ON SOME LEGISLATIVE ASPECTS OF MANAGING AND PRIVATISING LAND STOCK IN ROMANIA AND FRANCE (A COMPARATIVE STUDY)

ASPECTE LEGISLATIVE ALE ADMINISTRĂRII ŞI PRIVATIZĂRII FONDULUI FUNCIAR ÎN ROMÂNIA ŞI ÎN FRANȚA (STUDIU COMPARATIV)

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This paper presents the analytical results of one of the most important criteria to reach in order for Romania to access the EU: ***legislative compatibility and correspondence between Romania and European countries****, as far as the* ***legislation in the field of privatising agriculture, of the management of the land stock, and of rural management and development*** *meant to harmonise Romania's agricultural structures with EU ones. In order to reach this objective, we analyse legislation from the point of view of privatising agricultural establishments, and of rural management and development, comparing France and Romania, and particularly legislation regulating the management and functioning of land stock managing structures in the two countries.*

Key words: *getting compatible and concordant from a legislative point of view, Community acquis, degree of getting compatible, degree of absorption of Community acquis, SAFER, ADS, and rural development and management.*

Common agricultural policy (CAP) of the EU has been one of the basic supports of the building of economic Europe, steadily improving starting with the provisions of the Treatise of Rome (1957) and up to the

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present form of the CAP – Agenda 2000 and the Agreement of Luxembourg (2003). Any candidate nation, including Romania, should meet the criteria presented at the European Summit in Copenhagen (1993) allowing accession to the EU in 2007, established by the European Council and contained in three important chapters, as follows:

- **political criteria**: stable institutions that guarantee democracy, government by the law, human rights, and respect and protection for the minorities;

- **economic criteria**: a functional market economy, the capacity of facing the pressure from competition and from the internal market of the EU;

- **criteria concerning the absorption of the Community acquis**: adopting national legislation in agreement with EU legislation, accession to political, economic, and monetary Community goals.

The practice of accession to the EU in successive steps of the 15 countries, including the last 10 states in May 2004, showed that one of the most difficult brief of integration is the **agriculture brief**, and more precisely, Chapter 7, "Agriculture and rural development". The explanation for this difficulty, particularly in the case of ex-communist nations, is both in the adaptation and getting compatible agricultural structures, and in developing and consolidating an agricultural market compatible with Community's agricultural market. This is why the EU insists on the need of developing and consolidating a functional market economy in each candidate nation.

Romania's main objective nowadays is its accession to the EU and its integration in the political and economic structures of the EU. Taking into account Romania's accession strategy, we should note that integration is not a conjectural, temporary operation, but an objective based on a set of performing criteria to fulfil until accession time.

In this paper we shall analyse the measure in which Romania, in general, and agriculture and rural development, in particular, reached economic performance criteria; we shall also analyse the measures to take in the agricultural domain to make it compatible with Community's acquis provisions.

Taking into account the evolution of the post-communist political and economic background, its features and particulars, the EU, through the Summit of the European Council in Helsinki (December 1999), took the

decision of starting accession negotiations with Central and Eastern European countries, including Romania. From that moment on, Romania has opened EU accession negotiation chapters, including Brief 7, **Agriculture and rural development**.

Bearing in mind that Romania's agriculture is in a deep, necessary, and compulsory process of restructuring, materialised in dissocialising (decomunising), decentralising, privatising, and developing European-like agricultural exploitations – a difficult, long-lasting, and troublesome process, after 40 years of communist agriculture – the necessity of intermediate programmes meant to support and prepare agriculture and rural area to access arose.

The goal of agriculture and rural space support and preparation programmes consists in minimising the shock, not only for Central and Eastern European countries, but also for member states. The support is meant to facilitate overtake and put into practice of Community's acquis, as well as the strengthening of the weakest rings of economic and social life. The present Preaccession fund is destined to this goal, a fund that the EU established for candidate countries from Central and Eastern European countries for the period 2000-2006 of about 3 billion € (price levels of 1999), an amount offered to eligible Central and Eastern European countries under the form of not-reimbursable assistance within 3 programmes:

1. SAPARD (Special Accession Programme for Agricultural and Rural Development) – 500,000,000 €;

2. ISPA (Instrument for Structural Policies for Preaccession) – 1,000,000,000 €;

3. PHARE 2000 (Poland and Hungary Assistance for Restructuring the Economy) – 1,500,000,000 €.

The SAPARD Programme supports agriculture and rural development in order to overtake and manage common agricultural and rural development policy of the EU. Through the ISPA Programme, they finance the development of infrastructure and the protection of the environment, and the PHARE 2000 Programme facilitates the adoption of community acquis. These programmes aim at preparing the accession of candidate nations and, at the same time, they spread the system of assistance of the EU, speeding up the development of in institutional system that ensure the functioning of assistance systems in pre-accession nations.

Rendering compatible and making Romanian legislation concordant with European legislation within the community acquis is a first requirement of juridical nature and the most important one from the point of view of Romania's accession to the EU.

Rendering legislation compatible and making legislation concordant, according to research in the field[3], can be analysed with the help of two indices: **degree compatibility** ($0<K_C>1$), where $K_C= 0$ – incompatibility, $0<K_C<1$ – partial compatibility (with several values over the domain [0-1]) and $K_C=1$ – total compatibility; and **degree of adoption of community acquis** ($0<K_T>1$), with the same values and significations as in the case of K_C.

The authors of the study mentioned above (1) have assessed for Chapter 7 "Agriculture and rural development" $K_T=0.55$, $K_C=0.635$, which represents, if we take into account the size of coefficients, an important step forward made by Romania towards rendering its agricultural legislation compatible.

To see if the authors' point of view is correct or if it is only covered statistically, we shall analyse here: (a) **the way in which they regulated the management of land stock and of forestry in order to manage and develop rural areas in France and Romania** (a case study), and (b) **the rendering compatible of an essential domain of agriculture – privatising state agriculture**.

We could consider on a similarity basis that the French structure corresponding to the Romanian ADS is the SAFER (Society for the Management of Land Stock and Rural Development).

There is no such thing as a land stock management society in France, but there are several such societies, as they are established according to anonymous society acts, over a certain area of activity, and based both on general regulations concerning commercial firms and on their own statuses.

The SAFER can be developed in order to buy agricultural or forestry land or free agricultural or forestry exploitations sold by their owners, destined to be re-sold after having been managed or re-organised, by increasing their areas, by concentration of plots, by land stock management etc. As one can see in the previous text, which can be found in the act concerning the organising and functioning of a SAFER, these societies are not real estate agencies. Though the societies buy agricultural and forestry land as well as agricultural exploitations, their main function is to manage

and re-organise exploitations by increasing their areas, by managing and equipping the land in order to turn them into new agricultural exploitations whose size and equipment make them profitable. After having been managed and re-organised, these agricultural exploitations are to be sold, mainly to young agriculturists.

The Act n^0 80-502/1980 concerning the management and technical equipment of rural areas stipulates in the first article that, "economic management and development of rural areas is a main priority in managing the land. This is why, in order to put into practice rural management and development policies, the Act stipulates the following:

1. favouring the use of all natural and human resources (potential) in rural areas;
2. maintaining and developing agricultural production in correlation with non-agricultural activities;
3. ensuring balanced distribution of different economic activities that contribute to the development of rural areas;
4. using the whole rural labour force of the habitat;
5. encouraging plural activities in rural areas, in which maintaining economic activities is essential;
6. developing services in rural areas.

French rural policy has special programmes for revitalising mountain agriculture and disadvantaged areas. Mountain agriculture in France, by plural activities, the use of labour force, the maintenance and conservation of soil, the protection and embellishment of landscape is a general interest activity, and a basic economic activity for mountain life. Taking into account the natural handicap of mountain farms, they need special support programmes for economic activities, particularly agricultural ones, such as dairying and pastoral activities, by investment financing programmes, by consultancy, extension, and technical assistance activities, particularly in agri-tourism and in mountain sylvo-tourism.

The fundamental legislative instrument in the development and management of rural areas is the Act concerning the development, organising, and functioning of **societies of land stock management and rural development (SAFER)**.

The main functions of SAFER, as stipulated by the law, are the following:

1. Employing, re-employing, and maintaining agriculturists on farms;

2. Increasing existing exploitations up to four times the minimal initial area, improving plot distribution, improving economic balance;

3. Safeguarding the family character of agricultural exploitations;

4. Fighting against financial speculations;

5. Preserving existing viable exploitations;

6. Valorising and protecting forests.

It is obvious that SAFER plays an important role in the policy of establishment of privately-owned agricultural exploitations, equipped and modernised, on which to settle, as a general rule, young agriculturists, capable of practicing a performing agriculture of the commercial type.

During the transition period of economy (i.e., rural economy) to a functional market economy, it is vital for this process to be successful to practice the economic policy of the State through reformation laws and their application.

Among the legislation instruments of rural transition, the following are of maximal importance:

1. The Act n^0 18/1991 of land stock;

2. The Act n^0 55/1996 for speeding up privatisation;

3. The Act n^0 1/2000 for the re-constitution of ownership right on agricultural and forestry lands;

4. The Government's Ordnance n^0 198/1999 for the privatising of commercial firms that administer agricultural lands or natural bodies of water;

5. The Act n^0 268/2001 for the privatising of commercial firms that administer publicly or privately owned lands;

6. The Act n^0 213/1998 for publicly owned property and its judicial regime;

7. The Act n^0 7/1996 for cadastre and real estate.

The law for the privatising of commercial firms that administer publicly or privately owned lands with agricultural destination and the establishment of the Agency of the State Domains through which they adopted the G'sO n^0 198/1999 as well as the Act n^0 268/2001 are the main legislative factors of the former SAEs.

The laws aim, according to art. 1, at regulating:

a) the judicial frame concerning the privatising of commercial firms detaining agricultural lands according to the Act n^0 15/1990;

b) the establishment, organising, and functioning of the Agency of the State Domains, a public interest institution;

c) the management of commercial firms and the regime of concession or tenancy of publicly and State owned lands exploited by them.

As a consequence, the institution that is supposed to privatise commercial firms in agriculture (the ex SAEs) is the Agency of the State Domains, under the patronage of the Ministry for Agriculture and Rural Development, i.e. under Governmental rule.

Agricultural lands publicly and State owned are formed of the agricultural lands of the ex-SAEs, as they resulted from nationalisation,, expropriation, and/or confiscation of lands from ex-owners after the Act n^0 187/1945 for agricultural reformation was applied, and of other regulations during the communist era, as well as from agricultural lands administered by institutes, agricultural research institutes, universities of agricultural science, agricultural high-schools, and rural area schools. The agricultural area of the publicly and privately owned domain is about 900,000 ha, of which 800,000 ha State owned and administered by agricultural commercial firms. Commercial firms detaining 800,000 ha are undergoing, in accordance with the laws previously mentioned (passed for the first time under the rule of I. A. Mureşan, Ministry supported by the PNŢ-CD, and amended in 2001, under the rule of I. Sârbu, supported by the PSD) a privatising process.

We shall underline, first, the fact that the privatising of the ex SAEs was a difficult, slow, uneconomic process. In the 14 years after the Act of land stock was issued (February 1999), none of the governments in rule really wanted to privatise the SAEs, transformed by the effect of the Acts n^0 15 and 31/1990 into State owned commercial firms.

The Act n^0 55/1995 concerning the speeding up of privatising exonerates from privatising agricultural commercial firms, the laws stipulating that they are going to be privatised as a result of a new Act.

At the end of 1999, the Government adopted the G'sO n^0 198/1999 for the privatising of commercial firms administering agricultural lands or natural water bodies, adopted as a law in 2000 and substantially amended by the Government installed in 2001 through the Act n^0 268.

1^0. It is necessary to underline that both laws (G'sO n^0 198/1999 and Act n^0 268/2001) stipulate a **partial privatising** of commercial firms in agriculture. This concerns the privatising of commercial firms' actives, the land remaining in the possession of the State, while the right of property prerogatives belong to the Agency for State Domains (ADS).

He who buys stock or actives of the commercial firms has a right of pre-emption on the concession of the land from the ADS.

2^0. In order to survey the compatibility degree of the legislation in the field of privatising agriculture, managing land stock in Romania and in France, we present below the attributions of ADS and of SAFER.

Attributions of ADS (Act n^0 268/2001)	Attributions of SAFER (Law n^0 933/1962)
a) exerting in the name of the State the right of ownership on agricultural lands belonging to the State; *b) managing and exploiting efficiently State patrimony, whose owner it is, as well as privatising commercial firms mentioned under art. 1 and 2;* *c) administering agricultural lands in public and State property and exploited by national societies, institutes and research and agricultural production centres, and agricultural and forestry education institutes;*	***Art. L 141-1*** *Land stock management and rural development societies with social capital whose public communities can fully participate, gather to purchase both lands, agricultural and forestry lands sold by their owners, and uncultivated lands destined to be given back after a certain management. These societies aim at increasing the area of certain agricultural or forestry exploitations, facilitating land preparation for cultivation, establishing or maintaining agriculturists on exploitations and plot improvements.* ***Art. L 141-2*** *Under the reserve of the provisions in art. L 121-16, land management and rural development societies can carry out any study concerning land management or valorising the land or associated to similar works. Within agreements, these can first towards rural land management mentioned under art. L 121-1.* ***Art. L 141-3*** *Land management and rural development societies can also lead operations destined to facilitate land, building, or*

d) conceding or lending agricultural lands belonging to the public or to the State and exploited by national societies, institutes and research and agricultural production centres, and agricultural and forestry education institutions; *e) conceding or renting goods, activities, and public services administered by the Ministry for Agriculture, Food and Forests.*	*exploitation conversion to non-agricultural usages, both to favour rural development and to protect nature and environment.* ***Art. L 141-4*** *Land management and rural development societies can equally converge towards the development of licensed forest management union associations. Plots with wind shields from the perimeter of associations or from forest land management projects shall be given back to their owners.* ***Art. L 141-5*** *Land management and rural development societies can under lawful conditions contribute technically to area communities and public institutions in their perimeter, to put into practice land operations and, in particular, pre-emption rights whose owners are the communities or the institutions. In mountain areas, these societies can intervene in the field of uncultivated or obviously under-cultivated lands in accordance with the conditions stipulated under art. L 125-8.*

As one can see, there is no compatibility between the two structures as far as their attributions are concerned. If we take into account the fact that Romania's ASD is, according to art. 4 of the Act n^0 268/2001, "a **public interest institution** with judicial personality with financial and commercial character established from extra-budgetary sources, **under the rule of MAPDT**", i.e. a **structure under the rule of the Government**, and the SAFER in France is a commercial firm established in order to purchase land or agricultural or forestry lands from owners of uncultivated lands in order to improve, divide them into plots, equip, and re-sell them, i.e. a **private structure**, speaks about the huge discrepancy, the full incompatibility of Romanian legislation in the matter, compared to French legislation and, implicitly, to the EC one.

Even if we stick only to legislation concerning privatising, management, and rural development, related to ADS and SAFER, we can see the necessity of adjusting as soon as possible Romanian legislation.

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5. **x x x** - Legea nr. 268/2001 privind privatizarea societăţilor comerciale ce deţin în administrare terenuri proprietate publică sau privată ;
6. **x x x** - Legea 213/1998 privind proprietatea publică şi regimul juridic al acesteia ;
7. **x x x** - Legea cadastrului şi a publicităţii imobiliare nr. 7/1996.

PARTICULARITIES OF THE DURABLE RURAL DEVELOPMENT IN THE MOUNTAIN AREA

PARTICULARITĂȚI ALE DEZVOLTĂRII RURALE DURABILE ÎN ZONA MONTANĂ

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The Romanian rural mountain area covers 7.4 million hectares, and includes 1 million private family farms and a signifcant livestock. The population living in the area is about 3.6 million inhabitants, of which 2.1 million are farmers.

In the first place, the economic reorganisation of the rural mountain area requires an increase in the financial resources that are necessary for the technological equipment of the agricultural systems specific of the area. Secondly, the increased financial resources will provide a modern infrastructure and will cover the household necessities.

Thanks to its human potential, the Romanian mountains are economically productive areas worth of special attention. The rural mountain area covers 7,400,000 hectares within the Carpathians boundaries, i.e. 31.15% of the national territory.

From the agricultural production perspective, the mountain area has the following characteristics:

a) the mountain land reserve is structured as follows:

- farm land – 41%, of which 71.5% natural pastures, 25.6% arable land and 2.7% vineyards and orchards;
- woods: 51%
- other destinations: 8%

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b) there are about 1 million peasant family farms that cover about 3 hectares;

c) the livestock includes 950,000 bovines and 2,700.000 ovines (according to the statistics in 1996).

The excellent productive potential of the rural mountain area has been a known fact since the communist cooperativisation times, when the output per unit (the product quantity per production unit) for several products (fruit, potatoes, cow milk, sheep milk and mutton etc.) was much higher than in the traditional production areas, as it should have been in the rural field regions;

d) there are about 821 localities with administrative representation, of which 92 towns and cities and 3,960 villages;

e) the rural mountain population is about 3,600,000 inhabitants, of which 2,100,000 are farmers; the average density is 48,6 inhabitants/km^2, lower than the national average — 94,7 inhabitants/km^2. Two aspects should be mentioned here:

- the density in the rural mountain area is 42,1 inhabitants/km^2, lower than the national average. This means that the area can produce a surplus of agroalimentary products that may be oriented towards the field regions or export;
- although not all the 2,100,000 rural mountain inhabitants — who make 9,33% of the country's population — are grown-ups, they are all capable of working. They represent a significant potential that if used reasonably could lead to the necessary framework for the economic stimulation;

In our opinion, the economic stimulation of the rural mountain area implies first of all an increase in the financial resources that are necessary for the equipment that the technological progress requires. Only after this increase has become obvious could we think about an increase of the consumption necessities. In other words, there must be a balance between the share of the newly established financial resources that is directed towards self-development and the one directed towards self-consumption.

Like the whole population of the country, the rural mountain inhabitants should understand the necessity to increase the share of the newly established financial value dedicated to self-development. If the population as a consuming entity does not understand that this is absolutely necessary especially during the economic reorganisation period that

Romania has been going through for a long while, than the political, administrative and party leaders must persuade the consuming masses that the resource volume for self-development should be increased by all means. This has not happened so far and for the past thirteen years we have made no progress at all in this direction.

The rural mountain area management is not adequate for the training of the human resources that are to be used in the economic activities that characterise this area of maximum productivity.

In this respect, the research work dedicated to the rural mountain areas has developed a number of programmes that include measures regarding education, training, research and advertising such as:

- the development of the education specific to the mountain area. The educational system must meet the mountain life realities. Consequently, primary schools and 2-3-year vocational schools with a special programme should be opened. A handbook on mountain rural economy should be elaborated as the fundamental book of the people who live in the mountains;
- training programmes for specialists and young farmers;
- diversified mountain research work mainly in the filed of biotechnology, economy and sociology;
- people should become aware of the role the mountain areas play in the national and regional economy, the precarious resources, their durable usage, the impact of the climate changes, the biodiversity preservation, the protected area management, the durable mountain economy.

The rural mountain area has special facilities meant to promote, expand and develop the rural mountain tourism that generates financial resources for the programmes that concern the durable rural mountain development.

Under these circumstances, the only solution is the durable development, a concept that has become an ideal of the 21st century.

Gheorghe Ionascu is but right to hold that durable development in general, and its rural mountain development component in particular is the path that leads to mankind's future and can provide environment protection and real opportunities for the next generations.

As for globalisation, the mentioned author holds that "There are no passengers on the ship called Earth, we are all part of its crew."

The World Conference at Rio has had a strong impact on the durable rural development. The Summit at Johannesburg launched a Plan for the implementation of durable development whose three components — economic development, social development and environment protection — should be applied. Chapter 40 of the Johannesburg Plan deals with durable development in the rural mountain area.

As a whole, the means the rural mountain population needs for living come from inside the mountain ecosystems. These have a unique flora and fauna diversity and are subjected to the adverse effects of frequent climate changes; that is why they require special protection measures at all levels, such as:

1. Special programmes and strategies that should integrate organically the economic, social and ecological components of the durable development in the rural mountain area. These programmes and strategies should be formulated so as to consolidate international co-operation for poverty eradication especially in the developing countries;
2. Programmes should be elaborated and implemented in order to avoid or limit deforestation, soil degradation processes, biodiversity loss, watercourse deviation, changes in field uses etc. Essentially man must respect the current natural structure of the mountain area;
3. Programmes and strategies should be elaborated to stimulate investments, small and middle-sized business, companies with immediate positive effects on removing the inequalities that the rural mountain communities have to cope with. The investments must be promoted mainly in the disfavoured regions where the living standard is under poverty limits.
4. Programmes and strategies should be elaborated to lead to the diversified economy in the rural mountain area. This is favoured by the biodiversity of the mountain space. The small and middle-sized enterprises that process primary agricultural and forest products should be developed primarily.

The insufficient processing of wood resulting form forest works has been discussed a number of times. It is common knowledge that work add to the value of processed products. The more a products results form prolonged and complex work processes, the more its value increases. A

higher processing degree generates high commercial value. The investments materialised in small and middle-sized businesses do not require high financial funds. The efficiency of such businesses is reflected in additional jobs, high incomes for the rural mountain population, higher gross national product and dynamic economic life. All this has a positive effect on the life quality of the people who live in the rural mountain areas.

Within the mountain space, the forest component plays the dominant part. Consequently, we believe that wood processing should make the primary field of the small and middle-sized enterprises, followed by enterprises specialised in wild fruit and other auxiliary forest product gathering, packaging, storing and trading.

Last but not least is the need of small and middle-sized processors of animal products, mainly sheep and cow milk.

5. The elaboration and implementation of agrotourism, rural tourism and forest tourism development. The rural mountain area is the ideal framework for the development superior levels of such tourism forms, all integrated in what we call ecotourism. Ecotourism is a superior form of tourism that respects all ecological rules, mainly those that concern food, residence, habitat, recreational facilities etc. The rural mountain area has great potential. Superior services will obviously bring higher incomes that added to the previously mentioned measures will stimulate the economic and social life in the mountains.
6. The generalisation of ecological or biological vegetal and animal production. Thanks to its purity and specific technological systems, the rural mountain area is the ideal framework to promote the biological production for less money than in the traditional agricultural regions. It would be a pity not to increase the existing potential that the mountain areas provide.

No fertilisers are used in the rural mountain area. The required nutritive substances are taken from the natural soil reserves and maybe from organic fertilisation. Pesticides (fungicides, insecticides and herbicides) are not used either. Pest, disease and weed control is made through classical methods and means that are non-polluting and do not affect the bioecological quality of the agroalimentary goods.

7. The stimulation of the subsidiary principle. Every rural mountain community must be responsible with the level of the economic

and social life of the community. This responsibility involves the competencies that are necessary for the local decisional activities. The subsidiary principle supports the following saying: "neither authority without responsibility, nor responsibility without authority". In fact, who knows the resources in the rural mountain area better than the community itself? If this is the situation, then the rural mountain communities must be provided with the whole range of competencies that self-management requires.

8. The stimulation of the scientific research work with immediate applicability and the consolidation of the international support of the technological and financial assistance for an effective implementation of the durable rural development projects in the mountain regions and the mountain ecosystems in the developing countries or the transition economies. Also firm measures for poverty control in rural mountain areas.

Although agriculture in general and its vegetal sector in particular are not the strongest sectors in the mountain regions, the agricultural farm and the peasant household will remain the basic structure of the mountain habitat. In this respect, animal breeding, mainly bovine and ovine breeding, is better developed.

The peasant household of the integrated type is the basic economic nucleus in the mountain areas and performs several functions. It is the space where its owner lives and the tourists are put up. At the same time, the peasant household includes the spaces for production, animal breeding, primary animal product processing, agroalimentary product storing etc. The better developed such activities are, the wealthier the household. This is very important, as individual welfare stimulates general welfare. To be more specific, a prosperous peasant household can generate the prosperity of a whole mountain village.

The peasant household is the production microelement of the peasant's family in which work never ends. Each family member has precise tasks. The young are educated to respect work, while the husband and partially the wife manage the household.

The house is the central component of the mountain household. A mountain house embodies typologies and architectural features that individualise the area it belongs to.

The architectural typology is determined by the location (orography, alignment in the street, construction patterns), volume, proportion, building, finishing and covering materials, the colours and the architecture.

The architectural typology is a delimiting feature in the mountain regions. However, there are common architectural particularities that make the Romanian rural mountain area unique. These are the building materials (wood or rock), the roof (made of shingles, tile or more often sheet iron, as they are more resistant in the Aeolian climate), the colours (light and pastel colours), how the inside o the house is organised, how the house parts (the stables, the processing and storing rooms etc.) are arranged.

A constitutional element that creates a special bound between the mountain localities is the concept of preservation. How can one evaluate this concept? First of all, rural mountain preservation has positive connotations that are materialised in:

- unchanged customs sent from generation to generation. For hundreds of years, the same kind of music and culture has been preserved in large folk areas like The Apuseni Mountains, the Fagaras, Sibiu, Vrancea, Hateg, Caransebes or Almaj and many others;
- the mountain people have had the same occupations for generations. It is an element that helped individualising the most famous mountain regions, such as: *Rucar-Bran*, where life is based on animal goods especially cheese, agrotourism and rural tourism; *Sibiu*, where people have developed the cloth and wool clothing industry; *Caransebes* area is specialised in fruit growing (chiefly apples); the inhabitants of the *Apuseni Mountains* are specialised in wood processing, pails and barrels that the field people need; sheep cheese is the basic product in *Fagaras, Harghita and Semenic* areas; the distilled beverages produced in *Maramures* are famous both in the country and abroad;
- the folk costumes typology. Within the Romanian Carpathians boundaries, the female costume mainly and the male one have their peculiarities in every territory they delimit. The costume worn in Fagaras and Sibiu is based on two opposing colours: black and white. Other areas use many colours, but red prevails;
- maybe the most obvious peculiarity of the rural mountain preservation is the ancestral tendency to preserve the natural

environment unchanged, as it as in their ancestors' times. Here are some examples. The daffodil glade in the Fagaras Mountains is endangered when people who live in cities come to admire the lovely flowers at the beginning of summer. It is them who leave cans and bottles behind, not the locals. Some mountain rivers are polluted as a result of the industrial activities performed by others than the locals (Aries and Zlatna are two famous examples). Nobody has heard of mountain areas in which pollution results from the activities that the inhabitants perform. On the contrary, we can say for sure that the specific rural mountain activities have always been oriented towards preserving the environment unchanged.

Based on the above mentioned facts, we believe that in the current period the rural mountain area rehabilitation must pursue the following objectives (Figure 1):

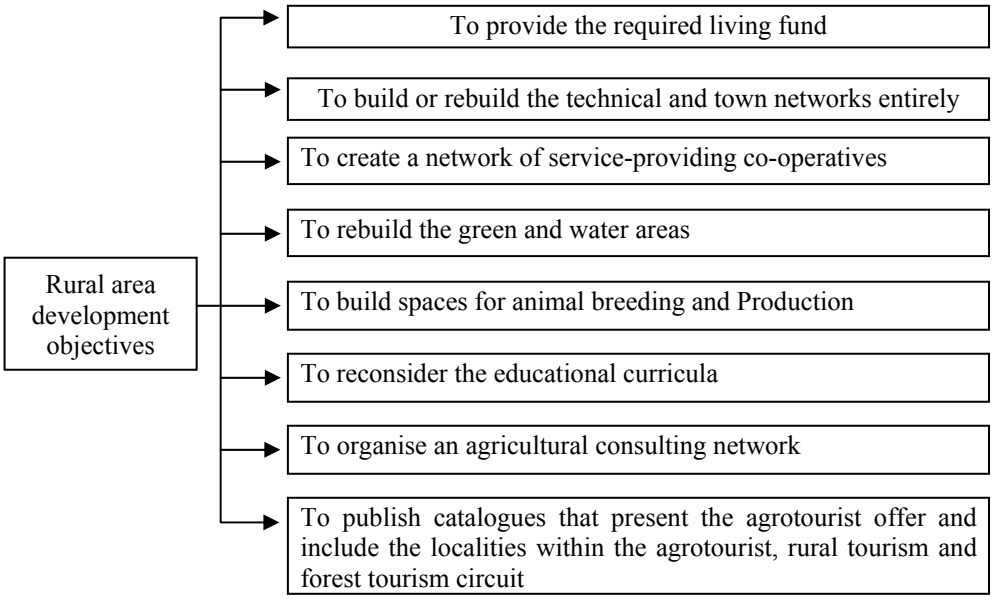

Figure 1. Rural area development objectives in the mountain area of Semenic

a) to provide the necessary living fund by renovating the existing buildings and erecting new ones that should be comfortable inside and have an adequate exterior aspect. At the same time, they must respect the mountain architecture;
b) to build or rebuild the technical and town networks entirely: water, power and gas supply, sewerage, roads and telephone networks for the traditional and modern telephony;
c) to create a network of co-operatives that provide services for the rural mountain population, including sanitary and sanitary-veterinarian services;
d) to rebuild the green and water areas so that the mountain localities should be naturally integrated within the mountain environment;
e) to build spaces for animal breeding and production and provide the minimum mechanisation level for animal watering, feeding, milking, sanitary-veterinarian protection etc.;
f) to reconsider the educational curricula of the primary education grades and reorganise the vocational schools so as to meet the rural mountain economic requirements;
g) to organise an agricultural consulting network for young farmers and use the knowledge of experts in mountain social and economic nature;
h) to elaborate and promote methods of including the family households in the domestic and international agrotourism circuit, by publishing catalogues that present the agrotourist offer, the mountain localities, evaluate the houses and classify the households according to international standards in order to define options based on preferences and prices. In this way the rural mountain localities will maintain their place within the circuit of public values and will contribute to the development the rural agro- and forest tourism. These forms of tourism derive from the basic economic activities and generate additional incomes that add to those obtained in the agricultural, vegetal and animal breeding sectors in the mountain regions.

