost of the acquisition is the aggregate cost of the individual transactions. When an acquisition is achieved in stages, the distinction between the date of acquisition and the date of the exchange transaction is important. While accounting for the acquisition commences as form the date of acquisition, it uses cost and fair value information determined as at the date of each exchange transaction.

MERGER'S STAGES

Absorption merger is made in six stages which are:

1. General inventory of assets and liabilities of merger agricultural entities according to accountancy law no. 82/1991, republished.

In Financial Statements an asset may be recognized if:

- it's possible to realize future benefits from entity ;
- cost or value of asset can be measured reliably.

2. Drawing up of Financial Statements before merger by merging agricultural entities.

According this Financial Statements we determine net asset as in formula:

Net Asset = Total Assets - Total Liabilities

3. Global assessment of agricultural entities.

To assessment of merger entities we can use one method such as:

-net asset method;

-money market method;

-results based method (profitability value, efficiency value, super profits value);

-joint method;

-cash-flow method.

Global value of entity establish trough one of mentioned method is merger net value of each merging entity. According to this net value is establishing exchange proportion.

Net asset value is equal with merger net value only when we used net asset method in global assessment of entity. In case which both values are not equal at the acquiree, differences are recognized profits or loses from merging as: if merger net value is bigger than net asset we get profit and reverse situation are recognized as loses.

According independency principle of accounting, profits and loses from past period are recording with 117"Post results" account for each financial year, if is possible.

4. Calculate of exchange report for shares to reward the acquiree capital.

In this stage we do:

a) shares value of merger entities determinate trough divide net contribution to number of issue shares.

b) calculate of exchange report for shares trough divide the value of acquiree shares to the value of acquirer shares;

5. Determinate number of shares issues for net contribution pays for.

Steps which must follow are:

a) determinate number of shares issues for the acquirer trough divide net asset of the acquiree to one shares value of acquirer or trough multiply the acquirer number of shares with exchange report ;

b) capital rise at the acquirer trough multiply number of the acquirer issue shares with its one shares value;

c) merger premium calculate such as subtraction between shares value and nominal rated of share.

6. Bookkeeping all the events generated by merger.

CONCLUSIONS

The new procedure of merging brings our accountancy to new trends. This procedure is use in many developed countries.

The news consists in global assessment stage which wasn't used in old procedure. The acquiree entities are dissolving and losing legal personality from merger record at Commerce Registry Office.

Merger means strength of entities in general and particularly of agricultural entities because two or more entities are more strength than one.

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PERSPECTIVES OF THE ROMANIAN AGRICULTURAL AND RURAL DEVELOPMENT DURING THE C.A.P. IMPLEMENTATION PROCESS

PERSPECTIVELE DEZVOLTĂRII AGRICOLE ŞI RURALE A ROMÂNIEI ÎN PROCESUL DE IMPLEMENTARE A P.A.C.

ANDREA NAGY*, V. GOSA*

Romanian adhesion to the European Union supposes, beside other substantial transformations, the implementation of the Common Agricultural Policy, including the assimilation of a new financing mechanism for agriculture and rural development, from budgetary funds. With all implications provided by CAP implementation into the Romanian agriculture, by the difficulties caused by market organization under conditions of respecting the common acquis, the advantage of being part of a big quality market is remarkable. This advantage derives from the various forms of support, financial and logistic, and from market discipline.

***Key words**: CAP, agriculture, direct payments, market measures, rural development*

At the same time with Romanian adhesion to the European Union, the financing mechanisms of the Romanian agriculture affiliate to the directory lines established by the new Common Agricultural Policy reform in 2003.

The new CAP reform is a fundamental reform, meaning that the support measures move from quantity to quality, from market regulations (Pylon 1) to rural development and environmental protection (Pylon 2). It also introduces a new mechanism of supporting farmer incomes, called single payment scheme – SPS, which will replace gradually the mechanism represented by direct payments per hectare and per animal used in the

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present. This mechanism has been partially introduced, beginning with 2005, in most old member states.

The single payment scheme as mechanism of supporting the agricultural incomes, reunites all types of direct supports offered at the moment and will simplify their administration. In the future, the support offered is expected to be gradually detached by production within the entire E.U.

The new member states (E.U.-10 + Romania and Bulgaria) are free to take decisions concerning the selection of the payment scheme and also its potential supplementation from the national budget, through the "top-up" mechanism (Complementary National Direct Payments – CNDP).

In the summer of 2005, Romania has decided to apply the Single Area Payment Scheme – SAPS. Actually, among the ten states admitted into E.U. in May 2004, only two (Slovenia and Malta) have adopted directly the single payment scheme, the other eight choosing for SAPS.

According to the common regulations, this support scheme may be applied for three years after adhesion, when the new member states may improve their Management and Control Integrated System (MCIS), necessary for the administration of the single payment scheme – SPS. At the end of the three years, the European Commission will assess the stage of MCIS implementation and will decide whether this form of payment will continue (maximum two one-year prolongations) or it will be replaced by the single payment scheme.

According to these stipulations, this payment scheme may be possibly available for five years after integration, in the case of the new member states. If after the prolongation period of SAPS application the management and control systems within the new member states are still unprepared to apply SPS, then it is possible to continue with SAPS, but the support percentage will be frozen at 50% of the direct payments level.

The new member states have also the opportunity to supplement after adhesion, during the transition period, the European Union direct payment level with complementary allocations from the national budget, in sums of maximal 30% of the admitted direct payment level.

The eligibility criteria for the application of SAPS are:

- minimal exploitation area – 1 ha;
- plot size – minimum 0.3 ha;
- land maintenance under good agricultural and environmental conditions.

According to the negotiations between Romania and the European Union concerning Chapter 7 – Agriculture, the financial package is about 4 milliard euros for the period 2007-2009. These funds will be distributed between rural development, market support and direct payments:

- for direct payments, the financial support is 881 million euros and includes the financial support for products and sectors requiring quotas, reference areas or national limits. This type of financial support does not need co-financing from the national budget, but involves national implementation costs. Similarly to the 10 new member states, in Romania the direct payments will be introduced gradually, starting with 25% of the direct payments allocated in E.U.-15 in the first year after adhesion, 30% in the second year, 35% in the third year, 40% in the fourth year, and then an increase of 10% every year up to the level of 100% in 2016;
- the sum of 732 million euros is destined for market measures, including market intervention and export refinancing;
- the financial support for rural development from the E.U. budget represents a commitment of 2424 million euros for the period 2007-2009. The percentage of co-financing requested from the national budget is represented by 25%. According to the methodology of fund allocation, the annual money volume engaged yearly must be spent in the year n+2.

The check points necessary for the assessment of direct payments offered after adhesion, for arable crops, are:

- the eligible reference area for direct payments: 7012666 ha;
- the reference efficiency: 2.65 t/ha;
- subsidy per tone in E.U.-15: 63 €/t.

According to the last official information, the total budgetary allocations stipulated for Romania from the common budget, for 2007-2013, are represented by about 30 milliard euros, more than 40% coming to agriculture and rural development (about 12 milliard euros). These remarkable values will be completed by supplementary sums from the national budget. Table 1 presents the global situation of the estimated value of direct payments for agriculture from E.U. sources and from the national budget, for 2007-2016, within the vegetal and animal breeding sectors, and also the allocations destined for market measures.

Table 1

Estimated value of allocations for agriculture

- thousand € -

Specification	2007	2008	2009	2011	2013	2016
Vegetal sector – E.U.	292691	351230	409768	585383	819535	1170765
Vegetal sector – national budget	351230	351230	351230	351230	351230	0
Total allocations vegetal	643921	702460	760998	936613	1170765	1170765
Animal breeding sector – E.U.	122759	147310	174606	249437	349212	498874
Animal breeding sector–national budget	147311	147311	149662	149662	149662	0
Total allocations animal breeding	270070	294621	324268	399099	498874	498874
Total direct payments (EU+national budget)	**913991**	**997081**	**1085266**	**1335712**	**1669639**	**1669639**
Market measures	**249000**	**244000**	**239000**	**244000**	**244000**	**244000**
Total allocations agriculture	**1162991**	**1241081**	**1324266**	**1579712**	**1913639**	**1913639**

Source: Own calculations according to the results negotiated by Romania with E.U. Concerning the Chapter 7 – Agriculture, to the financial package for 2007-2009, quotas, reference areas or national limits obtained.

The implications of the Romanian adhesion to the European Union, in terms of finance, are very strong for the entire period 2007-2016, with multiple consequences upon the development of agriculture, in particularly, and of the rural area, on the whole. The sums allocated may be absorbed totally only under the conditions in which Romania meets all requirements asked by the new common agricultural policy, requirements aiming at quantitative achievements, concerning especially the negotiated quotas, but especially at qualitative achievements, concerning the application of an environment-friendly agriculture, the assurance of life conditions and animals wellness, the accomplishment of the new quality and food safety standards, the conformation with "the code of good agricultural practice", etc. All these requirements must be accomplished within the periods established at negotiations, on the contrary Romania will not benefit by the financial allocations negotiated.

The current agricultural structure in Romania, with subsistence and semi-subsistence exploitations representing more than 97% of the total agricultural exploitations, creates big difficulties for the post-adhesion performance (Table 2).

Table 2

Exploitation structures within Romanian agriculture

Exploitation structures	Number of exploitations		% within the total agric. area used	Average area per exploitation (ha)
	Number	%		
Subsistence exploitations	3400890	76.3	28.8	1.117
Semi-subsistence exploitations	947480	21.2	22.4	3.3
Commercial agricultural exploitations	92650	2.0	4.1	6.17
Commercial and agricultural companies	22670	0.5	44.7	274
Total agricultural units	4463690	100.0	100.0	3.24

Source: Ministry of Agriculture, Forest and Rural Development

According to the MAFRD estimations, only about 100000 agricultural exploitations, among the total of 4.5 million households, sell most production at market and may represent the basic nucleus of the future viable family farms. The increase of the number of exploitations producing for market is maximally important because E.U. does not assure financing only for those achieving incomes from the agricultural activity, in a proportion of over 50%. The greatest commercial and agricultural companies founded in concordance with Law 36/1991, namely 23000, must be supported to restructure themselves and to become efficient within the tough competition from the common market.

At macroeconomic level, the assessments concerning adhesion's financial implications are strongly positive, under the conditions in which Romania will meet the common quality standards and the conditionality factors related to direct payments. In such conditions, Romania could be a net beneficiary of the common funds, respectively it will receive sums bigger than its contribution to the E.U. budget, which is 1.14% of the national GDP, namely almost 1 milliard euros. Being aware of the Romanian realities, these estimations, assessesed in concordance with the hypothesis that Romania is fully prepared for the absorption of the common

funds, may be much negatively affected if the quotas will not be accomplished (and there are some sensible sectors, like sugar or milk sector) and the quality standards of the processing and slaughtering sectors will not be met. So, in Table 3 we present the comparative situation of the agricultural financial support from E.U. sources and national budget, comparatively with the last year of the pre-adhesion period, in four variants of accomplishment of the common requirements:

- variant 1 – Romania accomplishes the requirements integrally (100%);
- variant 2 – Romania accomplishes the requirements in a proportion of 80%;
- variant 3 – Romania accomplishes the requirements in a proportion of 60%;
- variant 4 – Romania accomplishes the requirements in a proportion of 40%.

Table 3

Comparative situation of the agricultural financial support from E.U. sources and national budget, comparative to the last year of the pre-adhesion period

Specification	Preliminary 2006 from national budget	Allocations from E.U. sources + national budget			
		Variant 1 – 100%	Variant 2 – 80%	Variant 3 – 60%	Variant 4 – 40%
Year 2007					
Total (mil. €)	**617**	**1162**	**930**	**697**	**465**
Difference (mil. €)	**-**	**+545**	**+313**	**+80**	**-152**
% compared to 2006	**-**	**188,3**	**150,7**	**113,0**	**75,4**
Anul 2008					
Total (mil. €)	**617**	**1241**	**943**	**745**	**496**
Difference (mil. €)	**-**	**+624**	**+326**	**+128**	**-121**
Percentage compared to 2006	**-**	**201,1**	**152,8**	**120,7**	**80,4**
Anul 2009					
Total (mil. €)	**617**	**1324**	**1059**	**794**	**530**
Difference (mil. €)	**-**	**+707**	**+442**	**+177**	**-87**
Percentage compared to 2006	**-**	**214,6**	**171,6**	**128,7**	**85,9**

Source: Calculations of the authors

In variant 1, the subsidy funds totalized (E.U. + national budget) will be 1162 million euros in 2007, reaching the level of 1324 million euros in 2009. Theoretically, these sums are much bigger compared to the sums allocated in the pre-adhesion period. However, being aware of the current agriculture situation and of the need of improvement for the new CAP requirements, the allocations mentioned will be much diminished due to non-conformation to the conditionality factors.

Different impact studies elaborated so far consider that Romania has a capacity of absorption of the common funds of about 60%. At this level, in the first year after adhesion, Romanian agriculture will benefit by a supplementary sum of 80 million euros (113% compared to 2006), followed by an annual increase which will lead to a subsidizing level of 794 million euros at the end of 2009 (128.7% of the level from 2006).

Analyzing the possibilities of using the European funds for agricultural financing, we consider we should specify the fact that, beginning with the first year of adhesion to E.U., Romania will become a contributor to the process constituting the European funds, meaning about 1 milliard euros in 2007; this sum is going to be charged in the European common budget with no conditions. In addition, Romania has to supplement the annual allocation from E.U., in a percentage of 30% of the direct payments, meaning about 500 million euros/year, a maximal sum destined to contribute to the increase of the direct allocations and to the decrease of the differences between Romanian and E.U. agriculture. Moreover, Romania has to contribute to the financial package for rural development, as co-financing, with about 200 million euros/year, in order to implement the projects concerning this chapter. The very consistent financial effort Romania has to perform is obvious; at maximal level, this effort will represent about 1700 million euros. In addition, the direct payments for agriculture from European funds will enter the country with 1-year delay. In this situation, for 2007 Romania will spend about 2.1 milliard euros.

CONCLUSIONS

The exigencies of the new CAP reform concerning the utilization of the financial resources provided by the common budget, the change of the mechanisms supporting the agricultural production with mechanisms supporting the producers, in order to bring them close to the market, and

also the measures of liberalization of agricultural market in concordance with the agreements of the World Trade Organization and with the decisions taken by the Community impose the acceleration of the agricultural integration relying upon measures which should provide the achievement of advantages, after adhesion. Romanian agriculture will have to develop itself according to the same coordinates with the European agriculture, to be able to assure a decent life for farmers, reasonable prices of agricultural products for consumers, environmental protection and conformation to the animal wellness standards, possibilities of economic increase within the poor areas as a result of the rural development programs, the increase of the foreign investments in agriculture and food industry.

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SUBSIDY IMPACT UPON ROMANIAN AGRICULTURAL PERFORMANCE DURING THE PERIOD OF PRE-ADHESION TO THE EUROPEAN UNION

IMPACTUL SUBVENŢIILOR ASUPRA PERFORMANŢEI AGRICULTURII ROMÂNIEI ÎN PERIOADA DE PREADERARE LA UNIUNEA EUROPEANĂ

ANDREA NAGY*

The analysis of the subsidies from the last decade and its impact upon the agricultural exploitation results indicates that the agricultural support system has not be able to promote performance within the Romanian agriculture, revealing the remarkable difference between the Romanian and the European financial policies and performances. Consequently, Romanian agriculture must be prepared for a new step of the CAP reform, in order to adopt new viable agricultural decisions which should ensure agricultural performance.

***Key words**: subsidies, investments, yield, performance*

Within the period of transition to the market economy, the instruments and mechanisms of budgetary agricultural support have been different from one period to another; their analysis revealing the lack of a coherent constant legislative and institutional framework for the application of some adequate support mechanisms and the lack of a rational management of budgetary resources, and also serious deficiencies concerning the organization of agricultural market. The performance expected has not been reached, yield level in some important food products has decreased and the agricultural structures have evolved gradually to an emphasized state of subsistence. The mean yields achieved in Romania in five major agricultural products, during the last decade of the 20th century (1991-2000) may be compared, along time, with the mean yields achieved by France 40-50 years ago, namely just after the war (Table 1).

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Table 1

Gap between the mean yield per ha and animals in Romania (1991-2000) and France

Specification	Romania 1991-2000	France Decade	kg/ha l/capita	Gap F/RO (years)
Sunflower	1200	1945-1955	1100	50
Wheat	2600	1951-1960	2700	45
Maize	3100	1951-1960	2900	45
Grapes	4600	1951-1960	4700	45
Milk	2700	1961-1970	2800	30

Source: Otiman, P.I. (coordinator) – Durable rural development in Romania, Editura Academiei Romane, 2006

More serious problems concern the quasi-generalized stagnation of the Romanian agriculture during 1990-2005. While in France the mean yields have been doubled, in Romanian they have stagnated or even regressed (Table 2).

Table 2

Comparative situation of the mean yield per ha and animal in Romania and France in 2005

Specification	Romania kg/ha, l/capita	France kg/ha, l/capita
Sunflower	1401	2334
Wheat	2998	6987
Maize	3981	8370
Grapes	2901	7955
Milk	3159	6548

Source: Eurostat, online database

The explanation for this very big difference and for the immense gap is a simple one, being the effect of different levels of capitalization and of endowment with production assets of the agricultural exploitations, especially with equipment, and also of the different consumptions of production factors within the Romanian and French agricultural exploitations. The Romanian investment policy is totally improper, as quantity and as dynamics, as well (Table 3).

Table 3

Level of investments in agriculture (1992-2004)

Specification	1992	1994	1996	1998	2000	2002	2004
Total national investments (TI), mil. €	2221,5	4069,2	5422,2	6058,0	6263,2	8694,0	11070,2
Investments in agriculture (AI), mil. €	239,3	777,1	628,4	409,3	495,1	1013,6	608,9
Percentage AI/TI	10,8	19,1	11,6	6,8	7,9	11,7	5,5

Source: Calculated according to the Romania Statistical Yearbook, 1993-2005

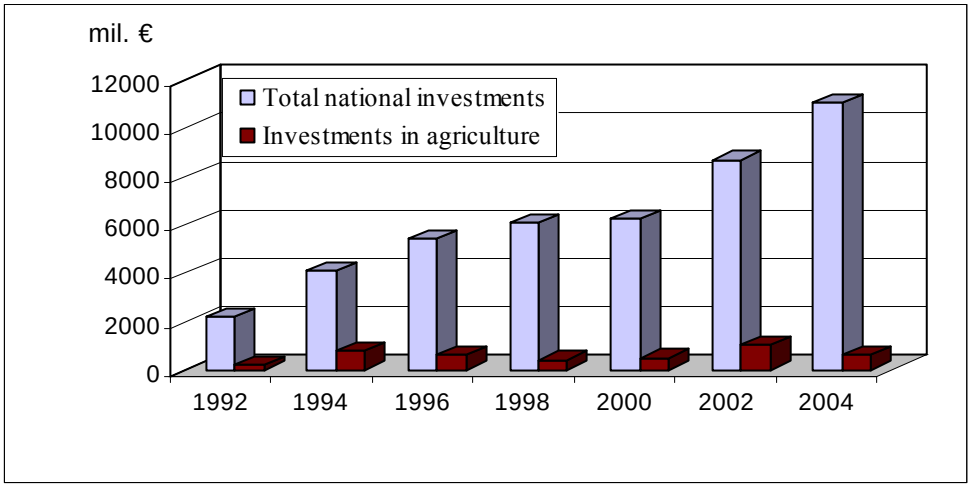

Figure 1. Evolution of total national investments and investments in agriculture during 1992-2004

During 1992-2004, the total sum of 4175 million € (about 321 millions/year) was invested in agriculture, and it is not insignificant at all. But, taking into consideration the reduced number of agricultural machines and also their physical and moral ageing, the sums invested in agriculture are insufficient to balance the tractor and agricultural equipment load, and also they are not even able to replace the disabled assets. The depreciation of the technical-material endowment, under conditions of agricultural investment let-down, has led to the substitution of the permanent capital

with manual labour, with negative effects upon the agricultural productivity and on the competitive product supply.

The investment policy is tightly related to the budgetary agricultural support. The budgetary funds allocated for Romanian agriculture have been much reduced in comparison with the European Union allocations for other member states or for the neighbour countries. But, during the first transition steps, their administration was bad, reform components were not approached in correlation, especially the privatization process and the organization of the agricultural exploitation. On the whole, during the first transitional decade, the effects of the budgetary support could not be reflected in the creation of agricultural structures specific to a functional market. The Romanian agriculture performances have decreased, and the budgetary resources allocated have been wasted and used either for social protection of the subsistence households, or for the benefit of some big state agricultural enterprises, which have not spent the resources efficiently. Under such conditions, the agricultural sector has lost important internal and traditional external market, determining Romania to become an agri-food net-importer country (Table 4).

Table 4

Evolution of agricultural macroeconomic indicators

Indicators	1994	1996	1998	2000	2002	2004
Budgetary support (€/ha)	35.9	58.1	37.4	36.6	28.0	60.8
Agricultural GDP (€/ha)	532.1	596.5	575.5	475.5	589.2	809.9
Exports (mil. €)	337	552	392	369	463	588
Imports (mil. €)	562	700	905	1023	1243	1714
Balance account (mil. €)	-225	-148	-513	-654	-780	-1126

Source: Calculation according to the statistical data

Analyzing the dynamics of the agricultural macroeconomic indicators for the period 1994-2004, we may notice that this evolution may be considered to be stationary, excepting the year 2004 (a very favourable year in terms of weather conditions). The annual budgetary support allocated for Romania (less then 40 €/ha during 1994-2003, 60.8 €/ha in 2004), much smaller compared with the one allocated in the European Union (300.5 €/ha in EU-15 and 138.6 €/ha in EU-10, in 2004), cannot be materialized into a significant economic increase, the agricultural gross

domestic product being maintained at low levels, with a slow increase, more significant in 2004.

The decrease of the agricultural performance during the pre-adhesion period is reflected by the percentages of export-import with agricultural and food products, too. These reports have been depreciated gradually, and now Romania is a significant importer of basic food products (cereals, meat, sugar, fruit etc.). The structure of the agricultural and food products exported by Romania (live animals, cereals, oleaginous plants, especially agricultural raw matter and products with a low processing level) reflect the inadequate international competitivity of the Romanian agri-food sector, especially with regards to the processing sector, where the amount of exported products increases slightly, but it is still below the level of other European countries. The Romanian processing sector is low competitive even in the internal market and contributes much to the balance of agricultural and food commerce, which has remained constantly negative and increasing (Figure 2).

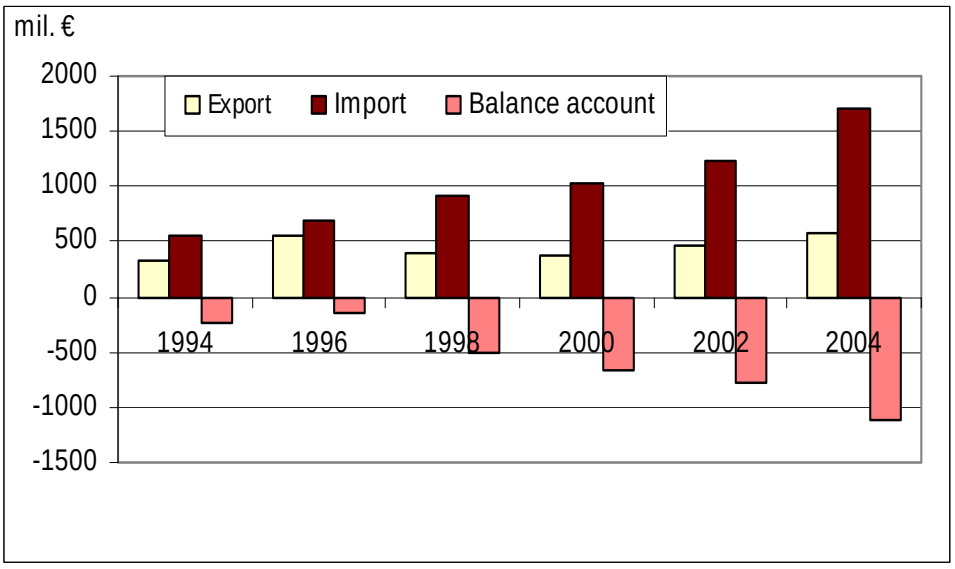

Figure 2. Agri-food commerce balance 1994-2004

CONCLUSIONS

The analysis of the budgetary support from the last decade and its impact upon the agricultural exploitation results indicates that the agricultural support system has not be able to promote performance within the Romanian agriculture, revealing the remarkable difference between the Romanian and the European financial policies and performances.

Consequently, Romanian agriculture must be prepared for the new step of CAP reform. Some profound impact studies are needed for the adoption of some viable decisions of agricultural policy. At the same time, we must take into consideration the acceleration of the process of formation of compatible agricultural structures, so that Romanian farmers should benefit on the common support under the new CAP reform conditions established by the European Commission in 2003.

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ROMANIAN ACCOUNTING IN THE EUROPEAN AND INTERNATIONAL FRAMEWORK

CONTABILITATEA ROMÂNEASCĂ ÎN CONTEXTUL REFERENȚIALULUI EUROPEAN ŞI INTERNAȚIONAL

L. CERNUŞCA [*]

The article presents the Romanian accounting system's evolution in order to meet the European and international requirements. The author details the stages trough which the Romanian accounting legislation changes. The Orders 94/2001 and 306/2002 are presented in detail, as well as the new legislation, Order 1725/2005. The article ends with a series of conclusions regarding the current accounting system applicable in Romania.

Key words**:** *harmonization, IFRS, Order 94/2001, Order 306/2002, Order 1725/2005.*

The Romanian accounting couldn't stay indifferent to the challenges to which the international accounting is subjected to, as a result of businesses' globalization, international business affairs, continuous development of multinationals, the continuous stock capitalization and the appearance of new financial services.

In this situation, the production and the comparable and credible financial information flow, which use a common accounting language, are extremely important for the Romanian business environment. The solution to attain these requests is to harmonize the Romanian accounting system to the international and European framework.

The international accounting harmonization represents an institutional process which as the objective to ensure the convergence of national accounting norms and practices and, therefore, making easy to compare the financial statements issued by enterprises in different countries [3], [5].

To be able to integrate in the European Union, Romania had to comply with certain requests, among which, embracing the European

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acquis. European IV th Directive and European VII th Directive represent the basis of the European acquis regarding the corporations' accounting. By implementing the new legislation, Order 1752/2005 both the European IV th Directive (78/660/EEC) and the European VII th Directive (83/349/EEC) have been assimilate in the Romanian accounting system.

Between 1990 and1993 the Romanian accounting system had to go through changes in order to adapt the old system to the new realities which were brought by the first legislation specific to the market economy. Therefore, a number of norms have been legislated in order to organize and manage the new enterprises. The new accounting regulations have been applied in practice starting Jan 1, 1994 by all the enterprises on the market, including the banks. At this stage, the changes have been implemented with the help of French counselors.

In an economy based on enterprises' freedom of action, creating an accounting communication language cannot still be based on rigid norms, established and enforced by the state, but by using conventions established and accepted by the accounting information's producers and users [1].

After 1994, the legislators started to align the Romanian accounting system to the European and international norms. However, the Romanian legislators implemented a series of norms specific to the Romanian accounting system, which were both accepted and debated. Introducing the Dual Accounting Plan opened the Romanian accounting system to the financial accounting oriented towards the information's users, both internal and external. Even though the state was still the main user of accounting information, the new Romanian accounting system was addressed to a vast category of users.

However, among the good things the new accounting system brought, there have been a series of problems as well, making it obvious that the initial "tailoring" also had some faulty "seams":

- The synthesis documents didn't get the be utilized as they should have;
- The valuation rules were, in fact, only some remarks about the historical costs;
- The norms for applying the legislation were a horrible mix of finance and accounting;
- The simplicity of liquidation and merger rules;

all have been only some of the criticism of the first attempt of harmonization the Romanian accounting system with the European and international norms [4].

Starting with 2001, the Public Finances Ministry (MFP) starting implementing the second stage of Romanian accounting system's reform which begun with Order 94/2001 for approving the harmonized accounting norms with the European IV th Directive and the International Accounting Standards.

Order 94/2001 can be described as it follows:

- Certain norms for the enterprises which have to use the international accounting norms, based on certain criteria (turnover, employee's number, total assets);
- Doesn't include any norms based on the European VII th Directive;
- Includes some regulations that are to replace the IAS norms.

Prof.univ.dr. Niculae Feleagă, referring to the new legislation agrees with the need of "defining an accounting system which considers the particularities of our country's business environment, according to the European norms and, therefore, with the international accounting norms" [6]

Between 2000 and 2005, more and more enterprises started using the new accounting regulation. First to use them were the companies rated at Bucharest Stock Exchange, the national state companies and several companies which satisfied the criteria imposed by the new legislation. New regulations, norms and financial audit rules were imposed, all in accordance to the European and international norms.

In 2002, the MFP gives off Order 306, which is a simplified variant of Order 94, containing accounting norms adapted to the small and medium enterprises. The international accounting harmonization phenomena is therefore present in the Romanian accounting system and the delusion of Romania's adherence to the European Union makes the legislators choose te international accounting regulations [2].

Two major stages have been emerging regarding the use of the international standards (IAS-IFRS) in the Romanian accounting system:

- Stage I: a transition stage needed to revise the financial statement (Jan 1, 2005 – Dec 31, 2005). During this stage:
  - The assets, debt and equity have to be recognized as per IFRS requirements;

- The assets, debt and equity have to be reclassified as per IFRS requirements;
- Revaluing or adjusting the assets, debt and equity according to IFRS requirements.

➢ Stage II: a stage when the new norms are actively implemented (Jan 1, 2006 – Dec 31, 2006).

Applying the new IFRS regulations has been a priority for about 100 companies in Romania. Such an accounting system based on IFRS regulation will lead to a market reaction, mostly referring to the presentation of financial information. The time while the new norms are implemented represents a great challenge for the companies involved in the process.

This "challenge" means, in real terms, the following [7]:

- Understanding the main and real problems tolerated by an enterprise, as well as their impact on the enterprises' activity;
- Planning and finding solution to different problems which occur in the enterprise;
- Training the personnel to apply IFRS efficiently within the entire array of activities;
- Finding new information according to the new accounting system and ensuring their quality;
- Making available to the public the budget and forecasts according to IFRS.

For 2006, MFP gave off Order 907/2005 regarding the category of enterprises which use the new accounting regulation according to the European Directives. For 2007 and onward, a new order would be made public which will state which enterprises will apply the accounting regulations based on IFRS.

According to Order 1121/2006 regarding the use of the International Financial Reporting Standards, the enterprises which are present on a stock market have to apply the IFRS regulations starting with Jan 1, 2007. The credit institutions continue to use IFRS when they create their consolidated financial statements.

IFRS (The International Financial Reporting Standards) are a set of accounting standards, issued by the International Accounting Standards Board (IASB). Many of the new standards are known by the older name IAS (International Accounting Standards). In April 2001, the IASB adopted

all IAS and renamed them IFRS and continued their development. In a broad sense, IFRS comprise:

- Framework for the Preparation and Presentation of Financial Statements;
- IAS standards issued before 2001;
- IFRS standards issued after 2001;
- SIC (interpretation of the standards); and
- IFRIC (new interpretation, given after 2001).

In the European Union, all publicly traded companies are to prepare their consolidated accounts using IFRS starting from 2005. However, in order to be applied in EU standards must be endorsed by ARC (Accounting Regulatory Committee). ARC didn't approve two sections of IAS 39 (Financial Instruments: Recognition and Measurement) so IFRS applied in the EU differs from that used elsewhere.

Order 1752/2005 for approving the accounting regulations according to the European Directives, modifies the way in which the annual financial statements are presented, this being a very important problem for the small enterprises which will have to present detailed information. The new order also enforces a new Accounting Plan which is applied by the enterprises which use IAS-IFRS regulations and by the enterprises which used the simple regulations, including micro-enterprises.

CONCLUSION

Currently the Romanian society, which is still in a continuous transition, still tries to solve its problems by adhering to the solutions enforced by the European Accounting Directives and by the International Financial Reporting Standards, which are given more and more importance at an international level. The accountants, as a profession, the academic accounting medium, as well as other factors involved will have t use their common efforts in order to cut loose and unchain the Romanian accounting system, because Romania is now on a new orbit which certainly doesn't have any turn back route.

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ENHANCING THE FINANCIAL AND MANAGERIAL PERFORMANCES IN RURAL TOURISM

ÎMBUNĂTĂŢIREA PERFORMANŢELOR FINANCIARE ŞI MANAGERIALE IN TURISMUL RURAL

L. CERNUŞCA[*], CRISTINA DIMA[*]

The financial management is a very important field for a business's success. The following article presents some aspects which the authors consider to be essential in any attempt to enhance the financial and managerial performances of a rooming house located in a rural area. We will discuss about the profit centers, maximizing the income, financial management, operating expenses, how to calculate the rates/prices and how to manage the business in less profitable seasons (off-seasons).

Key words: *rooming house, income, rooms, craftsmen*

Rooming houses, depending on the products and services they offer, could generate income from different sources. Some rooming houses only offer rooms while others offer other services as well, such as conference rooms, restaurant, souvenir shop, etc. In order to maximize the income, each business operating in the tourism industry, would have to establish exactly what services and products they offer to their clients.

Some of the profit centers linked to a rooming house include: rooms; restaurant; shops (usually souvenir shop); conference rooms and fitness rooms. For each of these profit centers the owners would try to maximize the profit. First step in this direction has to be taken by evaluating the sales potential. Once the potential established the owner can develop ways to add value to the main product and to use marketing strategies in order to sell its product at the best price.

OCCUPIED ROOMS AND THE REVENUE GENERATED BY THEM

The rooms offered for boarding represent the main profit center in a rooming house. The profit is obtained when the rooming house "sells" the rooms at the higher price than the operating expenses. Here is an example of

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a maximum income generated by a rooming house which offers four rooms at a price of 24 RON per night.

Number of empty rooms: *4*
Total number of empty rooms per year (100%): *365 x 4 = 1460*
Optimal price per room: *24 RON*
Maximum income generated by the rooming house per year:
1460 x 24 = 35040 RON

However, few rooming houses manage to operate at a 100% rate of occupied rooms. If the owner takes into account the changes generated by the seasonal activity and the fact that some rooms might be unavailable in any time of the year then the owner can estimate a realistic occupied rooms rate of 60%.

The following example based on the previous one, shows the maximum income which can be obtained at a 60% rate of occupied rooms.

Number of rooms at a 60% rate of occupied rooms: *1460 x 60% = 876*
Optimal price per room: *24 RON*
Maximum income generated by the rooming house per year:
876 x 24 = 21024 RON

In both the examples above, the operating cost might be very low, especially if the owner and the family work for the rooming house. The related costs can be: towels and bed linen, electricity and water, a cleaning lady hired part time and maintenance expenses. Let's assume these expenses sum up to 3000 RON. In this case the net profit generated by the rooming house is 18024 RON. If the owner has to pay other debts, interest and taxes, then the net profit will be diminished accordingly.

In the example presented, in order to increase the generated income, the owner can use two strategies: increase the number of rooms "sold" per year and/or increase the price per room.

The strategies used might include one or more of the following methods: collaborating with tour operators in order to increase the number of rooms "sold"; increase the number of tourists; attract people who need temporary lodging over a longer period of time; partnership with other rooming houses in order to attract groups of tourists.

The methods above might lead to an increase of the occupied rooms rate but, on the other hand, might mean a decrease of the price, mostly when the rooming house chooses to work with a specialized travel agency or with

a tour operator. A possible strategy to be applied in order to keep the price is adding value to the travel package offered.

MAXIMIZING THE INCOME

There are several methods by which a rooming house's income can be maximized. These include: duration of stay; the existence of several lodging options (types of rooms); travel packages; special offers and adjustable prices.

Duration of stay :The main method to maximize income generated by a rooming house is to extend the duration of stay. In order to do that, it's necessary that the tourist has enough reasons to stay in a certain rural area. When a tourist or traveler chooses a certain destination, the person already knows how long their vacation will be.

Several methods to make a tourist stay longer than planned are as follows:

- offering an extended travel package which includes a trip to a destination located far from the rooming house to add another boarding night;
- creating events over the weekend which could make the client participate in (i.e. The Pork's Dinner before Christmas, Caroling);
- offering travel packages which include 3, 5 or 7 boarding nights at special prices for families with children and/or for couples (i.e. special package for Valentine's Day).

Lodging options (types of rooms): Offering the potential client the possibility to choose between several types of rooms is one of the most common methods to increase the income generated by a rooming house.

The rooms can have different prices depending on: room size: single, double, apartment; bed size: single, double, matrimonial; bathroom size and equipment (bath tub, shower); view; room's location in the rooming house; other services included in the room price such as: breakfast, bath robe, fitness room, coffee, fridge, AC, a bottle of plum brandy (n.a. pălincă), etc.

Collaborating with Craftsmen and Artisans : An often under-rated profit center is opening a souvenirs' shop. Most hotels and even big ones don't offer enough space to such shops. It's a lost opportunity in many ways. Most tourists, especially those spending their holidays in the rooming

house, want to buy souvenirs to remind them of the location where they sent their holiday.

Establishing partnerships with craftsmen and artisans from the rural area is a very good way to offer tourists genuine and interesting merchandise. Along with offering the customers the satisfaction of buying genuine products, the shop will also generate income both for the rooming house and for the craftsmen and artisans.

Finding an attractive manner to display the merchandise is crucial. The display should intrigue the tourists so that they go into the shop for further details.

Collaborating with Tour Operators: Collaborating with tour operators has the advantage of increasing the sales volume, but at the same time, decreasing the prices. This happens because the tour operator has to obtain profit as well. Also the tour operator assumes that since it will increase the rate of occupation for a longer period of time then it is entitled to ask for discounts. The operating expenses of such travel agency are high as they require state of the art communication gadgets and highly skilled employees. The requirements increase further more when the tour operator works with foreign tourists or partners.

The benefits of such collaborations are numerous and include the following: income which otherwise wouldn't have been obtained ("unsold" rooms); recognitions from other tour operators; new guests who could come back later on their own; new guests who could recommend other persons; the opportunity to extend the market and marketing; the possibility to obtain more profit from the profit centers.

The expenses associated with housing groups of tourists include the following: time needed to determine the new group price; new problems that might arise when a group is present; increased expenses regarding the employees and the storage; unsatisfied clients; sharing the profit with the tour operator.

In order to work more efficiently with a tour operator the owner has to draw up a contract in which to establish all the rights and liabilities of both parties involved. Also the contract should stipulate clearly what services are offered to the tourists brought by the tour operator.

FINANCIAL MANAGEMENT OF A ROOMING HOUSE

Analyzing the financial performances of the rooming house will determine whether the business is profitable or not. Recording the income and expenses is very important and therefore keeping the books up to date is a tool which, if used correctly, will offer a realistic image of the business's profitability. The operating transactions should be recorded daily and carefully.

Here is an example of the income and expenses recorded for a rooming house which has 6 rooms.

Table 1

Income and Expenses for June 12, 2006

June 12, 2006				
Room Type	Number of rooms sold	Income (inRON)	Occupation rate	Average Price per day
Single	3	72	100%	27,9
Double	1	42		
Triple	2	54		
Total Income from rooms		168	Income/Room = 27,9	Income/Client = 33,27
Sales		144		
Rent for meeting room		42		
Coffee/snack		12		
Total Income		366		
Expenses				
Labor (2 persons, 8 hours x 6 RON)		96		

Income/Room is the income generated by a room sold and shows how much the rooms contribute to the total income of the rooming house. The index shows as well which of the rooms should be sold more often in order to increase the income.

Income/Client is the income generated by each client and shows the average income generated by each guest who stays at the rooming house. If the rooming house has several profit centers, the index shows which of the centers contributes to the total income of the rooming house and to which extent. It's an index which shows which of the profit centers should be promoted more often in order to increase the income.

Most rooming houses keep statistics as presented above. These statistics should include: amount of money from rooms sold; number of rooms sold per day; money from other profit centers; money from any other source which are related to the rooming house.

OPERATING EXPENSES OR THE COST OF PRODUCTS AND SERVICES SOLD

The operating expenses related to the rooms include: personnel wages (cleaning employees and front desk). Also, the expenses include cost of bed linen, cleaning products, heating, water, electricity, etc.

The expenses recorded daily will become monthly financial statements and then annual statements and will have to include all the expenses: personnel wages; storage; electricity and other utilities; advertising and marketing; accounting; interest;other expenses.

When all the information is gathered, the balance sheet (audit) is written down. The balance sheet is the economical index which shows the owner if the business obtained profit or loss over the analyzed time frame.

Here is the example of a balance sheet (audit) for a 6 rooms rooming house.

Table 2

Balance Sheet at December 31, 2006

For the financial year ending on Dec 31, 2006	**Expenses**	**Income**
Income		
Sales from Rooms		24528
Sales from Restaurant		12264
Retail Sales		6000
Rent (for the conference room)		600
Commissions (paid to the rooming house)		75

Total Income		**43467**
Expenses		
Wages	3810	
Other work	6810	
Storage	3678	
Office equipment	750	
Advertising	960	
Utilities	180	
Accounting and Management	2382	
Interest	1080	
Maintenance and other services	2160	
Total Expenses	**21810**	
Net Income before Income Tax		**21657**

CALCULATING THE ROOM PRICE

The price for each room can be calculated in several ways. Two of the most common methods are presented below.

Room Price = Competition's Room Price

One of the methods to choose a price is to copy the competition's price. If other rooming houses ask for 18 RON/night/room then the owner can set the same price. However, this method doesn't ensure that the price covers the expenses and generates enough profit.

Room Price = Fixed Costs + Variable Costs + Desired Profit

The best method to calculate the price is to take into account all the expenses (costs). The fixed costs are those costs that have to be paid no matter whether the rooming house has guests or not while the variable costs are those which occur once the guests arrive. This method starts by establishing a base price stating from the fixed costs to which the variable costs are added.

Step 1: Calculating the fix costs

This step includes calculating the costs regarding the management, advertising and marketing campaigns, interests, utilities, wages, storage and certain maintenance costs. These are the costs that have to be covered even

when there are no guests in the rooming house. Then divide the estimated fixed costs by the total number of stays estimated for the next year.

Based on the 6 rooms rooming house which estimates 60% occupation rate, the example is presented below:

Fixed costs = 10572 RON (from the balance sheet presented above)
Number of stays = 876

$$Base\ Price = \frac{Fixed\ \ costs}{No\ \ of\ \ stays} = \frac{10572}{876} = 12{,}06\ \ RON$$

Step 3: Calculating the variable costs

The owner has to calculate the variable costs which occur to cover the tourists' needs which occupy the 876 rooms (over the year). Considering that the fixed costs represent 50% of the total operating expenses and the owner wants minimum 10% profit rate, then the variable costs will be about 40% of the total costs. This means, the price per room per night to cover all the operating expenses and generate 10% profit rate will be 24,12 RON.