Given the crisis in the resources required by the social and economic development in the rural mountain environment, the projects concerning the

rehabilitation of the mountain localities must be supported financially both local resources but chiefly with national and community resources. Otherwise these projects will remain a nice rural mountain dream.

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PRODUCTIVITY AND EFFICIENCY IN THE ROMANIAN AGRICULTURE

PRODUCTIVITATE SI EFICIENTA IN AGRICULTURA ROMANIEI

I. FRUJA *

The adherence of Romania to the European Union supposes the reach of certain economic efficiency indicators , either at the average level of the E.U., or at the level of some member countries like : Greece, Portugal or Spain.
An analysis of such indicators of economic efficiency was realized for the time interval between 1990 and 2001.

THE USE OF WORKFORCE IN AGRICULTURE

For this purpose the next indicators were taken into consideration:

- the percentage of population engaged in agriculture from the total numbers of active population;
- the number of people working in agriculture for 100 hectares of arable land;

Table 1 The main indicators for using the agricultural workforce in Romania

Name	m.u.	1990	1995	2000	2001	2001/ 1990 (+/-)
The percentage of agriculturally involved population from the total number of active population	%	28.2	33.6	40.8	40.9	+12.7
Cultivated surface for one person working in agriculture	he	3.08	2.89	2.41	2.58	-0.5
Active persons for 100 he of cultivated land	persons	32.5	34.5	41.4	38.8	+6.3
Active persons working in agriculture for one physical tractor	persons	24.1	19.5	22.0	22.4	-1.7
Work productivity for one person engaged in agriculture	lei (current prices)	86987	7396021	4664288	80563760	+80476778
	USD	3883	3637	2149	2772	-1111

Source: computed based on the Statistical Year Book of Romania, 1991, 2002
Exchange rate: 1990-1 USD= 22.4 lei; 1995- 1 USD= 2033.28 lei; 2000- 1 USD= 21692.74 lei; 2001- 1 USD= 29060. 9 lei.

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- work productivity per working person in agriculture;
- other indicators.

The level of these indicators pinpoints a situation that is totally unfavorable in comparison to the average of the E.U. and each member country taken separately , even in comparison to some of the Eastern and Central European countries recently admitted in the E.U.

Table 2 The structure of the population engaged in agriculture

Country	Year	Percentage of population working in agriculture and forestry
Romania	2001	42.3
Bulgaria	1999	26.6
The Czech Republic	2000	5.0
Letonia	2000	13.3
Lithuania	2000	19.6
Poland	2000	18.7
Slovakia	1999	7.4
Slovenia	1999	10.8
Hungary	2000	6.5
Austria	2000	5.8
Denmark	1998	3.4
Germany	2000	2.7
Greece	2000	16.7
Italy	2000	5
Holland	2000	3.2
Portugal	1999	12.3
United Kingdom	1999	1.5
Spain	2000	6.4
Sweden	2000	2.3

Source: The Statistical Year Book of Romania, 2003

In the rural environment agriculture is the main economical activity, engaging more than 70 % of the workforce and being the only economic branch in which the older population is predominant. Almost 52 % of the population working in agriculture was, in the year 2000, over 50 years old, and about 23.1% were over 65. The free lance workers (exploit managers) are predominantly of old age, over two thirds of them being over 50 and one third over 65 years old.

Out of the rural population working in agriculture, those with ages between 50 and 64 work in a proportion of 84% in this area.

The old age of workforce and the incompetent use of the calendar work time are major causes for the low level of productivity in this branch.

The economic efficiency may also be determined with the aid of indicators regarding the contribution of agriculture to the gross national

product and the gross national product created by a person working in agriculture.

Table 3 The contribution of agriculture to the development of some macroeconomics indicators

Crt. No	Name	m.u.	1990	1995	2000	2001	2001/ 1990 (+/-)
1.	The contribution of agriculture to the gross national product (gross added value)	%	18.0	20.9	12.0	14.8	3.2
2.	The rapport between the contribution of agriculture to the gross national product and the percentage of population engaged in agriculture	-	0.64	0.62	0.29	0.36	-
3.	The gross national product created by a person in agriculture	lei in current prices USD	49372 2204	4374427 2151	24148510 1113	43387189 1493	+43337817 -711

Source: computed based on the Statistical Year Book of Romania, 1991, 2002
Exchange rate: see table 1

In comparison to the year 1990, in 2001 the gross national product created by a person working in agriculture decreased with 711 USD, respectively with 32% in comparison with the level of the year 1990, underlining the incompetent use of workforce.

The economic efficiency of agriculture activity is brought forward by the structure of the global agricultural production. The more modern the agriculture, the greater the percentage of animal production in the total agriculture produce and vice versa.

In Romania this rapport draws attention to the existence of an agriculture that is predominantly extensive. The percentage of animal produce decreased from 47 % in 1990 to 36.1% in 2001, a decrease of 10.9%.

Table 4 The structure of agriculture produce in Romania (%)

Crt. No	Name	m.u.	1990	2000	2001	2001/1990 (+/-)
1	Plant produce	%	53.0	61.1	62.8	+9.8
2	Animal produce	%	47.0	38.9	36.1	-10.9
3	The percentage of agricultural services in the agriculture produce	%	-	1.2	1.1	-0.1

Source: computed based on the Statistical Year Book of Romania, 1991, 2002

The outcome per hectare and animal fed is one of the main indicators for expressing economic efficiency.

In the Romanian agriculture, in the period of 1990- 2001, the outcome per hectare for plant produce had a general tendency to decrease. The same happened for animal produce. Only for corn, soy beans, sugar root, potatoes and cow , sheep and cattle milk were there rises.

Table 5 The outcome per hectare and fed animal in Romania

Crt. No	Name	m.u.	1990	2000	2001	2001/ 1990 (+/-)
1	Wheat and rye	kg	3212	2280	3034	-178
2	Barley	kg	3577	2105	2988	-589
3	Corn	kg	2756	1603	3066	+309
4	Sunflower	kg	1409	821	1029	-380
5	Soy beans	kg	742	594	1623	+881
6	Sugar beat	kg	20149	13787	22432	+2283
7	Potatoes	kg	10964	12249	14393	+1277
8	Tomatoes	kg	14440	12815	14175	-265
9	Cow milk	l	2063	2867	2957	+894
10	Sheep milk	l	34	43	46	+12
11	Wool	kg	2.85	2.48	2.49	-0.36
12	Eggs	piece	163	145	148	-15

Source: computed based on the Statistical Year Book of Romania, 1991, 2002

Comparing the production per hectare in Romania to the level in some country members of the E.U, we may notice an important downfall for Romania.

Table 6 The comparative level of Romania regarding production per hectare in comparison to some E.U. countries

Crt No	Country for comparison *	Wheat		Corn		Potatoes	
		1989	1999	1989	1999	1989	1999
1	Austria	68	56	32	37	47	51
2	France	53	38	37	41	41	38
3	Germany	542	37	332	43	342	38
4	Greece	149	122	29	40	61	76
5	Italy	134	85	31	37	61	60
6	Spain	141	132	39	38	65	59

Source: "The Economist", no. 1304/ 21- 22.02.2003

- for which the production per capita = 100

The production of the main agricultural products per capita is an important criterion for appreciating the economic efficiency. In the year 2001, in comparison with 1990 , this indicator decreased for eggs, meat,

fruit and sugar beat and increased for the other products in table 7, so Romania was situated at a level much inferior to that in the E.U. (with the exception of grain).

Table 7. The production of the main agricultural products per capita in Romania

Crt No	Name	m.u.	1990	2000	2001	2001/ 1990 (+/-)
1	Grain	kg	738.3	467.0	842.1	+103.8
	Out of which: wheat and rye	kg	317.2	198.6	346.5	+29.3
	Corn	kg	292.7	218.3	407.0	+114.3
2	Sunflower	kg	23.9	32.5	36.8	+12.9
3	Sugar beat	kg	140.9	29.7	29.7	-111.2
4	Vegetables	kg	101.3	112.7	128.4	+27.1
5	Potatoes	kg	137.0	154.7	178.4	+41.4
6	Fruit	kg	62.5	58.0	60.4	-2.1
7	Meat	kg	95.9	63.0	63.2	-32.7
8	Cow milk	l	190.1	230.1	237.7	+47.6
9	Eggs	pieces	347	255	268	-79

Source: computed based on the Statistical Year Book of Romania, 1991, 2002

Food consumption in Romania, in comparison with that in France and Germany is as follows:

Table 8

Specification	Romania 1998	France 1994-1996	Germany 1994-1996
Cereal- total	123.0	113.5	90.4
Meat and meat products	38.4	96.8	84.4
Milk and dairy products	190	270	275
Fruit- total	26.4	98.4	115.7
Vegetables- total	90.0	123.0	81.2
Sugar and sweets	10.8	36.3	43.5
Vegetable oil	9.8	16.5	16.9

Economic efficiency is also reflected in the level of work productivity per person working in agriculture, in comparison with the level of this indicator in other branches of national economy.

Expressed in USD this indicator is as follows:

Table 9. Work productivity in Romanian economy 2000 (in thousands of USD)

Specification	Year 2000
Total economy	9.1
Agriculture	2.3
Industry	12.5
Services	13.1

Source: computed based on the Statistical Year Book of Romania, year 2002 and on the average exchange rate lei-dollars , 1 USD= 21672.74 lei

In the year 2000 work productivity per person working in agriculture was 3.96 times lower than the average in the national economy, 5.43 times lower than in industry and 5.7 times lower than in services.

There are also huge differences between the end average production per person working in agriculture in Romania and some member countries of the European Union.

Table 10 Differences in the end average agricultural production per person working in agriculture in Romania and some countries members of the E.U.

Specification	1990	1997
Romania	1.0	1.0
Minimum level E.U….15	1.5- Portugal	2.1- Portugal
Average level E.U……15	6.4	9.9
Maximum level E.U….15	14.6- Holland	23.4- Denmark

Source: Ph.D. thesis, Luminita Chivu, I.N.C.E., 2000 and the Report of the European Commission, 1998

Economic efficiency also depends upon the concentration level in agriculture produce. In Romania this level is much inferior to that recorded in the countries members of the E.U.

Concentration level in the sector milk cows:

The industry of milk and dairy products in Romania is characterized by small scale production. It is estimated that there are approximately 1.2 million agricultural exploits for milk cows, respectively only 33% of the agricultural exploits in the rural environment. The average number of animals is of 1.5 cows/ household and the average milk production / cow is close to 3000 liters/ year. At present 97% of milk production is obtained in the private sector.

Table 11 The structure of animal farms according to size, may, 2001

	Farms		Cows		
Specification	No. of farms	% of total	Heads	% of total	Average heads/farm
Total	1188387	100.00	1735979	100.00	1.46
1-2 head	1134118	95.43	1444366	83.20	1.27
3-5 head	47705	4.01	173667	10.00	3.64
6-10 head	4316	0.36	32415	1.87	7.51
11-15 head	964	0.08	12806	0.74	13.28
16-20 head	435	0.04	7727	0.45	17.76
21-30 head	301	0.03	7527	0.43	25.00
31-50 head	225	0.02	8624	0.50	38.33
51-100 head	145	0.01	10167	0.59	70.12
>100 head	178	0.01	38682	2.23	217.31

Source: the Romanian food chain: a way to adherence- M.A.P.A.M., Bucharest 2003

At present only 0.19% of farms in Romania that grow cows have more than 11 head and together they hold only 4.94% of the total number of head.

In comparison with the E.U. the situation is as follows:

Table 12 The average dimension of cow herds and the average production in some countries members of the E.U. and in Romania

Country	The average dimension of the herd (1997)	The average production per fed animal (l/ year)
Romania(2001)	1.5	2990
E.U. …15	24.0	5433
Sweden	29.6	7380
Holland	44.0	6864
Denmark	50.8	6542
Great Britain	68.8	5929
Greece	7.7	3810
Portugal	5.2	5254

Source: the Romanian food chain: a way to adherence, M.A.P.A.M., Bucharest, 2003

The production of beef and veal represented in the period of 1990-1998 35% of the total meat production, 95% of it coming from the private sector.

In the year 2001 96% of farms were fattening up to 2 head of cattle, having average herds of 1.3 head and delivering on the market 83% of the effective quantity of meat in live animals. Exploits with over 50 head for fattening delivered just 4.7% of the meat production.

CONCLUSIONS

- The level of economic efficiency in Romanian agriculture is much under the level of the average in the E.U. and even under the level of less developed countries, members of the European Community, like Portugal and Greece;
- The structure of the global agricultural production, with a high percentage of the plant one, underlines the existence of an extensive type agriculture;
- Outcomes per hectare and fed animal, with some small exceptions, are at the level of the 1950s or 1960s (from the E.U.);
- The average productions per capita, with the exception of grain, underlines important differences in comparison to the average in the E.U. and the countries that are members of the European Community;

■ The degree of concentration in farms producing milk and beef is still very low in comparison with the average in the E.U. and the achievements of countries like Denmark, Holland, Belgium, Great Britain, etc;

■ The low level of concentration is also present in areas like: growing and fattening pigs, poultry for meat and eggs, etc.

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THE ROLE OF AGRICULTURE COOPERATIVES IN DEVELOPING AND MODERNIZING ROMANIAN AGRICULTURE

ROLUL COOPERATIEI AGRICOLE IN DEZVOLTAREA SI MODERNIZAREA AGRICULTURII ROMANESTI

I. FRUJA[*], R. GHERMAN[**]

The cooperative association represents an alternative to the process of re-structuring and modernizing Romanian agriculture.
The own experience in the inter-war period regarding the extension of some forms of cooperation, but mostly the experience of economically developed countries fully confirm the viability of such an option.

The formation and extension of different forms of cooperation in the agriculture produce per se and mostly in the activities situated on hills and downhill may contribute to:

- creating a competitive agricultural sector;
- practicing some methods of production and selling that would respect the environmental protection requirements and those regarding produce quality;
- practicing an agriculture that is diverse, maintaining the rural specific, but imprinting a complex development that would allow for a better use of workforce for the entire duration of a year, creating workplaces for the young generation, etc.

Excesive division of production land may also be reduced by the association system among producers.

Under these conditions, agriculture may benefit from the advantages of concentration, without trespassing the right of property and decision on the part of the owner.

The cooperative association in the production sphere and especially in the area of supply, processing and valuing agriculture produce may integrate the family household and the needs of the household in an

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organizational structure that confers stability and increased economic efficiency.

In the same time, the agriculture cooperative will ensure the protection of property rights, allowing the selling of land in much more advantageous conditions, taking into consideration that by approaching the moment of adherence the price of land will go up.

Synthesizing the necessity and perspectives of cooperatives in Romania, we take the liberty of making the following arguments: in the cooperative sector, the lack of technical means and financial means on the part of individual small and average size producers for developing efficient exploits determines- at present- an increase in the interest shown to forming such cooperative associations. These associations will ensure:

- the protection of the property rights over land, in the conditions of selling it at prices still very low, the price of land in Romania being one of the lowest in Europe. In the future, after the adherence to the E.U., the price of land will increase considerably in comparison to the present one;
- the possibility of developing agriculture produce with increased efficiency and profitability;
- the possibility of purchasing production factors at prices lower than individually possible;
- the possibility of processing agriculture produce realized in an associative system, as is happening in economically developed countries;
- the possibility of having acces to credits and various subsidies from E.U. programs, in more advantageous conditions than by individual actions;
- increased acces to distribution by creating own channels (wholesale and retail warehouses) or by negotiating distribution with big wholesale and retail intermediaries through the means of cooperative associations. A conclusive example in this respect is the system practiced in E.U., Japan and other economically developed countries.

In the evolution of agriculture cooperatives in Romania, there will occur a series of long- term and average-term mutations. In the first stage, due to the lack of own means to work the land, the forms of association in the agriculture production per se will extend. Subsequently, for reasons of economic efficiency, especially the strong cooperative units will survive.

In this respect, some cooperative associations will disappear, others will merge with the strong ones (economically efficient ones).

While the individual producers will have the means to work the land, they will come out of the associative production system, others will sell the land, and so, gradually, the role of the agriculture cooperative will decrease.

Step by step, the role of the cooperative in activities uphill and downhill agriculture will consolidate; uphill in the area of supply with production factors (fertilizers, tractors, agricol devices, seeds, etc.) and also uphill, in the area of credit, by establishing credit cooperatives for agricultural producers, in the area of insurance by creating or affiliating to cooperative insurance companies, and for producing concentrated food for individual producers.

In the future, during the production process per se, associations may be created in the area of using production technique , leasing or leasing system tractors, combines, other devices difficult to maintain by individual producers due to cost and inefficiency, or by service offered to individual producers by the respective cooperative.

Organizing consulting centers for associated agriculture producers is foreseen in the future.

Downhill agriculture units for processing agriculture produce (meat, cereal, milk, etc.) that will be destined for market will be established.

Also, units for storing the agriculture produce in primary state or the processed ones (warehouses for keeping wholesale produce that would be sold to various beneficiaries), trade units for agriculture produce on their own or through intermediaries will be established.

The conclusion is that, based on the facts presented above, gradually the weight centre of cooperation in agriculture will move from the agricultural activity per se towards spheres situated uphill and downhill agriculture (supply, processing, trade, etc.)

The association degree differs greatly, in spite of the territory, being higher in some counties like : Constanta 80%, Ialomita 89.6%, Braila 88.2%, Galati 78.2%, Dolj 59.4%, Buzau 50.9%, Timis 21.9% and Arad 30.7% [1]

According to the opinion of the Academy of Agriculture and Forestry science and the Agrarian Economics Institute, the developing of a modern agriculture, that is intensive, compatible with E.U. systems needs an agriculture exploit structure within which the cooperative forms have a high percentage (55-60 % of the agriculture land).

Table 1

The optimal structure variant for agriculture exploits in Romania

Forms of agriculture exploits	% of agriculture land	Optimal limits regarding the average surface per exploit (ha)
Cooperative forms (private associations) [1)]	55-60 % (8-9 mil. Ha)	500-1000-2000
Private forms [2)]	14-15 % (about 2 mil. Ha)	100-1000
Individual agriculture households	15-20 % (2-3 mil. Ha)	0.5-5
State forms [3)]	7-10 % (1- 1.5 mil. Ha)	1000-3000
Public domain farms [4)]	4-5 % (0.7- 0.8 mil. Ha)	100-200

Source : "The Economist", no. 1604/ 26.04.2004

1) organized by associated cooperatives based on private- cooperative property
2) organized by leasing, granting and buying agriculture land
3) organized on terrain in state property
4) specific for agriculture scientific research, agriculture teaching, other public service.

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MODERN CONCEPTS IN FEEDING MILK COWS

CONCEPTE MODERNE ÎN HRĂNIREA VACILOR DE LAPTE

I. PETROMAN*

In a exploatation of milk cows growing, the facts that can determine a profitable activity are many, but from these the main are: genetic quality, nutrition, best conditions of technologic confort in the period of keeping milk cows in shelters as when they are exploatated on cultivated fields or natural improvement.

***Key words**: cows for milk, nutrition, ideal productive kind, technologic confort.*

INTRODUCTION

The milk cows is a more a more performant "animal machinery" whose efficacy and productivity depends on its genetic background, on feeding and on management.

Lately, genetics mode rapid progresses, we can even sustain spectaculous, obtaining animals with bog potential. Stockbreeders have to profit by best animals but they should take into consideration the environmental conditions.

Its feeding tries to answer to the difficulties linked to increasing genetic performances of milk cows. Cows with big potential have increased nutritional exigency and more and more vulnerable to its way of feeding.

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Management supposes correct and harmonious applying of all the factors implied in milk production. In these conditions, stockbreeder has to be a skillful manager, especially if he appeals to specialized services made by others.

All these concern one goal, that is economical optimum of milk production. This optimum depends on different cases, on price of the milk, on feeding costs, on production expenses, on selling some reproduction animals, etc.

MATERIAL AND METHOD

Touching special performances in qualitative and quantitative milk production in the way of putting in value the induced genetic potential, is impossible without respecting some facts that can determine a profitable activity. These facts are:

The genetic quality of biologic material, expressed through the existence of a maximized production potential, which permanent progress should be assured by:

- the cattle obtained from the cows with the best performances, which will be grown in best conditions, feed properly until comes the process of reproduction and production.
- the intensive reproduction on the base of biotechnologies (artificial inseminations with frozen seminal material and embrions transfer)

The nutrition of milk cows should determine and uphold the maximum expression of genetic potential. It will give up at grocer fodder concept by using fodder with maximum palatability grade, reducing at minimum the water content in the moment of administration.

-assurance by technologies of cultivating, collecting, preserving, manufacturing, and administration of fodder resources, keeping, if not entire, than at higher levels of all nutrition categories: proteins, vitamins, energy, macro and micro elements;

- assurance of foddering at best moments on the production;
- replacing the practice of fielding on composer fields that don’t assure the necessary nutrients for a high on quantitative milk production;

- the balance of rations regarding the feeding rules, UNL, seeing the absorption processes (metabolism)

- the base of ration will be assured by the fiber forred (grasses), the juice one (corn silo) roots

Best conditions of technologic comfort, in the stabulation period as in the pasture one should assure modern habitats, perfectionated equipments with the resting and feeding space, for mechanic milking efficient and hygienic, watering, evacuation of dejections and best assurance of microclimate facts (temperature, relative humid, light, the speed of air currents, CO_2, NH_3, H_2S concentration). For obtaining special results regarding the qualitative and quantitative production in maximum efficiency conditions it impose the abstinent of a productive thing of cow witch should satisfy these demands. This productive kind should have the next qualities:

- healthy mammary gland, perfect as volume, structure, uniform nipples, good speed of milk, well adapted of mechanic milking to produce over 40 kg of milk daily;

- a digestive apparatus well developed to englobe a high quantity of dry substance (20 kg) to be able to uphold high milk productions;

- blood system adequate, seeing that for producing a kilogram of milk mammary gland should get a quantity about 500 liters blood, witch means that for a productions of 40 kg of milk is necessary a quantity of 20000 liters of blood;

- in the work of improvement has as purpose the improvement of meat production qualitatively and quantitatively, the conformation of animals, the state of healthy, and resistance at illness, adaptability at different exploitations systems.

CONCLUSIONS

The preoccupations of improvers for obtaining productions with maxim efficiency are straightened for obtaining of a ideal productive kind which should have a digestive apparatus well developed a perfect mammary gland and a good constitution and conformation.

It will be asked the respect of facts that determine the profitability of exploitation: the gene quality of animals from the exploitation, the nutrition and the assurance of best condition of technologic comfort (modern systems and procedures of exploitation)

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YIELD MANAGEMENT IN TOURISM INDUSTRY

MANAGEMENTUL DE PRODUCȚIE ÎN INDUSTRIA TURISMULUI

I. PETROMAN[*], **I. BRAD***

Yield management aims primarily at assessing the highest value of tariff/price that can be charged within costs and available facilities and making it sure that all clients needing services are willing to pay. Yield management ensures the maximisation of mean profit for a product that is available on the ground of assessing the clients' anticipations on price, and the establishment of the highest value that client are willing to pay. This is how seasonal demand is diminished: transferring surplus in peak periods to another time interval.

***Key words**: yield management, tourism offer, profit, hotel business, tour-operator, and air transportation.*

INTRODUCTION

Present evolution of international tourism is characterised by a permanent renewal of tourism offer, by a diversification of product range, superior both quantitatively and qualitatively as tourists have become very demanding depending on human society changes. Yield management is a new concept applied by numerous firms in international tourism wide spread in hotel, tour-operator, and air transportation business, being based on the analysis and interpretation of the demand curve as a representation of the relation between price and demand, i.e. if the price for a certain product or service decreases, the demand tends to increase, and vice-versa.

Worldwide there is a tourism offer that is part of an increasing fragmentation of the market in which competition is increasingly acute;

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economic agents on the market are compelled to try new means of creating marketing and promotion products by adopting new styles of management (1, 5, 6).

Yield management is a relatively new concept applied by great companies of international tourism, with a high degree of applicability in the hotel, tour-operator, and air transportation business (2). In tourism, there are 5 functional component parts derived from yield management principles (2, 3, 4):

1) Market segmentation in order to identify tourist groups that are willing to pay the price, and that have a different behaviour, of great significance for the firm's decisions.

2) Price policy takes into account the possibility of offering a different price category for each segment of clientele depending on market changes and demands.

3) Predicting demand takes into consideration previous sales, the size of client segment, and the prices they are willing to pay.

4) Availability and capacity to lead refers to the tourism company capacity of quantifying tourism demand characteristics.

5) Negotiating booking. The tourism company must take into account the changes that occur and the fact that some clients are willing to negotiate price (6).

RESULTS AND DISCUSSION

The profit thus made is difficult to anticipate. In the case of yield management, success depends on discipline and ability of the user. By applying this concept in tourism practice, together with increasing income there are diminutions in the costs of management and marketing, with good economic results.

Depending in applicability degree of yield management in tourism industry in relation to the levels at which it can be adopted (2, 6) one can see that in hotel business the degree of applicability is the highest, in tour-operating it is medium, and in air transportation it is high (Table 1), no matter the rank of the company (small, medium, and big).

The action of some factors negatively influence the applicability of yield management concept because of lack of knowledge of yield management principles, because of lack of information, and also because of

scepticism that can take the following forms: considering yield management as a simple price cut, associating it with dumping price, or viewing the system as destined only to big tourism companies, without taking into account the advantages of the system.

Table 1

Yield management degree of applicability on tourism

Applicability degree	Sector		
	Hotel	Tour-operator	Air transportation
HIGH	x	x	x
MEDIUM	-	x	-
LOW	-	-	-

Seasonality does not constitute an impediment in applying the concept of yield management because the system has a series of concepts to reduce it.

Yield management systems are based on prediction correctness in tourism demand, aiming at determining the highest price to ask the client, and getting an additional profit through optimisation methods, discipline, and user's skill.

CONCLUSIONS

In order to maximise a tourism firm's profit it is imperative that specialised firms to use yield management in their economic activity aiming at assessing the highest price to ask the clients within costs and available facilities. This is how one can get an additional profit from optimising demand and price. Five functional components of yield management are known: market segmentation, price policy structure, demand prevision, availability and capacity to produce, and booking negotiation.

Implementing the system in practice is confronted with a series of obstacles such as: high technological costs, lack of infrastructure, seasonality of demand, and certain Governmental restrictions concerning prices. Applying the system in the hotel, tour-operator, and air

transportation business results, besides income increase, management and marketing cost cuts providing more complete information, which, if correctly used, can result in superior performances.

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TRENDS ON THE POULTRY MEAT MARKET

TENDINŢE PE PIAŢA CĂRNII DE PASĂRE

I. PETROMAN*, T. IANCU*

World broiler chicken production was of 53.8 million t at the end if 2003, with an estimate of over 55.4 million t in 2004. Import taxes introduced by Russia will influence both world export and import that will slightly decrease. The biggest broiler chicken producer will still be the U.S.A. (14.5 million t) that has increased deliveries to Asia, followed by China (9.8 million t), and Brazil (7.7 million t).

***Key words**: poultry, market, trends, and price.*

INTRODUCTION

The European Union diminished its broiler chicken production with 2% in 2003, because pf the epidemics that hit Holland at the beginning of the year, reaching, at the end of 2003, 6.72 million t. the greatest share (29%) of total exports of the European Union belongs to Holland. Broiler chicken import in 2003 diminished with 5%, below the quantitative level of 390, 000 t. In Romania, the financial situation of poultry raisers improved after the increase of subsidies and equalising of prices with production costs. In the competition with cheap imports, Romanian products won due to their quality. Romanian aviculturists struggled a lot to win in the battle against poultry importers, being forced to face not only dumping prices practiced by the latter, but also a mass of poor buyers compelled to keep consuming chicken déclassé and bought from European warehouses. Broiler chicken raisers enlarged their share of the market not due to these buyers, but due to buyers that gave up pork to eat chicken. Chicken sales on the Romanian market increased in 2003 with 20% compared to 20%, with a real chance for this to go over the maximum level of the last years – 230,000 t.

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Aviculturists would thus become the most important operators on chicken market in Romania, overrating for the first time pig and cattle raisers.

In a market economy, performances, costs, and production, price and markets are "regulated" by the biggest and most efficient producers. Animal products provide, besides calories, mineral salts and vitamins, and protein of the best quality necessary to a harmonious development of man and in particular of children and youth, the future of a nation. The lack of meat such as indicated by literature (1, 2) results in serious deficiencies on mental and physical development. Animal product consumption in Romania is below World Health Organisation recommendations and far below that of economically developed countries. At the end of 2003 meat and meat product consumption was of 36.6 kg (2, 3) per capita, lower compared to 1990 (60.4 kg) and much lesser than that in France (101.2 kg) and Germany (79.4 kg).

Raising poultry, and in particular, broiler chicken, provides for a wide range of industries – food industry, pharmaceutics, installations, meat processing machines, mixed forage processing machines, etc. Raising poultry also represents a sector providing jobs for a considerable number of country people and continuous income for farmers. To make it higher and surer, we need to assess properly product costs with broiler chicken raisers, and to diminish the number of bureaucrats, that hinder necessary paper making to get Government subsidies (2).