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THE MAIN FINANCING WAYS FOR AGROFOOD COMPANIES

POSIBILITĂȚI DE FINANȚARE A UNITĂȚILOR DE ALIMENTAȚIE PUBLICĂ

CRISTIANA TINDECHE*, RETA CONDEI*, P. TINDECHE*

With the purpose of obtaining superior levels of market, achieving the planned financial objectives as well as to cope with a developing competition in domain, which impose as imperiously necessary a good coordination of activities at the agrofood unit's level, the renewment of the technology of the production capacity as well as setting an efficient system of management. At the same time, the rational usage of resources of any kind, the efficient unfolding of production represent major objectives and at the same time, essential premises of developing agrofood units. In conclusion, the identification of financial resources which must contribute to the growth of economical rentability and competitivity of units represent an imperious necessary condition.

Key words: *financing sourcess, agrofood companies, rentability, competitivity*

MATERIAL AND METHOD

The potential sources of financing from at the level of an agrofood unit are: creditors, investitors at the same time other potential finances (creditors or investors).

RESULTS AND DISCUSSIONS

Creditors – the most frequent source of financing

In this category the commercial banks, the financial corporations and, generally, all those which gives credits for the business finance are included. From the bank's point of view an ideal debtor possess some essential features:

- For an available business - a cash flow insurable for reimbursing

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the loan;

- For a new business – an owner which possesses a successful experience in the same sort of activity;
- An owner with financial results and enough guarantees for being able to cope with unexpected problems that could affect the business.

At the time when an agrofood unite requires a credit for the business's upholding, the bankers are following carefully 4 essential aspects:

1. The applicant's character –the bank's trust and security that the debtor will not vanish when the business will face difficulties is the main concern. The creditor will notice the applicant's specific feature, as well as the frankness, the managerial abilities, the inspired trust for taking a decision about the business's financing.

2. The finance capacity refers to the business possibility to pay on time its obligations to the bank.

3. The offered guarantee. This involves the assurance of recovering the amount paid in advance and the cohered interest through the handsel right or mortgage on the real estate or the equipments. The equipments, the buildings, the lands and the vehicles are used as guarantees, because of the considerable value and the abilities to maintain this value for a longer period of time.

4. The applicant's contribution. The banks desire that the enterprisers to have a sufficient degree of financial involvement in the business for which they desire the obtaining of the credit. This is to make sure that they are strongly tied of the company's success and thus of the financing's success, while the exposure to the risk is shared between creditors and enterprisers.

Investors – main financing source for developing businesses

The investor's category includes the individual investors the institutional ones, investment funds and other economic organisms that finance the investments. Investors are drawn by a business, first of all because of the profit they hope to achieve and second because of the predicted growth of the bussines. They represent that category of investors

that need to find out that the business will record a growth and future consistent profits.

The potential investors concentrate their attention on the following aspects:

The compelling approach of the market makes sure that the enterpriser has identified the demands of the potential clients.

The proof of the product's/service's acceptability- the enterprisers have to prove that they know to whom and how they will be selling the products and that they have the necessary instruments to realize this product.

The protection offered by the property rights. The investment risk may be reduced if the enterpriser owns the property rights under the form of licenses, patents, registered trademarks.

Credibility previsions are a weapon of carefulness and sincerity in the contact that the solicitor will be having with the potential investor.

Investment Funds

A special category of investors is represented by the risk investors. The risk investors mainly follow two aspects:

-Efficiency of 25-45% or higher

-Investments to become liquid in a relatively short period of time;

CONCLUSIONS

For the financing's approval, investors put a considerable accent on the next four factors:

- The enterpriser's quality-experience and the competence of the person that is starting the business
- a well balanced and performant managerial team
- special character - the continuous search of businesses that don't have any competition and cannot be easily imitated
- exit- a clear road in that which concerns the possibility of abandoning the business stimulates the investment decision

In conclusion, for each potential source of financing an individual approach strategy must be found, adapted to the source's characteristics and also to the available informations. No one can have the guarantee to find the

right financing sources, but the enterpriser, through its qualities, must find the right way to the best source at one certain moment.

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POSSIBILITIES FOR INCREASING ECONOMIC EFFICIENCY AT THE AGROTOURISME COMPANIES

MODALITĂŢI DE ÎMBUNĂTĂŢIRE A PERFORMANŢELOR ECONOMICO-FINANCIARE LA NIVELUL UNITĂŢILOR AGROTURISTICE

CRISTIANA TINDECHE*

There are some may to improve the activity of the company as follows developing a marketing department, identifying the constant clients which respect the deadlines for the payment allocating a considerable budget for the commercial activities and for the publicity employing young staff; training the staff for applying for an upper level; introducing a motivating programme. This study has been developed at the level of representative company from S.C. CARAIMAN.There are some may to improve the activity of the company as follows developing a marketing department, identifying the constant clients which respect the deadlines for the payment allocating a considerable budget for the commercial activities and for the publicity employing young staff; training the staff for applying for an upper level; introducing a motivating programme.

***Key words**: management activity, agrotourisme companies, economical financial indices, ways for improving*

MATERIAL AND METHOD

In order to make this study, some accounting data from the Accounting Department of the company for the period 2002-2006 were used.

The economic and financial indicators were calculated for the analysed period using the existing methodology for economic and financial analysis. The decision factors can decide on the appropriate measures to improve the management activity and the profitableness of the company, taking into consideration the values of these indicators.

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RESULTS AND DISCUSSIONS

Table 1

The evolution of profit and turnover during 2002-2006

-thousand lei

Specification	Years				
	2002	2003	2004	2005	2006
Turnover	1831530	5000000	14000000	13788502	16077344
Profit	104555	300000	900000	536304	212847
Percentage the turnover in the profit	5.5%	6.00%	6.40%	3.90%	1.32%

Analysing the data from the table, we notice a decreasing evolution of these indicators beginning with 2005, situation which needs radical measures to make the company more profitable.

Table 2

Financial profitableness rate in the period 2005-2006

Indicators	Year 2005	Year 2006
Income	18429858	21800300
Total assets	5531121	5539302
Proper capital	3588119	3769002
Net profit	536304	212847
Financial rentability	14.94%	5.64%
Assets rotation speed	3.29%	3.93%
Financial lever	1.54	1.46
Net profitableness of income	0.029	0.009

A significant decrease with 9,3% of the financial profitableness rate was registered in comparison with the previous period.

Table 3

The situation and dynamics of the income, expenses and profit in the 2005-2006 period

Indicators	Year		2006/2005
	2005	2006	%
Turnover	13788502	16077344	116.59
Brought to day turnover	1516735	1125414	74.19
Other sources of income	10868	23795	218.94
Overall exploitation income	18358256	21654914	117.95
Overall exploitation expenses	17202488	21186598	123.16
Gross margin from exploitation	1155768	468316	40.51
Exploitation expenses -human resources -others	17202488 3416367 15095	21186598 3491381 11715	123.16 102.19 77.60
Financial expenses	34673	169252	488.13
Exceptional expenses	224482	87228	38.85
Exploitation result	1155768	468316	40.51
Financial result	7705	-	-
Exceptional result	-	27133	-
Overall income	18429858	21800300	118.28
Overall expenses	17461643	21443078	122.80
Profit before taxation	968215	357222	36.89
Profit tax	431911	144375	33.42
Net profit	536304	212847	39.68
Brought to day net profit	5899344	1489929	25.25

In conclusion, in the last years, S.C. Caraiman S.A. made profit, but both the turnover and the profit obtained in 2006 are situated under the values from the preceding year.

Table 4

Financial profitableness rate in the period 2005-2006

Indicators	**Year 2005**	**Year 2006**
Income	18429858	21800300
Total assets	5531121	5539302
Proper capital	3588119	3769002
Net profit	536304	212847
Financial rentability	14.94%	5.64%
Assets rotation speed	3.29%	3.93%
Financial lever	1.54	1.46
Net profitableness of income	0.029	0.009

Table 5

Indicators used for debts –obligations diagnosis

Indicators	**2005**		**2006**	
	Thousand lei	**%**	**Thousand lei**	**%**
Turnover	1378502	100	16077344	116.6
Debts	563101	100	377970	67.12
Obligations	2744704	100	2420882	88.20
Debts/obligation relation	0.20		0.15	

In conclusion, in the analysed period, the debts and obligations decreased, while the turnover increased, which favourably influenced the flow of reserves. This influence is also showed in the debts /obligations relation.

Table 6

The situation of the liquidity and solvency indicators

Indicators	**2005**	**2006**
General liquidity	0.56	0.63
Imediate liquidity	0.36	0.29
General solvency rate	2.84	3.12

The size and the evolution of the indicators show that, the company while regarding the solvency is in a better situation, the values of the liquidity indicators show an alarming situation**.**

Taking into consideration the values of the economic and financial indicators determined through the known methodology and information picked up on an interview leasis at the level of the company a few recommendations can be made regarding the aspect of improving the activity of the company in order to increase its profitableness.

Recommendations for improvement

Among the proposals which could immediately be solved are:

-creating a new marketing department;

-finding new clients who will increase the production orders towards a maximum capacity;

- modernisation and development of the distribution and selling system;

-developing the base for materials, additional materials and auxiliary materials coming from importation

-implementing new and efficient motivating methods

-promotion on a competence leasis;

- increasing the budget for advertising the products and for publicity;

Research and development

-organizing activities with a main concern on:

-creating new products and technologies;

-implementing new technologies and using substituted and value added products;

CONCLUSIONS

1. Employing new qualified staff in the company's departments represents a necessity within S.C. Caraiman S.A.

2. What is really in order to promote a modern management, is implementing new, efficient motivating methods

3. Modernizing and completing the management instrument, anew quality at the decision level needs a radical transformation and reconsideration of the range of the management methods is needed as well

as real methods of utilization at the level of all organization phasing within the companies

4. Increasing the budget for the advertising the products and for publicity represents a solution for earning new clients and regain the market

5. Developing the base for raw materials, additional materials and auxiliary materials coming from importation is a very important issue in a strategic supplying with material resources

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BANKING PRODUCTS AND FINANCIAL SERVICES FOR AGRICULTURAL CUSTOMERS

PRODUSE BANCARE SI SERVICII FINANCIARE PENTRU CLIENŢII AGRICOLI

DANIELA HARANGUŞ*

*Banks must develop and diversify their portfolio of bank services and products in order to face their competitors and consolidate their position on the market. Agricultural clients constitute an important clientele segment, an extremely disciplined one and one keen to accept rules imposed by the banks. The complex issues the Romanian rural environment is confronted with nowadays makes it compulsory for the nature, structure and functioning of bank products and financial services offered by the banks to agricultural customers to occur. Mainly the diversification of channels and credit types for agriculture and the implementation of s*ome modern bank products and services are necessary.

Key words: *banking products, financial services, agricultural customers, agricultural credit*

The great changes that occurred in the economic world also impose changes in the nature, structure and functioning of banking products and financial services offered to clients by the banks.

These changes refer mainly to the rapid connection of business partners through the bank transactions they realized, the personalization of client relations and the increase of the IT role in the communication between the bank and its customers.

In order to stand up to a dramatically aggressive competition, the commercial banks must develop and diversify their product and service portfolio which is offered to the customers.

This priority, beside the quality of the bank offer, helps banks build, consolidate and protect their position on the market. They must permanently

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establish a close connection between the variety and quality of banking products and services, on the one hand and the nature and volume of customer requests on the other hand. In the portfolio of banking products and services the commercial banks offer to agricultural customers an important part is played by credits.

Commercial banks mainly try to place their own and the attracted resources in an efficient and maximum guaranteed way in the credits they give to clients, whether physical or legal persons.

The orientation of banks towards clients that have a credit vocation, positive bonnily indices and an efficient business is obvious. These clients can include agricultural customers.

Commercial banks give credits to their customers on bonnily criteria, not political or client criteria. They must have the certainty that these credits shall be reimbursed on term by their customers, according to the reimbursement graph, and the income and commissions shall be paid according to the terms of the credit contract.

The fact that crediting operations, beside their dynamic and lucrative character suppose mainly the trust banks place in their clients made commercial banks have a reserved and prudent attitude toward crediting agricultural customers, who have activities that involve a high degree of risk.

Agricultural customers are generally the most disciplined customer segment, meaning the most inclined to accept the rules of the game enforced by the bank, mainly term reimbursing the contracted credits and the payment of due income.

Agricultural customers can benefit from the following credit categories:

1. *Short term credit,* with a reimbursement duration that can not be longer than one year. In this category of credit fall:

- credits regarding current activities, production, given especially for: expenses for the acquisition, depositing, conditioning, manufacturing and selling of agricultural products; expenses for the next year production (unfinished production), acquisition of animals and birds, both young and adult, and young reproductive animals for selling, etc;
- credits for season stock of food products, give on basis of the stock situation, mainly to agricultural customers which have raw product stocks and finished products;

- credits for the making or finishing of investments, with a maximum reimbursing period of up to one year, etc.

2. *Average term credits*, with a duration of reimbursement between one and five years. In this credit category fall:

- credits for plant agricultural production, respectively for the establishing of durable and seed cultures, strawberry plantations, vine and young fruit trees;
- credits for the animal agricultural activity, given for growing animals and birds for reproduction, cattle for fattening, etc;
- credits for certain vine activities (obtaining wine and distilled wine, and champagne).

3. *Long term credits,* with a reimbursement duration of over five years. In the category of these credits are:

- credits for establishing new capacities and technologies for agricultural production;
- credits for establishing and modernizing vine plantations, trees and fruit tree plantations;
- credits for the acquisition or passing to the basic herd of reproduction animals (cattle and sheep) and of work animals;
- credits for the acquisition of machinery, tools, installations, machines, transport means and others;
- other credits for investments necessary in the food and agriculture sector, given for: cereal mills, greenhouses, seed conditioning centres, beer factories, spirit and malt factories, cereal warehouses, etc.

All these credit categories offered by the commercial banks are unfolding in accordance to their own crediting regulations, specific to each bank.

Another issue is the differentiation of banking products according to the agricultural customer and the type of agriculture t practices, namely urban or rural agriculture (depending on the place of practicing agriculture, in the urban or rural environment).

In the past 20 years around the world, urban agriculture extended rapidly as a response to economic crises exacerbated by the structural adjustment programs and the increase in population migration, from the rural to the urban environment.

Given the complex issues the Romanian rural environment is confronted with, we believe a new policy in the area of banking products and services offered to agricultural customers must be promoted. It must be based mainly on:

- diversification of credit channels for the agricultural sector by promoting the system of deposit certificates and leasing;
- promotion and diversification of credit types destined for agriculture;
- the introduction of banking products of retail banking type for the clients in the rural environment;
- diversification of saving instruments and banking products of cash management type, which to stimulate the value of money availabilities for agricultural customers. The stimulation of value obtaining may be done by attractive income and various facilities offered by the bank;
- offering services of counselling and bank consultancy, adapted to the specific and needs of agricultural customers;
- implementation of modern products and instruments for payment, such as bank cards. These facilitate the access to availability accounts or credit accounts for the agricultural customers, who re no longer compelled to go to the bank for any operation they have to make;
- offering banking products and services packages destined for agricultural customers. These must create the farmers the perception that the business partnership with the bank is unfolding for the mutual benefit;
- offering modern banking services, of internet banking type, which to allow access for agricultural customers to their bank accounts and make payments and transactions without their physical presence in the bank.

According to studies made at a global level, regarding the experience, attitude and perception of farmers concerning internet services there has been noticed that in the world farmers have the technology,

knowledge and skills necessary for using the internet. Over 40% of American farmers used online internet services in 1999.

For the agricultural customers the internet can offer three facility categories, namely:

- *information*, the internet being one of the most complex and efficient information sources for agriculture;
- *communication*, for long distances, with other farmers (even from countries on different continents), with agro-businesses, with specific universities around the world, with business partners and banks, etc;
- commercial, because the electronic commerce from the farming industry decreases distances between farms. Actually the e-commerce created an agriculture revolution by developing the on-line virtual markets. The e-commerce also compressed time and space in the world of virtual markets, without any barriers.

Banking services of internet banking type are necessary for the agricultural customers in accessing their accounts and making payments and transfers they wish online.

The banks must steer towards this type of banking services (internet banking) also for the reason these services may ensure the future of small farms which must be able to stand up to competition on the integrated market.

Banks must develop and diversify their portfolio of bank services and products in order to face their competitors and consolidate their position on the market.

In the age of world economy globalization, the development of banking culture and civilization requires from banks new orientations in offering banking products and services for their agricultural customers.

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THE ATTITUDE OF COMMERCIAL BANKS TOWARDS FINANCING AGRICULTURE AND RURAL DEVELOPMENT

ATITUDINEA BĂNCILOR COMERCIALE FAŢĂ DE FINANŢAREA AGRICULTURII ŞI DEZVOLTĂRII RURALE

DANIELA HARANGUŞ*

The globalisation and integration have imposed new dimensions in the relations between banks and agricultural customers. The new market segment of small agricultural customers imposed to the commercial banks a new attitude towards financing agriculture and rural development. The bank credit for agricultural customers presents more risk for the banks. To grant bank credits for agricultural customers requires to analyses both risk factors and risk symptoms.

Key words: *commercial banks, financing agriculture, rural development, agricultural customers, credit risk.*

The development of the European bank culture and civilization has imposed some new dimensions in the attitude of commercial banks towards financing agriculture and rural development in the era of globalisation and integration.

Globalisation means different things to different people. What is more, the word globalization is used in two ways, which is a source of some confusion. It is used in a positive sense to describe a process of integration into the world economy. It is used in a normative sense to prescribe a strategy of development based on rapid integration with the world economy.

The EU rural development policy constitutes the second pillar of the European Union's Common Agricultural Policy. It recognises the importance of a balanced development of rural areas along side market measures and the requirements regarding the competitiveness of European agriculture. Rural development, however, is a vague term, difficult to specify, measure and thus evaluate. It has a different content and the concept is therefore essentially user specific.

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The literature abounds with general definitions of what rural development is. Some authors define rural development as the "process of strengthening the live ability in rural areas according to the quality of life, landscape identity economic viability and quality of the bio-physical environment". Others associate rural development with improvement in welfare notes that conceptions of rural development are rooted in a combination of theory of regional development and practice in promoting and animating rural development, which may or may not be connected.

Whatever the meaning of rural development is, the changing role of the, until recently, traditional activities such as agriculture and forestry reinforced by the growing concern of society towards the natural environment, has modified the possibilities and the content of development in many rural communities. It is increasingly argued that the future of rural areas as places for economic activities, can no longer be dependent upon the role of commodity agriculture, instead is influenced crucially by integrative intersectorial development approaches.

In recent years, financial institutions of all types are operating in an increasingly competitive market environment. To be competitive in this changing market environment, financial institutions, including banks of all sizes, utilize marketing planning tools and techniques. In the customer-oriented mission of commercial banks, one needs to study two interrelated aspects of bank marketing strategy. The first issue is whether the commercial bank can provide the needed / required banking services to its diverse market segments. The second issue is whether the commercial bank's available resources and competencies can match the current needs and expectations of its target market(s).

Commercial banks are interested in serving their customers effectively to structure their marketing decision variables in an optimum way to form commercial bank-customer relationships. It must be pointed that commercial banks have two types of customers. The first type is a bank's internal customers – that is bank employees, bank stakeholders, and bank constituencies. The second type is external customers, which includes a bank's target market.

The essential element of this matchmaking process between the needs of commercial bank customers and the offerings of the banks is the development of market segmentation and positioning strategies. This is the creation of a place or niche for each commercial bank in the minds of bank

customers. Through this effort, each bank creates a unique position for itself relative to the position of the competing banks in a particular locality.

Generally, in financing agriculture and rural development, the agricultural customers of banks in local areas are security-oriented. As a result, the bank and banker must look conservative and traditional. Using standard research methods of attitude and personality measurement, commercial bank managers attempt to discover fruitful insights by asking bank customers whether they agree with certain attitudinal statements. This makes it possible to divide different consumer markets on the basis of lifestyle, attitudes, and values.

The globalisation and integration have imposed new dimensions in the relations between banks and agricultural customers.

The development of the European bank culture and civilization guided to the reconsideration of the relations and bank products and services portfolio for retail customers. Moreover, the European model of "universal banks", which works in the "director tradition" and less transparence before shareholders was gradually replaced by retail banks. These banks are more efficiency and they are particularly orientated to the small and medium sized enterprises and to the agricultural customers (farms).

This new market segment of small agricultural customers imposed to the commercial banks a new attitude towards financing agriculture and rural development. The banks must have a new conduct regarding to:

- the reconsideration of credit risk indicators;
- the analysis of the performance indices registered by this agricultural customers;
- the influence of the economic, political and legislative environment in the customers activity. It has some specifically characteristics from one country to another;
- to establish the guarantees and collateral for credit in a more flexible banking manner;
- the analysis and the assessment of the business plan which these agricultural customers must present to their bank for an examination;
- the selection of a new addressing manner, in a personification way, specifically to these customers. In fact, this personify relations with retail customers is an important part of the marketing policy in a lot of commercial banks;

- the agreement between banks and agricultural customers (farms) to be partners in their business affairs.

The bank credit for agricultural customers presents more risk for the banks.

Generally, in financing agriculture and rural development there is more risk for commercial banks.

Besides the specifically credit risk for all credit activity, banks have confronted with the business risk of the customers activity.

To grant bank credits for agricultural customers requires to analyses both risk factors and risk symptoms.

In Romania, bank credits for agricultural customers, for financing agriculture and rural development are enough difficult to be obtained. It is motivated by less flexible credit activity of Romanian commercial banks and by the difficult problems in the customers activity.

After the introduction of credit, consumption and productivity are raised and they will invest more in the productive input.

Without a positive attitude of commercial banks and without financing agriculture and rural development, agriculture alone cannot guarantee the functioning of rural areas anymore.

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THE BASIC RULES FOR THE FINANCING OF THE COMMON AGRICULTURAL POLICY

REGULI DE BAZĂ PENTRU FINANŢAREA POLITICII AGRICOLE COMUNE

RODICA GABRIELA BLIDIŞEL[*], DANIELA HARANGUŞ*

Paying agencies for financing the common agricultural policy should only be accredited by Member States if they comply with certain minimum criteria established at Community level. The payment shall be executed by the agency's banker, or as appropriate, a governmental payments office. No payments shall be made in cash.

Key words: *basic rules for financing, common agricultural policy, payment*

The basic rules for the application of Council regulation No 1290/2005 are the financing of the common agricultural policy by detailed provisions as regards the accreditation of paying agencies and other bodies as well as the clearance of the accounts of these agencies.

Paying agencies should only be accredited by Member States if they comply with certain minimum criteria established at Community level. This criteria should cover the four basic area of internal environment, control activities, information and communication as well as monitoring. Member States should be free to lay down additional accreditation criteria to take account of any specific features of a paying agency.

Member States should be obliged to periodical verify whether their paying agencies continue to comply with the applicable accreditation criteria and to establish a system for exchange of information on possible cases of non-compliance. A procedure should be put in place how to deal with such cases, including the obligation to draw up a plan to remedy any identified deficiencies within a determined time limit.

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The role of the coordinating body should by clarified and the criteria for its accreditation fixed.

In order to allow the Commission to clear the accounts, it is necessary to specify the content of paying agencies annual accounts and to establish a timetable for the transmission of these accounts and other relevant documents to the Commission. It should further be clarified for how long the paying agencies must keep the supporting documents regarding all expenditure and assigned revenues at the disposal of the Commission.

The Commission establishes the form and content of the accounting information which the paying agencies must forward to it. In this context, it is also appropriate to include into this Regulation the rules regarding the use of such accounting information.

For reason of simplification, these rules should be included into this Regulation and, where necessary, adapted to take account of past experience with the conciliation procedure.

In order to be accredited, a paying agency shall have an administrative organisation and a system of internal control which comply with the criteria.

Member States may lay down further accreditation criteria to take account of the size, responsibilities and other specific features of the Paying agency.

For each paying agency, the Member States shall designate an authority at ministerial level which is competent for issuing and withdrawing the agency's accreditation and for carrying out the tasks assigned to it by this Regulation ("the competent authority"). It shall inform the Commission thereof.

The examination shall be carried out by the body which is independent form the paying agency to be accredited and shall include, in particular, the arrangements regarding the authorisation and execution of payments, the safeguarding of the treasury, the security of information system, the maintenance of accounting records, the division of duties and the adequacy of internal and external controls.

If the competent authority is not satisfied that the paying agency complies with accreditation criteria, it shall address to the agency instruction specifying the condition it is required to fulfill before accreditation may be granted.

Pending the implementation of any requisite changes, accreditation may be granted provisionally for a period to be fixed in relation to the seriousness of the problems identified which, however, shall not exceed 12 months. In duly justified cases, the Commission may, upon request of the Member State concerned, grant and extension of this period.

The competent authority shall keep the paying agencies for which it is responsible under constant supervision. At last every two years, it shall review whether the paying agencies continue to comply with the accreditation criteria.

Member states shall establish a system that ensure that any information suggesting that a paying agency does not comply with the accreditation criteria is communicated to the competent authority without delay.

If accreditation is withdrawn, the competent authority shall without delay accredit another paying agency to ensure that payments to beneficiaries are not interrupted.

The statement shall rely on an affective supervision of the management and control system in place throughout the year.

The coordinating body must be preocupate about:

- the distribution of Community texts and guidelines relating thereto to the paying agencies and to those bodies responsible for their implementation as well as the promotion of their harmonised application;
- the communication to the Commission of the information referred to the paying agencies;
- the holding at the disposal of the Commission of a full record of all accounting information required for statistical and control purpose.

A paying agency may act as a coordinating body provided that the two functions are kept separately. In performing its tasks, the coordinating body may, in accordance with national procedures, call on other administrative bodies or departments, particularly on those with accounting or technical expertise.

The member State concerned shall by way of a formal act at ministerial level decide on the accreditation of the coordinating body after it has satisfied itself that the administrative arrangements of the

body offer sufficient assurance that the body is capable of fulfilling the tasks.

In order to be accredited, the coordinating body shall have procedures in place to ensure that:

- all declarations to the Commission are based on information from properly authorised sources;
- declarations to the Commission are properly authorised before transmission;
- a proper audit trail exist to support the information transmitted to the Commission;
- a record of information received and transmitted is securely stored, either in paper or computerised format.

The confidentiality, integrity and availability of all computer data held by the coordinating body shall be assured by measures adapted to the administrative structure, staffing and technological environment of each individual coordinating body. The financial and technological effort shall be in proportion to the actual risks presented.

The certification body shall conduct its examination of the paying agency concerned according to internationally accepted auditing standards taking, into account any applicable guidelines established by the Commission. The checks shall be undertaken both during and after the end of each financial year.

The certification body draw up a certificate which shall state whether it has gained reasonable assurance that the accounts to be transmitted to the Commission are true, complete and accurate and that the internal control procedures have operated satisfactorily. The certificate shall also cover compliance of payments with Community rules as regards the capability of the paying agency's administrative structure to ensure that such compliance has been checked before a payment is made. The certificate shall be based on an examination of procedures and a sample of transactions.

The certification body shall draw up a report of its findings. The report shall further state whether:

- the annual accounts referred to this Regulation are in accordance with the books and records of the paying;

- the statements of expenditure and of intervention operations are a materially true, complete and accurate record of the operations;
- the financial interest of the Community are properly protected as regards advances paid, guarantees obtained, intervention stocks and amounts to be collected;
- recommendations for improvements addressed to the paying agency have been followed up.

As of financial year 2008 at the last, the certification body shall further provide, before 1 January of the fallowing year, a statement as to the information systems security measures put in place by the paying agency and, if applicable, the coordinating body. The statement shall be based on the version applicable in the financial year concerned of the chosen internationally accepted security standards, serving as the basis for the security measures, and shall indicate whether, for the financial year concerned, effective security measures were in place.

For the financial years preceding that for which the first statement on the security of the paying agency's information systems is drawn up, the certification body shall, in its report of its findings, include comments and provisional conclusions, using a scoring mechanism, as to the information systems security measures put in place by the paying agency.

The annual accounts shall include:

- information regarding expenditure and assigned revenues or confirmation that detail of each transaction is held computer file at the disposal of the Commission;
- the table of the amounts to be recovered for the end of the exercise;
- a summary of intervention operations and a statement of the quantity and location of stocks at the end of the financial year;
- confirmation that the details of each movement of intervention storage is held on the paying agency's files.

The documents and the accounting information shall be sent to the Commission following the end of the financial year which it concerns.

The accounting information shall be used by the Commission for the sole purpose of:

- carrying out its functions in the context the clearance of the accounts;
- monitoring developments and providing forecasts in the agricultural sector.

In this context, the European Court of Auditors and the European Anti/fraud Office, have access to this information.

The supporting documents regarding the expenditure financed and the assigned revenues shall be kept at the disposal of the Commission for at least five years, following the date of the final payment by the paying agency.

The clearance of accounts decision shall determine the amounts of expenditure effected in each Member State during the financial year.

The amount, which as a result of the decision, is recoverable from or payable to each Member State shall be established by deducting the intermediate payments in respect of the financial year concerned from the expenditure recognised for the same year amount shall be deducted by the Commission from or added to the following intermediate payment or the final payment.

When, as a result of any enquiry, the Commission considers that expenditure was not effected in compliance with Community rules, it shall communicate its findings to the Member State concerned and indicate the corrective measures needed to ensure future compliance with the aforesaid rules.

After expiry of the period allowed for the reply, the Commission shall convene a bilateral meeting and both parties shall endeavour to come to an agreement as to the measures to be taken as well as to the evaluation of the gravity of the infringement and of the financial damage caused to the Community budget.

When evaluating the expenditure to be excluded from Community financing, the Commission may take into account any information eventually communicated by the Member State after expiry of the deadline, if this is necessary for a better estimate of the financial damage caused to the Community budget, provided that the late transmission of the information is justified by exceptional circumstances.

For the purpose of the conformity clearance procedure, a Council Body is set up with the Commission. Its tasks shall be:

- to examine any referred to it a Member State which received a formal communication, including an evaluation of expenditure which the Commission intends to exclude from Community financing;
- to try to reconcile the divergent position of the Commission and the Member State concerned;
- at the end of its examination, to draw up a report on the results of its reconciliation efforts, making any remarks it deems useful should all or some of the points of dispute remain unresolved.

The members of the Conciliation Body shall carry out their duties independently, neither seeking nor accepting instructions from any government or body.

No member make take part in the work of the Conciliation Body or sign a report if, in an earlier office, he has been personally involved in the matter at issue.

The Conciliation Body shall conduct its investigations as informally and promptly as possible, basing itself on the evidence in the file and on a fair hearing of the Commission services and the national authorities concerned.

The agency shall adopt the necessary procedures to ensure that payments are made only to the claimant's bank account.

The payment shall be executed by the agency's banker, or as appropriate, a governmental payments office, within five working days. Procedures shall be adopted to ensure that all payments for which transfers are not executed are re/credited to the Funds.

No payments shall be made in cash. The approval of the authorizing official and/or his supervisor may be made by electronic means, provided an appropriate level of security over these means in ensured, and the identity of the signatory is entered in the electronic records.

The information regarding documentary evidence of the authorization, accounting and payment of claims and handling of advances, securities and debts shall be available in the agency to ensure at all times a sufficiently detailed audit trail.

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NEW OPPORTUNITIES FOR AGRICULTURAL ACCOUNTING

NOI OPORTUNITĂŢI ALE CONTABILITĂŢII ÎN AGRICULTURĂ

RODICA GABRIELA BLIDIŞEL [*]

The paper starts out to observe that there is a gap between the importance given to accounting and the low level of bookkeeping and accounting practice in the agricultural sector. Reasons for this gap are that current general accounting rules do not adapt very well to the particularities of farming and are difficult and expensive to implement.

Key words: *IAS 41, agricultural accounting, EU Fourth Directive.*

INTRODUCTION

In spite of its relative importance in the economy of many countries and its growing interrelationships with other sectors, agriculture has traditionally not received much attention from accounting researchers, practitioners and standard setters. Consequently, current accounting principles typically do not respond very well to the particular characteristics of agricultural business and the information needs. As an example, until the appearance of IAS 41 in February 2001 there was no standard anywhere for biological assets, whose valuation is difficult and controversial.

Together with other reasons, like the generally lower level of managerial complexity and lack of economic means in the sector, the limited suitability of general accounting principles has led to a situation in which farmers are more unwilling to prepare accounting reports and use this kind of information than the agents in other economic sectors (Poppe, 1991; Poppe and Breembroek, 1992). On the other hand, accounting can improve farm management and lead to better farm performance.

Accounting is a necessary condition to generate useful information for decision making, and it is also a good complement for management information systems.

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Given the government interference in many agricultural markets in many countries, policy makers also have a need for accounting information.

1. OPPORTUNITIES OF ACCOUNTING IMPROVEMENT IN EUROPEAN AGRICULTURE

IAS 41 introduces important improvements for agricultural accounting.

The first improvement relates to the definition, valuation and presentation of biological assets and agricultural produce, both of which are of great importance for the agricultural businesses and generation of income.

IAS 41 defines agricultural activity as 'the management by an enterprise of the biological transformation of biological assets for sale, into agricultural produce, or into additional biological assets' (IASC, 2001, p. 11). In this context, biological transformation comprises the processes of growth, degeneration, production and procreation that cause qualitative or quantitative changes in a biological asset. *Biological assets* could be living animals and plants that are controlled as a result of past events and *agricultural produce* as the harvested product of an enterprise's biological assets. Further helpful distinctions are made between *mature* and *immature biological assets*, and between *consumable biological assets* (that are themselves to be harvested) and *bearer biological assets* (that are not the primary agricultural produce themselves but only bear it for harvest). Finally, the recognition that biological assets are typically managed in groups can be very helpful in determining their value in practice.

The nature of farming makes an historical cost-based valuation of biological assets, and consequently also of agricultural produce, inherently difficult, because the physical state of biological assets typically changes over time, i.e. they strengthen, mature, fatten, etc. Furthermore, their quantity does not only depend on buying and selling activities, but is also determined by such processes as procreation, growth and death. Therefore, many assets owned by a farm at a certain moment in time are typically substantially different from how they were when acquired, or have never been acquired from outside parties at all. In this sense they are similar to the produce of manufacturing farms, and product costing techniques could be applied to assign the historical cost of inputs used to outputs obtained. The

problems caused by joint-cost situations, however, usually far exceed the complexity already encountered in manufacturing environments.

IAS 41 breaks with this tradition and turns fair value into the rule instead of the exception. The Steering Committee that developed the standard considered that fair value is a better basis for the valuation of biological assets and agricultural produce than historical cost. It further concluded that market price is an indicator of fair value when active markets exist, and that market prices are more objective than allocations of historic cost. It also pointed out that for most agricultural assets relatively efficient markets exist and that therefore fair value can be obtained relatively easily. In the absence of active and efficient markets, IAS 41 requires to determine fair value based on the most recent market price for the class of asset, market prices for similar assets with adjustments to reflect differences, or sector benchmarks such as the value of an orchard expressed per export tray, bushel or hectare, and the value of cattle expressed per kilogram of meat.

IAS 41 requires that the fair value of these physical changes be recognized in the income statement for the period in which they occur irrespective of whether or not the assets are sold. There is a reputable presumption that fair values can be determined for all agricultural assets. If an active market for a biological asset does not exist, the most recent market transaction price, or market price for similar assets, can be used in determining fair values. However, if market-determined prices are not available, an enterprise may use the present value of expected net cash flows from the asset in determining its fair value.

The most contentious aspect of IAS 41 is the requirement that increments or decrements in the fair value of biological assets, less estimated point-of-sale costs, be recognized as revenues or expenses in the income statement for the financial year in which the increments or decrements occur.

Simplicity is another improvement of IAS 41 regarding clearness and simplicity valuations for agricultural assets.

As regards the European context, IAS 41 appears to be in accordance with the Fourth Directive, although some contradictions between these two frameworks can be found. More problems are likely to arise from conflicts between IAS 41 and accounting standards of individual EU members. For example, asset valuation based on current value is not contradictory to the Fourth Directive, which in Article 33 explicitly refers to the possibility of

valuing. However, the directive excludes land from the assets that may be valued at replacement value and, moreover, many EU Member States have not adopted this option in their national rules at all.

Most European farms are in a position to use IAS 41, given that, because of their small size or legal form, they have no legal obligation to publish financial statements according to any specific accounting rules.

IAS 41 is a very interesting document for professional accountants, to whom it provides an excellent conceptual framework. In my opinion it is unlikely that this standard by itself will overcome the barriers to the implementation of accounting in most farms, as it cannot change the economic and managerial limitations of the farmers and their farms. The standard will therefore not be of any direct help to most farmers, who rather need a 'cookery book', and probably also someone to show them how to read it. In our opinion, it would be very helpful for this reason if the standard were complemented with (optional) tools for its implementation and mechanisms for the transfer of accounting know-how.

There are some reasons why of IAS 41 debating in the context of international accounting harmonization.

First, the approach to income measurement prescribed by IAS 41 is based on the presumption that the fair value of a biological asset can be determined reliably.

Second, the requirement for annual revaluation of biological assets at fair value might prove onerous and expensive, particularly in less developed countries. Practitioners are likely to find the rationale behind the 'marking-to-market' approach in IAS 41 more difficult to comprehend or appreciate than the more pragmatic historic cost model.

Third, there are some major inconsistencies between the EU Fourth Directive and the provisions of IAS 41.

A forth major problem is that it would be very difficult to implement IAS 41 in the forestry industry in many tropical countries where much of the commercial logging is carried out in vast expanses of primary forest as opposed to tree plantations. Typically, most forest exploitation companies secure rights to operate within specified areas, known as logging concessions, over an agreed period.

3. CONCLUSION

The conclusion of this paper is that there exists an external demand for accounting information in agriculture and that this information would also be useful for the farmers themselves. Farmers do not get involved in accounting, however, because current accounting rules do not adapt very well to their type of business and are difficult and expensive to implement.

Farm accounting has not received much attention from accounting researchers, practitioners or standard setters.

The arrival of an IAS on agriculture offers the opportunity to change this situation, but in my opinion its contribution is mainly
on a conceptual level and requires additional tools for implementation in practice, like some form of an accounting plan.

There are also some contradictions between IAS 41 and the Fourth Directive, due to the fact that the latter allows for a wide range of accounting practices. However, superficial inspection suggests that there are likely to be many more contradictions between IAS 41 and the different implementations of the Fourth Directive in the EU Member States. It is nevertheless likely that most European farms will eventually be able to use IAS 41, not in the last place because given their small size or legal form they have no obligation to publish financial statements according to any accounting rules.

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NATURE CONSERVATION OF THE PEATY MEADOW IN ECONOMICAL RESPECT AS AN EXAMPLE OF GALGAHEVIZ, HUNGARY

CONSERVAREA TURBARIILOR NATURALE RESPECTAND PRINCIPIILE ECONOMICE IN GAHEVIZ UNGARIA

M. VONA[*], ANITA NAGY[**], C. CENTERI[*]

The studied area is situated in the Central Hungarian Region, 46 km East of Budapest, in the vicinity of Galgahévíz and Hévízgyörk. Continuous botanical and pedological investigations have been made here and the area has been mowed regularly since 2004. As a result of regular mowing, reed area has shrunk from the most valuable association stands and the amount of invasive plant species has also decreased. The area has constantly been enlarged at the expense of reed and changes of vegetation have been followed up with regular series of monitoring by authors. During observations at landscape scale, influential components of the surroundings are also estimated.

Keywords: *nature conservation, peaty meadow, mowing, goodwill value*

INTRODUCTION

Our investigation area is situated on a peaty meadow of Galgahévíz. The peaty areas of Hungary are shrinking, so they have high value. Effects of erosion, nutrient loss and sedimentation (Gournellos et al. 1997, Centeri and Vona 2006) has impact on the Galga watershed (Centeri and Császár 2005). Water regulation caused conquest of reed, covering areas of high nature protection value. It is proved with the examination of the change in the surface cover, the growth of the reed area and the diffuse agricultural pollution (Centeri and Pataki 2003) and the lack of mowing (Malatinszky and Penksza 2004. Our purpose was to fully reveal the botanical (Penksza 1995, Pintér 2001, Vona and Falusi 2005), pedological and landscape potential data of the area (Vona 2006); to monitor the changes caused by handling and to evaluate the costs of handling.

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MATERIALS AND METHODS

Galgahévíz situated in Pest county, 46km eastwards from Budapest, Hungary. Botanical surveys are carried out regularly (1998-), nature protection measures were undertaken since 2004. The area is being mowed regularly. During the botanical surveys species lists and coenological investigations were prepared. The surveying is done in investigation units of 4x4m in the characteristic associations. For the 4 most typical associations of the area, 5-5 coenological investigations were carried out for comparative analysis. The relative ecological indicators (Zólyomi et al. 1967) of the vegetation were calculated. The nature protection value of the associations was estimated according to Simon (1988). We mowed the grass 3 or 4 times in the summer and autumn to determine the optimal dates for reducing the reed cover. This reduces the costs significantly.

Results of vegetation change as an effect of handling

Previously the area was mowed regularly. In recent years mowing has been limited to small patches of land. The owners decided to do burning once a year during the spring, which has greatly degraded the area. After the burning reeds gained significant ground, suppressing the associations' characteristic to fen meadows. It can be concluded that while the mowing in early winter is beneficial from cleaning and handling point of view as it does minor damage to the vegetation, springtime burning is an entirely unacceptable treatment solution. By having the area mowed in the spring (Jun-July) and possibly in summer (August) as well, reeds can be quickly forced out, allowing the vegetation of the fen meadows to re-conquer the fields.

***Juncetum subnodulosi Koch 1936* association (JUN SUB)**

The surveying of the nature protection values according to Simon (1988) (Diagram 1) shows that the proportion of the accompanying species indicating natural state (K) is the highest and increasing still (60,4%). The proportion of the edificatory species (E) is dropped to half, because continuous mowing suppressed the *Phragmites australis*.

The protected species of the association are the *Orchis laxiflora subsp. palustris, Epipactis palustris, Gentiana pneunomonanthe*. *Equisetum palustre* is the only weed that indicates degradation (GY).

***Caricetum davallianae Dutoit 1924* association (CAR DAV)**

This is the most valuable type of association of Galgahévíz. It is very rich in species (40 species were found). From these the characteristic species of the association according to Kovács (1962) are the *Carex*

davalliana; Carex panacea; Eleocharis quinqueflora. In consequence of the gradual disappearing of the *Carex davalliana* the ratio of the accompanying species (K) in the association is decreasing, while in parallel the ratio of disturbance-tolerating species (TZ) and weeds (GY) (*Equisetum arvense, Ononis spinosa, Pulicaria dysenterica*) are increasing, showing gradual degradation (Diagram 2). The ratio of protected species (V) is the highest in this association (5,2%), consisting of the *Carex nigra,* the *Gentiana pneumonanthe* and the *Epipactis palustris*. Among the highly protected species (KV) the *Iris sibirica* is present, with an increasing stand. Besides the protected species also there are the rare and potentially endangered *Carex buekii*, the *Carex nigra*, and the *Blysimus compressus*.