Of particular importance is currency brought in by raising animals and exporting meat pr meat products. In Romania there is a decrease in exports and an increase in imports of animal products. Worldwide, among indices used in assessing economic development of a country is animal production, with an advisable 50% and even more. In Romania, this index had its highest share of 47% on 1997, but it is decreasing now.

RESULTS AND DISCUSSION

Worldwide there is an increase of production in broiler chicken from 53,800,000 t in 2003 to an estimate of over 55,400,000 t at the end of 2004. The main poultry producers are the U.S.A (14,500,000 t), China (9,840,000 t), and Brazil (7,700,000 t). The European Union diminished its broiler chicken production with 2% because of the epidemics that hit Holland, the

greatest exporter (29% of the total E.U. export), reaching at the end of 2003 a production of 6,720,000 t of broiler chicken. There is also a decrease in meat import of 5% in the European Union, the quantitative level being below 390,000 t.

These trends on poultry market, be they increasing or decreasing, are due to both objective (epidemics) and subjective (feeding habits) factors. Population worldwide, including that of the European Union and of Romania, shifted to poultry to the prejudice of pork and beef.

Un Romania the financial situation of poultry raisers has improved after they got subsidies from the Government and after prices equalled production costs. Broiler chicken raisers managed to enlarge their market share on behalf of buyers that gave up pork and beef and shifted to broiler chicken. Thus sales increased on the Romanian market with 20% compared to the same period of 2002, so that aviculturists have become the main producers on meat market in Romania.

Aviculture is the only animal husbandry sector in Romania in which they have made investments (the biggest ones) that have fundamentally changed production technologies on poultry farms and in processing units. Thus, there are units that produce broiler chicken in world competitive conditions (mean daily gain of 48 g, specific consumption of 1.9 kg). The only impediment in penetrating external markets is the price – higher because of the great difference in subsidising between E.U. countries and Romania. Though subsidies for Romanian products are almost four times higher than those in the E.U., Romanian producers supply domestic market with products almost two times cheaper. Romanian aviculturists made special efforts to win the competition with both meat importers who practiced dumping prices, and with poor buyers that prefer to buy chicken déclassé for low prices.

Table 1.

Broiler chicken price (ROL/kg) in Romania

Nr.	Meat assortment	Year		Notes
		2002	2003	
1	Chicken whole carcass	48,415	49,367	
2	Griller chicken	56,036	55,255	
3	Legs	68,568	66,250	
4	Breast	69,427	78,278	

Table 1 show the evolution in meat price. We can see that while input price almost doubled, meat price increased insignificantly. To produce 1 kg of meat aviculturists spend 45,000 ROL/kg, which they sell to intermediaries for 46,000 ROL/kg, i.e. a profit of 1000 ROL/kg.

We can see that in Romania in the two years under study prices barely oscillated and even decreased in some assortments, because of the massive leg imports (though of a doubtful quality), the producers being compelled to diminish the prices. Though Romanian producers sell chicken for 46,000 ROL/kg, traders have taken advantage of the increasing demand for chicken and increased the price with 15-20,000 ROL/kg, earning more than the producers whose profit is only of 1000 ROL/kg.

CONCLUSIONS

Both worldwide and in Romania, there is a new trend towards consuming broiler chicken that has overrated pork and beef. The highest share in broiler chicken is that of the U.S.A., China, and Brazil. In the European Union, poultry production in 2003 of 6,700,000 t decreased with 2% because of repeated epidemics that affected Holland, the biggest exporter of the E.U. (29%). Community imports of broiler chicken diminished with 5% - below 390,000 t.

In Romania, aviculturists won the competition with broiler chicken importers, increasing their market share on behalf of consumers that gave up pork for chicken. This, sales increased on the Romanian market in 2003, with aviculturists ranging first among meat operators. The only impediment in penetrating foreign markets is the price – higher in Romanian meat and meat products because of the great differences in subsidy levels between E.U. member countries and Romania. Though subsidies for Romanian products are almost four times lower than those in the E.U., our producers supply the domestic markets with products two times cheaper.

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DYNAMICS OF MEAT AND MEAT PRODUCT CONSUMPTION AT NATIONAL LEVEL

DINAMICA CONSUMULUI DE CARNE ŞI PREPARATE DIN CARNE LA NIVEL NAŢIONAL

CORNELIA PETROMAN*

The supply level of consumption and marketing domestic market from the pork and beef foreign market strictly depends on the state of the domain that does not benefit from subsidies to develop and to face competition. One can see that the share of animals in 2003 in private households represent 60% in cattle and 45% in swine of the national production. Live meat production was of 120,600 t, i.e. about 20,000 t less than in 2002, this diminution being the result of diminishing livestock. Meat and meat product consumption diminished from 23.9 kg per capita to 18.5 kg per capita, while purchase prices in meat or meat produce increased.

Key words: *meat and meat produce, dynamics, price, and consumption.*

INTRODUCTION

The constitution and functioning of agro-alimentary markets is conditioned by the action of numerous internal and external factors (production, techniques, technology, economy, society) doubled by a competent macro-economic and micro-economic management. Romanian market must meet domestic demands and exigencies of penetrating European and international markets, as meat market is a very important step to improving population feeding.

No matter technical state, beef and pork (refrigerated or frozen) can be sold as such (not carved, not portioned, and not protected by wrapping) or carved, portioned and pre-wrapped in polyethylene films.

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RESULTS AND DISCUSSION

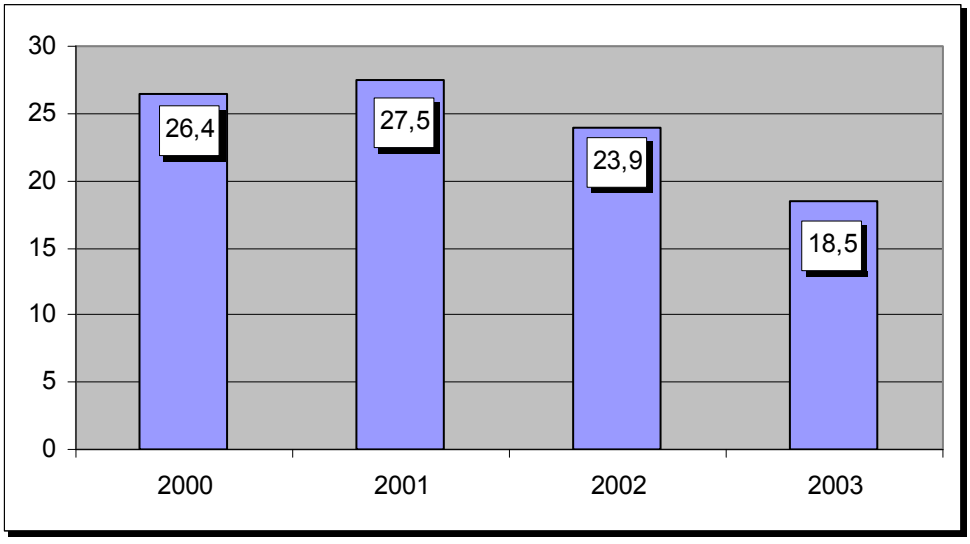
Pork is also delivered as fat pork (1st category) (semi-carcass without head, goitre, internal organ debris, but with rear foot not detached and with 2 coccyx vertebrae) and lean pork (2nd category) (semi-carcass without head, goitre, but with members sectioned at the joints, and without tail), while beef is marketed under different forms:

- Veal from animals slaughtered at the age of 6 months;
- Beef from cows, bulls, and oxen aged over 3.

Meat and meat product consumption in 2003 was, in Romania, of 18.5 kg per capita and recorded a diminution compared to 2002 of 5.4 kg per capita. The dynamics of meat and meat produce consumption per capita is shown in Figure 1.

Figure 1.

Dynamics of meat and meat produce consumption per capita



The decreasing trend has been steady since 1990, when meat and meat produce consumption per capita was of 59 kg, because of the decreasing livestock and of the diminishing purchase power of the population. For 2004, they estimate a production of 140,000 t that will be produced in individual households – 60% in beef and 45% in swine.

Mean sale prices on the farmers' market maintained at high levels, much over purchase prices and production costs. By simply comparing production costs with purchase prices, one could believe that purchase prices are covered for producers' costs. In reality, taking into account that in the price structure the greatest share is that of forage costs (60-75%) depending on species, and that animals are privately owned (92.2% in beef, 84.7% in swine, and 92.8% in poultry), we can say that production costs do not contain labour costs which, in most cases, are not accounted for.

It is obvious that the relation purchase price – costs is a reverted one. Thus, through the level of purchase price, production costs revisited would be as follows: 78.6% in cattle and 77.4% in swine. Meat market recorded a series of changes in 2003. Analysing price evolution in pork shows a substantial decrease in the second half of 2003. If, at the beginning of the year live pork purchase price was of 21,000-22,000 ROL/kg, at the end of the year it was 12,000-15,000 ROL/kg, purchase prices resulting in different marketing prices. If at the beginning of April maximum marketing price was of 54,000-55,000 ROL/kg, at the end of 2003 it was of 30,000-34,000 ROL/kg (Table 2).

Table 2.

Dynamics of mean consumption prices in pork and beef in Romania (ROL/kg)

Year	**2000**	**2001**	**2002**	**2003**
Beef (sirloin)	18,600	22,400	34,100	35,400
Beef	12,500	16,700	30,700	27,200
Chop	10,500	10,100	20,400	18,900
Pork (sirloin)	20,200	21,800	49,000	45,700
Pork	15,700	25,600	44,300	37,400
Chop	11,700	13,000	26,300	26,100

CONCLUSIONS

Supplying market with pork and beef is being done 45% in pork and 69% in beef by the private sector that does not benefit from enough subsidies to develop and modernise so that it can face foreign competition. Livestock diminished in number and so did meat and meat produce

consumption – from 23.9 kg per capita in 2002 to 18.5 kg per capita in 2003 – and because of a lower purchase power of the population.

One can see a substantial decrease of pork price in the second half of 2003, though production costs are only 77.4% covered in swine and 78.6% covered in cattle.

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ON THE EVOLUTION OF PROCESSED MILK PRODUCTION IN ROMANIA

EVOLUȚIA PRODUCȚIEI DE LAPTE INDUSTRIALIZAT ÎN ROMÂNIA

CORNELIA PETROMAN[*], IULIANA CREȚ[*]

Processed milk production stagnated these 3 last years, without recording any qualitative improvement because milk valorising was done on the farmer market. Processors did not benefit from the raw material they needed though total milk production from the 1,440,000 dairy cows increased through the increase of mean production per head and through the use of a high value genetic material. Processors demand measures that support the farmers and access to low interest credits because most of the breeders have no access to SAPARD funds.

Key words: *milk, quality indices, sanity indices, number of dairy cows, and productions.*

INTRODUCTION

Calculi made by specialists emphasise that in order to benefit from Community funds and from an amount of 7.5 million t of milk it is necessary to fund new exploitations that meet EC regulations and that milk valorising be not done on the farm market but industrially, observing quality and sanity parameters. In addition, payment to producers will be done depending on amount and quality observing EC regulations.

Milk eaten by humans as such or processed is produced by several animal species (cattle, buffalo, and sheep), but cattle share is over 90% worldwide and about 87% in Romania (1, 2, 3). Cattle number worldwide is of 1.4 billion heads from which they get yearly about 550 million t of milk.

The situation in Romania is quite different, cattle number decreasing after 1990 from 2,123,000 heads to 1,744,000 heads in 2003, but mean productions per head of dairy cow increased due to the use of a valuable genetic material. Despite all this, processed milk production maintained

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constant because part of the milk is used for self-consumption (up to 50%) and another part is valorised on the farm market (30%). Only 20% is industrially processed in sanitary conditions and with respect for quality standards.

Milk payment is done in the classical and modern systems: the first form relies on fat content that serves in establishing merchandise production, while the second applies in EC countries (2) and is based on protein and fat content. Protein content per l of milk (the base calculus is 31.5 g of protein per kg) and to this value they add or abstract 3.7 units of protein. On the European market, for fat content the base calculus varies depending on fat content and on origin, price recording rather low variations, which shows a good stability of the market.

In good animal husbandry countries and particularly in the EC countries, milk payment is done depending on sanitary condition, on somatic cell number per ml of milk and on total number of germs in relation to which milk gets a price supplement is within a certain scale or declassed if it does not meet sanitation indices.

RESULTS AND DISCUSSION

One can see that in Romania, according to specialists, in order to benefit from Community funds processed milk amount should increase seven times, an objective hard to reach as the age interval between generations is of 5 years and private household dairy cattle number decreased. For an amount of 7.5 million t of processed milk it is unlikely to find financial sources as during these last 3 years milk production in Romania was never higher than 1.2 million t which means that they should fund during the following 2 years another 50,000 dairy cow micro-farms (4). To reach this target we need a massive reproduction animal import (heifers 18-20 months old), which supposes a high financial effort and also domestic measures such as banning milk valorising on the farmer market in questionable sanitary conditions. This would result in an increase of processing production with about 1 million t. we also need to intensify reproduction in cattle through expanding artificial insemination and embryo transfer, contributing very rapidly to increasing production per head of foraged cow without increasing the cow number.

The situation of cattle number and of productions in the 2 years under study is shown in Table 1.

Table 1.

Situation of number of cattle and of total milk production

Items	Years	
	2002	2003
Cattle number (thousands of heads)	1,759	1,744
Total production (thousands of hl)	52,761	55,366

Data shown in Table 1 demonstrate that total milk production increased with 2,605,000 hl while cattle number slightly decreased (15,000 heads), which shows that through the measures undertaken genetic value of the biological material improved on the ground of subsidies provided by the Government to the breeders to encourage them to raise cows and heifers of great breeding value and of genetic material necessary for the reproduction. The value of subsidies for the breeders in the first month of 2004 per categories are shown in Table 2 – 4.7 billion ROL.

Table 2.

Value of subsidies for reproduction material in the first month of 2004

Animal category	Amount provided (millions of ROL)
Calves	2.1
Young cattle	1.0
Heifers	1.6

These facilities concerning agricultural exploitations are allotted as follows (H.G. nr. 1553/2002 and OG nr. 118/2001):

1. Heifers at first delivery obtained through artificial insemination and coming from:
   - Bull cow-mothers 3 million ROL/head
   - Pure breed COP 2 million ROL/head
   - COP Animals 1 million ROL/head
   - Testing bull female offspring 4 million ROL/head
   - Mountain area cattle 1.3 million cattle
2. Calves obtained from cows and heifers coming from:
   - Bull cow-mothers 2.5 million ROL/head
   - Pure breed COP 750,000 ROL/head
   - Not COP Animals 510,000 ROL/head

3. Reproduction

Calves 6 months old obtained through artificial insemination from:

- Bull cow-mothers 2.5 million ROL/head
- Pure breed COP 2.0 million ROL/head
- Others 500,000 ROL/head
- Natural insemination

Heifers ready to deliver obtained by artificial insemination from:

- Bull cow-mothers 3 million ROL/head
- Pure breed COP 2 million ROL/head
- Not COP Animals 1 million ROL/head
- Testing bull female offspring 4 million ROL/head
- Natural insemination in mountain areas 1.3 million ROL/head

Since 2002 there has been modernising on farms, micro-farms newly established being populated with 10,000 heads. Increasing cattle number with 1 million cows that should produce milk for the market is difficult to achieve, but not impossible because budgetary allowances for the building of new sheds are not higher than 200 billion ROL that would ensure sheltering for only about 3,500 heads. Through financial efforts and through new funds in the years to come it is necessary to achieve this objective.

Nowadays Romania is the only country that cannot prove it has valorised real milk production because of the total production only 20% is processed by dairy industry the rest being used for self-consumption or valorised on the farmer market. Comparing processed milk productions during the 2 years under study one can see an increase of production in 2003 but not a significant one, as shown in Figure 1.

Officially, starting with 2004, marketing the milk on farmer market is banned because producers do not have proper conditions for processing and valorising it, contributing thus at least 1 million hl to industrialised production. Processors demand measures that support farmers to be able to modernise their exploitations and to get valuable genetic material.

Milk price varies quite a lot on Romanian market, elite farms sell milk for 10,000 ROL/l to processors, in exchange exploitations with 1-2 heads get up to 5,000 ROL/l, the mean price for milk varying around 7,500 ROL/l. evolution of milk price for the first 4 months of the year is shown in Figure 2, where one can see a slight increase at the beginning of the year of the mean price, followed by a decrease in March and April below this level.

Figure 1.

Processed milk production (thousands of hl)

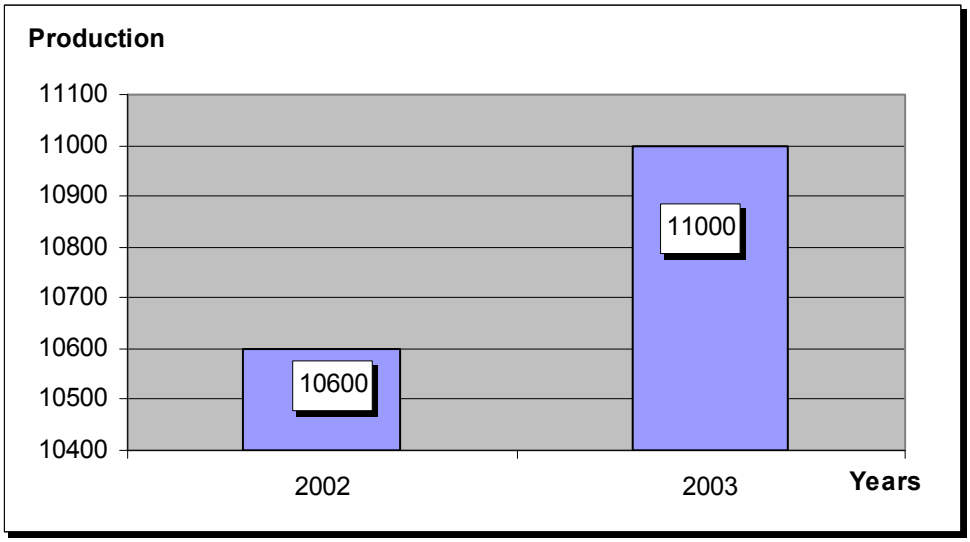
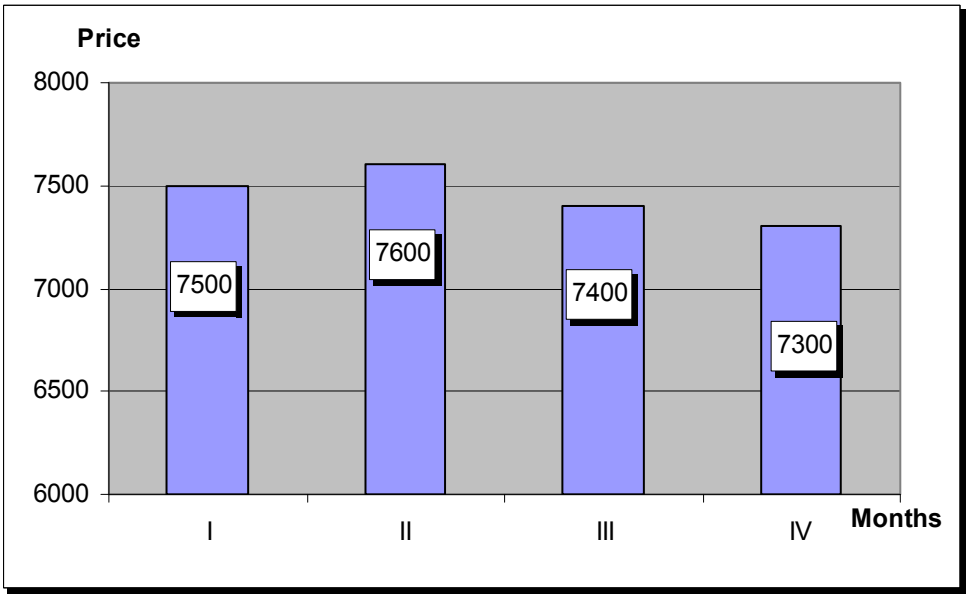


Figure 2.

Evolution of mean price in milk



CONCLUSIONS

To benefit from Community funds and from an amount of 7.5 million t of milk, Romania should increase its production of industrialised milk, which cannot be done but through an increase of the number of cattle with high genetic value and through modernising and building new exploitations that ensure the welfare of animals and that meet EC requirements. This desideratum cannot be reached but with the support of breeders and with their access to low interest credits because many of them cannot access SAPARD funds.

It is necessary therefore to develop a milk market and to ban valorising it on the farmer market, asking for it to be processed only by observing quality standards and sanitary indices. Milk market will be constituted depending on protein and fat content and with observance of sanitary indices (number of somatic cells/ml of milk and total germ number).

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JAPANESE COOPERATIVES: A MODEL FOR ROMANIA?

COOPERATIVELE JAPONEZE – UN MODEL PENTRU ROMÂNIA?

NICOLETA MATEOC-SÎRB*

In a market economy, agricultural exploitations are in the centre of a network of exchanges, as they purchase, produce, and sell as any other economic agent.
To produce, an agriculturist is compelled to sell more and more to be solvable from a financial point of view. Nowadays, agricultural production in Romania is completely cut off from the demands of agricultural produce market.
Taking into account these aspects, to which we should also add the generally low level of financial means, the necessity for cooperation between agriculturists is a must.

Key words: *cooperation, agriculture, cooperatives, upstream, surety*

Post 1990 Romania is characterised by economic degradation, i.e. agricultural degradation too.

As the new type of ownership in agriculture (private property) has resulted almost entirely in eliminating all previous structures, we are undergoing nowadays a process of formation of new agricultural structures.

New structures being developed should meet the requirements of market economy.

Agricultural exploitations in Romania should be organised after western principles, which makes it a necessity to set and consolidate performing private family exploitations that produce in accordance with market economy demands.

Cooperation can be done **horizontally**, between producers or agricultural units (to set, for example, a mechanic repair workshop, a combined feed factory, etc.), and **vertically**, between individual producers or agricultural units and other economic agents up or downstream in fields such

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as research-development, supply, production and processing, marketing or services.

Cooperative companies organised upstream aim at purchasing in common the necessary production factors from upstream.

Cooperatives downstream are organised so that they allow producers to process, stock, and market in common.

In Europe, this type of cooperative companies – that have different names – have developed a lot, due to the advantages for farmers.

Romania's agriculture, in full process of reform and restructuring, needs the development of competitive production structures and of different forms of cooperation and integration based on the principles of market economy that ensure food safety, a modern agricultural production, and its integration in the national economy.

This is why we are looking for formulas that can be applied in our country too.

Is Romania really willing to become a part of the E.U.? If so, why are we looking for models in Japan, when there are such functional structures in the E.U. that have already proven their economic efficiency?

The Romanian agriculture cannot be compared to that of Japan. In Japan they are practicing a completely different agricultural system. Over the almost 4.6 million ha of agricultural land in Japan, 4 million are cultivated with rice, which is the basic food for the population. The proof: comparative data for the two countries in Table 1.

Table 1. Comparative economic indices

Nr.	Specification		MU	Japan	Romania
1.	Total area		ha	37.782.900	23.839.100
2.	Arable area		ha	4.567.952	9.423.500
3.	Labour in agriculture		%	5,2	42,7
4.	TOTAL of population employed in agriculture		mil.	64,6	10,76
5.	TOTAL inhabitants		mil.	126,5	22,5
6.	Arable area/inhabitant		ha	0,04	0,41
7.	Mean area/exploitation		ha	2,8	1,3
8.	NGR/inhabitant (1999)		USD	25.170	5.441
9.	Exports/inhabitant		USD	3.301	378
10.	Imports/inhabitants		USD	2.450	470
11.	Share of foreign trade in world trade	Exports	%	7,55	0,15
		Imports	%	5,47	0,19

Source: Anuarul Statistic al României 2001

Romania is in full negotiations in order to access the E.U. Why do not decisive factors competent in the field analyse the way they have organised agriculture in European countries with tradition in cooperation such as France, Germany, Belgium, and Denmark, where cooperatives have good results and managed to dominate both home and foreign markets, and where they have developed performing agricultural exploitations economically efficient?

In centralised economy Romania before 1989, there were agricultural production cooperatives and inter-cooperative associations.

After 1989, new forms of cooperation in agriculture appeared: ▪ family associations with no legal personality; ▪ producers' associations; ▪ legal personality agricultural companies (set on the structure of the ex IASs).

Most if them have now a vegetal character and **their goal is to work the lands in common** and persons manage them whose interest is not the owner's profit.

For activities upstream and downstream, cooperative association is poor, because of both objective and subjective causes such as: small size of exploitations, low amount of capital, lack of legal facilities, low level of skills in exploitation managers, lack of information in the field, and inefficiency of the National Agency for Consultancy.

In Romania there is a draft bill called "Agricultural Cooperation Bill" on: principles, objectives, setting mechanisms for cooperatives, statute content, social capital, rights and obligations for associations and cooperatives, management and its goals, financial control, financial means, and legal statute of patrimony.

Thus, it is possible to organise the following types of agricultural cooperatives in accordance to the already existing draft bill: supply cooperatives; production cooperatives; processing cooperatives; marketing cooperatives; agricultural service cooperatives; mixed cooperatives.

With agricultural exploitation consolidation, we could also organise other forms of cooperatives – credit cooperatives, insurance cooperatives, etc.

Such cooperatives already function in E.U. countries and they have existed in pre-war Romania, as the basis for agricultural cooperation was set back in 1870.

In Japan, the reform in agriculture in 1947 resulted in the disappearance of estates and in the adoption of the Bill for Agricultural Cooperatives.

In 1961, they adopted the Fundamental Agricultural Bill that allowed the concentration of a farmer's plots. Structurally, Japanese cooperatives are of the pyramidal type, i.e. there is a primary cooperative for several villages, and all primary cooperatives in a district – 20-30 cooperatives, depending on the district's size – are represented by the Agricultural Cooperative at a Prefect's office level which, in their turn, are represented at a national level by the National Union of Agricultural Cooperatives. In order to become a full right member of an agricultural cooperative one should own 0.10 ha and a minimum of 90 days of agricultural work a year.

As a conclusion, we can say that such a centralised organisation of cooperatives would no longer be profitable for Romania. This is the kind of experience Romanian peasants experienced between 1962 (the year agriculture met the cooperative system) and 1990.

What we need in Romania is to develop and consolidate commercial agricultural exploitations that produce for the market, so that food health is ensured from home production and not by importing basic agro-alimentary produce from Spain, Egypt, Greece or other countries whose agricultural potential is smaller than ours.

As for cooperation, it should only develop upstream and downstream. Working the land in common proved to be inefficient as a system both during the communist period, and after 1989. This can be seen in the yields in all basic crops in Romania, compared to developed countries where the dominant form of organisation is the private family farm.

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DEMOGRAPHICAL EVOLUTION OF THE LOCALITY SANOVITA, TIMIS COUNTY AND THE POPULATION INVOLVED IN AGRICULTURE

EVOLUȚIA DEMOGRAFICĂ A LOCALITĂȚII ŞANOVIȚA, JUDEȚUL TIMIŞ ŞI POPULAȚIA OCUPATĂ ÎN AGRICULTURĂ

NICOLETA MATEOC-SÎRB[*], I. BRAD[*], COSMINA TOADER[*]

In this paper we decided to underline the demographical evolution of the locality Sanovita between the years 1969 – 2003 and the degree of involvement of the population in agriculture. For the analysis of the demographical evolution we used indicators such as: total number of inhabitants, population density, birth ratio, death ratio, natural enhancement, population structure per age and gender.

Key words: *population, demographical situation, population evolution.*

The population is represented by the group of people which live in a certain geographical area. From the socio-economic point of view, population may be identified as a social subsystem which deals with the number of inhabitants, density, structure per age and gender, death and birth factor, feminization of migrations, demographical aging, renewing of the labor. Population is an action factor as well as a consumption factor. The demographical element in the diagnostic analysis of the rural area appears mainly as a development potential.

We shall present here the aspects of the demographical evolution in the locality Sanovita from the Timis County and the situation of the population involved in agriculture.

Same as the majority of the localities from the rural area, Sanovita also has to deal with the same issues, from which one of the most important

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is of demographical nature, more precisely the aging of the population, the low number of births, migration of the population towards the urban area, etc.

The number of inhabitants used to amount in 2003 to 515 and we find it slowly decreasing. In comparison with year 1980, the number of inhabitants decreased with 6.36%, and in comparison with 1969, with 27.25%.

The density of the population is an element with great variability in the area, being the result of the geographical, historical, economical and social conditions of which area. This economic indicator is expressed through the number of inhabitants per km^2 and it indicates the distribution of the population throughout the administrative territory of a locality at a given time. Due to the fact that the area to be inhabited of the locality is of 1.53 km^2, and the population amounts to 515 inhabitants, in the year 2003 the population density was of 297 inhabitants/km^2.

The main factors which contribute to the socio-demographical evolution are: ratio of births and deaths and migration.

The ratio of births is expressed through the indicator which represents the number of newly born alive which amounts to 1000 inhabitants. The value of the indicator depends first of all on the structure per age of the population and is influenced mainly by the demographical behavioral way of the area and the social economic conditions. If in 1969 the ratio of births was of 17 to 1000 inhabitants, in 2003 it was approximately 10 to 1000 inhabitants, being thus very obvious the decrease of the number of births.

The mortality is a factor that contributes to the evolution of the population. The indicator which expresses it is the ratio of deaths, which represents the number of deaths registered at 1000 inhabitants of a locality. The ratio of deaths in the year 1969 was approximately 11 to 1000 in habitants, in 1980, 7 to 1000 inhabitants and in year 2003 of approximately 16 to 1000 inhabitants.