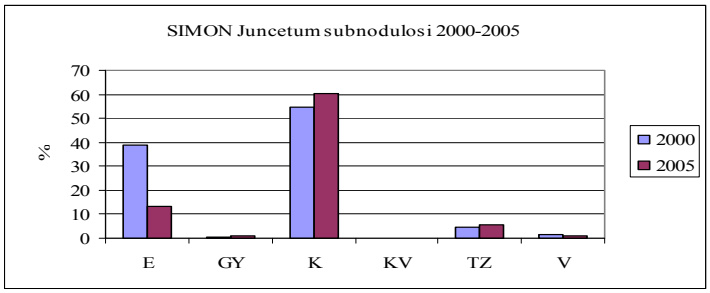

Diagram 1: Changes on distribution based on nature protection values (Simon 1988) (JUN SUB)

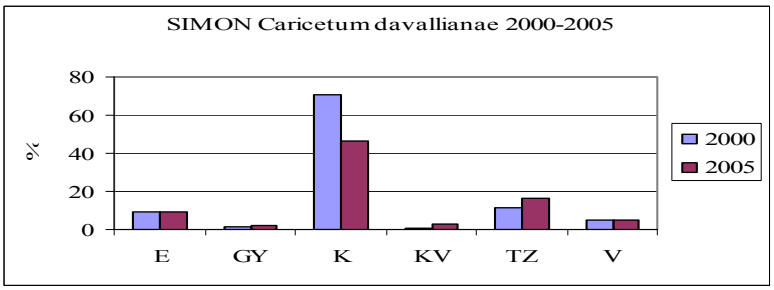

Diagram 2: Changes on distribution based on nature protection values (Simon 1988) (CAR DAV)

***Deschampsietum caespitosae Horvatić 1930* association (DES CES)**

The following characteristic species are present: *Festuca arundinacea, Lathyrus pratensis, Sanguisorba officinalis*. In the *Deschampsietum caespitosae* association also the accompanying species (K) have the biggest share (82%), with the *Deschampsia cespitosa* giving half of

this (Diagram 3). The share of the edificatory species (E) did not change (*Phragmites australis* and *Carex distans*).

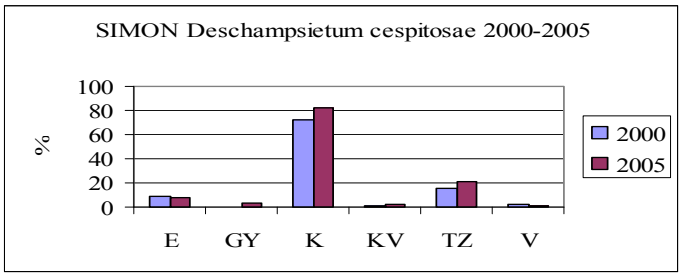

Diagram 3: Changes on distribution based on nature protection values (Simon 1988) (DES CES)

The 10 species of disturbance-tolerating types (e.g. *Festuca arundinacea*) shows a ratio of 19.94%. The share of weeds is insignificant, as can be observed in the whole area. The ratio of protected species (V) is around 1% (*Carex nigra*, *Epipactis palustris*). Among the highly protected species (KV) the share of *Carex appropinquata* increased to 2%.

***Succiso-Molinietum hungaricae /Komlódi 1958/ Soó 1969* association (MOL HUN)**

On the highest point of the area the *Succisio-Molinietum hungaricae* association is dominating. Its characteristic species are Kovács (1962): *Molinia hungarica*, *Selinum carvifolia*, *Succisa pratensis*, *Taraxacum palustre*, *Dianthus superbus*. In the *Succisio-Molinietum hungaricae* association the highest share (87.4%) is also for the accompanying species (K), consisting of 17 species, among them the *Molinia hungarica* (Diagram 4).

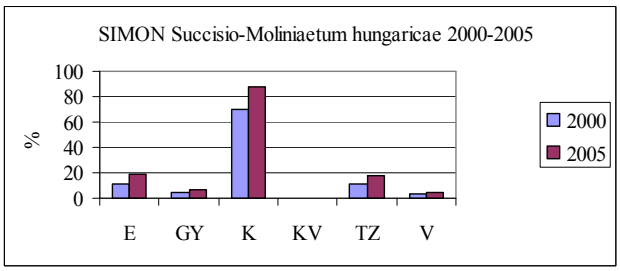

Diagram 4: Changes on distribution based on nature protection values (Simon 1988) (MOL HUN)

The share of weeds is the highest in this association (6.2%), among all associations examined. This is caused by the large numbers of 3 species, namely the *Equisetum arvense*, the *Taraxacum officinale* and the *Ononis*

spinosa. From the protected species (V), the *Dianthus superbus* and the extremely rare *Koeleria javorkae* are present. Due to the regular mowing, the number of species and the ratio of protected species are large, but there are also associations with poorer species count, caused by the ceased mowing in the past years.

Nature conservation handling can only be done by manual grass cutting only, to reduce trampling effects. Only Stihl 450 and Husqvarna 250R type lawn mowers could be used because mowers with lower horse power were often broken down thus their maintenance costs are high. The basic costs of nature conservation handling were financed from state funds. The cost of one machine is €850-900. The 10-15ha area of the peaty meadow requires two machines.

Mowing must be done when it does not disturb protected vegetation. Based on our experiences the best time for first mowing is at the end of June or at the beginning of July. To calculate the costs of the machinery we offer the working hours. One hour work costs € 1.20 worth of gasoline:oil mixture. It is necessary to gather the hay to avoid rotting of the organic matter. This requires high living labour, gathering with machinery is not suggested. This task was done with university students and other volunteers. We provided only food and drink for the workers. One worker's daily food support cost €8.5 per day. During the work we needed an average 5-6 volunteer (€50 per day). During the mowing, one mower was working for 9 hours per day, cleaning only 1 ha because of the high cover value of the reed. With two mowers we needed 7 days. The costs were as follows: 1.20*2*9*7 = €195 fuel and 8.5*6*7 = €360 food and drink, the total was €560.

Summer mowing was repeated in autumn taking into account the phenological stages of the vegetation. This way the job could be done in 5 days: 1.20*2*9*5 = €110 fuel and 8.5*6*5 = €255 food and drink, the total was €365. Amortization and maintenance charges were €120 per year. The handling of the 15ha peaty meadow requires a min. of €1050.

Effective and controlled handling requires monitoring that must be documented. It raises the costs. The hay can not be sold because animal husbandry decreased in the area significantly. Timing of the mowing must fit into the nature handling and not in a hay production plan.

Table 1. contains the protected plants and their nature protection goodwill value on the examined and handled 15ha peaty meadow of Galgahévíz based on the counting of Boecker (2007).

Table 1. Number and goodwill value of protected plants

Species name	Number	Goodwill value (€)	Total (€)
Listera ovata	10	20	200
Dianthus superbus	420	20	8400
Veratrum album	28	8	224
Dactylorhiza incarnata	160	40	6400
Koeleria javorkae	60	20	1200
Eriophorum angustifolium	84	20	1680
Gentiana pneumonanthe	1200	40	48000
Orchis laxiflora subsp. palustris	260	40	10400
Lathyrus palustris	6	20	120
Epipactis palustris	530	20	10600
Eriophorum latifolium	33	20	660
Iris sibirica	2500	40	100000
Orchis militaris	1	40	40
		Total:	**187,924**

Goodwill value of the protected plant species varies from €8 to €40 per individual but some of them are numerous, reaching 1200 and 2500 individuals. This way the total goodwill value of the protected plants species on the peaty meadow is more than €180,000.

Summary

During the researches carried out up to now in the two areas 153 species of plants were recorded, from which 13 species are protected, and 2 potentially endangered. (*Iris sibirica, Dianthus superbus, Eriophorum angustifolium, Koeleria javorkae*). Based on the nature protection value categories this area can be regarded valuable from nature protection point of view. This is underpinned by the fact that the share of accompanying species is the highest in all four associations. The ratio of weeds is insignificant, on the other hand protected and highly protected species are present in all examined associations, making these associations even more valuable.

The regular and for a short time (4 years) ongoing mowing activities resulted in the suppression of reeds in the most valuable associations, and the number of invasive species is decreasing. The area being mowed is continuously increased at the expense of reeds, and the vegetational changes are constantly followed up by regular series of observations. Moreover, in regional-level investigations the landscape formation factors of the area are evaluated as well. Based on our experience, mowing can fundamentally influence the associations of fen meadows, in consequence of the treatments the *Molinia* meadows gain ground. From the plow-lands surrounding the area adventive and among them invasive reeds endanger the valuable parts of the

area (or rather the reeds turn up where some signs of degradation can already be discovered).

The nature protection goodwill value f the plants is more than €180,000 versus the cost of handling: €1050. It is unfortunate that this amount of fund is not available for the National Park Directorate, neither for NGOs. Handling tasks can only be covered from funds but these are not continuous. In case we do not stop the degradation of this peaty meadow, the state of Hungary suffers serious loss. Unfortunately this problem is not specific for this certain area but for the Hungarian nature protection as whole. We can say that this is the biggest challenge of nature conservation. The solution is not only the interest of Hungary but for the whole European Community and the World, too.

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EXCISES UPON THE BRANDY ON DIFFERENT ALCOHOLIC CONCENTRATIONS IN VOLUME

ACCIZE PE GRADELE DE TUICA

IRINA DANIELA DURAN *

According to the Fiscal Code applicable since January 1st 2007, the manufacturers of alcoholic drinks shall pay excises, irrespective of the fact that the drinks have or not a commercial purpose. The manufacture of brandy for the non–commercial purposes, shall be made in those individual households that are provided with appropriate installations. The individual households shall be recorded to the financial administrations in a special book that shall include the production installations, their effective capacity, with the provision stipulating that, during the idle periods, such installations shall be appropriately sealed.

***Key words**: excises, individual households, fiscal stocking agents.*

1. ACTIONS FOR PREVENTING THE EFFECTS OF THE FISCAL CODE

Starting with January 1st, the plum brandy manufactured in the peasants' farms shall be excised depending on the alcohol vol. percentages it has after distillation, irregardless if the drink has or not a commercial character or it is produced for self – consumption.

Introduction of the excises, record with the Revenue Administration and the seal of the boilers during the idle periods are just a few of the new legal dispositions. The hardest conditions refer the taxation level.

The direct effects of this measure will automatically lead to the dramatically increase of the brandy's price, unless the manufacturers are not willing to give up to a part of their profit in order to maintain the prices to a reasonable level.

In order to prevent the negative effects of the accelerated increase of the excises, the government decided on July 29th 2005 to sent control mix teams to supervise and inspect the manufacturers or traders of these products. This decision also applied to all the natural persons who held brandy boilers.

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These mix control teams, by the agency of the local authorities, took the necessary measures for identifying the brandy boilers from the individual farms (and thus, determined the manufactured quantities), used for the manufacture of the fruit brandies, intended for the commercial or own consumption.

Romulus Dascalu, the president of the GARANT patronage organization, stated that it was found that, from over 30.000 brandy boilers all over the country, only 200 benefit of the function authorization. For the remaining 99% brandy boilers that have been inspected, no fees to the state budget are paid. Therefore, the brandy, Romanian brandy and snaps manufacturers earn huge profits.

According to the prognosis of GARANT during one year, approximately 120–140 million liters of alcool are produced and unfortunately, this production does not bring any contribution to the state budget. Dascalu also stated that the Romanian state loses due to this "business" over 200 million EUR per year. The GARANT President affirms that ANAF adopted this measure of identifying the brandy boilers due to the pressures launched by the manufacturers from the alcohol industry complaining of the unfair competition on this market. He also stated that the identification and authorization of the brandy boilers represent an European requirement.

The activity of the control teams shall be coordinated by a Central Board, referring to the working present conditions and the degree in which they comply with the terms declared for obtaining the manufacture authorization. These teams also control the manner of compliance with the legal provisions regarding the consumer's protection and the dispositions regarding the public health. The control starts by taking and analyzing the samples taken from all the products that were distributed and sold, in order to set forth the quality and alcoholic concentration, and to ascertain the observance degree with the legislation in force regarding the definition, description and presentation of these features.

If it is found that the conditions for granting and holding the manufacture licenses or the terms related to the production fiscal storage authorizations are not observed, the inspectors shall seal the installations and shall announce the fiscal bodies, in order to set forth the additional fiscal obligations. They are also entitled to announce the criminal prosecution bodies if any infringements are found.

2. THE IMPLICATIONS OF THE FISCAL CODE

The New Fiscal Code and its norms of application make a significant distinction between the peasants who manufacture the brandy for their own consumption, which it refers to as the "individual farms", and those to intend to sell to "the next door neighbour on glass of brandy" and who have to become "fiscal storage agents". Both categories of producers have to come before the Revenue Administration for recording and submitting compulsory monthly statements, irrespective of the fact that they produce of not brandy during that month, and also to estimate the brandy quantities on a yearly basis. The individual farms shall be recorded to the revenue authorities in a special records book that shall include the name and the address, the production installations and their capacity.

Moreover, the production installations shall remained sealed during any idle periods. The brandy can be produced only in special boilers and installations, with sanitary – veterinary authorizations; the production installations have to be alembic installations. When the plum crop is gathered and the owner of the "alembic" is ready to start the production process, he/she has to submit a written request to the competent revenue administration to unseal the installation. Furthermore, he/she has to indicate the type of raw material that is to be used. The brandy boilers have to be equipped with appropriate timers, and this aspect falls under the competences of the Romanian Office of Legal Metrology.

"The manufacturer has to declare, at the best of his/her knowledge, the volume of the brandy quantities that are manufactured, and the purpose of the product – commercial or own consumption" declared Cristina Ionescu, representative of Finances Department of Neamt County.

The "small distillation units" are those which are independent from the juridical and economic point of view, do not function under the product license agreement and that comply with the legal conditions. By the individual farm, we shall understand the farm (household) that belongs to a producer individual person, whose production is consumed by the owner and its family members.

According to the normative document, the producers who intend to produce the brandy, will not be able to require assistance from other persons with similar installations. "The production … can be performed according to a services performance system only in fiscal storehouses authorized for

the production of fruit brandy and snaps", is stipulated in the regulations issued by the Finace Department.

The rules are the same also for the different fiscal storage agents. It is not important the quantity that is produced, but the purpose for which the brandy is produced, respectively for own consumption or for trade.

Another measure included in the Fiscal Code is the six-time reduction of the production intended for the producers' own consumption. "The brandy and the different fruit snaps intended for the own consumption within the individual farms are exempted from the payment of the excises, within the limits of a quantity equivalent to 50 l with the alcoholic concentration of 40% in volume, for every individual farm / year, irrespective of the manufacturing place", is stipulated in the normative document. In this context, we have to mention the fact that the brandy and snaps production from the individual farms has been non – excised within the limits of a quantity of 300l / year until the application of this normative document. The large alcohol producers requested the reduction of this non-excised quantity from 300l/year to only 50 l/year, on the grounds that these "domestic producers" resort to an unfair competition, trading their products to lower prices than those applicable on the market.

The entire range of alcoholic drinks produced for the own consumption in the individual farms, within the limits of a quantity of 50l product / year, with an alcoholic concentration of 100% volume, shall be excised by applying a quota of 50% from the standard excise quota applicable to the ethylic alcohol, and for the ethylic alcohol produced in the small distillation units, whose overall production does not exceeds 10hl pure alcohol / year, there will be applied specific reduced excises.

3. REACTIONS AND CONCLUSIONS RELATED TO THE FISCAL CODE

Even if the Ministry of Finances (MFP) included in the new Fiscal Code, starting on January 1st 2007, the obligation of the excises upon the brandy and Romanian brandy manufactured in the peasant farms, no producer presented up to this moment to the revenue administration to register itself as a fiscal storage agent.

The representatives of the associations do not agree with the legal provisions and hope to obtain several facilities after the negotiations with the competent authorities.

Moreover, the peasants decided not to pay any fees to the state budget related to the excises upon the brandy, considering that the aforementioned fees are inappropriate, stated the Vice – President of the Romanian Brandy Producers Association of Tara Oasului, Cornel Muresan. He stipulated that for a liter of home – made brandy that amounts to 100.000 lei, the excise that should be paid would raise to 130.000 lei. Due to the fact that the peasants are not supported by MFP or by The Ministry of Agriculture, they expect the designation of the Euro – parliamentarians who will be asked to support their cause to Bruxel.

"The peasant shall produce large quantity of brandy which they will not declare, similar to the situations existing before the revolution, since they do not afford to register themselves and to pay all the fees to the state" declared President of the Romanian Brandy Producers Association of Tara Oasului, Gheorghe Ciocan.

"No holder of a brandy distillation unit does not intend or want to be recorded as a fiscal storage agent, since this is not normal, they do not produce anything, they just perform services" stipulated Cornel Muresan.

He also underlined another complaint related to the new fiscal provisions, that stipulating the following: "we cannot equal the fruit brandy with the cereal brandy".

"In order for our traditional brandy not to disappear once with the adherence to EU, we will request to the Ministry of Agriculture that the traditional alcoholic drinks to benefit of certain fees exemption", said Mr. Cornel Muresan.

"Even from 2003, by the Order no.268 of MADR, the brandy and the Romanian Brandy have been erased from the wine class and recorded as a spirituous class. This order caused a series o issues, since we were imposed all the rules afferent to the manufacture of the spirituous products: the fiscal storehouses and the payment of the excises", declared Mr. Cornel Muresan. He also added that he explained the situation of the brandy producers, even to the former Minister Sebastian Vladescu and to the present Minister of Economy, Mr. Varujan Vosganian, but without any positive results since the excise has been already introduced during the same year.

"I also explained to Mr. Vladescu that the peasant comes with the plums and the wood to the brandy distillation unit, manufactures the brandy and then he/she takes the product. Therefore, we do not understand why the brandy boiler holders have to pay excises", said Mr. Muresan.

The Minister of Agriculture, Forests and Rural Development, Mr. Dan Motreanu, signed on February 12th 2007, an address by means of which he submitted to the Ministry of Public Finances all the proposals regarding the improvement of the excises upon the brandy, Romanian brandy and snaps, as well as the proposals concerning the authorization of the installations where these products are manufactured.

"We consider that is necessary that the manufacture of these products to be encouraged in favour of the small producers, by the manner of excising and authorizing the afferent installations, similar to the procedures applicable in the EU States, with a remarkable tradition in this field and which protect the small manufacturers" said the Minister.

The proposals included in the address of The Ministry of Agriculture, Forest and Rural Development (MAPDR) were the bases of the community legislative regulations and of the practices of production and excising applied to the traditional alcoholic drinks in EU, which stipulate several reduced excises.

The MAPDR aims to the complete excises exemption related to a quantity of 400l product (brandy or Romanian brandy or fruit snaps, wine sediments snaps and marc snaps), to the payment of an excise of 50% of the standard value for a quantity larger than 400l but not exceeding 1000 l product (brandy or Romanian brandy or fruit snaps, wine sediments snaps and marc snaps).

For the quantity that exceeds 1000l product (brandy or Romanian brandy or fruit snaps, wine sediments snaps and marc snaps), the payment of the excise shall be made in full. According to the MAPDR address, the beneficiaries of these proposals would be all the fruit and wine-vinicultural sub – product holders who process their own crop either to their own installations (boiler) or to a brandy manufacture installation in the area, belonging to another producer who has in property brandy boilers or who processes in other industrial boilers, authorized according to the law.

"It does not seem normal to me that the alcohol production intended for our own consumption to be excised" – stated the Minister Dan Motreanu. And with a view to the authorization of the boilers held by the fruit producers and by the small distillation units, the MAPDR proposals refer to the simplification of the authorization procedures.

By means of this proposal it is aim to set forth functioning regulations related to the small alcohol producers, given the fact that most of

the boilers held by the fruit producers or by the small distillation units are not recorded or authorized, resulting thus the impossibility of supervising and excising procedures carried out by the competent institutions. Pursuant to the community regulations, the brandy, the Romanian brandy and some of the snaps are Romanian traditional products recognized as unique in EU.

These products are manufactured in areas with reduced agricultural development, representing the main source of income for the producers living in these regions.

The Association of the Natural Romanian Brandy of Sălaj County aims to change of the legislation in force, adding that these are traditional products, which do not undergo the same treatment in the EU states.

"The large spirituous drinks producers aimed to put their brand upon our products". By means of a Governmental order, these traditional products have been taken out from the category of fruit – based products, being included in the class of the spirituous drinks.

By the new Fiscal Code, the Romanian brandy, the brandy and the snaps have been excised, a practice that does not observe the EU legislation.

This aspect is considered as abnormal by the brandy producers of Sălaj County, since the Romanian brandy is a traditional product, and in the EU states, the excises for the products of this type have a value of 20-50% of the excises set for every individual state.

The President of the APPN Sălaj declared that Sălaj County is the largest producer of Romanian brandy in the country, with the largest plum-trees orchards.

4. OTHER COUNTRIES BACKGROUND

"The Bulgarians are unsatisfied with the high level of the excises applicable to the home-made brandy, although Sofia has been granted, by the European Commission, an important reduction of the excises", says Rador. The Bulgarian producers protested and claimed that the new excises raise the price of the brandy liter to 5 euro, almost double in comparison to the sale price of the industrial manufactured brandy.

The manufacture of the traditional drink, that is similar, in this area, with the Romanian brandy, represents an important source of income, after the significant reduction of the areas cropped with oriental tobacco.

"The Romanian brandy and snaps producers should start feeling as European citizens, that's why we support before the Ministry of Finances

the proposal submitted by the Minister of Agriculture, Mr. Dan Motreanu regarding the excises - exemption of an alcohol quantity up to 400 l", stated The Council President, Mr. Mihai Sâmpetru..

He also stipulated that the excise level could be renegotiated, since everything reduces to a "political decision".