Table 1

Evolution of the population of Sanovita between 1969 – 2003

Year	Total inhabitants	Newly born alive	Deaths	Natural enhancement
1969	708	12	8	4
1970	650	13	18	-5
1975	605	14	15	-1
1980	550	6	4	2
1990	530	4	8	-4
2002	540	10	9	1
2003	515	5	8	-3

Source: Data processed from the Mayor's Office from the commune of Ghizela.

The evolution of the population between 1969 – 2003 is represented in Table 1, which shows a slow process of decrease in population. Between 1969 and 2003 the population has decreased by 27.25%.

The structure of the population on age groups and gender groups is underlined in the following table (Table 2), where we can notice that the population devised by gender is relatively balanced, the number of females (256) being approximately equal to the number of males (284).

Table 2

Structure of the population per age groups and gender groups in year 2002

Total inhabitants			Age group							
			0-9	10-19	20-29	30-39	40-49	50-59	60-69	70-…
	Nr.	**540**	**51**	**55**	**51**	**58**	**52**	**53**	**120**	**100**
	%	100	9,27	10	9,27	10,5	9,45	9,63	21,8	20
M	**Nr.**	**256**	**27**	**26**	**26**	**32**	**25**	**25**	**55**	**50**
M	%	100	10,1	9,77	9,7	12,03	9,39	9,3	20,6	18,7
	Nr.	**284**	**24**	**29**	**25**	**26**	**27**	**28**	**65**	**60**
F	%	100	8,45	10,5	8,8	9,15	9,5	9,85	22,8	21,1

Source: Data processed from the Mayor's Office from the commune of Ghizela.

Referring to the structure of the population per age groups, by a simple view we notice that the majority of the population is the one aged between 60-69 yrs (21.8%) and over 70 yrs (20%). At the other end we find the age groups between 0-9 yrs, 20-27 yrs and 40-49 yrs. The percentage of the youth is very reduced, on short term being very weak perspectives as to the growth of the population. The lack of the young population is due to the migration towards the rural area as well as of the low degree of the number of births.

It is well known the fact that all throughout the Romanian rural area the main activity is agriculture, which may be considered the backbone of it. This fact is valid also for the Sanovita locality, the following table being very expressive in this respect.

Table 3

Structure of the population on areas of activity

Active population							
Total inhabitants			**Sector I Agriculture**			**Sector II Ind/cons**	**Sector III Serv/com**
			Total	Total time	Partial time		
	Nr.	150	100	40	60	30	20
	%	100	**66,5**	40	60	**20**	**13,3**
M	Nr.	64	45	17	28	10	9
	%	42,66	**70,31**	37,77	62,2	**15,62**	**14,06**
F	Nr.	86	55	23	32	20	11
	%	57,33	**63,95**	41,81	58,18	**23,25**	12,79

Source: Data processed from the Mayor's Office from the commune of Ghizela.

The table represents the structure of the active population on sectors of activity, the active population amounts to 150 people and represents 27.7 % from the total of inhabitants. From these 150 people 100 people work in agriculture (40% part time and 60% full time). The population involved in agriculture is the greatest in numbers, 66.5% from the total of active population. It is also noticed that the majority of people which are involved in agriculture work part time, which does not allow the practice of a high level agriculture, from the viewpoint of the time invested as well as from the viewpoint of the technical and financial resources, thus agriculture practiced

is a sub- resistant agriculture. The practice of a high level agriculture, except the financial and technical resources, implies agricultural knowledge.

The analysis of the population based on the level of knowledge has brought to light data which we have synthesized in the following table.

Table 4

Structure of the population based on level of knowledge in year 2002

		TTotal	**Level of school graduated**						
			No education	1-4 grades	5 - 8 grades	Crafts and trades school	High school	Post high school	Higher education
Total	**Nr.**	**414**	**23**	**63**	**234**	**57**	**22**	**7**	**7**
	%	100	5,6	15,09	56,45	12,72	5,45	1,80	1,80
M	**Nr.**	**200**	**11**	**26**	**96**	**41**	**15**	**6**	**5**
	%	48,36	5,63	13,15	48,12	20,67	7,5	2,6	2,25
F	**Nr.**	**214**	**12**	**36**	**142**	**11**	**8**	**2**	**3**
	%	51,63	5,63	16,9	66,19	5,28	3,52	1,05	1,4

Source: Data processed from the Mayor's Office from the commune of Ghizela.

From the total number of inhabitants of the locality, the majority are those who graduated 5-8 grades (56.45%), this phenomenon can be explained by the impossibility of sending the children to school because of lack of money or the need of labor in agriculture. We thus mention that it would be highly valued certain courses and seminars in agriculture.

We think that in the near future the population will continue to decrease, due to the people that are now in the age group "over 70 yrs old", but he number of births will also decrease. Their households will be left to their relatives, heirs which mostly live in the urban areas and which will either sell them in the beginning, or use them as a pastime place. As for the lands, they probably will be buy by futures agriculturals enterprisings.

We think that after 10-15 years by continuous decline of the population will register a growth of the population, which shall be due to the fact that the rural area will get "more attention" from the city folk, which will understand that the city does not offer them what they need.

In this period the phenomenon of migration to periurban area will be more developed, the locality Sanovita being at a distance of 50 km from Timisoara is in this situation. We have to mention that that this phenomenon exists but it manifests only on a span of 20-30 km from the city. For these inhabitants agriculture will no longer represent the main activity, in this area will be develop activities like agrotourism, farm produces processing.

We estimate on a long-term basis that it will have a "straightening out" from the demographic point of view, but in accordance with the saying "the man makes the place holly", soon there will also be the town specific household utilities (running water, drainage, natural gases, telephony, TV cable, etc.), modernized public services (health, education, etc) reaching thus the comfort of the majority of people which "fled" toward the urban areas.

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RURAL DEVELOPMENT PLANNING IN MICRO-REGIONS

PLANIFICAREA DEZVOLTĂRII RURALE ÎN MICRO-REGIUNI

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Abstract: Rural development is a conscious activity coming from the outside of the system (local communities, micro-regions etc.) with the purpose to improve the life conditions and the role of the rural areas in society and in spatial structure. One method for this is when the actors in a given rural area (local communities, micro-regions etc.) actively take part in the development of their own system.

Through their activity a bridge can be built between the process of improvement and the process of evolution, which can be utilised when making a rural development programme. The preparation and the implementation of rural development programmes are carried out during the programming process, where the first step is planning. The main phases and characteristics are summarised in this presentation.

Key words: *programming, planning, SWOT-analysis, problem analysis, objective analysis*

RURAL DEVELOPMENT PROGRAMMING

When speaking of programming we mean a system or methodology with the help of which a region development programme can be completed. This is an up-to-date planning and controlling method embracing the whole development. Programming starts with making a programme, that is planning.

Planning includes strategic programming as well as operative programming. Within strategic programming we determine the objective (prospects) we wish to achieve during the development. It involves the steps which help us create related programmes leading to the accomplishment of the objectives.

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Operative programming includes concrete actions, detailed plans for accomplishment and projects aiming at the accomplishment of the programmes as defined in the strategy.

The scheme of rural development programming is shown in the table bellow (Table 1).

Table 1: Scheme of rural development programming

Strategic programming	**Operative programming**
- Defining the objectives - Situation analysis - SWOT analysis - Problem analysis - Objective analysis - Objectives, priorities - Programmes, sub-programmes - Measures	- Measures, actions - Projects

Drawn up after Kovács (2003)

STRATEGIC PROGRAMMING

The first task of programming is to determine the objective to reach a certain situation that the given development programme is designed for. Such an objective can be e.g. the improvement of the life quality of people living in rural areas, or to increase the population-retaining power of the region.

The first step in making a rural development programme is the situation analysis basically in order to explore and assess the resources of the micro-region. In the situation analysis we must consider the geographical position of the micro-region, the assessment and the estimation of rural resources (natural factors, human resources, infrastructure) and the facilities and characteristics of regional economy (economic sectors, enterprises). This part of the situation analysis is grounded on various databases (KSH, TEIR stb.) and also personal information, where dinamics is one of the most important features. It means that situation analysis contains not only mere data and facts. It contains data of the past period

(time series) and analysing statements built upon them, which connect situation analysis with the strategy.

The next step in situation analysis is SWOT-analysis, which is an acronym made up of the first letters of four English words, that is Sterngths, Weaknesses, Opportunities and Threats. Both parts of the situation analysis (text and SWOT-analysis) are important and necessary to form a realistic picture, which is essential to create an effective and real strategy.

SWOT-analysis is a common method for situation analysis and it means team-work. Team work has several advantages, one of them can be identified as a better outlook upon problems. Another important advantage of activities carried out in groups is that it involves the actors of the micro-region (local authorities, entrepreneurs, civil organisations) and stakeholders in the rural development programme into programming, that is decision making in questions influencing their lives and life conditions.

Further advantage of team work and involving the stakeholders is that the intercommunication-system of the participants improves, co-opertation develops, strategy obtains a wide-scale support and priorities are defined according to the ideas of the stakeholders. As a result of all these a good quality programme can be made which meets the development requirements of the micro-region better.

During a SWOT-analysis participants carry out the analysis of the current situtation according to certain categories. The analysis is based on the fact that the situation of a micro-region is influenced by both internal and external factors. Thus the SWOT-analysis starts with the analysis of the internal characteristics and facilities, when the strengths and weaknesses of the micr-region are to be assessed. This is followed by the analysis of the external environment that can be positive (opportunities) and negative (threats).

When analysing the situation, various strategic directions can be designated. In the areas where the region has special strengths supported by external factors a so called offensive strategy can be applied. In such a way four possible strategic directions can be defined in various fields.

PROBLEM AND OBJECTIVE ANALYSIS

The next step of programming is the so called problem (problem tree) and objective (objective tree) analysis built upon the results of the

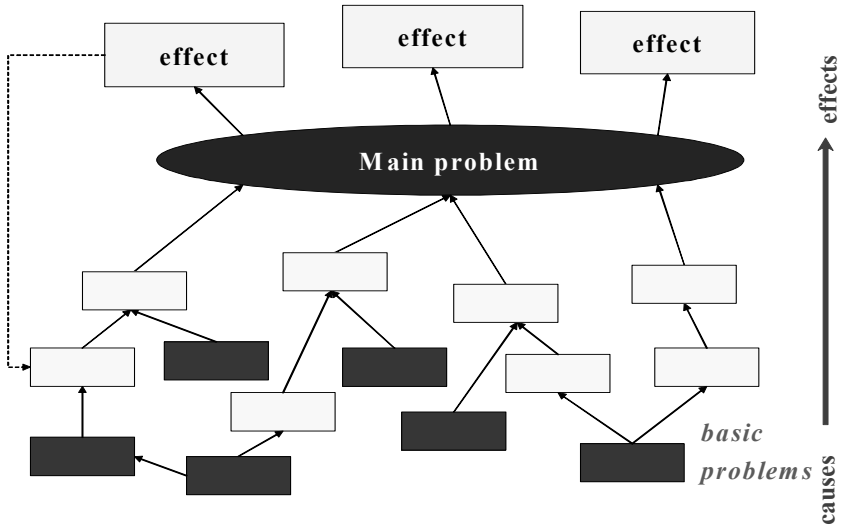
SWOT-analysis. The essence of problem analysis is to identify the problems in the current situation and explore the relation of cause and effect.

The analysis consists of the following three steps:

- To identify the main problem of the region,
- To identify the basic problems generating the main problem,
- To explore and visualise the relation of cause and effect, to create a so called problem tree.

The result of the analysis is a diagram containing the effects generated by the main problem of the region and ranking the problems effecting it, according to the relation of cause and effect (Figure 1). The aim of the analysis is to identify the existing problems of the region and the tight cross-section of the development in the micro-region, where the participants (the stakeholders) associate priorities in order to span the problems and development gaps.

Figure 1: Problem tree



Source: VÁTI (2003)

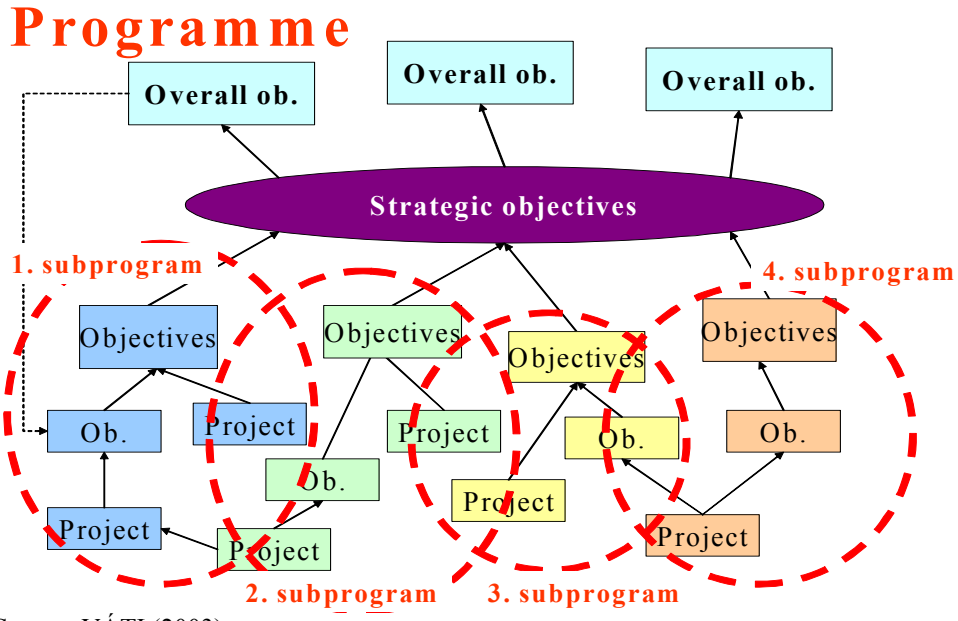
By exploring the the relation of cause and effect we can identify the basic problems which are the main reasons for the negative situation being

present in the region and by classifying them the main trends (directions) of the development programme can be defined.

The objective analysis is a method derived from the above, where the problems and negative situations of the previously created problem tree are converted into solutions. The solutions are, in fact, objectives forming an objective tree. The result is another diagram providing a clear view of the desired future situation and the activities to be completed (Figure 2).

When converting the basic problems at the bottom level of the causality-structure into objectives they indicate the most important projects, while the objectives linked by the relation of cause and effect give the sub-programmes of the programme. The problem analysis and the objective analysis, therefore, connect situation analysis with the definition of the objectives and forming a strategy.

Figure 2: Objective tree



Source: VÁTI (2003)

In the further steps of strategic programming, using the results of the problem and objective analysis, the concrete sub-programmes and activities

are defined, which, through the accomplishment of the special objective will lead to the attainment of the central or general objective (desired situation).

There may be close connection between the sub-programmes due to the cause-effect correlation (there may be several outcomes deriving from a certain problem and also several factors may cause the same problem) and in this way the accomplishment of a certain programme (measure or project) can help the accomplishment of other sub-programmes as well. Our programming process is correct if the sub-programmes are in connection, in synergy, and strengthen each other.

Strategic programming having been finished the next step is operative programming which is the plan of the concrete accomplishment of strategic programming.

In the phase of operative programming the supported activities within the certain actions are determined. The activities within the certain measure must comply with not only the strategy (to provide the accomplishment of the programme objectives) but it is also important that they go along with the various conceptions (county, regional, national) and supports (that can be a source of the accomplishment).

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LOGISTICS IN AGRICULTURE

LOGISTICA ÎN AGRICULTURĂ

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Summary: In this study the application of logistics in agriculture was introduced by the operation of a regional logistic centre in a producer organisation. The co-operative and its logistic centre serve the opportunity of mutual purchasing, post-harvest processing, storage and distribution for the regional producers. In our example the horticulture was choosen, because the production of horticultural products is very high, and on the other hand the small-scale horticultural farms need highly the integration in the supply chain.

Key words: *Logistic centre, producers organisation, regional developement, horticulture*

INTRODUCTION

The large multinational chain stores posses an ever-growing ratio of the Hungarian food market and within that the vegetable and fruit market. To meet these concentrated requirements concentrated supply is necessary so that producers may get a more favourable position when forming their prices.

The existing producers organisations provide the solution with their efficient operation supported by logistics. Logistics integrate all kinds of activities in connection with moving and storing goods (KNOLL, 1999), which on the one hand facilitate the flow of products from the producers to the consumers, and on the other hand the flow of information that get the product move with the purpose of providing an adequate quality supply at a reasonable price.

The tasks of Hungarian agricultural logistics (BENKŐ, 2000):

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- To provide a choice of goods in a sufficient quantity, at the right time, at the right place, in an adequate quality and at the lowest possible cost.
- To train the management of the producer or service companies controlling certain processes and/or obtaining the services.
- To keep Hungarian markets by increasing the standards and decreasing the costs.
- To integrate into the international logistics processes.

With the introduction and spread of new production and marketing strategies Hungarian agriculture and food industry can keep and strenthen its position on local as well as on EU markets.

In our work we sought an answer to the question how the producers' organisations can apply the possibilities provided by logistics.

MATERIALS AND METHODS

We wish to show an important field of applying agricultural logistics through the example of the Agricultural Logistics Centre of the Mórakert Co-operative.

We made interviews with the manager and employees of the Mórakert Co-operative and in its largest investment – approximately 250 million HUF –, the South Plain Regional Logistics Centre. We collected data on the activities of the company.

The method of the data collection was based upon the questionnaire compiled by SZEGEDI (1998).

DISCUSSION

Owing to the successful connection the direct supply increased, but the quality and quantity requirements of the chain stores made the Co-operative strengthen their general production-organising and integrating function and develop their administrative and logistic system. The development was successful, which is proved by the fact that as a result of their experience in the field of production-control, processing, logistics, marketing and their economic position Mórakert Co-operative is the only

acknowledged fruit and vegetable producing and marketing organisation (PO) in the country.

In 2003 the number of its members was over 300 and they have more than 1500 suppliers. The annual turnover is 1.6 million HUF.

The continuous development can only be kept up by new investments. It was within the framework of these developments that the so far largest, approximately 250 million Ft, investment of the Mórakert Co-operative could be realised when they established the South Plain Regional Logistic Centre. The logistic base has an area of 3600 m^2 consisting of a loading bay, a manipulation area for vegetable and fruit sizing and wrapping and an area for ULO (Ultra Law Oxygen) technology. Apart from the logistic base the co-operative also possesses a separate building (800 m2) for wrapping potatoes. After the planned expansion of the logistic centre there will be a 3000 m^2 area for assorting, wrapping and storing fruit and vegetables.

They purchase raw materials from the South Plain Region, that is from Bács-Kiskun, Csongrád and Békés counties. The agricultural area of the three counties totals up to 1.3 million hectares. This region provides one third of the overall fruit and vegetable production of Hungary and this is where two thirds of the green houses and platic tunnels can be found.

They sell 80% of the products in Hungary, while 20% is for export. Through their direct commercial channels the co-operative delivers products to the logistic centres of different chain stores like AUCHAN, TESCO, CORA, SPAR, Profi, Csemege.

A great advantage for the members/supplyers of the Mórakert Co-operative is that they „only" have to produce the goods. Selling and marketing the goods to meet consumer needs belong to the logistics activities of the Mórakert Co-operative.

Acquisition activity

Farmers bringing products to the Mórakert Co-operative can be divided into the following groups: members, regular subcontractors, new, temporary subcontractors and regional member-co-operatives.

Regular subcontractors are those who had a turnover of over 1 million HUF with the co-operative in the previous year. These producers form an important basis in the group of suppliers, their number is 1 500. New and temporary subcontractors cannot always sell their products

through the co-operative as certain products are supplied by members or regular subcontractors but they have great importance all the same, since the co-operative can turn to them in case custemers demands proves to be greater than the planned.

Other important suppliers are the member co-operatives in the Homokhát small region namely in Domaszék, Röszke, Forráskút, Zsombó, Zákányszék, Pusztamérges and in Szatymaz. These member co-operatives have their own range of suppliers. They supply certain product-groups in reliable quality and quantity to the Mórakert Co-operative. It is obvious from the relation with its member co-operatives how important integrating role Mórakert Co-operative has in the small region. A significant part of the contact with producers are professional training and consultancy realised in the form of professional evening talks.

Farmers bring their goods to the co-operative themselves. This is a one-centred co-operative, all the products arrive at the same place. It has a great advantage, as no extra time or energy is needed to plan and organise transport between different sites.

Supply from members is regulated by a quota system. Production contracts are concluded with the farmers.

The Co-operative thinks it important to observe quality measures, which is achieved by the use of the HACCP system.

Post-harvest activities

Fruit and vegetable wrapping and assorting take place on a manipulating area of 1 200 m^2 kept up for this special purpose only.

Task: to create single standard quality products from the different quality goods. Bar code is used on the wrapping to identify the product.

Fruit and vegetable manipulator-wrapper machine

The double-function machine does the assorting, preparing and packing of two product-groups. The machine is made up of two separate technological units:

- The firs technological unit was designed for assorting, cleaning and manipulating purposes
- The other technological unit is the packing-traying machnine which packs the products into baskets.

The machine is used in 9-10 months annually owing to the elongated production period characteristic to the small region because of the foil cultivation.

Storage

The products are stored in a refrigerator a ULO technology on 900 m^2. The refrigerator is divided into 7 chambers so that the different product groups can be stored and chilled systematically. The volume of the stock depends on the season and the expected quantity of orders.

Commission

After receiving the orders the required quantity of goods is taken out of the refrigerator and it is prepared. All products leave the co-operative equalised.

Orders are compiled in accordance with the demand of the consumers. The goods are prepared for delivery in the loading bay, where they are put on loading pallets and joined by bands.

Three articulated trailers can be loaded from the back through sluice gates, while side-loading trucks are loaded in front of the building in a place covered by a roof.

Distribution and marketing

The company management thought it important to create a motto saying: „Strength is in vegetables". This slogan represents what the co-operative deals with and inspires confidence in consumers towards the products sold by the co-operative.

The Mórakert Co-operative has had a uniform image since 1997, which is consistently put on each of their pre-packaged products. The management arranged to have the name, address and the logo of the co-operative put on the trucks and trailers of the Transport Company.

At the Mórakert Co-operative the time of performance is better than the national average of 3.2 days; it is approximately 24 hours here. Orders that arrived within 12 hours of the previous day are performed in 12 hours during the following day.

When creating a domestic consumer circle it was an important logistic aspect to arrange that deliveries should be taken to centres and not

individual stores spread all over the country. This can considerably reduce costs.

Product seasonality and fluctioation

Product seasonality and production fluctuation are characteristic of vegetable and fruit production. The Mórakert Co-operative makes efforts to reduce the unfavourable effects of these phenomena (e.g. they compile a so called ”product-calendar”, they conclude production contracts).

Cost of logistics

There is no clear separation of logistic costs in the accountancy of the Logistic Centre run by the Mórakert Co-operative either, which does not mean they do not follow the costs of logistics. These costs are usually compared with two data, that is the turnover and the total costs. According to estimations made by the management of the enterprise these are as follows: the ratio of logistic costs compared with turnover is 15-20%, while its ratio compared with total costs is 40%, which can be considered as good.

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A COMPARATIVE STUDY OF ECONOMIC EFFICIENCY INCREASE IN MILK PROCESSING

STUDIU COMPARATIV AL MAJORĂRII INDICATORILOR DE EFICIENȚĂ ECONOMICĂ ÎN CAZUL PROCESĂRII LAPTELUI

I. CSÖSZ[*], **SIMONA CRISTINA CONSTANTINESCU**[*]

Milk industry is one of the branches of food industry whose goal is to turn milk into different assortments of dairy products. Milk is a valuable and necessary food with a particular fortifying action on human body. In a modern civilisation, milk consumption is an important index of living standard.

Milk processing turns in a higher profit than pasteurised milk or than polyethylene wrapped milk.

***Key words**: milk and dairy products, processing, and profitability.*

Milk, with its reach trephine content, is a food indispensable to babies and absolutely necessary to adults and old people, which requires from milk processors a good knowledge of raw material from the point of view of chemical composition, of physical and chemical features, and of basic technological processes. Milk is one of the most important foods destined to both humans and animals. It is also an important raw material in food industry. It is a food for children and for most sick people, for teenagers, old people, and workers that work in high-toxicity environment.

Milk is a valuable and necessary food with a high fortifying action on the body. In a modern civilisation, milk consumption is an important index of living standard.

Daily food requirements in humans from an energetic, main components, and ratio point of view have been assessed, as shown in Table 1.

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Daily food requirements in humans

Table 1.

	Children		Adults	
	Requirements	**Of which milk (%)**	**Requirements**	**Of which milk (%)**
Calories	1500 cal	40	2800 cal	22
Proteins	50 g	70	70 g	45
Calcium	0,8 g	100	0,8 g	100
Phosphorus	0,8 g	100	1 g	100
Iron	10 mg	10	15 mg	6
Vitamin A	5000 IU	40	5000 IU	4-0
Vitamin D	450 IU	5		
Vitamin B_1	0,7 mg	60	1,5 mg	30
Vitamin B_2	1,3 mg	100	2,5 mg	60
Vitamin PP	9 mg	12	15 mg	8
Vitamin C	50 mg	40	75 mg	25

It is very important to note that milk supplies high biological value proteins, cheaper than those in meat, chicken, or fish. On the other hand, digestive use coefficient (i.e. the share of substance absorbed in the intestine) is very high in milk proteins, similar to that in meat or egg (90-97%). Similarly, lactose is not only a source of energy, but also a substance with a particular nutritious value, particularly for children. From an energetic point of view, milk fat supplies 50% of the caloric value of milk. Good milk fat digestibility is the result of high concentration in oleic acid, easily assailable, and of low concentration in stearic acid, which is more difficult to absorb. Milk lecithin, with its coline content, facilitates lipid balance in the body.

Mineral substances in the milk are better absorbed by the human organism compared to other food, due both to lactose and citric acid. Calcium in the milk provides a particularly efficient protection against cavities, even in the presence of sugar. As for vitamins, cow milk contains most vitamins in higher amounts than human milk.

By pasteurising milk man aims at supplying a “cleaner” milk from a micro-biological point of view and at maintaining for as long as possible normal milk features, applying a proper thermal treatment.

Until recently non-processed milk was thought to be more profitable than processed milk. We are going to show that milk processing and dairy products are profitable from an economic point of view.

We could see that lately big companies in food industry turned bankrupt mainly because of high fixed expenses and of the impossibility for

small manufacturers to invest. We can say that a milk processing company can function at high technical and economical parameters only within an association that ensure both necessary investment funds and raw material production, or within a family association.

The comparative study on economic efficiency in pasteurised milk, wrapped milk, and processed milk was carried out at the S.C. Impex S.R.L. Timişoara, the Saravale processing unit, and study methodology is based on comparing three different methods of getting finite product.

There are different ways of calculating analytical indices of economic efficiency, mainly of the total production cost index, for different dairy products. In this paper, the total production cost index was obtained by assessing each expense element within the technological process with the help of measurements, corroborations and calculus. We think this way of presenting analytical indices is more accurate and real than other methods such as economical and mathematical simulation method which, though laborious and exact, ignore everyday realities of production process.

We show below the interpretation of analytical and synthetic indices for each case with the mention that in each of the three cases we started from the same amount of raw material.

Pasteurised milk

Table 2.

Nr.	Item	Value (ROL/year)	%	Milk value (ROL/l)
1	Raw material	13.608.000.000	64,13	
2	Additional material	14.950.000	0,07	
3	Building liquidation	295.820.500	1,39	
4	Equipment liquidation	38.925.823	0,18	
5	Energy consumption	1.326.460.000	6,25	
6	Wages	424.710.000	2,03	
7	Indirect wages	93.436.200	0,44	
8	Other expenses	1.570.886.632,3	7,4	
9	Interest	3.843.530.000	18,11	
10	Total expenses	21.216.719.155,3	100	
11	Incomes	22.680.000.000		
12	Price			15.000
13	Cost	1.463.280.844,7		
14	Profit		6,89	
15	Profit rate			14.032,22
16	Labour productivity	1.890.000.000		
17	Profit/1000 ROL invested		68.9	
18	Profit/U.M.			967,78

Source: Economic balance of S.C. Impex S.R.L., Timişoara, 2003

We can see that:

- expenses are within raw material and additional material expense normal limits;
- liquidity expenses are low;
- while wages expenses are low compared to the number of employees;
- income produce a profit rate of 6,89%.

Wrapped milk

Table 3.

Nr.	Item	Value (ROL/year)	%	Milk value (ROL/l)	Cream value (ROL/kg)
1	Raw material	13.608.000.000	49,01		
2	Additional material	244.950.000	0,88		
3	Building liquidation	295.820.500	1,09		
4	Equipment liquidation	105.826.366	0,38		
5	Energy consumption	5.426.890.000	19,54		
6	Wages	824.710.000	2,97		
7	Indirect wages	181.436.200	0,65		
8	Other expenses	2.050.619.686,6	7,38		
9	Interest	5.026.137.500	18,1		
10	Total expenses	27.764.370.252,6	100		
11	Incomes	36.424.286.640			
12	Price			16.000	75.000
13	Cost	8.659.916.387,4			
14	Profit		31,19		
15	Profit rate			13.520	51.310,29
16	Labour productivity	2.276.517.915			
17	Profit/1000 ROL invested		311,9		
18	Profit/U.M.			2.480	23.689,71

Source: Economic balance of S.C. Impex S.R.L., Timişoara, 2003

We can see that:

- raw material expenses are unchanged, but additional material expenses are quite high;
- building and equipment liquidities are low, as energy and labour expenses;
- total income from wrapping milk has a profit rate of 31,19%, …

Processed milk

Table 4.

Nr.	Item	Value (ROL/year)	%	Milk value (ROL/l)	Cream value (ROL/ glassful)	Yoghurt value (ROL/ glassful)	Yoghurt whit fruits (ROL/ glassful)
1	Raw material	13.608.000.000	37,66				
2	Additional material	1.126.950.000	3,11				
3	Building liquidation	295.820.500	0,81				
4	Equipment liquidation	905.826.366	2,5				
5	Energy consumption	9.926.890.000	27,43				
6	Wages	995.710.000	2,75				
7	Indirect wages	219.056.200	0,6				
8	Other expenses	2.685.919.687	7,42				
9	Interest	6.414.387.500	17,72				
10	Total expenses	36.178.560.253	100				
11	Incomes	54.059.040.000					
12	Price			16.000	19.500	5.500	7.000
13	Cost	17.880.479.747					
14	Profit		49,42				
15	Profit rate			12.376,35	10.966,82	4.233,34	3.865,23
16	Labour productivity	2.845.212.632					
17	Profit/1000 ROL invested		494,2				
18	Profit/U.M.			3.623,65	8.533,18	1.266,66	3.134,77

Source: Economic balance of S.C. Impex S.R.L., Timişoara, 2003

We can see that:

- raw material expenses are identical, i.e. circulating expenses are identical;
- all production factor consumption elements and analytic indices of economic efficiency are lower in the processed milk than in processed milk;
- profit rate (49,42%) is clearly in favour of processed milk;
- labour productivity is in favour of processed milk.

We can therefore conclude that profit is higher in the case of wrapped milk compared to pasteurised milk, with a profit rate of 31,19%, a profit that is both from milk production and cream production, while not

processed milk profit is much higher compared to the other variants, resulting in a profit rate of 49,42%.

Wrapping does not yield a considerable profit because wrapping costs is high enough; in wrapping they use polyethylene, a plastic material that cannot be reused (it is a non degradable waste) leading to the profit decrease.

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THE AGROTOURIST FUND OF CIACOVA, TIMIS

FONDUL AGROTURISTIC - LOCALITATEA CIACOVA, TIMIŞ

I. CSÖSZ, DANIELA FARCAŞ*

The natural agrotourist fund is the total of those physical and geographical elements in a territory that by virtue of their value can attract potential tourists and ensure the tourist value of the territory. Thanks to this capacity, the natural tourist fund differs from the rest of the natural conditions that are only the framework for tourist circulation.

***Key words**: tourism, agrotourism, village*

The natural agrotourist fund is important for the beginnings of tourism in a territory. Consequently it is a starting point for its tourist capitalisation. The capitalisation implies a good technical and material basis that should guarantee the satisfaction of tourists' necessities.

The importance of relief in tourism comes from the fact that it represents the general natural framework for tourism and it is also one of the major natural factors in attracting tourists. The attraction that the relief has for the potential tourist is closely related to its forms. The geographic structure differences, the geomorphologic aspects, the accessibility degree, the beautiful landscape are all tourist motivations.

Ciacova is a village situated in the south-western part of Timis County at 32 km from Timisoara.

According to HAACK atlas, Ciacova lies at latitude 45.31° north and longitude 21.09° east. FIERO (HIERO) gives different figures: at latitude 45.31° north and longitude 38.47° east. The village is at 83 m above the sea level. Ciacova lies on the left bank of the former Timis River, called the Dead Timis today. It is made of several hamlets: Ciacova, Cebza, Gad, Ghilad, Macedonia, Obad and Petroman. The whole surface is 21.944 hectares, being the largest village in the county.

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The village has over 7,000 inhabitants. Most of the population is made of Romanians, but there are also Germans, Serbians, Hungarians, Ukrainians and Jews. The inhabitants' main occupation is agriculture - cereal cultivation mainly. Other local economic activities are farm produce processing, wood processing, milling and trade.

Meteorological data registered at Banloc station - about 13 km from the Ciacova - and some data registered at Timisoara station - about 32 km from it - were used to characterise the climate of Ciacova.

The thermic regime is the following:

- annual average temperature: 10.7°C;
- monthly average temperatures - see figure 1:

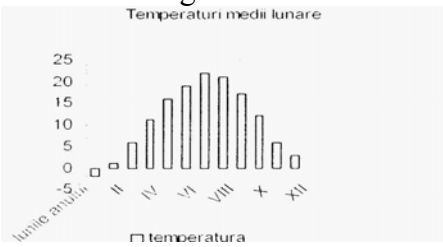

Figure 1. Multiannual monthly average temperatures

The absolute maximum temperature - 38.1°C - was registered in August 1961. The absolute minimum temperature was -31.8°C and was registered in January 1963. Frost comes first around October 27th and lasts until April 18th. It may freeze in September or May, but extremely rare (Mai 19th 1952). The pluviometric regime is the following:

- annual rainfalls: 604.5 mm;
- average monthly rainfalls: see figure 2.

The most frequent winds blow from the North and East, but the strongest are those that blow from the South and North.

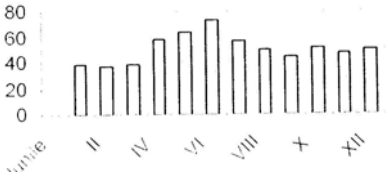

Figure 1. Multiannual monthly average rainfalls

Ciacova's territory is part of the hydrographic basin of the Timis, in the Dead Timis basin and Lunca - Birda.

The Timis has a permanent course with some fluctuations depending on precipitations. The river flows in the West as the natural border of the village.

The draining network was started 200 years ago and at present it is continued by thick series of canals on the microdepressionary forms of relief and on some abandoned water courses which it removes from under the influence of humidity excess. At present, the waters in some canals, Lunca - Birda included - are polluted with waste from the animal breeding complexes in the area (Padureni, Voiteni, Birda) so they cannot be used to supply water for animals or irrigations.

The phreatic waters level is high enough, except for the droughty years (like the one when the present paper was written), and respects the relief in general.

The territory of Ciacova village is located in the subsidence river-lacustrine field of the Tisa, the Timis plain district. Lying on a line of maximum sinking, the plain has a typical subsidence aspect with large water divagations, many meanders and frequent swamps.

It is a typical Holocene divagation plain, both with local subsidences (Timisoara, Gad) and a large subsidence in the inferior course of the Tisa and the older and more recent alluvial deposits.

At present the territory of the village is almost completely without swamps thanks to man's intervention; as a result, the processes of washing, transport and accumulation of soil material are not necessary any longer.

The energy of the relief is relatively small, between 0 and 5 m, and the extreme altitudes vary between 80 and 85 m.

Seen as a whole, the relief appears like a plane surface. However, if taken separately, the microrelief has changes from positive to negative forms on a small distance, sometimes of only several metres. Thus soils appear on these diverse areas with frequent variations.

A characteristic of the studied area is the forest steppe vegetation bordering the semiwet steppe dominated by grass, like in low, wet plains.

The spontaneous grassy vegetation is dominated by mesophile, hygrophile and halophile groups on salt areas. The cultivated plants have good growing conditions beside a large variety of cereals, technical plants, fodder, vegetables, and herbs.

Wheat, maize, barley, beet, lucern, shamrock, soya, aubergine, green pepper, camomile, mint, lavender.

The 300-ha forestland near Macedonia is managed by Timisoara Forestry Inspectorate.

Trees (old trees) are cut only for maintenance purposes.

The wood is near the Timis river, 8 km far from Cebza.

Tree species lacking value are eliminated, while others are improved. There is a forest range near Macedonia that manages the works on the 300 hectares.

Among the species that grow in the forest are oak-trees, beech-trees and hornbeam. There are few acacia and lime trees.

Anthropic resources

In the Western part of the country, geological data have long revealed the existence of geothermal waters but the small number of fodder reduced their knowledge.

In 1962 an unusual phenomenon took place at Cebza. Winter was over. A ditch at the end of the village was full of hot water for several months. Experts were called and decided to drill the Cebza area. Because of the bureaucratic system, the drilling took place only in 1965. It was only after this year that ample studies were started and drillings revealed the presence of geothermal waters in the whole Western Plain. The analysis proved that upon the crystalline base there was a succession of Mio-Pliocene deposits made of compact grit stone deeper, and marls, sands and clay closer to the surface. In the porous sand-gravel deposits covered with marl there are a series of deep aquiferous slopes (500-300 m). The aquiferous layers decrease with the depth as a result of a logical process, but at the same time their temperature increases from 32°C at 500 m to 90°C at 2,000 m.

It has been considered that geothermal water use is most profitable at 2,000 m, as the drilling is not too deep, the flow stays at 30/s and the temperature is 90°C.

On searching the causes that explain the presence of geothermal waters around Cebza, the studies have revealed as a first cause the fact that Maharovicic surface lies in the area of the Pannonian depression at small depth- 15 km - under which lies hot magma. Naturally temperature, water quantities of aquiferous layers and mineralization are also influenced by local causes: roc types, rock porousness, quality of accumulated stages, pressure. As these waters can be used in so many different ways, they will be a power and fuel source if the physiognomy of the locality would be

different than today; they are a natural wealth that may influence the life ad welfare of Cebza.

Not so long ago in the past of the village, each Sunday both the old and the young people of the village gathered together for the dance that was organised. As the number of the inhabitants came down, because many of them migrated into the large industrial centres, the custom was lost. Another tradition in the village was a mixed chorus that participated in musical events organised in Banat. The first attestation of the chorus mentions the choral events organised at Chizatau. This cultural tradition was lost in time.

Ruga Banateana, a traditional annual celebration with folk music and dance, is organised in the first Sunday after Pentecost, which is also the dedication day of the village church. There is also a monastery in the village that has a church in the cemetery. Every year people celebrate the dedication day of the church in the cemetery on September 14th. Balls used to be organised in the cultural club at every religious celebration like Christmas or Epiphany. Only the local instrumentalists played at any folk event. Today instrumentalists from other villages play at Ruga Banateana.

Agrotourism implies a specific demand for goods and services that trigger an increase in their production. Tourist demand implies the adaptation of the supply, which requires the development of the technical and material base, the stimulation of the branches and a well-equipped accommodation space, the modernisation of the road network and entertainment facilities.

Agrotourism development has a positive influence on the use of the labour force with a view to creating new jobs.

In order to increase the level of welfare and living standard in every family in Ciacova village, the private activity must be stimulated by:

- credit from the state to allow the acquisition of farming machinery so that the optimum working period of the soil should be respected strictly;
- information (for specialists) on the use of quality varieties and hybrids, the use of quality seeds, the application of a technology of cultures according to soil conditions where the owner ploughs his land;
- the organisation of seed selections activities (especially for the wheat and barley cultures), the controlled organisation of seed treatment by experts in order to obtain healthy biological cultures;

- the initiation of the villagers in using agrochemical mapping in order to set the rational fertiliser doses; the peasants must be informed on the special role of using organic fertilisers (manure);
- experts should teach the peasants how to use herbicides correctly both in selecting the dose and in weed killing;
- the peasants should be taught to cultivate those plants that give profitable crops and required by the market economy;
- given the international purpose of obtaining ecological productions without chemicals, I consider that peasants should be well informed about the negative effects that the pollution factors have upon soil quality and their health;
- in order to achieve these objectives, besides the efforts that the villagers will make and the crediting means, I believe it is necessary to develop a local system meant to gather funds (maybe even a bank) and organise the agricultural credit that will allow the creation of a quality infrastructure;
- the peasant (owner) must be taught about management in agriculture and agrotourism in order to capitalise production according to demand and for profit.

The creation of this minimal framework in the main sector of the village can lead to more dynamic private properties and an increased economic power of the peasant households that will in turn lead to a superior living standard in the agricultural field. As economic power increases from the above-mentioned activities, an entertainment area can be developed around Cebza, on the banks of the Timis river.

The local century-old historical monument (the Cebza Monastery) can be turned into a tourist attraction and described to the tourists.

These are objectives in close connection with the life of Ciacova village. They can be achieved if the mechanisms that revitalise both the economic and the moral life are stimulated adequately.

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PROFILE AND CHARACTERISTICS OF THE TOURISTS FROM THE BĂILE CALACEA RESORT, TIMIŞ COUNTY

STUDIU PRIVIND COMPORTAMENTUL TURIŞTILOR DIN STAȚIUNEA BĂILE CALACEA, TIMIŞ

GH. GOJE[*], MARIA GOIAN[*]

*For analysis of touristy situation from health resort **Băile Calacea** it can be used the following methodology, which has on the basis an investigation based on questionnaire. The station must create a strategy of maintaining and development of its activity.*

Key words: *services management, marketing researches, rural development*

The realization of this kind of study suppose running through next stages:

1.The identification and the operationalization of the problem

- The definition of research problem
- The specification of informational needs (of research objectives)

2. Establishing the research program

- The identification of the type of the study and of the date's source.
- The determination of methods for accessing dates
- The designing of instruments for collecting dates
- Establishing the sampling plan

3. The collect of dates

4. The treating and analysis of the dates

- Codification of the dates
- Treating of the dates
- Plan for analyzing the dates

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1. THE IDENTIFICATION AND THE OPERATIONALIZATION OF THE PROBLEM

Decisional problem consists in evaluation of touristy situation from Baile Calacea health resort. For solving the decisional problem we need more categories of information. For this purpose there will be collected information about:

- Behavior when visiting other touristy stations;
- Length of the vacation at Calacea station; Visited touristy stations;
- Reasons for choosing Calacea station; Influences in choosing this station
- Attitude beside the station;
- Evaluation of the offer of B***ă***ile Calacea station in comparison with other stations;
- Demographic and psychographic characteristics of respondents.

2. THE CONCEIVING OF THE RESEARCH PROGRAM

This kind of methodology suppose a descriptive study and the used method in research is investigation based on questionnaire. The questionnaire was projected starting from these information which contribute to the solving of decisional problem and it is presented in annex number 1.

3. COLLECTING DATES

Administration of the questionnaire was made personal, on a pilot sample of 27 persons, the method of sampling was a non-probabilistic method: convenience sampling, being investigated those persons who had the possibility of supplying necessary dates.

4. TREATING AND ANALYSIS OF THE DATES

The questions and the answers of the 27 questionnaires were codified for being processed. The treating and processing of dates was made on computer and for this purpose was used the program SPSS.

The main **conclusions** detached after the processing of the dates refer to the next aspects:

Sample characteristics Everyone who answered the questionnaire questions respective 100% declared that they are from Timis district.

- 96% from persons who answered the questionnaire questions are pensioner, only 4% are working.
- Most respondents 74 ,1% have incomes under 2 millions lei, being followed by those with incomes between 2 and 3 millions lei: 18,35%.
- From these , majority (52,6%) was in the station for 5 times in the last 5 years and we can detach the conclusion that they are going every year in the station.

a. Reasons for choosing Băile Calacea station

- 88,9% from respondents declared that the reason for coming in this station is represented by the treatment conditions.
- 44,4% from respondents declared that the reason for coming in this station is represented by specific therapeutic properties.
- The principal influence in choosing of the station belongs to the doctor, with 66,7% from respondents declaring that they picked this station at the suggestion of doctor.

b. Attitude beside Baile Calacea station

- 88,9% of respondents declared that they agree with the affirmation that refers to the treatment services.
- 96,3% of respondents declared that they agree with the affirmation that refers to the personnel kindness.
- 63% of respondents declared that they agree with the affirmation that refers to the reasonable tariffs, while 25,9% expressed their disagreement with this affirmation.
- 70,4% of respondents declared that they agree that the accommodation services are very good, while 14,8% had a neutral attitude, respective they expressed their disagreement with this affirmation.
- 74,1% of respondents thinks that the station is arranged in a kind way.
- 89% of respondents declared that they are going to recommend the station to other tourists, while 7% declared that they are not going to do this thing.

c. Improvement elements for the offer of the Băile Calacea station

- 67,9% from those who answered the questions consider that the principal element for improvement of the touristy offer is represented by the identification of new possibilities for spending leisure.

5. CONCLUSIONS

The purpose of the working is to realize a provisional study over touristy request at the Băile Calacea station.

For this strategy S.C. Băi Calacea must adapt to actual conditions and must take into consideration:

- attracting new tourists from the area where it operates;
- assurance of the concordance between the offer and the request, cleaned from the seasonal variations
- attracting population which resting time is in extra-season;
- diversifying the scale of touristy products in extra-season;
- diversifying pleasure services by offering daily a variety possibilities of choosing the way for spending leisure destined to the rest (sports, competition organization, music, dance, cultural or folkloric manifestations);

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RESEARCH CONCERNING THE POSSIBILITIES OF EVALUATION OF THE EMPLOYEES PERFORMANCES

CERCETĂRI PRIVIND POSIBILITĂŢILE DE EVALUARE A PERFORMANŢELOR ANGAJAŢILOR

MARIA GOIAN*

The paper contains several opinions concerning the evaluation process'content of the hired persons and an evaluation of the necesity of selecting certain criteria which correspond to the code of the individual evaluation paper, so that it might be useful for the purpose chosen.

Key words: *criteria of evaluation, dimensions of the evaluating process, objectives, evaluation paper.*

INTRODUCTION

The evaluation of the employees represents the appreciation of one member of the organization in what certain criteria and operations of processing information by an evaluative person are concerned. The evaluating criterion represents the standard which is the base for the appreciation and the comparison of the results of the quality and of the behavior.

THE EVALUATING PROCESS'CONTENTS

The Evaluating Process has three dimensions: the purpose of the evaluation, the contents and the evaluative person.

The purpose of the evaluation can be: the appreciation of the employee's work in order to realise whether she/he corresponds to the job, she/he can make decisions of revieuring the salary or of the occupying a different position in the hierarchic structure.

The contents of the process is related to the purpose and it concernes the appreiation of the employee's personality, behaviour and overall activity.

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In what the evaluative person is concearned, she/he can be a person at a superior hierarchic level, at the same hierarchic level, from the outside (specialised companies), or even himself/herself.

The evaluation objectives – the employees'performances are related to the evaluation's purpose and concearn the groups of interests, meaning: the management, the employees and direct managers (the superior managers of the team managers).

The **management –** makes the evaluation through the department of human resources, which has as tasks: the planning and development of the employees, establishes the number of necessary qualification and requalification courses, makes decisions concearning the job's rotation, the promotion, the dismissal, the payments, the leaders'improvement.

Certain employees claim that the management only wants to have to the impression that the evaluations of the employees are for the latters'own good, but in fact, the leaders are more or less concearned of the evaluated employees'interests. Usually, the leaders openly present the firm's expectations concearning the evaluated person's deeds, the possibility of increasing the results, the improvement of the communication, of the colleagues and leaders cooperation, the integration of the desires concearning the career, personal development, the relationship between the deeds and the salaries, it informs the employees about the strong and the weak points etc.

The direct managers (leaders) – being evaluative, they represent the crossroads of multiple interests. The management expects from them to fulfill the organization's objectives through the function's evaluation and the evaluated colleagues should stand for their interests in front of the management. Beyond this, there are also some inherent objectives towards their role: guiding the employees'behaviour and deeds.

Usually, the promovation of these managers is done in accordance with the evaluations of the lower employees.

In such a case their own objectives (promotion) might be integrated in the evaluation. There is also a possibility for the evaluation to represent a motivation for an already made decision. For instance, editing a negative evaluation in order to motivate the dismissal of an emplyee.

Table 1

Paper of individual evaluation

The criterion to evaluate the received mark	**Totally inferior to the expected level** **1**	**Inferior to the expected level** **2**	**In conformity to the expected level** **3**	**Superior level** **4**	**Highly superior to the expected level** **5**
Quality of work	- very weak seizure of the job, procedures - needs permanent help - repeated mistakes	- weak seizure of the job, procedures - needs permanent help - sometimes makes mistakes	- masters the job sufficiently, procedures - needs punctual help - rare mistakes	- mas ters the job, procedures well - doe sn't need help - mis takes very rarely	- masters the job, procedures perfectly
Communicat-ion (problems, current raports)	- doesn't communicate problems - presents raports only if asked	- difficulties in communicating - sometimes makes raports	- correct communication - correct raports with no futher information	- good communication - correct raports with relevant information	- a lways sends raports and problems precisely and on time
Initiative	- withoud initiative - needs permanent supervization of the activity	- rare initiatives - n eeds frequent supervization of activity	- usually has initiative - Needs reduced supervization of activity	- good level of initiative - good authonomy in activity	- initiatives with great impact in the activity - totally independent
Team-working skills, disponibility towards colleagues	- doesn't integrate - refuses to give assistance	- difficulties in team integration - helps colleagues only if asked	- good integration, connected to the team - oftenly helps team	- good integration, active member of the team - always helps colleagues when asked	- very good integration into the team, good listener - offers help spontanously
Disponibility for unpredicted activities	- always refuses	- sometimes accepts	- most of the times accepts	- accepts it every time	- offers himself as a volonteer if necessary

The appreciation of the departement of human resources'leader for the marketing leader is the following:

Table 2

The evaluation for the office's leader

Criterion	**Mark**	**Characteristics**
1. work quality	3	- enough knowledge, needs permanent help - repeated mistakes
2. communication (problems, current reports)	3	- correct communication - correct reports, without mistakes
3. initiative	3	- usually has initiative - needs reduced supervisation
4. team connection disponibility towards colleagues	4	- integrated - solidarity with the team - helps colleagues when asked
5. disponibility for unpredicted activities	4	- always accepts unpredicted activities

The evaluation paper can contain a great number of objectives and it is the least probable for it to be compatible between them. In practice, it is oftenly used the introduction of the criteria on an evaluative scale with several degrees of characteristic incidence. In order to obtain valid information, it is important to keep a balance when doing the scale, because there is a tendency towards indulgence and a convergence towards an average.

An example of evaluative individual paper, used in bread making branch firm is:

CONCLUSIONS

The office's leader is appreciated with medium marks for most of the criteria with an average of 3,7 which might matter at the salary or awarding. Yet, mark 3 which appreciates the initiative and the possibility of communication is quite low compared to the qualities that she/he can have in order to complete the tasks as the leader of the marketing departement. In the eventuality of developing the firm, as the departement leader, she/he might have in view a more capable person.

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CONSIDERATIONS CONCERNING FINANCING COSTS IN AGRICULTURAL EXPLOITATIONS

CONSIDERAŢII PRIVIND COSTURILE DE FINANŢARE A EXPLOATAŢIILOR AGRICOLE

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No matter its form of organisation, any business needs, in order to be operational, enough liabilities whose acquisition is conditioned by capital.

***Key words**: cost, financing, commercial credit, bank credit*

Depending on the development of the national or international financing system, enterprises have a more or less diversified range of financing possibilities, which asks for a rigorous choice of financing resources conditioned by several criteria such as: duration of financing, autonomy and flexibility of loans, source of loans, and, last but not least, *financing costs*.

Analysing financing costs seems relatively simple to do if we refer to each source separately; in exchange, determining *global financing costs* asks for important efforts, sometimes difficult to make even from a technical point of view.

The share of each source of the general capital determines the financial structure of an enterprise, which influences both the cost of each source and the global financing costs.

The importance of calculating capital costs derives from the following main reasons:

1 – minimising capital costs together with minimising all inputs is a condition for reaching the maximising of the business value;

2 – making decisions in the process of selection of investment projects;

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3 – making all financial decisions, including those related to the RULMENT fund policy, contracting bank credits, financing through leasing, etc.

Funds necessary to acquire actives, which in fact also define capital structure, can be obtained from:

1 – *commercial effects to pay* or active purchase on the ground of credit from suppliers;

2 – *accumulating funds from the business profits* which are not distributed to shareholders when the sum of the dividends paid in time is smaller than the net profit;

3 – *loans from different institutions* (banks, insurance companies, retirement funds, etc.) by acquiring different mobile titles ("debt emissions");

4 – *selling common and preferential shares* to different investors;

5 – *other funds* such as the so-called "stable passives" determined by salaries and fiscal duties payable by the deadline.

Taking into account the *symmetrical character* of the relationship between credited and creditor, we can say that any profitability exigency of the creditor results in a financing cost for the company. In other words, the profitability rate for the investment asked by the creditors becomes a capital cost rate supported by the credited company.

Analysing capital costs supposes certain clearings and approaches of individual capital structure elements; once the costs of each constitutive part known, we have to analyse the possibility of calculating composite cost.

1. COMMERCIAL CREDIT COSTS

From the very beginning we should bear in mind that *any credit, no matter its manifestation, has a direct or an indirect cost*, visible or deducible. As a rule, the seller asks for a higher price for the same merchandise paid for later (for example, 30 days after delivery) and another price, a lower one, if the merchandise is paid for upon purchase (the moment the invoice is written). Similarly, when the merchandise is paid for within a longer period of time, the seller cuts the price (discount). The size of the discount depends on the number of days deducted from the maximum mentioned in the credit terms.

In order to calculate *approximate percentage annual cost* appearing in the case of commercial credit, when the buyer gives up the cut-off price benefit, they use the following formula:

$$Approximate\ annual\ \cos t = \frac{Cut - off\ \ percentage\ offered}{100 - Cut - off\ \ percentage\ offered} \times \frac{365}{Credit\ \ period - Cut - off\ \ credit\ \ period}$$

To give an example in "2/10, net 30" credit terms, this cost is:

$$Approximate\ annual\ \cos t = \frac{2}{100-2} \times \frac{365}{30-10} = 0{,}0204 \times 18{,}25 = 37{,}2\%$$

There are a few mentions to make concerning this calculus formula:

1. Cut-off percentage offered, the numerator of the first term of the equation, represents the cost of a 100 ROL credit, and the denominator of the first term of the equation (100 - Cut-off percentage offered) represent the funds available when there is no cut-off benefit. The second term of the equation [365/(credit period – cut-off credit period)] shows how many times a year the company should bear this cost.

2. Annual cost thus calculated is approximate, because, in reality, this cost is supported all the year round, and not only at the end of the year. Starting from the "2/10 net 30" credit terms the company can use the funds for 20 days (30-10=20), so that there are 18,25 "interest periods" a year (365:20=18,25) and the first term of the equation is 0,02:(1-0,02)=0,0204=2,04%, which represents in fact a periodical rate that is to be multiplied by 18.25 per year, that is:

$$Real\ rate = (1+0{,}0204)^{18{,}25} - 1 = 44{,}6\%$$

We can see that the calculus formula for the commercial credit cost is below the true annual cost of the commercial credit with 7,4% (44,6%-37,2%=7,4%).

The value of 37,2% would be valid only if costs due to the discount loss appeared at the end of the year.

If we admit the "30/10, net 365" credit condition, then:

$$Annual\ \cos t = \frac{30}{100-30} \times \frac{365}{365-10} = 0{,}428 \times 1{,}028 = 44\%$$

and

$$Real\ rate = (1+0{,}428)^{1{,}028} - 1 = 44\%$$

The longer the credit period and the shorter the cut-off credit period, the lower the value of the second term of the formula, and the more the annual approximate cost reaches net value of the real rate thus becoming at limiting condition equal.

2. SHORT-TERM BANK CREDIT COST

The real cost of a bank loan is difficult to calculate, as the bank has at its disposal of several variants that can be used in the calculus and in-cash process of the loaned capital. Though interest is a basic component in the calculus of capital costs, we should bear in mind that it is not the only calculus element. Banks operate with several types of commissions, obligation fees, or stand-by fees, or they can ask for the constitution of compensation surplus stocks at the bank's disposal, all these modifying, sometimes in a significant way, the real cost of the loan.

The theory of interest was one of the most disputed problems in monetary theory and not only.

Stricto sensu, or as a formula commonly used, *interest is the sum due to the owner upon reimbursing of a loaned sum or the price for using capital and implied risk for the loan.*

The cost of a bank loan depends on several factors that we shall mention without making their more or less motivated analysis.

1. The level of interest rate in a country's economy is a very important influence factor with effects on bank credit costs. This interest level is, in its turn, influenced by:

- the ratio between credit demand and offer on the credit market;

- the level of inflation, which will always constitute the minimal limit of interest rate;
- the monetary policy of the Central Bank;
- other factors, such as the policy in the field of State Treasury loans, etc.

2. Loan risk degree

In bank practice, they use the so-called *reference rates*, which are used in calculating interest for the loans to clients best satisfying credit standards. Such a reference rate is used in calculating interest for loans to important clients, stable and acknowledged on the credit market.

For a bank's clients that do not belong with the above-mentioned category, interest calculus rate for loans will be higher than reference rate. This difference between real interest calculus rate and reference rate is called *risk rate*, and it can usually oscillate between 0,5 and 3%.

Risk rate reflects just the loan risk degree, which, as a rule, is not practised at high levels, as banks prefer not to loan to high-risk companies.

3. Loan size

In credit management, they have in mind, from the very beginning of discussion and analysis stage and up to the reimbursement stage, a series of costs, which in general, have a relatively constant size compared to credit size. In other words, both in the case of high credits and of low credits supported by the bank are approximately equal (constant). This makes that in the case of lower credits the percentage of management costs be high, which has repercussions on the size of interest rate, resulting in its increase.

4. The falling due period of the loan is a factor in relation with credit management expenses and with the incidence of loans depending on crediting period. The influence of this factor resembles the one discussed in the case of loan size.

Determining *real, simple interest rate* when a loan is reimbursed within one year and interest is entirely paid by the same time is done using the following formula:

$$r = \frac{D}{C} \times 100$$

in which:

r – real annual interest for the ,loan;

D – interest;

C – loaned capital.