According to the statements launched by Mr. Sâmpetru, in the EU member states, there are fees- exemption practices, even subventions granted to the alcohol drinks producers. Thus, in Germany, there are 29.700 grant-aided distillation facilities, and a producer receives 281 EUR for every alcohol liter that is produced. Similarly, a Greek producer has to pay only a half of the excise value, irrespective of the manufactured alcohol quantity, while the Romanian producers have to pay 17,5 lei/brandy liter, if their production exceeds 50 l / year.

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CROSS-BORDER COOPERATION CHARACTERIZED AS INSTITUTIONAL ENTREPRENEURSHIP

COOPERAREA TRANSFRONTALIERĂ DEFINITĂ CA INIȚIATIVĂ INSTITUȚIONALĂ

IRINA DANIELA DURAN [*]

This paper consists of three parts. Firstly, I offer a brief overview of the main characteristics of Euroregions which are mainly concerned with administrative matters that demand cross-border co-ordination at the local level. Secondly, I discuss the role of a policy network that acted as an institutional entrepreneur in the area of CBC. This was achieved through addressing policy-makers, with the intention of providing support for the establishment of cross-border regions across Europe. In the third section, I gloss over the analysis made in the previous sections.

***Key words**: Euroregions, crossborder co-operation*

1. EUROREGIONS

By the beginning of 2000, there were more than seventy initiatives in europe that referred to themselves as "euroregions". these initiatives consist of more or less stable co-operative arrangements between neighbouring regional authorities across a european nation-state border, and can be subsumed under the rubric of "crossborder co-operation" (cbc).

Cbc activities have become a generally recognized part of the repertoire of public agency in european border areas.

Firstly**,** Euroregions have become an *institution*. The post-war history of European CBC can thus be treated as a process of institution-building within the specific context of the European polity.

Secondly, I argue that this institutionalization of the Euroregion can be attributed to the long-term activities of a trans-European policy network.

The strategies and actions of the latter secondly can thus be characterized as *institutional entrepreneurship*. The hypotheses thus cover both the structural and the agency-related aspects of European CBC.

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In terms of their activities, Euroregions are mainly concerned with administrative matters that demand cross-border co-operation at the local level. Traditionally, such co-ordination concerned issues including spatial planning, transport and environmental externalities. More recently, the scope of Euroregional action has been widened to include initiatives in economic policy, the labour market and social and cultural issues. Supranational factors play a crucial role in providing a viable context for CBC in Europe.

The Madrid Convention (1980) initiated by the Council of Europe provides a legal framework for the completion of multinational agreements allowing for public law CBC between non-central governments.

Compared with the legal focus of the Council of Europe, the CBC-related activities of the European Union are primarily financial.

Many CBC initiatives are eligible for support under the Interreg Community Initiative launched by the European Commission in 1990 as part of its European regional policy.

The fact that European CBC is so tightly linked to the supranational regional policy measures pursued by the European Commission ("Cohesion Policy"), points to European multi-level governance patterns as a crucial explanatory factor.

Regarding the early initiatives in the late fifties and sixties, those received no financial support from supranational authorities although their very possibility depended on macroregional integration driven through the Concil of Europe and the early European Communities.

However, given the recent CBC boom, this argument must be qualified in two respects:

a) Firstly, quantitatively, the growth of CBC from 1988 onwards must certainly be related to the launch of EU support schemes dedicated to CBC initiatives in Western Europe, and, from the early 90s, increasingly in Eastern and Central Europe. Qualitative evidence shows that the new funded Euroregions, tend to be closely involved in Interreg implementation.

b) Secondly, apart from the relevance of EU programmes for the more numerical increase of CBC initiatives, their impact can also be accounted for in qualitative terms. As a matter of fact, one can observe an increasing similarity among CBC initiatives in different European areas. It appears that the Euroregion has become the standard model for pursuing CBC, and in this process, EU support certainly has an important influence.

They emerged at a time when the limited problem-solving capability of the inter-governmental commissions became obvious but no alternative, decentralized governance mechanisms had yet emerged.

Thus, the impact of EU support programmes can be ascertained in both quantitative and qualitative terms. On the one hand, they increased incentives for establishing new CBC initiatives and, on the other, they helped to transform loose and poorly equipped communities into more institutionalized forms of co-operation.

The Euroregions' embeddness in the multi-level structure of EU Cohesion Policy has clear consequences for the way they operate and the effects they achieve

2. CBC AN EPISODE OF INSTITUTIONAL CHANGE

It is important to consider the role of policy networks for policy outcomes (the launch of Interreg) because it avoids attributing these outcomes exclusively to the formal policy maker (the European Commission). In the case of supranational CBC policy this is particularly relevant since there are at least two supranational policy makers: the Council of Europe and the European Commission. It is a policy network that provided for the continuity of CBC as a supranational policy field.

On the basis of the considerations so far, the theoretical and the empirical can be linked on the basis of the following assumptions:

a) the institution: the Euroregion is a blue-print for organizing public cross-border intervention;

b) the organizational field: a supranational policy field, EU regional policy, provided the transmission mechanism for the proliferation of Euroregions, that is, their effective institutionalization across the EU;

c) the institutional entrepreneur: a transnational policy network in the area of CBC has been crucial for advancing the interests of border authorities on both the national and supranational level in Europe over the last decades, thereby contributing to the institutionalization of the Euroregion as a legitimate model of public agency.

The argument relies on the assumption that social actors would act as pure decision-making centres independent of structural constraints.

One of the primary characteristics of policies aimed at the promotion of CBC is that they constitute a genuinely supranational policy field. As the addressees of CBC policies are always regional or local authorities

originating in more than one country, central governments rarely promote CBC activities on a purely national basis.

The AEBR is the formal expression of a transnational policy network, bringing together various organizational actors interested in the promotion of CBC. The network embraces three categories of individuals:

- CBC practitioners and advisors associated with the local authorities involved in CBC and formally organized in the Association of European Border Regions (AEBR);

- political representatives of border areas as members of national parliaments, MEPs and members of the Concil of Europe Parliamentary Assembly;

- public officials of the European Commission, the CoE and, to a lesser extent, national and regional governments.

The CBC network succeeded in positioning CBC as a relevant issue within the more general framework of EU regional policy.

Given that regional policy is targeted at specific areas, which are "less favoured", in some way or the other, "border regions" were constructed as a new, homogenous territorial category to function as an object of policy intervention. This was particularly important, as many border areas in the EU are not classified as standard "objective regions" within the framework of EU regional policy.

To achieve this goal, the AEBR attempted to unite the European border areas behind a collective project.

European CBC policy explicitly promotes the development of cross-border organizations, that is, the building-up of governance capacities on the level of cross-border regions that are able to jointly deploy European funds. The figures as "institution-building" could also be reffered to as "organization-building".

In this strategy, the AEBR was decisively helped by the fact that the Cohesion Policy frameworks have been re-negotiated after every four to six years.

The shared interest of the Commission and the AEBR is expressed by the fact that, in a document on the "institutional aspects of cross-border co-operation", the AEBR implicitly advocates a strong convergence between the Euroregion that is local cross-border organization on the one hand, and that is Interreg management unit on the other.

On the other hand, particular attention is paid to making Euroregions fit for their task in the design and implementation of Interreg.

Two observations can be derived from this chronological account. Firstly, the incessant activities of the CBC network contributed to the construction of a new territorial interest formation: the interests of cross-border areas. From being a diffuse nationally rooted interest the CBC network contributed to the transnationalization of these interests, converted them into a European issue and won the support of supranational authorities.

In this way, the network that is the institutional entrepreneur - skilfully exploited the opportunities the international context provided for creating legitimacy for Euroregion-type CBC initiatives.

On the one hand, it had a strong European dimension in the sense that it involved the co-operation of public authorities across borders. On the other hand, it had an intrinsic regional policy dimension insofar as *local* involvement in CBC was conceived as ideal for developing peripheral border regions under the "partnership" principle.

The point is that the growing involvement of the CBC network with the European Commission has led to a streamlining of CBC initiatives as a result of the availability of Interreg support, and thus, to the promotion of the Euroregion as preferred institutional form.

These considerations lead on to the second observation, concerning the political dimension of CBC and, in particular, the institutional model according to which CBC is pursued in Europe. In fact, the spread of Euroregion type CBC indicates a process of *regionalization* set in the context of European integration. The political project of the CBC network consisted in turning the local authorities into the main actors in CBC.

As an institution for inter-municipal co-operation in immediate border areas, the Euroregion was successfully introduced as the better alternative with respect to the (inter-state) governmental commission. This paradigm shift gave the border municipalities a stronger role in the field of cross-border planning. At the same time, importantly, the creation of Euroregions involved the opportunity for the participating municipalities to engage in a strategy of bottom-up region building.

These considerations are a further indication of the fact that this is not region building in the old regionalist sense. The strategies traditionally attempted to gain formal recognition as self-governed territorial

constituencies. The neo-regionalist strategies are oriented towards actualy competencies in the policy realm that often rely on co-operation networks.

3. CONCLUSIONS

In the following, I would like to stress several conclusions that can be drawn from the previous argumentation.

Firstly, CBC initiatives are mostly driven by policy considerations and embedded in a context of ordinary administrative practice. CBC initiatives are rarely linked to projects of popular mobilization, interpellating pre-existing cultural or ethnic commonalties among border people. On the one hand, this points to the continuing strength of national solidarities for the mobilization of identities. There is little evidence that the frontier as a marker of the limits of political identity has been effaced from the mentality of the populations of the frontier regions.

This does not mean that CBC is insulated from territorial or sectional interests, party politics and issues of popular representation, nor that CBC is necessarily efficacious. But the modalities according to which CBC is pursued are largely embedded in the administrative regulations, routines and cultures prevailing within and between the participating authorities.

In this sense, CBC is not merely "low" politics as opposed to the "high" politics of inter-state diplomacy. Rather, it is 'low politics even within the regional, district and local administrations involved.

Secondly, CBC initiatives do not appear particularly successful in constituting new, transnational scales of governance. Even though the intensification of economic cross-border contacts, which is among the ultimate objectives of CBC initiatives.

It is impetuous to observe the barriers that prevent cross-border bodies from being effective and efficient governing units acting on behalf of cross-border units as a whole ("cross-border regions"). The way Euroregions are organized, as transnational policy networks, does not constitute an efficacious governance mechanism to address distributive or even re-distributive issues. The participating actors are strongly oriented towards their own territorial and organizational interests. It is considered that Euroregions are hardly a good means of co-ordinating economic development strategies for a cross-border space.

CBC regarding from the point of view of neoregionalism cannot be equated with the emergence of new regions, that is, a level of territorial governance that would compete with existing levels such as intra-state

regions or even nation states. Rather, CBC is only one moment in the territorial and functional complexification of political decision-making in the EU.

Thirdly, CBC is a multi-level sistem in which supranational authorities, notably the EU, play crucial roles. The reason is that on the one hand many CBC initiatives were only started in response to the Interreg programme and on the other existing initiatives responded by aligning themselves to EU "windows of opportunity". Furthermore, national governments are involved as EU support for CBC is part of ordinary EU regional policy. Thus CBC initiatives act as implementation agencies on behalf of the EU and their respective central state administrations.

Thus, CBC initiatives cannot be seen as purely "bottom-up" mobilizations. They are also "top-down" in the sense that supporting CBC is an explicit policy target of the European Commission. This adds an important supranational dimension to CBC as it is constituted as an institutionalized policy field. Explicit attempts to induce the building of cross-border governance structures are among the objectives of CBC policy, operated by the EU as the main policy maker and the Member States as subsidiary policy makers.

The analysis differs from many political economy accounts to the degree that it does not relate CBC back to more general tendencies affecting the world economy, such as globalization, regionalization or in general, "re-scaling". The more immediate causal relationship is between the emergence and proliferation of Euroregions and the changing opportunity structures local and regional authorities face within the context of the ongoing process of European integration.

This shows that apparent tendencies of "re-scaling" must not be necessarily and immediately related to changing geographies of capitalist production and consumption. These so-called cross-border regions are usually rather technocratic entities through which local and regional authorities in border areas pursue their usual goals. This is documented by the fact that Euroregions rarely meet any opposition as they usually engage in community-oriented issues that are aimed at improving the daily life of border populations. This goes hand in hand with their function as implementation units for EU regional policy programmes, which do indeed have a modernizing impetus. However, this is far from stating that Euroregions would be able to use European or other funds for pursuing

effective boosterist regional development strategies although discursively many of them claim to do so.

This leads on to another conclusion, that the political discourses associated with Euroregions are strongly pro-European as the involved actors aim to stress both their commitment and their effective contribution to the overarching project of European integration, notably in guise of the EU. In these discourses, cross-border regions are presented as the "bridge-builders" between different countries and as micro-laboratories of European integration on the small scale. At the same time, Euroregions attempt to distance themselves from the allegedly centralist and bureaucratic EU and position themselves as citizen-friendly and non-bureaucratic institutions.

Concluding, I argue that the logic of European cross-border regions has to be more strongly related to the way the European polity is developing than to the tendencies inherent in the reorganization of global capitalism. This is the more immediate causal relationship one can infer from an empirical analysis that looks at the role of a trans-European policy network in constructing and launching a new institution: the Euroregion.

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TAX IN COUNTIES OF HUNGARY

TAXA IN JUDETELE UNGARIEI

ANDREA GÁSPÁR*

The state needs revenue to perform the public tasks. The most important revenue is the tax, which connives at the outlay of the state, and the state demands the tax, free of charge. In 2000, in Hungary, 80% the total collected revenue of the state was tax and taxatic revenues. [1] Since 1988. January 01. there were expansive reforming, in the course of reforming, there were tax categories which broke off (f.e.: payroll tax, general income tax, wealth tax), and there were such tax categories which took effect (value added tax, individual income tax, venture tax). The taxation of the population (which is the growth of the VAT in the rate of the GDP) have changed from 5,8%(1988) to 7, 12%(1996), and in 2005 it was 6,59%. After the tax reform, the Hungarian tax system have changed lesser or higher measure in every year, which made the tax system impenetrable for the corporations, and the population. The Hungarian regions have different state of economic development and infrastructure, but the same regulation applies to regions. The number of tax payers, which condescends the taxation, show different picture even inside each regions. (Number 1 table)

Key words: *Indirect taxes, Direct taxes, Social Contribution*

Table 1

The number of tax players in 2005.
(data in head)

Region	Number of tax players	Population
Middle Hungary	1.133.965	2.840.972
Middle Transdanubium	326.130	1.110.897
West Transdanubium	293.229	1.000.348
South Transdanubium	314.668	977.465
North Hungary	276.355	1.271.111
North Lowland	349.560	1.541.818
South Lowland	375.879	1.354.938

Source: Own editing

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MATERIAL AND METHODS

In my analysis, on the score of the dates of 2005, I analysed the changing of tax transfers of Hungary, and the Hungarian region. In my analysis, I descend to the more important tax categories and the rate of the tax for 1 inhabitant. Than dates what I used, these came from the database of the APEH, and KSH, which are cumulative, and these are uniquely unidentifiable.

In 2005, the tax, which was paid to the APEH, have increased by 6,5%, correlate to the dates of last year, it means 5,5% developing exteriorize to 1 inhabitant.

In 2004, a new tax category has shown, it is the SVT (Simplified Venture Tax), which doesn't maintain high symmetric. The rate and the range of applicability of the SVT are narrow, then the other tax categories.

There are 7 regions in Hungary; the regions contain 3 counties, except the Central region. (Number 2 table)

Table 2

Regions in Hungary

Number	Region	Counties
1	Middle Hungary	Pest, the Capital city
2	Middle Transdanubium	Fejér, Komárom-Esztergom, Veszprém
3	West Transdanubium	Győr-Moson-Sopron, Vas, Zala
4	South Transdanubium	Baranya, Somogy, Tolna
5	North Hungary	Borsod-Abauj-Zemplén
6	North Lowland	Hajdú-Bihar, Jász-Nagykun-Szolnok, Szabolcs-Szatmár-Bereg
7	South Lowland	Bács-Kiskun, Békés, Csongrád

Source: Own editing

Henceforth, I will mark the region with the numbers which was given in the number 2 table.

In 2005, in Hungary, 63% of the total collected tax came in to the APEH from the Middle Hungary region (1), 8% came in from the Middle Transdanubium region (2), the last 29% came in from the other 5 region.

RESULTS AND DISCUSSION

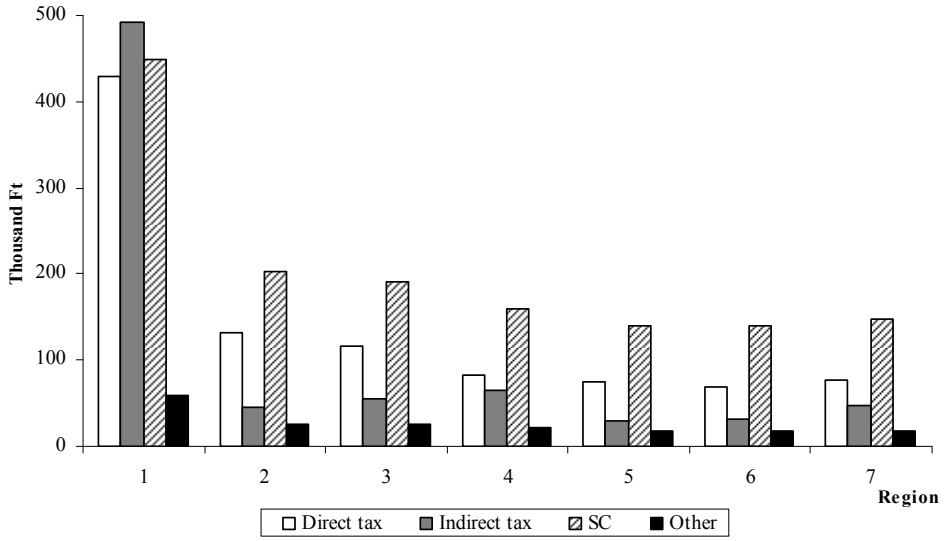
I analyzed the 4 groups of tax records.

1. Indirect taxes, which join to the products and services, and these oppress the users of products and oppress the users of services. In this nature are the Value Added Tax (VAT) and the consumption tax. But because of the small room, I will write shortly about it.
2. Direct taxes, which join to the income of the population, the economic activity of the companies. In this nature is the Personal Income Tax (PIT), Corporate Income Tax (CIT).
3. Social contributions (SC), these do like taxes, and these have been too paired after the work's and economic activity's real income. I differentiate 2 big groups of this tax record, according as who is oppressed by the deposit payment liability (the employer and the employee are oppressed by the national insurance contributions)
4. Other taxes. It contains the Simplified venture tax, the contributions of the employer, and the employee.

Analysing the tax payment for 1 inhabitant in the regions (Number 1 diagram), I have determined the followings

- only the Middle Hungary region has higher rate then the average rate of the country
- Middle and West Transdanubium region have nearly the same dates, which make more then 60% of the average rate of the country.
- The other 4 regions close the series, they don't reach the 50% of the average rate of the country

The rate of tax, comes into 1 inhabitant



Number 1 diagram

Source: Own editing

Tax categories in detail:

1, <u>Indirect tax</u>

Value Added Tax (VAT):

The VAT is multiphase, net, general, eventually it oppresses the consumers. I analysed only the **VAT.** Since 2004, the total collected tax increased by 3,3%. Analysing the regions, the rate of indirect tax come into 1 inhabitant is the higher in the Middle Hungary region (1), the next is the South Transdanubium (4), and the 3rd is the West Transdanubium (3). The North Hungary region has the lowest data. In the 1. region, the rate of the co-enterprises inside the total enterprises is 55%, the other regions the rate of individual ventures is more then 54%. 4/10 of the enterprises are around the capital city, this is the reason of the high VAT proceeds.

The number 1 table shows well, that the most tax payer are in the 1. region, and the lowest tax prayer are in the 5. region. In the 5. region, the lowest notion of venture was in Nógrád county.

2, Direct tax

These tax categories affect the companies who are doing economic activity, and the population who have income.

Because of the laws, the rates of taxes re different, I will review the direct taxes in two groups:

A. Personal income tax (henceforward: PIT)

The **PIT** is band progressive. If the worker revenue is higher, he will pay more tax. In the 1. region, the monthly gross wage is higher by 20% then the country average. (185.000.-Ft). The lowest wage was in the North Lowland region (6), and this is the 82% of the country average. This is the reason of the developing of the IIT.

In 2005, in Hungary, 997,8 milliard Ft came in to the budget from this tax category. It is the 13,19% of the total collected tax.

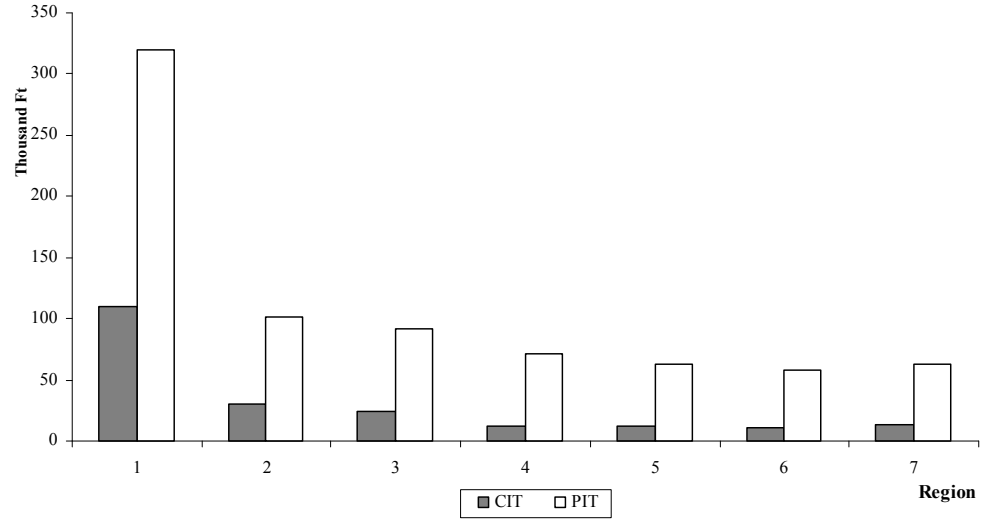
B. Corporate Income Tax (CIT)

It applies to the income of the taxpayer, which was got through economic activities. The **CIT** was 16%, and correlate to the VAT, the CIT is higher in the 1, 2 and 3 regions, which regions have better infrastructure, traffic, and geographical situation. The lowest developed North Hungary and North Lowland region gave the lowest direct tax.