If the loan is of 100.0000.000 ROL payable within a year, with a 30% interest, the credited company will pay both the initial loan of 100.0000.000 ROL and the interest of 30.000.000 ROL by that time.

Therefore:

$$r = \frac{30.000.000}{100.000.000} \times 100 = 30\%$$

When the loan is for a period shorter than a year, simple interest is calculated using the following formula:

$$Ds = \frac{r \times C \times t}{100 \times 365}$$

in which:

Ds – simple interest;

R – annual interest rate;

C – loaned capital;

T – number of days or duration in days of the loan.

Back to the 100.000.000 ROL example above, with an interest of 30% per year payable within 120 days, deadline for both the payment of the loan and of the interest, the interest will be:

$$Ds = \frac{30 \times 100.000.000 \times 120}{100 \times 365} = 9.863.014\,ROL$$

To mention that in Romania banking, banks use 360 days instead of 365, which, in a certain measure, increases the interest thus calculated.

If the credit is renewed two additional times in order to cover the need for capital of the company for a year, there are practically three credit lines under the same conditions (365:120=3). In this situation, the annual cost of the credit is the sum of the interest for the 120-day loan three times, i.e. 9.863.014 x 3 = 29.589.042.

In reality, the real credit cost is higher, as the total sum paid for each loan period is for the whole year (within the 120 days for each period), which is an advantage for the bank as the sum recuperated including the interest can be reinvested, the bank getting thus supplementary incomes. The real credit cost (r_{real}) can be calculated using the relation:

$$r_{real} = \left(1 + \frac{r_{nom}}{m}\right)^{m} - 1$$

where:

r_{real} = real interest rate;

r_{nom} = nominal interest rate;

m = the number of days in the composition period calculated as a ratio between the number of days in a year and the number of credit days.

Introducing the figures in the formula above:

$$r_{real} = \left(1 + \frac{0{,}30}{3}\right)^{3} - 1 = 0{,}331$$

or

r_{real} = 33,1%

We can see that in this case r_{real} = 33,1% compared to 30% - the value of nominal annual interest rate when the credit was for 365 days.

To note the following relations:

• when $t < 365 \rightarrow r_{real} > r_{nominal}$

• when $t \geq 365 \rightarrow r_{real} = r_{nominal}$

Knowing the cost of each financing source of a company is a must but it is not enough in assessing capital costs on the whole or its evolution determined by certain changes of the share of each financial instrument (credit, preferential shares, common shares) on the whole.

Approaching the problem of calculating global costs in financing (the composite capital cost) is useful and necessary as long as the results allow the assessment of the correlation between the structure of capital and the evolution of balanced mean cost of the capital.

Each company has different components defining capital both on the whole and as a structure. If we steadily aim at maximising the market value

of the company's shares, its financial management is forced to establish an *optimal capital structure*, which thus becomes a reachable and maintainable objective. Financing new investment projects should be done so as capital structure constantly reach the optimal level.

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THE RURAL SPACE UNDER THE INCIDENCE OF THE SAPARD COMMUNITY PROGRAMME

SPAŢIUL RURAL SUB INCIDENŢA PROGRAMULUI COMUNITAR SAPARD

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Preparing for accessing European structures is a particularly complex process asking for major efforts from both political and economical points of view allowing the reaching of an acceptable compatibility level comparable to European Union standards.

Key words: *SAPARD Community Programme, rural development, rural area*

The Europe's Council established, ever since December 1997, in Luxembourg, that the expansion of the European Union is an inclusive, evolving, global process developing on stages depending on the degree of preparation of each candidate. The process is a unique one, structured in two essential components:

1. The European Union strategy in preparing candidate countries for accession, which includes accession and pre-accession assistance partnerships as ensured by special financing programmes (PHARE, ISPA, SAPARD, SPP, LSIF, and others).
2. European association agreements, judicial papers signed by the European Union and each candidate upon accession.

Without entering into details concerning the European Union assistance in the pre-accession stage of Central and East-European countries, we will remind that between 1990-1999 these countries have benefited from an aid of about 11 billion EUROS. For the period 2000-2006, according to the "Agenda 2000", adopted by the European Council on

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March 24-25, 1999, in Berlin, they stipulate another 22 billion EUROS under the form of pre-accession funds, of which:

- SAPARD – 0.52 billion EUROS per year;
- PHARE – 1.56 billion EUROS per year;
- ISPA – 1.04 billion EUROS per year.

For the countries accessing between 2002-2006, another 56 billion EUROS shall be allotted from Community structural funds. In all, the funds allotted by the European Union to Central and East-European countries starting with 1990 and up to 2006 will reach 80 billion EUROS:

As for the Romanian rural space, which is economically dominated by agriculture, financial contribution through the SAPARD Community programme is a challenge for our country. As the most consistent financing programme for the rural area in general and for agriculture in particular, the SAPARD programme has at least 4 strong particularly important points, i.e.:

1. It is a particularly consistent not reimbursing financial aid for Romania's efforts of accessing the European Union.

2. It is a good opportunity for testing the operating capacity of the agricultural exploitation management or of other economic agents processing agricultural products, including local authorities in the rural area, on the ground of development and financing programmes. This aspect is probably more important than the financial aid per se, as it stimulates thinking, inventiveness, contractual discipline, management capacity itself, being also a useful exercise of co-operation between Romanian authorities and specialised services of the European Commission. Are thus put the bases for a later co-operation with European organisms in order to properly manage higher funds that will be allotted agriculture after accession through European Union Structural Funds. From this point of view, we can say that the SAPARD Programme is, in fact, a pre-FEOGA financing programme.

3. The SAPARD Programme is the clear proof that the European Union, after accession, through the Common Agricultural Policy (PAC), will supply the frame for Romania's rural policy (and, implicitly, that of agricultural policy), but its putting into practice and the responsibility for agriculture and rural development of Romania belongs to our country, and not to the European Union In fact, together with the SAPARD Programme, the European Commission transfers for the first time the whole responsibility of pre-accession assistance programme to candidate countries.

4. The development of the SAPARD Programme supposes legislative and institutional harmonising, as well as the acquisition of the Community acquis concerning Community agricultural policy (including rural development policy) and regional policy, a complex process, but absolutely necessary to adjust functional and institutional relationships between Romania and the European Union.

It is all this that make it necessary both the knowledge of the whole programme for an "oriented" development of agriculture by all those who work or are connected to rural area activities, to benefit from the financial support and, at the same time, to easier and better adapt to the Community economic model.

MAIN COMPONENTS DEFINING THE SAPARD PROGRAMME

1. The Special Accession Programme for Agriculture and Rural Development (SAPARD) supplies the financial contribution of the European Community established through the Regulation of the European Commission no. 1268/1999 from June 21, 1999, and the Regulation no. 2759/1999. This financing programme is exclusively destined to accomplish pre-accession measures in the field of Agriculture and rural development in Central and East-European countries. In the future, emphasis shall be laid in agriculture and in rural area on priorities identified for the pre-accession period, such as: improving agricultural and fish product processing and marketing structures, food quality control, veterinary and phyto-sanitary control, improving infrastructure for rural development and agriculture, developing rural economy and human resources.

The SAPARD programme is under the form of multi-annual programmes covering a period of 7 years, starting with January 1, 2000 and finishing with December 31, 2006. It addresses Central and East-European candidate countries aiming at supporting with financial aids agriculture and rural development, particularly through supporting investments. The SAPARD Programme is conceived as a co-financing programme, as 3 financing sources are mobilised to achieve a project:

1. Not-reimbursable sources allotted by the European Union;
2. Not-reimbursable sources allotted by the beneficiary State;
3. Own sources (own contribution) of the project beneficiary.

The first two not-reimbursable sources form together *public funds* at the disposal through programmes for agriculture and rural development.

The SAPARD Programme will finance two project categories:

- *private programmes generating income*, such as those concerning investments in agricultural product processing;
- *public programmes not-generating income*, such as those concerning the development and the improvement of rural infrastructure.

Depending the project type, beneficiaries will be:

- Commercial firms with integrally private capital (Law no. 31/1990 concerning commercial firms);
- Commercial firms with integrally private capital (from firms established according to the Law no. 15/1990 concerning the reorganising of economic state units as autonomous regies and commercial firms, with later modifications and completions);
- Consumption co-operatives (Law no. 109/1996 concerning the organising and functioning of consumption co-operatives and of credit co-operation);
- Village local councils;
- Legal status associations of village local councils;
- Individual agricultural producers;
- Family agricultural associations;
- Private agricultural firms or legal status agricultural associations (Law no. 36/1991 concerning agricultural firms and other association forms in agriculture);
- Agricultural commercial firms with integrally private capital (Laws no. 31/1990 and 15/1990);
- The Ministry for Agriculture, Forests, Waters, and Environment, for the measure 4.1.

Co-financing regulations are different for private and public beneficiaries. Private beneficiaries should finance, with their own funds, between 50 and 70% of the project's value, while public beneficiaries (for example, local communities) can benefit from a 100% financing of their projects from public funds, provided they do not generate incomes.

2. The National Programme for Agriculture and Rural Development (PNADR)

Starting from the regulations of the European Council 1260 and 1268 issued in 1999 concerning pre-accession measures, the Government of

Romania, through the Ministry for Agriculture and Food developed the *National Programme for Agriculture and Rural Development (PNADR)*, a document officially advanced by our country. On December 12, 2000, the European Commission acknowledged this programme (the version from December 22, 2000) on the basis of which they implement the SAPARD Programme in Romania.

The strategy and strategic objectives contained in the National Programme for Agriculture and Rural Development aim at supporting Romania's accession to the European Union according to the accession partnership and to the National Plan for adopting Community acquis. The main actions to contribute to the reaching of the general objectives proposed by the SAPARD Programme are grouped in two main directions:

1 – Implementing Community acquis concerning common agricultural policy and connected policies (food standards, control of the measures meant to ensure consumers' protection, public health, animal and plant health);

2 – Solving specific priority problems in adapting a sustainable agricultural sector and of rural space in Romania (the development of a competitive agro-alimentary sector, the increase of life standard in the rural space, the development of rural economy, the development of human resources).

The operational objectives concerning the regulating measures suggested by the SAPARD Programme are grouped into 4 priority groups:

Priority group 1: *Improving market access and processed agricultural product competitiveness:*

Measure 1.1.: *Processing and marketing agricultural and fish products;*

Measure 1.2.: *Improving structures with a view to accomplish quality, veterinary, and phyto-sanitary control for food product quality and consumers' protection;*

Priority group 2: *Improving infrastructure for rural and agricultural development:*

Measure 2.1.: *Developing and improving rural infrastructure;*

Measure 2.2.: *Managing water resources for agriculture;*

Priority group 3: *Developing rural economy:*

Measure 3.1.: *Investing in agricultural exploitations;*

Measure 3.2.: *Constituting producers' groups;*
Measure 3.3.: *Agro-environmental measures;*
Measure 3.4.: *Developing and diversifying economic activities in order to generate multiple activities and alternative incomes;*
Measure 3.5.: *Forestry;*

Priority group 4: *Developing human resources:*
Measure 4.1.: *Improving professional training;*
Measure 4.2.: *Technical assistance.*

3. Multi-annual Financing Agreement 2000-2006

This agreement was signed in February 2, 2001, between the Romanian Government and the European Commission and ratified by the Law no. 316/June 18, 2001. The Multi-annual Financing Agreement 2000-2006 is the official document deciding a not-reimbursable financial contribution for Romania of 1,072 billion EUROS for the period 2000-2006 in order to implement the SAPARD Programme.

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A COMPARATIVE STUDY CONCERNING THE TECHNOLOGICAL ASPECTS AND COSTS OF BIOLOGICAL METHODS FOR FERTILISATION AND PHYTOSANITARY PROTECTION IN VITIS VINIFERA

STUDIU COMPARATIV PRIVIND ASPECTELE TEHNOLOGICE ŞI COSTURILE METODELOR BIOLOGICE PENTRU FERTILIZAREA ŞI PROTECŢIA FITOSANITARĂ A VIŢEI DE VIE

CRISTINA SIMION*, AGATHA POPESCU, MARIA CONTOMAN*, ELENA POSTOLACHE*, SILVIA JULEI*, MARIA BARSAN*, E. INDREICA*, C. NIŢĂ***

Three biological methods were experimented for soil fertilisation: V1 – compost marc 20 t/ha; V2 – manure 20 t/ha, V3 – spring mixture of leguminous plants and grasses (peas 50 % and oats 50 %) 240 kg/ha. The control variant was unfertilised. Two experimental plots were used for each variant of fertilised soil, for testing biological methods for phytosanitary protection as follows: V1- biological authorised unpolluting products (bordelaise solution), sulphur, tannin in other to prevent and fight against mildery and powdery mildery and V2 – biophysical products (traps with pheromones) in order to fight against moth at Vitis Vinifera, Merlot type at Bujoru Hills Vineyard. For all the alternatives the related costs were calculated. All the three biological alternatives for soil fertilisation assure the improvement of soil structure and its content in humus and nutrients. The cheapest alternative is the one based on compost marc. A percentage of 80-90 effectiveness can be assured in the fight against mildery using bordelaise solution and against powdery mildery using powdered and soluble sulphur. The use of traps with pheromones is an effective way to fight against moth. The use of biological phytosanitary protection assures a reduced number of chemical treatments, an important decrease of the related costs and viticultural products of the highest quality.

Key words: *Vitis Vinifera* **,** *biological methods, fertilisation, phytosanitary protection, costs*

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INTRODUCTION

Biological technologies are an alternative against the pollution of viticultural products and environment. The use of conventional methods for soil fertilisation and phytosanitary protection, based on chemical substances has determined the appearance of negative phenomena such as: resistance of the parasites to pesticides, presence of residues in grapes and wines, soil settle, errosion and scarcity in organic matter.

For this reason, the creation of high effective technologies for viticulture, involving the use of biological methods of fertilisation and phytosanitary protection has become a priority.

This study is focused on the increase of effectiveness in soil fertilisation and phytosanitary protection at Vitis vinifera, Merlot type, using nonpolluting alternatives according to the requirements imposed for the entry of the Romanian agriculture into the EU structures.

Natural product such as: manure, compost of spring mixture of leguminous plants and grasses and marc, were used as fertilisers destined to intensify the microbiological activity and to reclame the soil content in organic matter.

Biological products and biotechnical unpolluting solutions were applied in order to reduce the number of the treatments based on pesticides.

The technical aspects were also approached from an economical point of view in order to establish the most appropriate alternative for obtaining biological viticultural products at the lowest costs.

The implementation of the biological methods at Bujoru Hills Vineyard will bring its fame among the producers of bio-products, very much required in the external market. The biological methods for fertilisation and fighting against diseases and pests in Vitis vinifera could be easily applied at a large scale in the private farms contributing to the increase of profitability, product and environment quality and food safety.

MATERIAL AND METHODS

This study was achieved within an AGRAL Project running during the period 2000-2003 at Bujoru Hills Vineyard. The experiments concerning the biological technologies for soil fertilisation were organised in 4 alternatives as follows: *V1- fertilisation based on compost marc* (a product resulted from grapes processing, containing grape clusters, cuticles and seeds), using a dose 20 t/ha whose content in nutrients was: N – 2 kg, P_2O_5-

0.8 kg, K_2O-3.0 kg and CaO – 1.1 kg; *V2- fertilisation based on manure*, using the amount of 20 t/ha. The composition of manure in nutrients was: N-100 kg, $P2O_5$ – 50 kg, K_2O – 90 kg, CaO- 100 kg, MgO-30 kg, organic matter 4,500; *V3- fertilisation based on a spring mixture of leguminous plants and grasses,* consisting of peas and oats in amount of 240 kg/ha, whose content in nutrients is given in table 1; *V4 – control variant* – unfertilised plot.

Table 1

Composition of spring mixture of leguminous plants and grasses in nutrients

Plant	Analized organ	Organic matter	N %	P %	K %
Peas	Stems	85	2.90	0.25	1.80
	Roots	86	1.40	1.70	1.50
Oats	Stems	93	1.70	0.30	2.20
	Roots	55	0.90	1.80	1.60

The experiments were applied at Merlot type taking into account the main characteristics of the soil within the experimental plots as follows: physical and chemical properties, agrochemical indices, hydrophysical constants, the composition of spring mixture of leguminous plants and grasses, marc and manure. The following aspects were comparatively recorded: *a) technological aspects* such as: dynamics of soil nutrients (humus, P^{AL}, K^{AL}, PH H_2O), intensity of photosynthesis process; *b) economical aspects:* costs per surface unit each fertilisation alternatives, taking into account: materials, according to soil and plant needs and input prices, labour cost, other direct and indirect cost items.

The experiments concerning the biological technology for phytosanitary protection required to study the extend and potential attack of diseases and pests (mildery, powdery mildery, moth) at Vitis vinifera, within Bujoru Hills biosystem and also to evaluate the meteo data, as well as phenological aspects of vine and the biological evolution of the pathogenic agents and pests.

Taking into account all these aspects mentioned above, the corresponding measures for biological fight against diseases and pests have been drawn per surface unit for Merlot type as follows: *V1-biological authorised unpolluting products* such as: bordelaise solution, sulphur, tannin, with an antibacterian and antifungic effect, but also against insects and other pests for the prevention and fight against mildery and powdery

mildery at Vitis vinifera; *V2- biophysical products* represented by traps with pheromones for establishing density, dynamics at flying curve of male population at Vitis vinifera moth; *V3-control variant,* untreated plot. For each alternative solution, the related costs were comparatively studied per surface unit, in order to identify the most effective variant.

The diagram of fighting against diseases and pest at Vitis vinifera implemented within the experiments is shown in table 2.

RESULTS AND DISCUSSIONS

A.Biological methods for soil fertilisation The effective use of fertilisers is deeply influenced by dose and ratios between various items, in close relationship to plant needs, soil characteristics and climate conditions. The Fertilisation based on marc and manure contributes to a substantial increase of soil content in humus, nitrogen, phosphorus and potassium. Also, a slight pH decrease from the basic to the neutral level has been noticed. The use of a spring mixture of leguminous plants and grasses can also reclame soil content in nutrients but at a lower level in comparison with the V1 and V2 (Table 3).From a technical point of view, the recommended doses per variant are the following ones: 20 t/ha compost marc every 4 years , 20 t/ha manure/ha every 4 years and 240 kg/ha spring mixture of leguminous plant and grasses, annually applied. There are some restrains in the areas where the rainfalls are below 500 mm and irrigation systems are missing.

The increase of soil content in nutrient has a positive influence on the photosynthesis process, assuring the corresponding elements at the leaf level necessary to synthetise plastic substances.

During the experiments, the physiological processes in Vitis vinifera have been deeply affected by the high temperatures recorded during the period of vegetation and the lack of rainfalls. For this reason, the obtained values are lower in comparison with the ones recorded under normal conditions of temperature and humidity (Table 4).

The costs per experimental variant are shwon in table 5. The data show that the lowest cost per surface unit, that is 1,001,337 lei/ha was recorded by V1- fertilisation based on compost marc .

On the second position comes V2 – fertilisation based on manure whose cost was 1,544,037 lei/ha and then V3 – fertilisation based on spring

mixture of leguminous plants and grasses – with 3,122,705 lei/ha. The cost per control variant being obviously the lowest one.

Table 2

Diagram for diseases and pest control at Vitis vinifera

Pheno-phase	Pathoge-nic agent	Biological control/ Product	MU	Dose Kg/l/ha	Chemical Treatments/ Product	MU	Dose Kg/l/ha	Mention
After budding	Powdery mildery	Soluble sulphur 80 PU	Kg	4.0	Powde-red sulphur Neoron 500 EC	Kg L	15.0 0.6	½ surface
Groth of offshoots	Powdery mildery Moth G 1	Powde-red sulphur Traps with phero-mones	Kg Pieces	15.0 7.0	- -	- -	- -	Row by row
Before flowering	Mildery Powdery mildery	Borde-laise solution + tannin Powde-red sulphur	Kg Kg Kg	6.0 3.0 15.0	Powde-red sulphur Mikal 75 PU Soluble sulphur	Kg Kg Kg	20.0 3.0 4.0	Row by row
After flowering	Mildery Powdery mildery	Bordelaise solution + tannin Soluble sulphur	Kg Kg Kg	7.0 3.0 4.0	Ridomil Gold 68 MZ Topas 100 EC	Kg L	2.5 0.250	Row by row
Growth of berries	Mildery Powdery mildery Moth G II	Bordelaise solution + tannin Powdered sulphur Traps with pheromones	Kg Kg Kg Pieces	8.0 4.0 20.0 7.0	Mikal B Vectra 20 EC Soluble sulphur Fury 10 EC	Kg L Kg L	4.0 0.125 3.0 0.3	Row by row
Growth of berries	Mildery Powdery mildery	Bordelaise solution Tannin Powdered sulphur	Kg Kg Kg	8.0 4.0 20.0	Ridomil Gold 68 MZ Soluble sulphur	Kg Kg	3.0 25.0	Row by row
End of clusters growth	Mildery Powdery mildery Moth G3	Bordelaise solution Powdered sulphur Traps with pheromones	Kg Kg Pieces	10.0 20.0 7.0	Bordelaise solution Powdered sulphur	Kg Kg	10.0 20.0	Row by row

All the three alternatives could be applied taking into account geographical and climate conditions where the farms are operating , plant

type and farmers financial resources. Each user has to decide which is the best alternative for his plantation. The input price is convenient: lei 10,000 /t compost marc, lei 30,000 /t manure, lei 5,088 /kg peas and lei 4,000 /kg oats.

Table 3

Dynamics of soil nutrients by bio fertilisation alternative

Alternative	Depth cm	Humus %	P^{AL}	K^{AL}	PH H_2O
V4 Control, unfertilised	0-20	1,80	51.53	110	7.79
	20-40	0,80	15.80	100	7.64
	40-60	0.73	14.36	87	7.68
	Average	1.11	27.23	99	7.68
V2 Fertilisation with manure	0-20	1.98	41.45	133	7.44
	20-40	1.44	7.98	80	7.43
	40-60	1.06	12.31	73	7.85
	Average	1.49	20.58	95	7.57
V1 fertilisation with marc	0-20	2.0	32.36	140	7.85
	20-40	1.22	15.70	120	7.46
	40-60	0.82	12.79	113	7.55
	Average	1.34	20.28	124.33	7.82
V3 Fertilisation with a spring a mixture of leguminous plant and grasses	0-20	1.98	11.02	107	8.18
	20-40	1.10	16.94	77	8.14
	40-60	0.82	7.82	76	7.87
	Average	0.68	11.92	86	8.06

Table 4

Intensity of Photosynthesis process in Merlot type (mg.s.u./dm^3/h)

Alternative	Phenophase			Average
	Flowering	Offshoots growth	Veraison	
V4 Control	5.3	5.5	6.0	5.6
V2 Fertilisation with manure	5.9	6.1	6.6	6.2
V1 Ferttilisation with marc	5.5	5.8	6.4	5.9
V3 Fertilisation with a spring a mixture of leguminous plant and grasses	5.5	5.8	6.4	5.9

From a structural point of view, the share of materials in direct costs is ranking from 57,34 % for V3 to 81,55 % for V2. Taking into account the material costs, we can say that the use of V1 is the most effective on, while the use of V3 is the highest costing.There are no differences concerning labor costs between V1 and V2, but the use of V3 requires 5.3 times higher costs. The share of labour cost in the direct costs/ha is ranking from 18.04 % for V2 to 42.36 % for V3. The share of direct costs in the total costs is ranking from 51.88 % for V1 , 59.68 % for V2 and 66.95 % for V3.

B. Biological and biophysical methods for phytosanitary protection

Mildery is the most pathogenic agent in Vitis vinifera. The attack can be noticed at all the green parts of the plant : leaves, shots, tendrils, flowers, clusters, berries.

The attack grade was higher at control variant VM, ranking from 18.47 % at leaf level to 20.41 % at cluster level.

The biological measures applied in three alternatives of fertilisation have recorded 0.16-2.50 % attack grade at leaf level and 0.18-1.92 % at cluster level (Table 6).

Table 5

Costs with soil fertilisation per surface unit and experimental plot

Cost Item	Um	V1 Compost marc	V2 Manure	V3 Spring mixture of leguminous plants and grasses
Materials	Lei	351,497	751,497	1,099,077
	%	67.65	81.55	57.34
Labour	Lei	166,255	166,255	885,821
	%	32.00	18.04	42.36
Other direct cost	Lei	1,757	3,757	5,995
	%	0.35	0.41	0.30
Direct costs	Lei	519,509	921,509	2,090,893
	%	51.88	59.68	66.95
Indirect costs	Lei	181,828	322,528	731,812
	%	18.16	20.88	23.43
Unfinished production	Lei	300,000	300,000	300,000
	%	29.96	19.44	9.62
Total cost	Lei/ha	1,001,337	1,544,037	3,122,705
	%	100.00	100.00	100.00

In conclusion, keeping under control the evoltuion of the pathogenic agent, making in time a correct warning and applying the treatments at the right moment, the bordelaise solution can assure an 80-90 % efficiency. Concerning powdery mildery, the attack grade for VM was ranking between 3.54 % at leaf level and 2.55 % at cluster level. In case of the biological alternatives V1 and V2, the attack grade was 0.60-0.32 % at leaf level and 0.25 %-0.17 % at cluster lebel (Table 7).

Satisfactory results can be obtained (E=80-87 %) using sulphur at the right time. Moth is the main pest in the vineyards producing 25-30% of total damages. The highest frequency of attack was recorded at the 1st generation 17.33-29.30 % for VM. In case of the use of traps with

phenomenas, we noticed that almost all the male butterflies were captured, so that the frequence of grubs is low (3.44-4.99 %).

Table 6

Attack grade and efficiency per alternative of biological measures for mildery control at Vitis vinifera

	July 26, 2001				August 7, 2002			
	Leaves		Clusters		Leaves		Clusters	
	GA%	E%	GA%	E%	GA%	E%	GA%	E%
Control	18.47	100.00	20.41	100.00	3.73	100.00	1.88	100.00
Chemical treatments	0.66	96.42	0.51	97.50	0.18	95.17	0.17	90.95
Biological control								
-Spring mixture	2.95	84.02	1.79	91.22	0.21	94.36	0.25	86.70
-Manure	3.22	82.56	3.24	84.12	0.12	96.78	0.14	92.55
-Marc	1.33	92.79	0.74	96.37	0.17	95.44	0.15	92.02
Average for biological methods	2.50	86.45	1.92	90.57	0.16	95.71	0.18	90.42

Table 7

Attack grade and efficiency per alternative of biological measures for powdery mildery at Vitis vinifera

	June 25, 2001				August 7, 2002			
	Leaves		Clusters		Leaves		Clusters	
	GA%	E%	GA%	E%	GA%	E%	GA%	E%
Control, untreated	3.54	100.00	2.55	100.00	2.10	100.00	6.66	100.00
Chemical treatments	0.05	98.58	0.05	98.58	0.30	85.71	0.47	92.94
Biological methods								
-Spring mixture	1.35	61.86	0.32	87.45	0.49	76.66	0.15	97.97
-Manure	0.11	96.89	0.10	96.07	0.28	86.66	0.19	97.14
-Marc	0.34	90.39	0.32	87.45	0.20	90.47	0.21	96.84
Average biological methods	0.60	83.04	0.25	87.97	0.32	84.59	0.18	97.31

Using the biophysical method based on traps with synthetic sexual pheromenes, we can maintain a low density of moth, assuring 62-64 % effectiveness (Table 8).

Table 8

Attack frequency and efficiency of moth control

	1st G			2nd G			3rd G			E %
	% attacked flowers	+- Control, untreated	Sign.	% attacked clusters	+- Control, untreated	Sign.	%attacked clusters	+- Control, untreated	Sign.	
Control, 2001	17.33	-	-	13.33	-	-	10.33	-	-	100.00
Chemical treatments	2.33	15.33	xx	3.66	9.67	x	3.66	6.67	xx	76.50
Biological methods -Spring mixture	5.33	12.00	xx	6.33	7.00	-	5.33	5.00	-	58.56
-Manure	4.00	13.33	X	4.00	9.33	X	4.66	5.67	X	69.10
-Marc	4.66	12.67	x	3.66	8.67	x	4.00	6.33	x	69.98
Average	4.66	-	-	4.99	-	-	4.66	-	-	62.15

The most effective alternative in the biological one, its application requiring 7,581,554 lei/ha, while the application of the chemical measures needs 10,182,101 lei/ha (table 9).

Table 9

Costs with phytosanitary protection by experimental variant (Lei/ha)

Cost Item	Biological Methods (BM)	Chemical treatments (CT)	BM-CT	BM-CT %
Materials	4,935,633	7,186,178	-2,250,545	68.68
Labour	655,655	320,180	+335,467	204.77
Other costs	24,678	35,931	-11,235	68.68
Direct costs	5,615,966	7,542,297	-1,926,331	74.75
Indirect Costs	1,965,588	2,639,804	-674,216	74.75
Total costs	7,581,554	10,182,101	-2,600,547	74.45

The weight of material costs represents 65.10 % in case of BM and 70.57 % in case of CT. Therefore the use of the biological methods contributes to the reduction of costs, while the share of labour costs is higher in case of BM (8.64 %0 and lower in case of CT (3.14 %).

CONCLUSIONS

1. The alternatives of Biologica fertilisation based on marc, manure and spring mixture of leguminous plants and grasses belong to the future as a reply to the conventional technologies based on chemical fertilisers.