In 2005, in Hungary, 430,0 milliard Ft came in to the budget from the corporation tax, which is 6,48% of the total collected tax.

More then 70% of the direct taxes was the PIT. It can be observe in each region. (Number 2 diagram)

Rate of the direct tax, comes into 1 inhabitant in the regions



Number 2 diagram

Source: Own editing

3, Social contributions

Risk-community based, obligatory, it oppress the acquired/stated, gross wage income.

The SC like the PIT is associated with the wages. The lowest rate of the NIC is in the 5-6-7 regions, the reason is the state of economic development, the unemployment, and the developing of the notion of venture.

4, Other tax

I listed 3 taxes to this tax category:

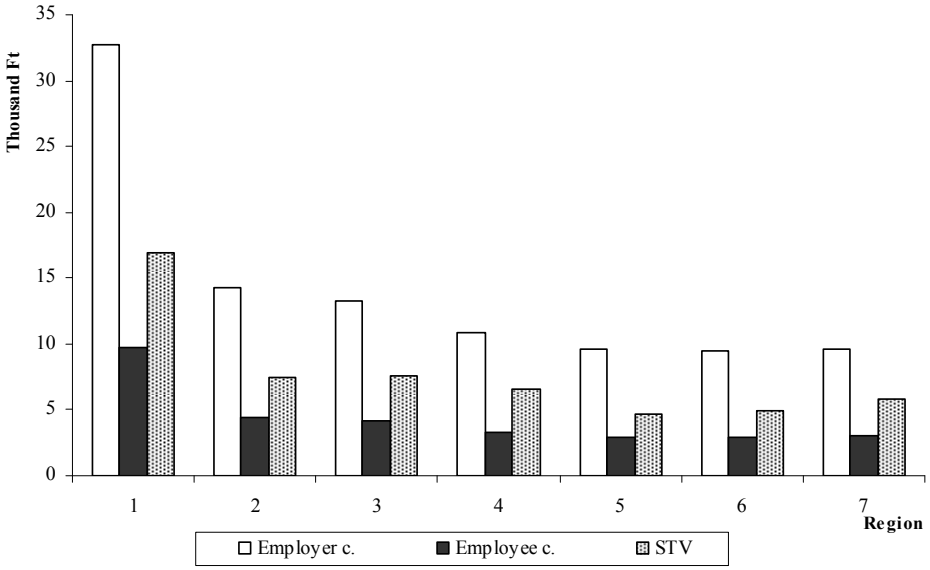
- Employer contribution
- Employee contribution
- SVT

The Employer contribution and the Employee contribution must be paid after the gross paid wages, so where the wages are higher, there this tax category has higher rate. (1,2 and 3 regions)

The SVT is a new tax category, it can be chosen at the end of the year, with definite conditions.

The lowest taxation was in the North Hungary region, 4.616.000 Ft, the highest taxation was in the Middle Hungary region, and the 2 and 3 regions. (Number 3 diagram)

The rate of the other taxes, comes into 1 inhabitant



Number 3 diagram

Source: Own calculation

SUMMARY

During my analyses, I gave the most important tax categories prominence, but it can be seen, that the Capital city, and surroundings, have higher rate in every tax categories, above the country average, until the lesser developed Trans Tisza areas, show lowest rate, under the country average. In the lowland, there are more agricultural ventures, which aren't such productive, like a service or commerce. The rate of GDP comes into 1 inhabitant is higher in the western part of the country, and in the capital city, because the infrastructure, and the state of economic development is better

there, and it increases the notion of venture, and has effect on the collected tax.

Because of the Hungarian tax system is same in the area of the Public of Hungary, there aren't differences in the rate of tax between the regions (applies to the analysed tax categories), so the reason of the taxation is that I wrote before.

My opinion is that with more stabile tax system would ensure the increase of the notion of venture, which increases the creation of workplaces, and economic and infrastructural activities. So reduce differences between regions in Hungary.

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THE ENLARGEMENT OF LAND MARKET IN THE CONTEXT OF RURAL DEVELOPMENT

EXTINDEREA PIEȚEI FUNCIARE ÎN CONTEXTUL DEZVOLTĂRII RURALE

OANA-CARMEN DUMITRESCU[*], MIRELA MONEA*

An important component of the rural transition process in the countries of Central and Eastern Europe and the former Soviet Union was the privatization of land and restructuring of the farm organizations. The distribution of landownership resulting from the land reform process implies a very important need for exchanging land between new owners and new users. Land markets are developing in Europe and Central Asia, but in an uneven way. Various pieces of evidence indicate that sales of land have been limited, in some cases because government regulations prohibit them, but often because households and farms do not want to sell or buy land.

Key words: *land market, rights, tenure, ownership, policy*

Land issues are of crucial importance to economic and social development, growth, poverty reduction, and governance. Access to land is the basis of economic and social life in both rural and urban areas. Land tenure is a complex problem comprising political, economic, technical, legal and institutional factors. Land tenure closely binds together issues of wealth, power and meaning. Control over land forms a significant part of the identity and maintenance of rural society. Land policies determine who has legal rights of access and/or ownership to certain resources and under what conditions, and therefore how these productive assets are distributed among diverse stakeholders. Land policies therefore express, implicitly or explicitly, the political choices made concerning the distribution of power between the state, its citizens, and local systems of authority. The multiple dimensions to land issues require a careful and well implemented approach

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which places current land issues within the broader historical, political economic and social context.

Political ownership, willingness and commitment are key factors for the definition and implementation of effective land policies and/or land reforms. Land reforms often reflect political compromises between various objectives and interest groups. It is the responsibility of national governments interacting with civil society to make their own land policy choices and craft feasible and effective solutions.

Land issues are also clearly of enormous importance in urban and peri-urban situations where they are closely related to demographic changes and migrations. In urban areas, the primary significance of land is as a means of shelter. Most of the urban poor do not have secure tenure and live in large informal settlements. Therefore securing formally recognized rights to land and housing in urban areas generally gives poor people access to basic services. It may also help them to access legal and financial services to raise capital to invest. It is necessary to alleviate poverty in growing towns and cities, and mitigate the problems associated with rapid urbanization. There is an urgent need for more inclusive policies, which offer people practical means of gaining secure legal title to their assets, within a land administration system which operates in an efficient and accountable fashion. Moreover, most of the issues are common to urban and rural areas, and separate rural and urban land policies often lead to ambiguities for peri-urban land management.

Rural land is an asset of the greatest importance in many parts of the world, both developing and developed. In the former, a high proportion of income, employment and export earnings stems from agricultural production and other land-based activities. Poverty is also particularly marked in rural areas and control of land is a major issue for peasant societies. In the absence of much economic diversification, access to land and natural resources is of especial importance for improving the livelihoods of poorer groups and providing greater security. Land constitutes an asset and a source of wealth for families and individuals as well as for communities, with strong links to cultural and spiritual values. Ownership and control over land confer very significant political power, particularly where land is becoming scarcer and hence more valuable. Land issues and conflicts are deeply embedded in the long-term social, economic and political history of a country and must be understood in that context.

The interrelated social, institutional and political factors involved in land make it an asset different from all others. Land is never just a commodity. It combines being a factor of production, with its role as family or community property, a capital asset and a source of identity. This mixture of qualities is not necessarily a constraint, as can be seen from the active market in land use rights that exists in many smallholder farming systems operating under customary land regulation.

Land tenure should be defined broadly as the **"**system of access to and control over land and related resources**".** It defines the rules and rights which govern the appropriation, cultivation and use of natural resources on a given space or piece of land. Strictly speaking, it is not land itself that is owned, but rights and duties over it. Land rights are not limited to private ownership in the strict sense, but can be a very diverse balance between individual rights and duties, and collective regulations, at different levels (different levels of family organization, communities, local governments or state), private or family ownership being one possible case. The rights and duties that individuals or a family hold are themselves embedded in a set of rules and norms, defined and enforced by authorities and institutions which may be those of rural communities and/or of the state. No system of land tenure can work without a body with the power and authority to define and enforce the rules, and provide arbitration in case of conflict. Thus, a land tenure system is made up of rules, authorities, institutions and rights. Land administration itself (maps, deeds, registers, and so on) is only one part of a land tenure system.

A land policy aims to achieve certain objectives relating to the security and distribution of land rights, land use and land management, and access to land, including the forms of tenure under which it is held. It defines the principles and rules governing property rights over land and the natural resources it bears as well as the legal methods of access and use, and validation and transfer of these rights. It details the conditions under which land use and development can take place, its administration, i.e. how the rules and procedures are defined and put into practice, the means by which these rights are ratified and administered, and how information about land holdings is managed. It also specifies the structures in charge of implementing legislation, land management and arbitration of conflicts.

Land policy is contained in texts issued by governments, and is further developed through legislation, decrees, rules and regulations

governing the operation of institutions established for the purposes of land administration, the management of land rights, and land use planning. To be effective, land policy must propose a practical and coherent set of rules, institutions, and tools, which are considered both legitimate and legal, and are appropriate for different context and interest groups.

There are frequent contradictions between formal and informal tenure rules and institutions, which lead to conflicts and inefficiencies. One aim of reformed land policies should thus be to find ways of combining these different systems so as to ensure legitimacy, equity and economic efficiency.

Land policy lies at the heart of economic and social life and environmental issues in all countries. The distribution of property rights between people has a tremendous impact on both equity and productivity. Inequitable land distribution, land tenure problems and weak land administration can lead to severe injustice and conflict. Changes to legislation, the distribution of property rights, and administrative structures are likely to have long-term consequences, positive or negative, for political, economic and social development. Similarly land policy is also crucial for environmental sustainability as it can create incentives for sustainable land-use and environmental management.

Land policy in developing countries has been strongly influenced by former colonial land policies which overlaid established patterns of land distribution and tended to restrict local populations access to good land. Subsequent state involvement in land issues, whether by collectivizing land or claiming state ownership to all land, has led in many cases to economic inefficiencies, ineffective bureaucracies and social injustice. In other cases, distortions and failures in the operation of markets have led to the expropriation of small farmers, increased landlessness, growing inequality in land distribution and increased poverty. As a result the rights of farmers to the land they cultivate often remain legally insecure and people may be excluded by government from access to natural resources upon which their livelihoods depend.

In the absence of trade and agricultural policies to support the small farm sector the predominance of export-oriented agriculture, the liberalization of agricultural imports and governments' withdrawal from the provision of rural extension services, have often resulted in land re-concentration and in exclusion and/or deprivation of vulnerable groups.

Addressing these legacies and promoting both equity and productivity is thus a key issue.

Land policy reform is an essential aspect of the policy and institutional reforms required to empower the poor and promote equitable and sustainable development; it should be seen as an essential means of securing the broader objectives of social justice and economic development. Drawing up a national land policy is the responsibility of the state, but will need to build on and respond to the concerns of many non-state actors. Land policy reform also has a key role to play in processes of democratization, the drive for improved governance, and decentralization.

Land rental is widespread in the countries of Central and Eastern Europe (CEE) and the former Soviet Union (FSU), largely driven by the way land was redistributed in the 1990s and by the role of corporate farms. Throughout the region, land rental markets have the potential to play an important role in stimulating much-needed land consolidation and farm restructuring for agricultural recovery and growth, and in contributing to employment and poverty alleviation in rural areas**.** To realize this potential, governments need to turn their attention to making land rental markets work better by creating the enabling environment and supporting infrastructure for these markets to develop.

The prioritization and relevance of actions will vary across countries in the region (hereafter referred to as Europe and Central Asia (ECA)). For instance, countries with a majority of small family farms, but with relatively clear property rights (Albania) should focus on improving the competitiveness of agriculture and access to credit for small farmers. Countries such as Romania and Bulgaria, which are about to join the European Union (EU) but where ownership is highly fragmented and restitution is incomplete, should focus on improving rights security, reducing transaction costs, and encouraging more efficient land rental markets. In countries such as Ukraine and Russia, where land redistribution and farm restructuring has advanced little and large corporate farms dominate the rental market, the focus should be on securing individual property rights and addressing constraints in credit, labor, and input markets.

In ECA countries, renting land is more common for land exchange than land sales. Less than 5 percent of rural households have sold land in all countries surveyed (Albania, Azerbaijan, Bulgaria, the Czech Republic,

Hungary, Kazakhstan, Moldova, Poland, Romania, Slovak Republic, and Tajikistan) and in many cases the share is below 2 percent. The share of land rented as a percentage of cultivated land area varies across the region, from more than 90 percent in Slovak Republic and the Czech Republic, to between 50 and 60 percent in Bulgaria, Hungary, and Moldova, to 35 percent in Azerbaijan and 10 percent in Albania. At the same time, the vast majority of rural households in the region (more than 90 percent) own some land, though the average amount of land owned by households and family farms in ECA is small—fewer than 7 hectares in most countries.

Land rental markets can provide these benefits with more flexibility and lower transaction costs than land sales markets. Land rental requires a smaller outlay of capital to access the land, leaving more for productive investments, and can provide a stepping stone toward landownership for the landless. This is important in transition economies where rural financial systems remain poorly developed and the profitability of agriculture is low.

Ownership structures, resulting from the way land was privatized and redistributed, have a significant impact on the way land rental markets have developed**.** Restitution of land in many ECA countries (such as Bulgaria, Hungary, Romania, and the Baltic countries) meant that land was often allocated to individuals who were no longer active in agriculture, but were either retired or living in urban areas. Data from Bulgaria, Hungary, and the Slovak Republic illustrate that the heads of household who are renting in land (from others) are significantly younger than the heads of household who are renting out land. Those renting out land in Hungary, the Slovak Republic, and Bulgaria are on average at least 60 years old. Land rental markets can provide for an exchange of land from older landowners to younger, rural residents who are more likely to be land-poor but labor-rich. The data show that in the Slovak and Czech Republics, and parts of Hungary, very extensive renting of land is going on (60 percent or more of total land used is rented), but mostly from households to large-scale corporate farms.

Because landownership and farm structures have undergone major changes in the past 15 years and are expected to continue, significant dynamics in land exchange, including the form and the extent of land rental contracts, should continue. The two surveys done in Bulgaria show an increase in the average length of rental contracts from one year in 1997 to three years in 2004. They also show an increase in the formality of

contracts, with 56 percent of written contracts in 1997 increasing to 82 percent in 2004. As the land market matures, farms and landowners are often uncertain about how market conditions, institutions, and laws will evolve. In such conditions, flexible and short-term rental contracts may be better choices than sales or long-run contracting, for both sides of the transaction. In addition, standard contract forms will help both landowners and renters.

In Western Europe, the prevalence of land rental reflects historical policy choices in promoting the development of competitive, family farms. In broad terms, two types of policy strategies were used in Western Europe to regulate rental markets. One type focused on improving tenure security for tenant-farmers and was followed in countries such as Belgium, France, and the Netherlands. The other type aimed to help tenants become owners and was dominant in countries such as Denmark, Italy, and Ireland. In the first type, regulations included contract specifications, minimum term lengths, automatic lease renewal, and automatic succession rights. These regulations led to a situation where farmers no longer wanted to purchase land because their tenure security was very high, and they could use their capital for other investments. In these countries, the rental share is relatively high. In the second type, the government set up state funds to purchase farms for poor tenants, and/or to subsidize the purchase of land by poor tenants, either directly or through regulating prices, through subsidized loan conditions, or through tax benefits for purchasing land. In all these countries, the share of land rental is relatively low, and regulation of land rental markets tends to be light.

Land sales markets typically function imperfectly, especially in poor countries. First, imperfections in input, product, credit, and insurance markets all affect the functioning of land sales markets. Second, transaction costs (notary and other fees, access to information, lack of parcel boundary definition) in land sales can be high. These factors make it expensive and difficult for efficient producers to buy land; they also reduce the attraction for less efficient producers to sell their land. Third, families hold on to land for reasons of prestige, lifestyle value, and tradition. As a consequence, rural land sales markets are often thin and may even be limited to distress sales.

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ASPECTS REGARDING THE FARMS ORGANISATION STRATEGIES IN THE CONTEXT OF THE EUROPEAN UNION INTEGRATION

ASPECTE PRIVID STRATEGIILE DE ORGANIZARE ALE EXPLOATAȚIILOR AGRICOLE ÎN CONTEXTUL INTEGRĂRII ÎN UNIUNEA EUROPEANĂ

MIRELA MONEA*, OANA-CARMEN DUMITRESCU *

The content of the paper presents few aspects of a strategic analysis of the agricultural branch, with some particularities, regarding the integration of the Romanian agriculture in the European model of agriculture which will guarantee the efficiency of this activity, the increase of products competitiveness, the protection of the environment and the safety of the consumers.

Key words: *strategy, objectives, viability, organization, sustainability*

In the structure of the national economy, the agriculture is considered one of the main branches, a branch with great material and technological potential having an important role. The agriculture has three major functions: the economic function (production of goods), the social function (occupational offer and rural development) and the ecological function (preservation of natural capital).

A strategy includes all the ideas, plans and actions developed by an agricultural exploitation in order to achieve his established objectives. A complete definition of strategy is: "the art of establishing medium and long term general objectives, at a certain organizational level and of developing action directions in order to attain them taking into account the existent resources, answering efficiently the demands of the environment where the action takes place". In agriculture, the achievement of the established

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objectives can be made in different ways, an important role having farms management in the decision making process.

Once with Romanian integration in the European Union structure, our country will follow the principles of Common Agricultural Policy based on measures regarding to the rural development.

In the states with developed market economy the agricultural domain organization is based on the private property and it is the result of one concrete action of the governments' intervention in this field of activity and also of the market forces in the structural adjustment process.

When we taking about agricultural entities organization we have to taking into account: the whole farms organization process by establishing organizational structure and the informational system; the organization of the main farms functional compartments such us development-research, production, merchandising, human resources, financial, accounting. Most important are: problems regarding production and labor organization; farms field organization; assurance and utilization technical means; assurance and utilization of human resources; choose the production structure both in crops and breeding;

Consequences of Romanian integration in the European structure it is necessary to adopt a clear strategy on medium and short time, a strategy which have to allow institutional and legislative harmonization with the European aquis in the agricultural domain.

Analyzing Romanian agricultural sector we can observe the existence of a reduce number of great dimension farms, fact which produce negative effects, such us: lower productivity and lower production quality, lock of financial resources, deficiency of infrastructure, lower experience in technical, managerial or marketing skills, high level of agricultural products imports, lower level of exports, reduce incomes in farms, non-observance of standards regarding quality products, safety and health foods in accordance with European standards.

In these conditions it is necessary a complex of measurements and planes to allow the integration of national agricultural policies with European agricultural policies, in order to practice a sustainable agriculture, such as:

- Acceleration of agricultural sector restructuring;
- Farms consolidation and small farms development (increase small farms subventions);

- Increasing farms productivity together with longevity assurance, increase environmental protection and assure social equity;
- Human resources development (staff training, technical assistance, publicity campaign);
- Observing quality standards and health foods standards;
- Observing environmental protection standards, consumers health;
- Improving economical performances;
- Using efficiently the natural, material and human resources in farms;

A very important issue to take into consideration is a strategically approach, to seek to merge the experiences and knowledge of traditional agriculture with new researches of ecological agriculture, approach which can ensure environmental protection and a lot of benefits for the consumers and entire society.

To preserve environment and assure a long term efficiency, agriculture is better to be built on ecological principles, but on the other side this approach needs long term investments in farms organization. Such farming system has to be built taking into consideration few basic principles:

- Adapting agriculture to particular local environments by optimizing the use of locally available resources and the different components of the farm system (plants, animals, soil, water, climate and human resources) to support each other creating a synergetic effect.
- Minimizing the use of non renewable fossil fuels and optimizing the use of solar and other renewable forms of energy;
- Reducing the use of external and non renewable inputs with the greatest potential to damage the environment or harm the health of farmers and consumers;
- Securing favorable soil conditions for plant growth, optimizing the recycling of nutrients within the farm system and minimizing losses from pests and diseases;
- To optimize the management of natural resources by increasing the knowledge of farmers and human resources in farms; it is important to recognize and built on existing local skills and knowledge, support farmers‘own organizations who work together in partnerships and networks;
-Minimizing risk, using all resources efficiently, planning all activities in detail and increase added-value to a farm production;

- To permit local communities to control, manage and benefit from their natural resources and to maintain their integrity while doing so;

- Recognizing the role of agriculture in shaping the landscape and regulating ecosystem services and ensuring that agriculture contributes positively to sustaining the life support systems.

These agricultural production systems could improve the quality of life for farmers, their families, consumers and society. Ecological aspects, social equity and economic feasibility, together, assure the sustainability of agriculture.

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INDICATORS SYSTEM USED IN FARMS SUSTEINABLE DEVELOPMENT ANALYSIS

SISTEMUL DE INDICATORI UTILIZAŢI ÎN ANALIZA DEZVOLTĂRII DURABILE A EXPLOATAŢIILOR AGRICOLE

MIRELA MONEA*

The paper presents the main aspects regarding the concept of sustainable development in agricultural domain, especially the sustainable farms concept. Also, the main part of the paper describes the most important aspects about farms sustainable development analysis focusing on the main indicators used in farms sustainable analysis. Sustainability indicators in agricultural domain have to be able to appreciate in which measure farms sustainable objectives are integrated in the European policies.