2. Fertilisation based on compost marc is the cheapest alternative improving soil structure and its content in nutrients.

3. From an economic point of view fertilisation based on manure comes on the second position. The humus resulting from manure bio-degradation increases the content of coloidal substances facilitating the exchange of cations.

4. Fertilisation based on the compost of spring mixture of leguminous plants and grasses is the most expensive one, but the costs are balanced by the increase of organic matter and nutrients in the soil.

5. The recommended doses for the private farms are: 20 t/ha compost marc, every 4 years, 20 t/ha manure also every 4 years, 240 kg/ha spring mixture (50 % peas and 50 % oats)) annually under the condition that the dose have to be adapted to the local geographical and climate conditions and plant type requirements.

6. The use of bordelaise solution in mildery control can assure 80-90 % effectiveness.

7. The powdered and soluble sulphur assures 80-87 % effectiveness against powdery mildery.

8. The biological technology for fertilisation and diseases and pest control at Vitis vinifera have a positive effect on the useful fauna and the balance of the natural biosystems in vineyards.

9. The biological measures used in phytosanitary protection could also decrease, the number of chemical treatments, the related costs and contribute to the obtaining of healthier viticultural products.

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RESEARCH ON ECONOMIC EFFICIENCY OF BIOLOGICAL TECHNOLOGIES IN VITICULTURE

CERCETĂRI PRIVIND EFICIENȚA ECONOMICĂ A TEHNOLOGIILOR BIOLOGICE IN VITICULTURĂ

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This study aimed to establish the economic efficiency of biological technologies for Merlot type of Vitis Vinifera at Bujoru Hills Vineyard.Four experimental plots were organized as follows: VM-Control plot, classical technology including soil fertilisation and phytosanitary protection based on chemical substances; V1- soil fertilisation with 20 t compost marc per ha; V2- soil fertilization with 20 t manure per ha; V3 – soil fertilization with 240 compost of t spring mixture of leguminous plants and grasses. For all the biological technologies V1, V2 and V3, phytosanitary protection was assured by means of biological and biophysical measures based on bordelaise solution, tannin, sulphur against mildery and powdery mildery and traps with pheromones. All the biological technologies were successful, except V3. The highest effective technology is V2 where the production cost was the lowest one lei 1,933 per grapes kilogram and the cost per surface unit was also the lowest one : lei 19,913,758 per ha . The V1 variant comes on the second position. These two biological technologies assure a higher grapes quality, a higher price and a higher profit compared to V3 and the control variant.

Key words: *biological technologies, viticulture, economic efficiency*

INTRODUCTION

The high amount of chemical used in viticulture during the last decades has generated an increased grade of pollution in soil, water, air,

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plants and other environmental factors. The soil structure has been deeply affected by practising monoculture and exagerated mechanisation. Anaerobical processes developed in soil have a negative influence on Vitis vinifera metabolism. Energy crisis, price rise of chemicals used for phytosanitary protection create serious financial problems for the companies dealing with viticulture. The remaining residues in grapes and wines are negatively affecting their quality, sale price and mainly food safety.

Romania's adhesion to the EU involves a new orientation of viticulture towards the producing of natural and healthier products and maintaining of environment quality.

The results obtained in the field of research both in the country and abroad have shown that soil fertility can be successfully increased using organic fertilisers such as manure, compost marc, compost of spring mixture of leguminous plants and grasses and diseases and pest control at Vitis vinifera can be deeply strengthened using integrated methods, traps with pheromones, pectolitical enzymes in vinification. The modern high performance biological technologies have to become effective tool to help farmers to create durable, commercial, competitive farms and their products to meet the EU quality standards.

This study aimed to compare the economic efficiency of various biological technologies applied in viticulture in order to establish which is the most effective one. The economic aspects of the new technologies are of high importance as their application depends on the farmers willigness to invest and of course, of their financial resources.

MATERIAL AND METHODS

The experiments were organised within Bujoru Research Station for Development in Viticulture and Vinification . Four experimental plots were established using Merlot type of Vitis vinifera as follows: VM – control variant where the classical technologies was applied meaning that all the agricultural works specific to Merlot type were respected; soil fertilisation and phytosanitary protection were based on chemical substances; V1-biological technology based on soil fertilisation with 20 t/ha compost marc and phytosanitary protection assured by using bordelaise solution, sulphur, tannin against mildery şi powdery mildery and traps with sexual synthetic pheromones against moth; V2-biological technology based on soil

fertilisation with 20 t/ha manure and phytosanitary protection similar to the one applied in case of V1, that is based on bordelaise solution, sulphur, tannin against mildery and powdery mildery and traps with sexual synthetic pheromones against moth V3 – biological technology based on soil fertilisation with 240 t spring mixture of leguminous plants (50 % peas and 50 % oats) and phytosanitary protection similar to the one applied in case of V1 and V2.

The economic efficiency was appreciated separately for each experimental plot and then comparing the variants to identify the least costing one. The following specific indications for such an analysis were calculated: average grapes production; grape quality expressed by means of the following characteristics: mass of 100 berries, their sugar content and acidity; production cost in lei per kilogram of grapes, cost per surface unit (lei./ha), average grapes sale price, income per surface unit, profit per kilogram of grapes and profit per hectare , profitability rate, costs at 1,000 lei income and incomes at 1,000 lei costs.

The results were compared between the alternatives drawing the corresponding conclusions for practice.

RESULTS AND DISCUSSIONS

The records concerning the level of economical indicators by experimental variant are presented in table 1.

Table 1

Economic efficiency by experimental variant

Indicator	MU	VM	V1	V2	V3
Average grape production	Kg/ha	10,600	7,600	10,300	7,300
Production quality					
-Mass of 100 berries	G	129	106	118	113
-Sugar	g/l	225	227	243	238
-Acidity	g/l	3.96	3.60	3.13	3.11
Production cost	Lei/kg	2,049	2,544	1,933	2,965
Costs per surface unit	Lei/ha	21,714,717	19,333,520	19,913,758	21,641,516
Grape price	Lei/kg	3,150	4,500	4,500	4,500
Income per surface unit	Lei/ha	33,390,000	34,200,000	46,350,000	32,850,000
Profit per kg of grapes	Lei/kg	1,101	1,956	2,567	1,535
Profit per surface unit	Lei/ha	11,675,283	14,866,480	26,436,242	11,208,484
Profitability rate	%	53.73	76.89	132.75	51.79
Costs at 1,000	Lei/ha	650	565	430	659
Incomes at 1,000 costs	Lei/haq	1,538	1,769	2,327	1,518

The highest grape production (10,600 kg/ha) was obtained by V1 – that is under the application of the chemical technology we may also notice that V2 – where fertilisation is based on manure combined with the biological phytosanitary protection can assure almost as high production level as VM, control variant, respectively 10,300 kg/ha, the amount of 300 kg being a non significant difference, under the advantage of obtaining high quality products. The grapes produced by applying V2 are by 18 g/l richer in sugar and have a lower acidity by 0.83 g/l in comparison with VM.

The other two experimental alternatives V3 and V4 recorded a lower grape production per surface unit, respectively V1 – 7,600 kg/ha by 3,000 kg less than VM and V3 - 7,300 kg/ha by 3,000 kg less than the control variant. But both in case of V1 and V3, the quality of grapes production was higher than the one noticed in case of VM, taking into account the richer content in sugar (+2 g/l for V1 and +13 g/l for V3) and the lower acidity (-0.36 g/l in case of V1 and – 0.85 g/l in case of V3).

Comparing the production costs, one can easily notice that the biological technologies V1 and V3 are more costing than VM and only the biological technology V2 is the cheapest one. Therefore, in case of V2 – the lowest cost was recorded, lei 1,933 per kg , which is by lei 116 lower than the production cost registered by VM, by lei 611 lower than the cost of V1 and by lei 1,032 lower than the cost of V3. So, the V2 variant can assure a high grape production (10,300 kg/ha) with the lowest cost (lei 1,933 /kg). This aspect can be explained looking at the cost per surface unit. The V2 variant recorded the lowest cost per surface unit, that is lei 19,913,758 per ha, by lei 1,800,959 lower than the level recorded by VM, by lei 580,238 lower than the level recorded by V1 and by lei 1,727,758 lower than the level recorded in case of V3.

The average price was lei 4,500 per kg in case of the grapes produced by using biological technologies, by lei 1,350 higher than the price got in the market for the grapes obtained in case of classical technology. The additional price of 42.85 % has had a positive impact on income.

So, in case of V2, the highest income were recorded: lei 46,350,000 , by 38.81 % higher than the one recorded in case of VM, by 35.52 % higher than in case of V1 and by 41.09 % higher than in case of V3. We have to

mention that V3 experimental plot recorded the lowest income, lei 32,850,000 , by lei 540,000 below the level recorded by VM.

As a result, we could affirm that all the technological variants were effective from an economic point of view in comparison with VM, but there are some differences of profitability between the biological alternatives. In comparison with VM, the additional profit recorded by the other alternatives was: lei 1,466 per grapes kg in case of V2, lei 855 per kg in case of V1, lei 434 per kg in case of V3.

Analyzing the economic aspects per surface unit, the most effective alternative is V2, assuring lei 26,436,242 profit, being 2.26 times higher than the one recorded by VM, 1.77 times higher than the one recorded in case of V1 and 2.35 times higher than the one recorded in case of V3.

On the second position, comes V1 variant, assuring lei 14,866,480 profit per ha.

Taking into account the profit rate, the hierarchization of the variants is the following one: V2-132.75 %, V1-76.89 %, V3-51.59 % and VM-53.23 %.

CONCLUSIONS

1. The biological technologies are obviously an alternative for increasing economic efficiency in viticulture. They belong to the future as consumers require more and more natural and healthier products.

2. Under the experimental conditions at Merlot type, all the tested biological technologies were successful, except V3. Therefore, the biological technology based on soil fertilisation with spring mixture of leguminous plants is not effective in comparison with the classical technology, applied in practice at present and with the biological variants V1 and mainly V2.

3. The highest effective biological technology is V2 – including soil fertilisation with 20 t manure/ha and phytosanitary protection based on biological and biophysical measures . It can assure a higher grapes quality in terms of sugar content and acidity (18 g/l additional sugar and less 0.83 g/l acidity compared to the classical technology), a good grapes production - 10,600 kg /ha , the lowest production cost - lei 1,933 per grapes kilogram and the lowest cost per surface unit - lei 19,913,758 per ha,

lei 1,466 per kg additional profit and 132.75 % profit rate. The V1 alternative, based on soil fertilisation with compost marc comes on the second position. These two biological technologies assure a higher grapes quality, a higher price in the market and higher profit compared to the classical technology.

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UNIVERSITY BUSINESS INCUBATOR ELEMENT OF ECONOMIC GROWTH IN AGRICULTURE

INCUBATORUL DE AFACERI UNIVERSITAR – FACTOR AL CREŞTERII ECONOMICE ÎN AGRICULTURĂ -

A. COJOCARIU[*]

The university business incubator is, an instrument used for the commercialization of the university scientific research results and for the set up of some business opportunities for the professors and its own students.

***Key words**: university scientific research, university business incubator.*

Romania had inherited from the communist regime, an obsolete economic system, and the subsequent governments had not succeeded in making the transition in a satisfactory proportion. Still, the increased rate of unemployment, the increased inflation and the private enterprises with no financial strength and persistence, the lack of the substructure are just few factors which make that even the agricultural universities, through means of the economic environment, to face some serious impediments in their development. At the present time there is a lack of the necessary resources to sustain the universities and we can notice an "exodus of brains", of the agricultural university graduates towards foreign countries, or their migration towards other fields. Not solving these problems eventually ensures the continuation of the present economic system in which the agriculture will remain one of subsistence, with an insuperable discrepancy in contrast with the EU countries.

Suggestively speaking, if we compare, for example, the agriculture of Hungary with the one of Romania, both ex-communist countries, from the same east-european context, we may establish that both agricultures "swim" into the Danube, but the hungarian one "against" the current going

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towards the Black Forest Mountains…, and the romanian one going down towards the Black Sea…(see the EU joining of Hungary).

Above all theory and politics we may claim that inside a developed market economy, the main goal in all the fields of activity is the making of profit by means of maximization of economic efficiency. The economic efficiency grants the meaning of the achievement of economic balance, and this balance is one of the main conditions for economic growth. Economic efficiency has a complex character which puts in balance the results and the efforts given during an activity. From this point of view, the economic efficiency characterizes all the phenomena and all the social-economic activities in agriculture in time and space.

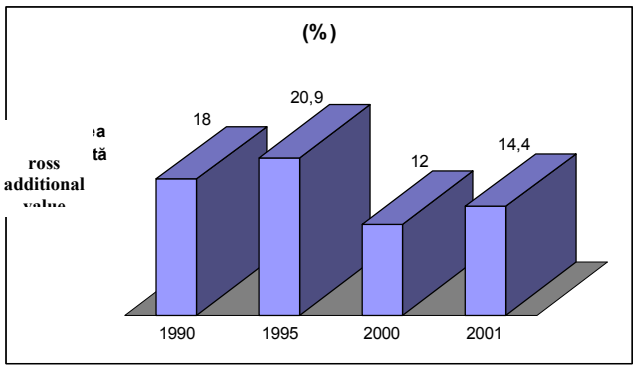

Figure 1. The contribution of agriculture at the achievement of the Internal Gross Product
The source: determined through the Statistic Year Book of Romania,1991,2002,

Analysing the situation of the Romanian agriculture it can be easily noticed that it is a field found in an economic depression, a proven fact even through the contribution of it at the achievement of Internal Gross Product (figure1) with increased variations from one period of time to another. There is also another indicator of economic efficiency, the outputs per hectare for the vegetable products and animals who had registered a declined tendency (figure 2). In a different way of speaking, the level of economic growth inside the Romanian agriculture can be found a lot lower under the average level of the EU countries and even of some not so developed countries, members of the community.

The characteristics of agricultural yield and the reflection of these in the economic field are found at the base limit of the defining of economic efficiency in agriculture, in a global vision which implies a series of factors.

But the economic field, in which these are found, have a straight impact on their positive influence. The same economic field tends to influence more even the agricultural universities in the way that the ones localized in a prosperous environment have an advantage due to their proximity towards the resources [2]. These resources comprise qualified specialists, valuable students, excess of incomes and, generally, a progressive culture, capable of promoting an agricultural higher education.

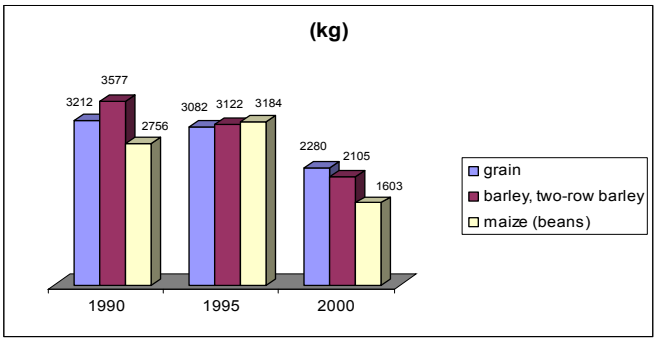

Figure 2. The output per hectare for the main cereals
The source: Statistic Year Book of Romania,1991,2001

We think that the agricultural university must become a vital element inside the economic field having a major indebtedness towards the development of it at the same time with the increase of its own value. A possibility through which the agricultural university can contribute to the development of agriculture is by means of a business incubator. The business incubator is, mainly, an instrument used for the commercialization of the university scientific research results and for the set up of some business opportunities for the professors and its own students. At the same time, with the help of its renown, the incubator is a means of advertising especially for the didactic and scientific accomplishments and generally for the life of the university into the context of the reorganization of the higher education.

From the start it has to be said that the business incubator use the same non-profit structure of the university, but it can benefit also by external financing of some tradesmen, the objective being to cover the working costs. At the same time, the incubator will have to create some successful enterprises, which at their exit from the incubator will be viable from a financial point of view and capable to stand on its own [2].

An example of a university business incubator must start from the university scientific research. The problem of a scientific research, in general, but also from the university scientific research point of view, is not completely solved. The field reform "displayed" by the present government was heavily started and has been incompletely applied. We shall not insist on these matters, we shall only specify that the effects of such state are distressing. The scarce interest in the field of scientific research hinders the making of some new enterprises, and the absence of these new enterprises leads to the diminution of the so needed financial resources within the actual bankrupt economic system; in these conditions the foreign resources will fail to appear, this way keeping up the acute lack of economic prosperity. Within this context, we suggest the university scientific research to be highly supported by universities through their out budget incomes, in the way of achieving a decisive role in the competitive and lasting development of the academic environment which will eventually lead to economic growth. In our opinion, agriculture must represent an elementary field, a strategic domain even, in order to the adhesion of Romania to EU. Thus, we consider that agricultural universities must make some constant efforts regarding the scientific research by means of management based on few new patterns promoted by the EU within the lasting, global development strategies [1].

The suggested pattern (figure 3) goes on with the agricultural university's designation of an expert team, which will carry on different activities that will be grouped inside the incubator, in three main directions. The team will be composed of a managing director, an agricultural field specialist, a marketing specialist, an accounting-financial specialist, a law specialist and a human resources specialist. The managing director's role will consist of the establishment of the business opportunities related to the results of the research fulfilled by the interdisciplinary research groups. The managing director will also keep up the relations with the outer environment and will coordinate the activity of the team. The director's task to maintain the relation with the university in order to achieve and fully revaluate the resources, is as well as important.

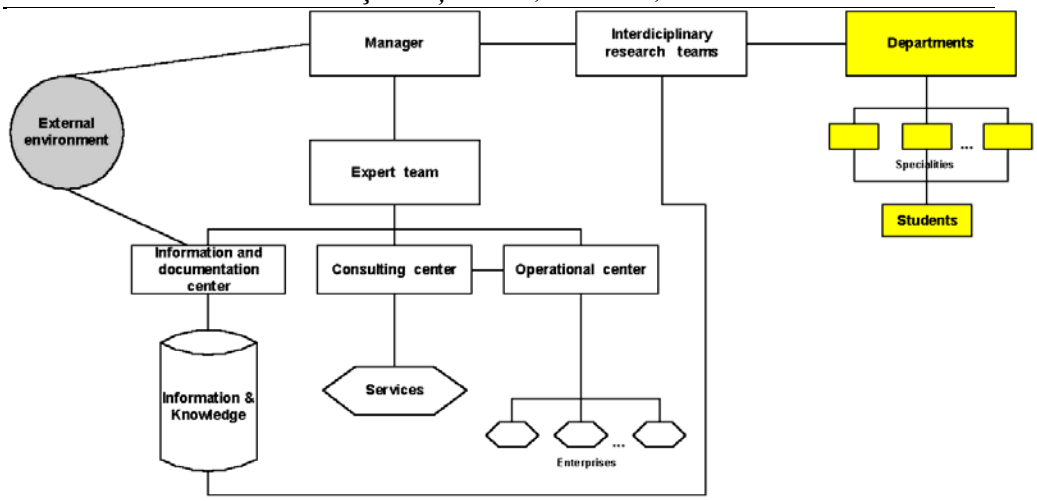

Figure 3. Model propus pentru incubatorul de afaceri universitar

The specialists within the incubator will have an internal role. They will have to counsel the clients (be they professors, students or entrepreneurs from outside) to manage during the first step of their business. This particular "help" will be manifested through a partial subvention of the rental and utilities costs, the making of the financial book- keeping, the recruitment of personnel, consulting, training etc. After the necessary period to launch the business (approximately 3 years in USA), the enterprise will detach from the incubator, being already on the competitive market, the incubator now having only a subsequent counselling role.

The report and documentation centre's main goal is to keep the connection between the academic and business environment, namely the competitive market. It must become a strong information gathering centre from outside, as well as from the university's environment (especially the research group's results). Thus, the centre will be able to provide a high-quality informational base on which new projects and solutions for different problems of interest will be found and, permanently brought up to date information will be assured. The consulting centre will provide a series of services for the merchants, thus the incubator will be in permanent relation with the business domain. The centre will provide training services within fields such as: agricultural management and marketing, finance-accounting-banking industry, stock exchange etc, as well as consulting services and recruitment of new clients; this way the incubator will be capable of gaining credibility and acceptance. The operational centre has the objective to

develop various business, on a result base of the scientific research, for the professors, students and for various outer clients.

Between the mentioned action directions, some tight connections must exist, these three centres interacting in order to achieve the incubator's objective. The university business incubator is a connection "centre" from which a series of benefits will result, so much as for the university which gives start to such kind of projects, as well as for the outer entrepreneurs. At the same time, the possibility to create jobs for the professors and for the students within their own business or from outside, should reduce the "exodus" of specialists and the migration of those towards other fields. Likewise, the possibility to commercialise the scientific research results, represent a significant benefit, as much as in the financial plan, as well as for the university's reputation, in such conditions as a university cannot exist on a single finite-product base-the graduate student, but on another similar product-the results of the scientific research.

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THE DECISION TREE

ARBORELE DE DECIZIE

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Decision tree is an assessing method of a disease prevention or control program and is part of the fighting arsenal of the epidemiological veterinary doctor. The present paper shows a work mode with a decision tree for a parasitic disease, calculating the monetary value of the possible variants for a certain sanitary-veterinary decision.

***Key words**: veterinary epidemiology, decision tree, and monetary value.*

The decision tree is a method to concept some evolution scenaries of a morbid entity, when effect of infection and disease` evolution can't be totally known (4).

This system allows to choose **the most lucrative** solution among many control options. Method's principle is to attribute **probabilities** to the different potential results and to calculate **the current monetary value** corresponding to each result (1).

The decision tree could be used to take a decision at three levels:

- individual animal that could be treated, reformed, sold or some some specific evolution is expected;
- in a livestock, where the disease determines depistaion, vaccination, treatment of affected animals or their removal from the flock;
- in an affected area, where the risk of some disease appearance would determine: vaccination, some isolated cases, treatment (of potential sporadic cases).

BUILDING A DECISION TREE

There are more options for a disease, which depend on the breeding system (intensive or extensive).

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Building of a decision tree is made from left to right and starts with the scheme of a decision, which must be adopted. Actions must be defined separately and independently.

Taking as an example a parasitic disease and supposing, whatever would be the chosen option, that the breeder treats with a curative antiparasite animals suspected to be infested, a disease cost will result (3).

A decision tree with a medium complexity was chosen, in order to select the most lucrative control plan, from the economic point of view, as working option. Approach of the decision tree could meet different structures and calculations. The following variants were selected as control options:

- Nothing to be done, with the exception of treatment of those clinically suspected; the additional cost brought by this option is null (Figure 1).
- Apply a chemoprophilaxy to protect the whole livestock, administrating a preventing antiparasite after each three months; the cost of this option is estimated at 375 euro/year for the livestock (Figure 1).
- Control this vector: for the individual breeder, the most practical would be the use of a pour-on type insecticide for animals; the cost of this option is estimated at 360 euro/year for the livestock (Figure 1).
- Avoid the vector, the cost of this option estimated in production losses on the best pastures, it is stressed by removals etc.; this cost was estimated at 225 euro/year for the livestock (Figure 1).

In a decision tree, fight options are illustrated with branches that come out from the trunk (conventional decision), represented by a rectangle (I). Results provided by each option are noted then at the corresponding probabilities (2).

In the example from Figure 1, each option has three possible results:

- Livestock is not infected;
- Disease appears, but at a moderate level, determining minor losses (A);
- Disease appears, the flock is seriously affected and has important losses (B).

Each branch from Figure 1 represents a fight variant and it is followed by a conventional, aleatory way, represented by an oval (II), from

which start three secondary branches, corresponding to the three possible results.

Options	Results	Probability	Cost of disease	Cost of control option
1	2	3	4	
Not react **407 euro**	Absence of disease	0,20	0	0
	Affecting level A	0,30	115	0
	Affecting level B	0,50	745	0
Chemoprophilaxy **393 euro**	Absence of disease	0,95	0	375
	Affecting level A	0,03	115	375
	Affecting level B	0,02	745	375
Fight against vectors **425 euro**	Absence of disease	0,85	0	360
	Affecting level A	0,075	115	360
	Affecting level B	0,075	745	360
Avoid contact with vectors **354 euro**	Absence of disease	0,70	0	225
	Affecting level A	0,15	115	225
	Affecting level B	0,15	745	225

Figure 1. *Example of a decision tree: option of fight against a parasitosis in a cattle flock and research of the cheapest variant*

Near each variant is a number, which indicates the probability of getting to this result after the application of fight option. Probabilities chosen here represent estimations of the moderate situation.

The total of the different probabilities resulted, provided by an aleatory way, and must be equal with 1. For example, for the way that follows the chemoprophilaxy option, probabilities are 0,95 + 0,03 + 0,02 = 1,00.

Once the final result obtained (absence of disease, level A disease, level B disease) and the noted probability, each final point could be marked. There are decision trees where the final points aren't marked this way, but their marking is useful, especially when different control options have variable length branches.

CALCULATION OF MONETARY VALUES

After the probabilities of different potential results were attributed to each control option, the next step consists of multiplying these possibilities with the monetary value of each result. Monetary value has normally two components: direct cost of application of control option, which normally doesn't vary with the obtained result, on one hand; on the other hand, the cost of disease, associated to each result.

So, in this example:

- costs of disease (including here the treatment of animals with clinical signs, production losses and mortality due to parasitosis) are null;
- 115 euro in case of type A affect;
- 745 euro in case of type B affect.

Then the decision tree is traversed in opposite direction, from right to left. The probability to obtain each result must be multiplied with the corresponding monetary value (total costs). The total for each option is called expected monetary value. So, for chemoprophilaxy strategy, from the figure, expected monetary value is: **0,95 x (0 + 375) + 0,03 x (115 + 375) + 0,02 x (745 + 375) = - 0,95 x 375 + 0,03 x 490 + 0,02 x 1120 = 356,25 + 14,7 + 22,4 = 393,35 (rounded off at 393)**.

This expected monetary value is noted then on the branch of the correspondent control option.

TAKING THE DECISION

The third step consists of taking the decision. In most of the cases, this is made choosing the most lucrative variant, that one with the lowest monetary value. In this example, the cheapest option is to avoid the vector that brings the lowest expected monetary value of 354 euro. This result could be explained by the fact that numbers were chosen for a livestock

breedee in an extensive system; the calculation was confirmed by the breeders`preference for this control option where the local conditions allow it.

The thoroughness of these suppositions and analysis could be checked by sensitivity tests. For this example, taking a livestock from the intensive system, with a much higher productivity, the direct costs of chemoprophilaxy and the fight against vectors will not enhance too much, but the variant of vectors avoiding will become very expensive. Analyzing the values of these calculations results the fact that chemoprophilaxy will be the cheapest option, followed by the fight against vectors. The other two options will cost approximately two times more. In addition, this fact perfectly fits the decisions taken by breeders.

EXPRESSING THE MONETARY VALUES

In the example from Figure 1, costs were listed and compared, because evaluation is the one that seems the simplest and has the lowest tendency to make errors. Another decision tree is founded on the control advantages, inferring the fight option costs to get to a monetary value for each final point of the tree that corresponds to a clear advantage. In this situation, decision is taken by choosing the variant with the highest clear advantage.

Another important point is (in example) that all monetary values were the costs for a year. With all these things, it is possible, for example in a control plan, to use costs representing the brought up to date value of costs for many years and to multiply numbers with the associated probabilities, following exactly the same proceeding.

Differences between a decision tree and a probability tree may be resumed:

- A probability tree has only an aleatory way, while a decision tree has as starting point a decision taking;
- A probability tree ends on the right side with the calculation of the probability to get to each result; then the total probabilities to get to a result or another are added;
- A decision tree ends at the left, because probabilities are multiplied with associated monetary values and they are reduced to fight option, to decide the most lucrative option.

So, the principle of economic studies is simple. It is about the evaluation of fight programmes` costs, but also about the total corresponding to the advantages that will result from their application.

Comparison between the current values of these costs and these advantages allows some idea of fight programmes rentability and choosing the most adapted to the established objective. However, application of these studies is difficult and it comes up against the uncertainty of disease` epidemiological evolution, the application of measures and their impact on malady. Knowing these difficulties permits to partially control them, especially taking into consideration the most probable evolution and framing between an optimistic hypothesis and a pessimistic one, or defining its rentability threshold. In some cases, using a decision tree can clear the situation and ease decision taking. These studies, even if they are not perfect, remain indispensable before taking the decision to apply a control plan or to prevent a disease.

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TRANSFERRABLE SKILLS AND PERSONNEL RECRUITING

ABILITĂȚILE TRANSFERABILE ŞI RECRUTAREA DE PERSONAL

ADRIANA RITT*

Transferrable skills are an important asset to be used in interviews. Employers are looking for easy adaptable flexible people. In order to market his/her skills, one has to look very carefully to the hiring announce and try to match the skills gained in previous jobs/position, with the new working environment. The candidates have to proove that their skills could be easilz adapted to the needs of the job.

***Key words**: transferrable skills, hiring interview, working environment*

During hiring interviews, the recruiting teams try to identify the most flexible candidate who can adapt easily and succeed in his/her new position, a success that affects both him/her and the organisation. This means that the position is not always obtained by the most experimented or trained candidate, but by the one who matches the organisation culture best.

From this point of view, the interviewer looks for and appreciates the so-called transferrable skills/abilities, i.e. those qualities that can be applied in a variety of contexts. Generally one acquires new skills from everything one does.

Katherine HANSEN (2001) defines transferrable skills as "skills you acquire all your life — jobs, courses, projects, parenting, hobbies, sports, practically anything — and are transferrable and apply to what you intend to do in the next job you will take."