Key words**:** *sustainable farms, efficiency, effects, efforts, performance*

The specific practices developed in agriculture and the technologies used had a great impact on environment, the results leading to necessity of the environmental protection measures by developing a sustainable development in agriculture.

Sustainable development concept was discussed and widely accepted at the Conference of Rio de Janeiro in 1992, after that in 1997 on the International Commission of Environment and Development the concept was defined like: "sustainable development is those which satisfy the present needs without compromise the possibility of future generation to satisfy their future needs".

This concept penetrated into agricultural domain being discussed on XXI Congress debate in 1991 (Tokyo) on International Association of the Agrarian Economists.

This concept could be synthesized taking into account the main objectives whose has to be accomplished when we are talking about

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sustainable agriculture, such as: satisfying human needs; preservation of the natural resources and environmental protection; using resources efficiently; supporting agricultural activities and increase human living standard; increasing people power in decision making process.

It is important that agricultural domain to be competitive and efficient from economical point of view, to satisfy consumers needs and preserve environmental protection and resources. Together with ecological aspects and social equity, the sustainability of agriculture is based on economic feasibility. This economic dimension is limited to measuring financial or monetary profitability. The economic sustainability of agriculture is seen in terms of producing enough for self-sufficiency and/or to generate an adequate income.

Economic analysis is often limited to measuring performance in terms of costs and returns: costs and expenses need to be reduced, while higher yields and higher prices ensure higher returns. Sustainable agricultural practices are expected to be competitive, that can be realized by focusing on the specific competitive advantages of each region.

To develop a sustainable farms have to focus on: soil fertility and climatic conditions; farms dimension; distance from markets; contamination with pesticides or nitrates; field dimension in comparison with lawn dimension; space between stables and buildings; solid and liquid refuse; crops rotation; the existence of biological processes and of organic production; labor availability; financing level.

We could define sustainable farms like being those who:

- Use efficient and complexes managerial techniques which assure ecological integrity of the environment and consumers;
- Are properly for an area in accordance with soil and climate and assure a certain relationship between offer and demand, so that these are very flexible;
- Farms dimension has to be in accordance with farms specific and applied technologies in order to be competitive;
- Keep the biodiversity, landscape beauty and other goods which can not be assessed on the existent market;
- On long term are profitable and economically efficient offering sufficient incomes for the farmers.

Sustainability indicators have to be able to appreciate the measure which sustainable agriculture objectives are integrated into the European

policies. We have to analyze these indicators taking into account few criteria such us: conceptual stability; political relevance; properly definition; statistical stability; analytical stability or cost-efficiency relation.

Moreover, those indicators have to be simple, easy to analyzed and explained, to be more useful in the decision making process. Indicators system in farms sustainability analysis has to take into account not only the economical dimension of sustainable agriculture, but also the social dimension of sustainable agriculture and rural development.

Also, important is the nature of farms activity and the farms analysis level in order to use the specific indicators depending on: nature and content of the farms activity (vegetable sector: crops, vegetable gardening, fruits growing, wine growing; breeding; others sectors: mechanization, chemicals); production and labor process organization.

The main indicators used in sustainable farms analysis are presented below.

Indicators which reflect the economical and financial results. The general framework of International Accounting Standards classifies economic and financial results into the following categories: rate of turnover; added-value; benefits: operation results, financial results, current results (operation and financial results), and extraordinary results. Benefits are presented at their net value that is obtained after deducing expenses from revenues; net profit; fiscal benefit.

Indicators which reflects economical efforts named economic-financial expenses indicators such us: cost of operation; financial expenses and extraordinary expenses; fixed and variable expenses, direct and indirect expenses; personnel expenses, loan expenses, investment costs; average costs

Economical efficiency indicators include most of financial ratio. Financial ratios are useful indicators of a farm's performance and financial situation. Most ratios can be calculated from information provided by the farm financial statements and can be used to analyze trends and to compare the farm's financial to those of other firms.

More important are: efficiency rate of fixed means (this is a ratio calculated using a results indicator like added-value, sales or profit reported at fixed means); efficiency rate of working capital; speed of working capital; labor productivity; efficiency rate of expenses; profitability ratio and

profitability categories: gross profit margin, return on assets, return on equity.

Environmental protection (pollution) indicators in sustainable farms

- Polluted land weight on total agricultural field;
- Ecological used land weight on total agricultural field;

Sustainable farms efficiency indicators are important to be taken into consideration when we analyze a sustainable farm, such us: total incomes from sustainable agriculture; assets productivity; labor productivity; land productivity; energy efficiency; financial independence; quality of production; financial stability; financial pressure; penalty expenses weight because of braking standards and rules about pollution; investments weight to improve agricultural products quality; quality standards achievement.

Understanding the economic dimension of sustainability means recognizing the advantages or disadvantages of agricultural practices in terms of costs and incomes (efforts and effects), as well as considering the relationship they have with environment, the impact on the natural resources and on human health and well-being.

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LUCRĂRI ŞTIINŢIFICE, SERIA I, VOL. IX(2)

THE MANAGEMENT OF IRRIGATION SYSTEMS

MANAGEMENTUL SISTEMELOR DE IRIGAŢII

A. GAVRUTA*, L. SAMBOTIN, P. FAZAKAS

The irrigation is a technical agricultural means used for the controlled administration of water for plants and soil, with the aim of obtaining higher and constant yields. From technical point of view, the irrigation activity ***is regarded as management of providing*** *the necessary resources for* ***crop yields****. In this* ***regard****, the* ***main source resides in*** *irrigation water. In Romania, the irrigation is of a complimentary type, i.e., through irrigation it is offered an extra quantity of water in addition to* ***rain-fed supplies****.*

Keywords: *Elements of irrigations regime, water distribution methods, irrigation techniques, surface drain, aspersion, drops, submersion*

The notion of management came into being in the 18th Century, in the same time with the Industrial Revolution. At the beginning, management meant the rational organizing and competent co-ordination of human groups within the production activities. As a science and concept, the bases of management were laid by American and French engineers.

The American pragmatic spirit includes, in the management concept, the totality of leadership activities, of all the members of the technical personnel, and the production process, the insuring of the information flux, and the exercise of the decision-making act.

Currently, management is perceived as a means of organizing change, of passing from older patters to newer, more efficient paradigms, able to insure the increase of work efficiency. The work efficiency is the source of performance, but its basis is formed by engineering know-how, and in this particular case (i.e,, irrigation system management) agricultural engineering. The bet known five [attribute constitutive] of management are:

- to foresee
- to organize
- to co-ordinate

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- to dispose
- to control

Water as a natural resource in the agricultural production; elements of technical management

The water, as means in the agricultural production, is practically a free natural resource; nonetheless, its capture, pumping, abduction, distribution, and irrigation, involve considerable cost. This issue is the object of the discussions regarding the motivation and opportunity of irrigations. The new concept regarding irrigations is one that says that irrigation is applied in order to increase the agricultural yield two-fold or three-fold. Romania holds 3.2 million hectares laid out for irrigations, being among the top four European nations – together with Italy, France, Spain – regarding the established surface. This issue is not to be neglected, being known that these arrangements lay on the most fertile soils.

Prior to 1989, Romania had a State agriculture, centralized, and these developments were conceived, drafted and executed as such:

- Large agricultural units;
- Large irrigation plots – in the order of tens of thousands of hectares;

The new climate after the 1989 Revolution concerning the real estate ownership and the agricultural exploitation ways generated a series of transformations, sometimes unwanted, especially from the irrigations point of view. Certainly, all the elements – such as crop rotation, crop rotation, crop structure, choice of cultivars and appropriate hybrids for irrigated culture, soil practices, crop maintenance practices during vegetation, the application of crop control treatments – are components of the technical management, i.e., the agro-technical side of irrigations.

The pumping, distribution, pressurization, and the application of watering are the elements of the hydro-technical side of the irrigations.

Currently, a number of technological improvements, rehabilitation and refurbishment works of the irrigation systems are being performed. The financing of these works is partly from the State budget, and mostly from the European Union; all these works are being performed in parallel with the adaptation of the irrigation systems at the current conditions.

A general rule in order to abide to all the requirements imposed – the territorial organization which must be done in the same time with the aforementioned works, of restoring the irrigation systems. Thus, it is assured

the application of modern technologies, the prevention of soil degradation, through swamping and secondary salinization, the increase of the performance of the agricultural devices.

As irrigation means, sprinkling is used in about 80% of the cases, and the soil surface irrigation has a percentage of about 20%. In order not to take much soil out of the agricultural circuit, the irrigation dams provide installations with removable pipes for water intake of the from irrigation dams. . This way, the temporary canal network that has to be done on a yearly basis is no longer necessary, and therefore the efficiency of watering is increased.

In Romania, in case of field crops, the irrigation norms were established between 300 and 600 cubic meters to the hectare – depending on the depth of plant root system. The irrigation schematics for the soil worked crops place the irrigations for the months: June, July and August, when the water consumption is at its maximum level. For the corn, which has the biggest percentage in the irrigated areas, two to four watering sessions are given, depending on plant needs.

The management of irrigations and the new trends in this area.

In Romania, the irrigation activity is administrated by the ANIF and SNIF (National Administration of [Soil Improvement] and National Society of [Soil Improvement]). The SNIF provides services for the ANIF, having territorial branches.

Currently, the exploitation activity is taken over by the AUAI (The Association of Irrigation Water Users) – that is, the representatives of the beneficiaries. These organizations sign a contract with the ANIF and benefit of a certain number of facilities on the water costs.

The new tendencies in the irrigation field are focused towards the sustainable agriculture and the use of renewable energies, and especially towards the precision farming.

In Europe, many countries such as Germany, Spain, Denmark, Italy, The Netherlands and Austria followed the North American developments in wind-powered irrigations. In Germany, in the Westphalien Land, there are 65 wind-powered devices that feed with electrical energy and water 50,000 farms and households.

In Romania, the utilization of wind power in irrigations is in the stage of an ongoing project. There are already places in the Danube Delta (Sfantu Gheorghe), Constanta (Pallas), and Brasov.

In this field, it is ongoing the formation of a consortium with partners from various fields. The national plan of [using] wind power in irrigations involves complex studies , bearing in mind the pluviometric regime, very different from one zone to the other, i.e., the agro-climate deficit, as well as the compensatory irrigations need.

Currently, the intensive farming justifies the supplementing of the water intake through the introduction of wind-powered irrigations.

The management of irrigation systems from SCDP Baneasa Research Station for Fruit tree species Development is conceived as a sustainable one, belonging to the club of the most evolved ones on the European level.

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THE MAIN CHARACTERISTICS OF UNEMPLOYMENT IN TODAY'S EUROPE AND UNGARN

CARACTERISTICILE PRINCIPALE ALE SOMAJULUI IN EUROPA DE AZI SI UNGARIA

GABRIELLA SZÓNOKY ANCSIN*

The present work is discussing one of the most important assets of the modern economies, namely the characteristics of unemployment and the major problems related. Although this economic phenomenon is affecting the whole of Europe, its degree and characteristics are significantly varying from region to region. There is a marked duality observable between the older and new members of the EU regarding this question as well. The present paper is giving an overview of the major characteristics of this duality.

Theoretical approach

According to László Gulyás (2005) „Unemployment turned into a mass social phenomenon in the world only when mass capitalism became prevalent. An unemployed person is a regular wage-earner prevented from working, i.e. unable to get a work assignment despite his best efforts to get one. „

Long-term unemployment generally leads to the emergence of poverty, which may also lead to social isolation. On the other hand, poverty also results in the negative development of a number of concomitant social phenomena such as education, income, expenditures, health, work force market, and the protective social web. In a socialist system, thanks to the presence of the socialist protective web, unemployment was a relatively unknown social phenomenon. This notion was used only in the factories referring to a special case, when the job of a single employee was carried out mutually by several workers. From the 1980s onwards, within these former socialist countries unemployment turned up outside the factories as well, parallel with the gradual appearance of capitalist production type. The

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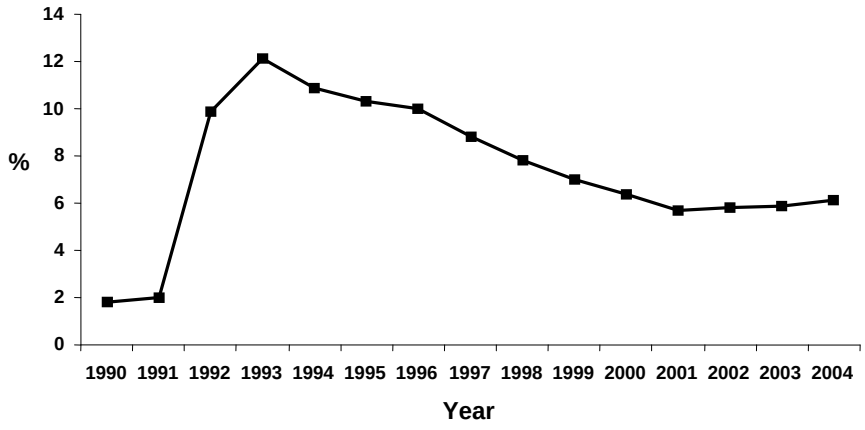
unemployment rate increased above 10 % during the years of transition within these countries. Then with capitalism gaining a stronghold in these regions, a minor drop in the unemployment ratio was also observable. This process is clearly observable on Fig.1, depicting the variations in the number of unemployed persons in Hungary for the past decade. There are three models dealing with the possible treatments of unemployment available in the literature: an American, a Japanese and a European model (GULYÁS 2005). In the European model, the state actively takes part in the formation of work force policies, providing subsidies to the unemployment giving them both material and ethical support for a successful startover in the labor market. The new EU member countries also tend to adopt this model, and the above mentioned policies. There are several subtypes or variants of this so-called Western European model. The most important of these are the German, Danish, Swiss and French subtypes.

One of the major tasks of the labor force policies of the EU is the complete elimination of unemployment in the economies of its member countries. In order to achieve this mutually beneficial goal, the member countries develop their individual National Action Programs year



Source: KSH
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Fig.1. The unemployment ratio in Hungary (1990-2004)

by year, discussing the aims and task attainable. These NAPs are always in accordance with the policies included in the Employment Guidelines of the EU. One of the major goals of the EU is to ensure 70% employment rate by 2010 in its member countries (Table. 2.).

Unemployment

As the 1999 report of Employment in Europe reads there was a significant, yet not sufficient decrease in the number of unemployed persons in the EU during the past 20 years. There were two peaks during this period; i.e. at the beginning of the 1980s and 1990s (Fig. 3.). In Western Europe, the majority of the unemployed are young, most of them under the age 20. These people generally represent a group with a high school degree but lacking any professional training, hampering their successful employment. The highest unemployment ratios are observable in Spain, Greece, France and Italy. Conversely, in some other member states this value is so low, that one can almost talk about full employment here in a classical sense. These are e.g. Austria (3.7), Holland (3.3) and Luxemburg (2.3).

In Hungary, and the other former communist member states the peak unemployment period was the beginning of the 1990s (over 10%), when the rest of Europe had its minimal values. This peak period was followed by a slow decrease lasting for several years from the mid-1990s, continuing into another slow rise from 2000. The number of young unemployed is also very high here as well, similarly to Western Europe. This is especially true for the ones below the age of 20. The number of employed female workers is also very low. Furthermore, there are a lot of unemployed professionals, most of them being fresh graduates. The number of employed pensioners is also very low (Fig. 4.).

There are also large differences observable in the spatial structure and distribution of unemployment in Hungary as well. The most affected regions are the counties of Borsod-Abauj-Zemplén (17,7), Szabolcs-Szatmár (17,2), Nógrád (14), and Hajdú-Bihar (12,4). The regional differences has intensified for the past 20 years. The areas with a beneficial geoeconomic position during the years of transition are the least affected today. The remaining regions experiencing a crisis during the same time are the hardest hit in this question (LAKY 2003). All this seems to indicate a long-term preservance of the regional differences of unemployment in Hungary. Most likely there will be no positive changes in this issue in the near future either.

	2001		1997		EU goal
	EU	Hun.	EU	Hun.	
Employment rate	**63,9**		**60,5**		**70** (The goal accepted for 2010 at the Lisabon convent)
Employment rate for workers aged 55-64	**38,5**		**36,3**		**50** (The goal accepted for 2010 at the Stockholm convent)
Ratio of employed female workers	**54,9**		**50,6**		**60** (The goal accepted for 2010 at the Lisabon convent)
Increase in the GDP	**1,6**		**2,5**		**3**

Hun. = Hungary
EU = European Union

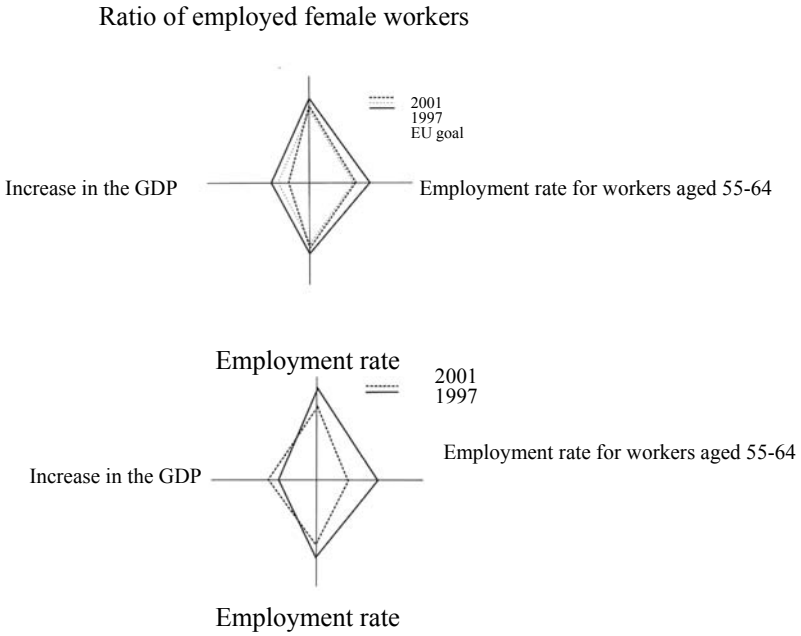

Fig.2. The employment policy of the EU compared to the labor force characteristics of Hungary

Source: Draft Joint Employment Report 2002, 14. pp.
Edited by: Gabriella Ancsin Szónoky

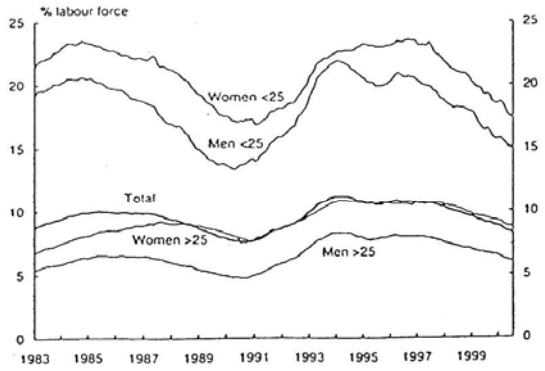

Fig.3. The unemployment ratio regarding the sex and age of the registered unemployed for the EU (1983-2000)

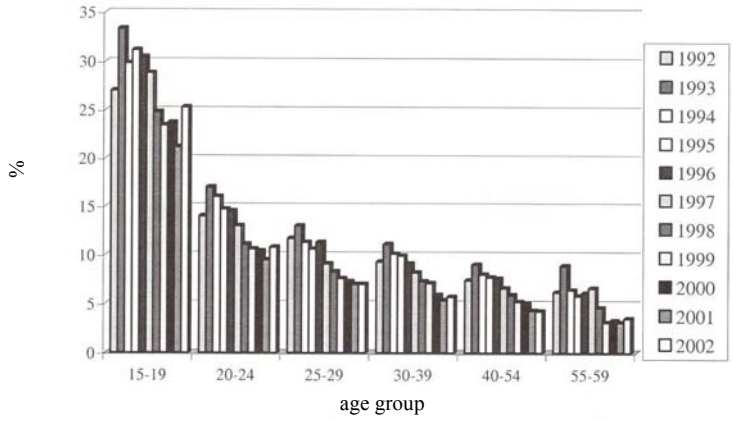

Fig.4. The distribution of unemployment within the individual age groups in Hungary (1992- 2002)

Source: Teréz Laky 2003.

below the age of 20. The number of employed female workers is also very low. Furthermore, there are a lot of unemployed professionals, most of them being fresh graduates. The number of employed pensioners is also very low (Fig. 4.).

There are also large differences observable in the spatial structure and distribution of unemployment in Hungary as well. The most affected regions are the counties of Borsod-Abauj-Zemplén (17,7), Szabolcs-Szatmár (17,2), Nógrád (14), and Hajdú-Bihar (12,4). The regional differences has intensified for the past 20 years. The areas with a beneficial geoeconomic position during the years of transition are the least affected today. The remaining regions experiencing a crisis during the same time are the hardest hit in this question (LAKY 2003). All this seems to indicate a long-term preservance of the regional differences of unemployment in Hungary. Most likely there will be no positive changes in this issue in the near future either.

Conclusion

In the former communist member states of the EU unemployment ratios experienced a contrasting trend compared to the states of Western Europe. This contrasting trend can be linked to the different social and economic development of these countries. In order to effectively reduce the number of unemployed in Hungary in the future, the local government must gain a wider role in this issue along with the beneficial work of some other civilian organizations. The major tasks of Hungarian employment policy are the increasing involvement of the young, old and female workers in the active work force, and the gradual elimination of the regional differences.

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