Most of the times we apply for an interview and have to draft our CV and letter of intention we do not know what kind of qualities to underline, which match the job best, and how to make the interviewer

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choose us from the other candidates. Most of us are not aware of how many qualities that we have may match the requirements of the job we want.

Therefore in order to "sell" our qualities in the most successful manner we must think about them carefully and try to identify our personal and professional attributes.

During the selection interview, the employer always looks for three types of skills/abilities:

- Skills relating directly to the job/position, i.e. those that are typical of an occupation (e.g., teaching, accounting, computer skills)
- Transferrable skills that are more general and can be transferred from one working environment to another (e.g., organising, planning, problem solving abilities)
- Skills related to personality, nature and personal style (e.g., honesty, sense of humour, relationing skills)

The university studies give the students the opportunity to acquire a series of transferrable skills such as: team work, leadership, individual work, communication, improvising, planning, time limit observance etc. The graduate student also possesses strictly academic skills like learning and thinking.

In his/her CV and during the interview the candidate must always present his/her qualities in a way that matches the employer's requirements for a certain job. Therefore it is important to read and understand the hiring announce very carefully.

For instance if the employer looks for a *dynamic* person, the candidate should mention the team sports he/she has practiced, his/her involvement in school or faculty group activities (collecting funds for a certain purpose) or other voluntary activities. *Qualities relating to work with the public* can be revealed by speaking about voluntary work such as questionnaire distribution or involvement in student associations or committees. *Punctuality* and *time limit observance* are revealed in the individual or group themes and subjects that the candidate prepared as a student; this means that he can cope with a certain time-limit related stress.

Any quality that the employer requires can be approached in this way. The requirements differ with every organisation so that the list of transferrable skills can be enriched. It can also include putting forward new

ideas, knowledge of foreign languages, persuasion and motivation of others as well as self-motivation, the desire to learn and assume responsibilities, self-confidence, creativity, initiative, imagination, adaptability etc.

In their daily activities the managers need transferrable skills that can be grouped in five categories, each with its specific qualities:

- Communication, i.e. the capacity to express, transmit and interpret knowledge and ideas, involves:
  - effective oral style;
  - careful listening;
  - idea presentation;
  - group discussion promotion;
  - adequate feedback;
  - negotiation skills;
  - non-verbal message interpretation;
  - providing information;
  - persuasion;
  - feeling description;
  - editing;
  - interviewing skills;
- Research and planning, i.e. the possession of specific knowledge and the capacity to identify requirements and find solutions, involves:
  - defining objectives;
  - identifying problems;
  - defining requirements;
  - collecting information;
  - selecting significant information;
  - putting forward new ideas;
  - imagining alternatives;
  - analysing;
  - finding resources;
  - making decisions;
  - solving problems;

- Human relationships, i.e. the use of interpersonal skills to solve conflicts and establish relationships, involve:

  - developing relationships;
  - sensitivity;
  - listening;
  - revealed feelings;
  - offering support;
  - motivation;
  - sharing trust;
  - counselling;
  - cooperation;
  - representing others;
  - delegation;
  - perceeiving others' feelings and situations;

- Organising, management and leadership, i.e. the ability to supervise, guide and direct individuals and groups so that they can carry out their tasks and objectives, involve:

  - initiation of new ideas;
  - detail management;
  - task coordination;
  - group coordination;
  - responsibility delegation;
  - teaching;
  - counselling;
  - promoting changes;
  - selling ideas and products;
  - collective decision making;
  - conflict solving;

- "Surviving" at the work place, i.e. daily skills that help increasing work efficiency and satisfaction, involves:

  - implementing decisions;
  - cooperation;

- applying the policy;
- punctuality;
- time management;
- concern for details;
- carrying out objectives;
- getting help;
- assuming responsibilities;
- term setting and compliance;
- organising.

As recent graduates from a faculty of management, how can we use these skills during the recruiting interview in order to convince the interviewer that we are the right person for a certain managerial position? We must know how to identify the required quality in our past experience and apply it to the job requirements.

For example, a temporary job as a waiter that we took during a summer holiday may appear insignificant, but it provides us with the possibility to prove that we possess a number of transferrable skills in the field of working with people, things and ideas. We can materialise these skills by thinking of the tasks we had to carry out and matching the results with a quality:

- sitting people at table means welcoming them;
- taking orders means explaining the menu, helping the customers choose from it and writing down their order clearly and precisely to transmit it further to the kitchen;
- transmitting the order to the kitchen means communicating a piece of information to others but also checking the correct understanding of the customers' choices;
- serving itself requires good memory (who ordered what), quick manipulation and good equilibrium;
- suggesting drinks and dessert involves persuasion;
- checking how satisfied the customers are means searching for feedback and being a good listener;
- solving complaints means solving problems, which depends on the ability to listen empathically and be civil and polite;

- cashing money from customers means the ability to handle it and work with figures.

This is how a temporary job can enrich one's experience with a series of transferrable skills that cannot be ignored.

The skill is usually expressed by a verb that denotes an action and a noun that denotes data, people or objects one has worked with, e.g., "to persuade others", "to observe time limits", "to coordinate a team", "to edit data" etc.

When using a transferrable skill to apply for a job, the degree of specificity that characterises it must be proportional with the degree in which the new working environment matches the previous one. For example, "preparing biology lesson plans" matches a didactic position in expression. If we wish to transfer this skill to a business environment, we should rephrase it as "preparing presentations for class lessons". As it is easy to see, the verb to "to prepare" was kept, but the rest was changed in order to adapt the skill to the new working environment.

In this manner the transferrable skills can be used successfully when we intend to bring a change in our career or approach a new activity field or environment.

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BUILDING OUR UNIVERSITY IMAGE

CONSTRUIREA IMAGINII UNIVERSITĂŢII NOASTRE

ADRIANA RITT*

After five years from a previous research a new one has been carried out in order to see if the university started to build an image, using the local written media. During January,1 and May,1,2003 three local papers – Renaşterea bănăţeană, Evenimentul zilei (de Vest), and Agenda zilei – have been investigated to look for the articles addressing issues of our university. In comparison, articles about the other three state universities in the town have been monitorised. The research underlined again that little interest has been invested in the area, our university occupying the last place among the others as number of articles published. Advice is offered about how to really build an image.

Key words: *image building, creating news, communication plan, coherent message*

INTRODUCTION

"Communicate in a profesional way and you will be perceived as being professional" (Youdale, 1991, 25). This is "the big secret" to appear in the eye of the community as a serious, respectable business, as a place people want to be, an organization people want to deal with, a management whose activities have a high visibility, an important and active member of the community. Universities are no exception of this simple rule. They become increasingly aware of their image in the community, as an important part of their normal development plan. The good image becomes an even greater issue with the perspective of Romania adhering the European Community in 2007, which will be also a moment to open the university doors even larger for students from everywhere in Europe and in the world.

Which are the public segments to be influenced by an university?

- the academic staff itself, as a teachers as well as researchers community;

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- the students, as "clients" of the university services;
- the perspective student candidates;
- the candidates' families;
- the high schools in the region of influence;
- the local community and its governing bodies;
- the journalists specialised in education and social problems;
- the graduates of the university;
- NGOs acting in education and agriculture (in our case);
- consulting bodies as the Rectors'Conference;
- parliamentary members with legislative power, etc.

A solid reputation and a good image are important to influence the opinion of each of these segments.But what is a "good image" of the university after all, which are the standards?

- an academic staff trained at European level, actively implied in research, and with a good morale;
- high level results in teaching and in research (i.e. prizes won by the staff, honour degrees, invitations to attend prestigious congresses);
- students interested to become excellent specialists in their specific fields.

How could be attained such achievements?

- curricula and syllabi compatible with those in other EU countries;
- research contracts with prestigious universities and research units in the country and abroad;
- international funded projects;
- books and papers published by the academics on a regular basis;
- a proper endowment of the departments and laboratories, and a library offering to its readers the latest publications, in the most modern way (CD-ROMs, DVDs, Internet);
- excellent learning and living conditions for the students.

If we take a good look at the public categories, the standards and the means, a coherent communication plan could be elaborated. As we pointed out in a previous paper (Ritt, Ritt, and Popescu, 1999), any PR specialist could base an image strategy on such a plan. "Without communication the values and the strategies of an organization will not be understood and accepted and the organization will not have a clear sense of its identity." (Ind, 1990, 24)

It is not difficult to understand that the ultimate goal of building the proper image is to encourage the community to see the university as a resource for the youth, now and in the future. To this end, "an ability to keep to tight deadlines, consistency [of the message] and a capacity to build close working relationship with journalists are the key skills"(Best, Internet), needed by the specialist.

It is the duty of the communication specialist not only to wait for news to come to the PR Office, but to create news. There are many opportunities in the university to do this:

- an award gained by an academic underlines the values of the university;
- a contest could be news through the connection between the theme and the sponsor;
- a honourific job in the community, performed by a member of the organization extends the prestige over the whole university;
- help to solve a local problem (i.e. fundraising for a shelter for abandoned children);
- launching a new specialization, coresponding to a need of the community (i.e. forestry – to train specialists to look after the dissapeared forests in the western plains);
- conferences for the larger public delivered by academics;
- hosting important events of the community
- implication of the university in social problems of large interest for the community (i.e. – finding a proper place for a new waste dump).

It is important to emphasize that not only the university leader has to appear in the media, to influence the public opinion. Of course, his person is crucial in creating and maintaining the image, but this has to be sustained by the contribution of other members of the university, otherwise the public could associate and reduce the whole institution to a single person.

MATERIALS AND METHODS

There have been investigated three local papers – Renaşterea bănăţeană, Evenimentul zilei (de Vest), and Agenda zilei – published during January,1 and May,1,2003, to look for the articles addressing issues of our university. In comparison, articles about the other three state universities in the town have been monitorised.

The research underlined again that little interest has been invested in the area, our university occupying the last place among the others as number of articles published. The number of articles, published on behalf of each university, in each researched media, is shown in Tables 1-3.

Table 1. Articles published in Renaşterea bănăţeană paper, during January,1 – May, 1, 2003

Month	Univ. of Agr. Sci. and Vet.Med.	University of the West	Politechnics University	Univ. of Medicine and Pharmacy
January	2	4	1	0
February	2	3	4	1
March	1	12	3	2
April	1	3	2	1
Total	**6**	**22**	**10**	**4**

It is to be underlined that the figures represent only articles strictly related with the education and research process, items contributing to the university image as an educational resource for the community. Our university occupies the last place, preserving the same position as in our previous research of five years ago.

Table 2. Articles published in Evenimentul zilei (de Vest) paper, during January,1 – May, 1, 2003

Month	Univ. of Agr. Sci. and Vet.Med.	University of the West	Politechnics University	Univ. of Medicine and Pharmacy
January	0	0	0	0
February	0	1	0	1
March	1	2	0	0
April	0	0	0	1
Total	**1**	**3**	**0**	**2**

Table 3. Articles published in Agenda zilei paper, during January,1 – May, 1, 2003

Month	Univ. of Agr. Sci. and Vet.Med.	University of the West	Politechnics University	Univ. of Medicine and Pharmacy
January	1	12	3	2
February	0	10	4	1
March	1	6	4	1
April	0	3	0	0
Total	**2**	**31**	**11**	**4**

DISCUSSIONS

Does this mean that journalists did not find interesting subjects to write about? Or nothing so special happened in the university? Nothing of this kind, because if we compare the subjects treated for the other universities, and we think at the events we have witnessed ourselves in this university, a single conclusion could be acceptable: the journalists have not been sufficiently informed about them.

What caused this phenomenon? No coherent communication plan exists at the level of the university, and nobody monitors the communication channels used, not to speak about the consistency of the message the institution wants to send to the larger public.

Table 4. Articles published about each university, in each researched paper

Paper	Univ. of Agr. Sci. and Vet.Med.	University of the West	Politechnics University	Univ. of Medicine and Pharmacy
Renaşterea bănăţeană	6	22	10	4
Evenimentul zilei	1	3	0	2
Agenda zilei	2	31	11	4
Total	**9**	**56**	**21**	**10**

There is also a prefference of the beneficiary (Table 4) for a certain media, like it seems to be the case with Renaşterea bănăţeană and perhaps for a certain journalist.

The paper's own politics could be a possible cause for not being interested so much in education problems, as it seems to be the problem with Evenimentul zilei paper, which is much more in favour of the political subjects.

RECOMMENDATIONS

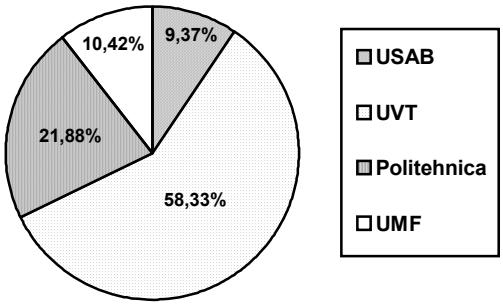
Once again I would like to emphasize that it is up to the university how its image is built and maintained. It's only the understanding and admiting of the problem that could change the ratios in Fig.1.

Using all the possible communication channels and transforming every activity or event in news, cultivating a good working relations with the local media, and communicating internally on a permanent basis in order to collect all the necessary information, are verified ways of controlling the issue of reputation.

It is also important to understand that the Rector's person is important in building the image, and ours one contribution to this end was

very rewarding but this is not enough. Other reputable academics should speak for the university and support the common effort.

Fig 1. Ratios of visibility in the media



Their opinion not only in the field of education but also in the area of the social problems of the community or about hot issues related with environmental problems (see the Roşia Montană project), could made them in respected opinion leaders of the community, and the more of them, the better!

A good reputation is crucial especially in this period, when the competition to attract more students and substantial funding from different sources becomes more and more a development and survival problem of each university. Because it will win only that one which prooves itself not only an education provider but also a place of democratic citizenship, an actively and conscious engaged member of its community.

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SOME RECOMMENDATIONS CONCERNING THE ENGINEER'S WRITING STYLE

UNELE RECOMANDĂRI PRIVIND DEPRINDEREA STILULUI SCRIS LA INGINERI

ADRIANA RITT[*], IASMINA PAUNCHICI[*]

An engineer has to have a simple but convincing and efficient writing style. The paper analyses the report writing as a form of writing style frequently used by engineers. This highly depends on the words he/she chooses to use, the presentation, and the indexing of the report.

Key words: *style, report writing, audience needs, presentation*

During their professional life, engineers speak and write their ideas. They also work as a project team to write proposals and reports. So, during their academic training they need to write and present large amounts of research. While, during academic life, the professor dictates what type of communication they need to use, in industry they will determine by themselves what is appropriate in particular situations.

Engineering is a complex profession, so it is desired for engineers to posess specific skills such as: analitycal ability, teamwork, system thinking, creative problem solving, technology skills, project management, business skills, ethics and profesionalism. All these are related with information gathering skills, and expressed through a good oral and writing style.

Creating messages that meet an audience needs involves a process of information development. Whenever you communicate, you convey information. How to shape this information is the key to technical communication. The pattern you use has to reveal the order, amount, and kind of information presented to the audience.

In their activity, the engineers have to write frequent *reports* or *proposals* that require hard preparation work. They must be as convincing as possible, as most of the times they address their superiors, clients, share

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holders, i.e. several internal and external public sectors that must be convinced of the efficiency and quality of their performance and results. The audience always wants the right information, at the right time, and at the right level of detail. Shaping communication to meet audience needs depends on understanding your audience and the purpose of your communication. For those interested in the literature concerning communication by engineers, we recommend an elaborate study produced by King et.al. of the Center for Information Studies, University of Tennessee.

The engineer must have a convincing writing style. Unlike the oral style, the written word may be re-read any time it is required or needed; therefore it must be very precise and chosen correctly.

It is necessary to know how to use an appropriate format for the report: introduction, description, development, conclusion and references. Spelling and grammar errors are not expected. The authors need to know how to use tables and graphics in the text, in order to sustain their affirmations. As Newcomer et.al. (2003) described in their paper, "perhaps the most significant challenge is convincing students of the importance to their careers of being good writers".

The engineering field has many established writing conventions. They affect how one organizes his/her thoughts and how he/she phrase the ideas. On writing a report, the engineers use a large variety of words that are unfamiliar to common people, but that another engineer would understand easily. Such words are specialised words that belong to the engineering jargon. Nevertheless, it has not to be omitted that familiar words provide clearer messages than unfamiliar ones.

Engineers use passive voice frequently: "your suggestions have been considered" or "complaints made by clients". The excessive use of the passive makes the writing style difficult to understand; therefore it should be avoided.

Tradition recommends writing in the third person, e.g. "it has been concluded that…" or "it is recommended that…" The modern tendency in the organisation style (every organisation has its own culture-defined style in preparing written papers) is to replace expressions like those above with "we suggest…" or "we recommend that…"

A style is adequate and convincing if it is characterised by simplicity, i.e. the use of active verbs and first or third person pronouns. If

the sentences are short, useless adjectives can be avoided and the general style of the paper will be more efficient.

The researchers of the engineer's writing style (BILL, 1984, 72) recommend 26-28-word sentences and three-sentence paragraphs on average for accessible texts.

The written report uses a series of *elaboration* possibilities such as bold or italic words, bulleting, chapter, section and paragraph numbering, graphics, charts tables, pictures maps etc. All this sets a clear distinction between the engineering style and the literary one.

Naturally the way in which an engineer uses the writing style depends largely on the readers: professionals, non-professionals, superiors, and subordinates. *The "beneficiary" of the written text influences the text expression and preparation level.*

In his attempt to meet the various reader demands, the engineer must respect "the style of the house" and comply with the professional practices that all his colleagues respect.

The structure of the written report must match the readers' demands, but it cannot leave aside the *introduction* that presents the aim of the report; the *contents*, that presents the analysed problem as correctly as possible, the way the specialised literature deals with it, the description of the studied material and the methods, the difficulties arisen during problem analysis/solving; and the *conclusion*, that includes the author's opinions/comments, the conclusions of the research and/or the work and recommendations/solutions for immediate or future applications.

It is recommended that the written reports should include a summary for the superiors who do not always have the necessary time to read the whole paper.

The *presentation form* of the report is also important.

The *exterior* form refers to the paper (which must be high quality paper) the covers (material, colours) and the text written on them (summary, positioning, fonts).

The *internal* form affects the readers in various ways. The introduction is important, as it must provide brief and clear information concerning the aim and form of the report. The chosen words must have a strong impact on the reader, as so must the summary.

The initial paragraph has its own importance as it presents the reader the problem analysed in the report.

The *elaboration method* (spaces, indents) makes the text even more attractive. If it is too long the reader may not read it; therefore a net distinction must be drawn between the text itself and its appendices. This can be done by using distinct delimitation marks or even different coloured paper.

The *indexation* (chapter, section and paragraph numbering) facilitates the communication between the author and the readers for their further reference to the parts of the report. It also helps the reader realise the importance of a particular section within the text economy, especially when a multi-numbered system is applied. For example, 1.2.5 refers to the fifth paragraph of the second section of Chapter 1.

A proper consideration of all these aspects (style, presentation, indexation) involves the use of the characteristics of an efficent and convincing style, a mandatory attribute for any engineer, especially if he is also a manager.

As Wheeler and McDonald, cited by Newcomer et.al., stated: "The technical competency of our students is raised, not lowered, by the thorough integration of writing in engineering courses."

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MODIFICATIONS QUALITATIVES DES PRODUITS ALIMENTAIRES CONSERVES PAR CONGÉLATION

MODIFICĂRI CALITATIVE ALE PRODUSELOR ALIMENTARE CONSERVATE PRIN CONGELARE

LUMINIŢA PÎRVULESCU[*], R. PALICICA[**]

Many alimentary products alter easily because of its microorganisms and its enzymatic activities, giving a limited seasonal character to consumption. For this reason, many conservation techniques are being used especially freezing.

No matter what conservation technique is used, all products suffer a series of influences, which if known, can prevente the minimalization of their comercial and nutritional value.

***Mots clef**: produits alimentaires, conservation, congélation, modifications qualitatives.*

La croissance du nécessaire d'aliments pour la population dans les conditions d'une exigence accrue face aux produits agroalimentaires impose une valorisation supérieure de ces produits conformément aux standards et à la législation en vigueur qui sont conçus sur des bases scientifiques garantissant le maintien des traits nutritifs, technologiques et de la marchandise.

Beaucoup de matières premières agricoles et de produits alimentaires s'altèrent facilement à cause de l'activité des enzymes et des microorganismes, en donnant au produit un caractère saisonnier limité**.**

Pour éliminer cet ennui on recourt à l'utilisation des techniques de conservation qui stabilisent relativement les propriétés du produit en lui agrandissant la durée en ce qui concerne la conservation et la commercialisation. Le tri des méthodes de conservation pour un produit alimentaire dépend de plusieurs facteurs:

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- la compatibilité du produit avec la méthode de conservation (certaines méthodes de conservation peuvent être appliquées à la majorité des produits alimentaires: la congélation, le traitement thermique etc. et d'autres méthodes peuvent être appliquées à certains produits: le fumage, l'acidité naturelle etc.);
- des considérations économiques (dans le choix des méthodes de conservation c'est l'influence du processus de conservation concernant le prix qui représente un facteur déterminant);
- la dotation technique existante (il y a des méthodes de conservation qui n'ont pas besoin d'appareils particuliers, mais il y a aussi des procédés qui emploient certains outillages: la réfrigération, la congélation, la stérilisation, la concentration etc.);
- l'influence du processus de conservation concernant le produit alimentaire (il y a des procédés de conservation parmi lesquels on modifie complètement les caractéristiques sensorielles du produit tandis que dans d'autres cas celles-ci se maintiennent plus intactes que possible).

Les microorganismes représentent l'une des principales causes qui détermine des modifications inattendues dans la plupart des situations, dans les produits alimentaires. Ces modifications peuvent réduire la valeur nutritive, sensoriale et la valeur commerciale, menant à l'altération du produit alimentaire. La croissance et le métabolisme des microorganismes ont à la base des processus biochimiques complexes qui sont fortement influencés par les conditions de l'environnement, de la nature et de la structure du produit alimentaire en question, du pH de l'environnement, par les conditions de la nature et de la concentration des sels etc. Le facteur d'environnement le plus important est la température. A la différence des enzymes qui à une température près de 0°C réduisent beaucoup leur activité, les microorganismes ont un degré élevé d'accommodation, certaines espèces sont capables de se développer aussi à des températures sous -18°C ou plus de 70°C.

La congélation fait partie de la catégorie des méthodes de conservation qui utilisent des températures basses et consiste dans la conservation des produits alimentaires à des températures inférieures au point de gel, d'habitude à -18 .... -45°C.

Les produits alimentaires peuvent être congelés, il l'est évident, à savoir: les légumes, les fruits, les produits de la viande, les oeufs, les

produits laitiers, le poisson. La proportion d'eau gelée, les modifications structurales et physico-chimiques dans les tissus du produit alimentaire dépendent de la vitesse et de la durée de congélation, influencées à leur tour par le niveau de la température négative appliquée.

Sans tenir compte de la technique de conservation, tous les aliments, pendant le stockage, subissent une série d'influences qui, si elles sont connues, peuvent prévenir la diminution de la valeur commerciale et nutritive des produits alimentaires. En même temps, on peut éliminer la situation de dépassement de la durée de conservation équivalente avec la perte du caractère d'aliment.

La plupart des produits congelés, conservés à la température de -18°C, ont une durée moyenne de 10-12 mois, approximativement l'intervalle entre 2 récoltes, avec beaucoup d'exemples d'assortiments sous et sur ces limites.

Les modifications qualitatives qui apparaissent aux produits congelés peuvent être histologiques, physico-chimiques, micro-biologiques.

Les modifications histologiques se produisent surtout aux produits congelés lentement, dû à la rupture ou au sectionnement des tissus par les grands cristaux de glace.

Les plus importantes modifications physico-chimiques qui apparaissent pendant le stockage des produits congelés sont:

- *Les pertes en poids*. La diminution en poids provient comme effet de la sublimation de l'eau, en valeurs minimes au cas où l'emballage serait étanche, de l'utilisation des matériaux ayant un bon coefficient d'imperméabilité ;
- *La brûlure de congélation*. C'est une modification spécifique aux produits congelés qui apparaît sous forme de tâches, le plus souvent de couleur blanche, en prenant un aspect spongieux. On constate surtout aux assortiments emballés dans une manière qui ne correspond pas aux normes, comme effet de la déshydratation avancée des tissus superficiels;
- *Les modifications de couleur, de goût et d'arôme*. Ces modifications apparaissent soit dû à l'estompage des pigments par les cristaux de glace, soit dû à l'oxydation des composés de couleur et de goût et en général aux produits stockés pendant longtemps.

Ainsi, les produits verts (l'épinard, le pois etc.) perdent l'intensité de leur couleur, la chlorophylle se transforme peu à peu dans phéophytine de

couleur vert-olive vers brun. A l'aide de nombreux tests on a constaté que la température de stockage a une grande influence sur le maintien de ces caractéristiques de qualité (Tableau 1).

Tableau 1

La durée en mois, après laquelle peuvent apparaître des modifications de goût – couleur aux produits congelés

Le produit		**La température**	
		–18°C	***–12°C***
GOÛT	Haricot	10	3
	Epinard	10	3
	Chou–fleur	6	2
COULEUR	Haricot	3	1
	Epinard	7	1,5
	Chou–fleur	2	0,5

- *Les modifications dans le contenu de vitamines*. Le contenu de vitamines des produits congelés est peu affecté.

La perte de provitamine A, dans les légumes échaudés au préalable est très petite, mais plus grande au cas des légumes frais. Le complexe des vitamines B subit des pertes minimes pendant le stockage des produits congelés, et la vitamine PP résiste bien tout au long du processus et au stockage. Quant à la vitamine C, les pertes pendant le stockage à la température de -18°C sont exemplifiées, pour quelques légumes, dans la Figure 1.

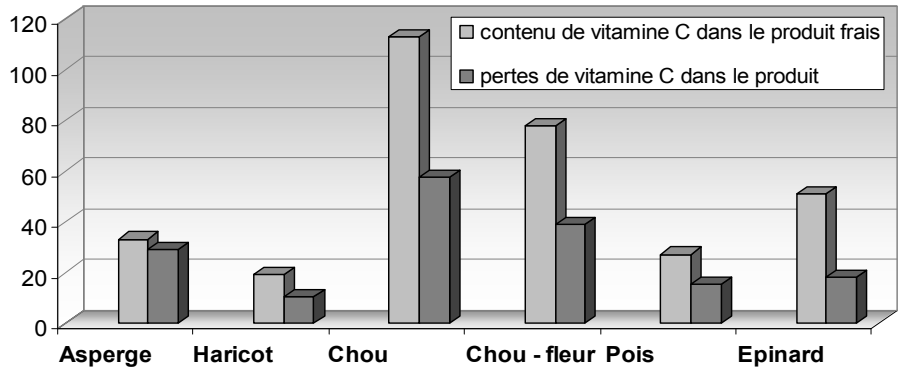

Figure 1. Les pertes de vitamine C, de quelques légumes, pendant la congélation

L'expression calculée en pour-cent des dates du graphique au-dessus est rendue dans le Tableau 2.

Tableau 2

Les pertes de vitamine C après 6 mois de stockage à -18°C

Produit	**Pertes de vitamine C,** % moyens et variations
Asperge	12 (12 – 13)
Haricot	45 (30 – 68)
Chou	49 (35 – 68)
Chou–fleur	50 (40 – 60)
Pois	43 (32 – 67)
Epinard	65 (54 – 80)

- Les modifications de l'extrait soluble et de l'acidité. Ces aspects se constatent surtout dans les fruits de sucre congelés. Ainsi, à partir des premières semaines on observe une croissance du contenu de substance soluble, dans les fruits et la décroissance de ce contenu au cas du sirop.

Au cas de l'acidité totale, le phénomène est inverse; on constate une décroissance de l'acidité des fruits et une croissance de l'acidité dans le sirop.

La conservation des aliments au froid se base sur le fait que l'activité des enzymes aux températures basses est beaucoup ralentie et même arrêtée. Les microorganismes sont beaucoup plus résistants aux températures basses, les légumes congelés en se caractérisant en général par la présence des bactéries, pendant que dans le cas des fruits on identifie plus fréquemment les moisis *Rhizopus, Mucor, Botrytis, Fusarium* etc. et les sédiments.

Une altération proprement-dite des produits congelés n'est pas possible si l'on respecte les conditions de stockage.

CONCLUSIONS

1. Pour obtenir les produits congelés de qualité il s'impose que dans tous les anneaux qui constituent la chaîne frigorifique soient accomplis les conditions suivantes:

- l'action du froid doit intervenir le plus vite possible après la récolte de la matière première;

- la congélation du produit doit se faire dans une période de temps très courte et doit être continuée jusqu'à ce que la température dans le centre du produit soit arrivée à -18°C;

- le produit alimentaire doit être maintenu à une température basse tout au long de la chaîne frigorifique, du producteur au consommateur;

- les produits alimentaires doivent être stockés à des températures spécifiques, différentes.

2. L'activité de certains microorganismes, bien que ralentie aux températures basses, n'est pas complètement arrêtée, les microorganismes s'adaptant aux températures basses auxquelles ils peuvent même se multiplier.

3. L'entretien d'une hygiène stricte et l'évitement des conditions de contamination pendant le stockage contribuent à l'assurance de la qualité des produits alimentaires congelés.

4. Même dans des conditions correctes de travail et de stockage, les aliments ont une période limitée de conservation.

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URBAN AND RURAL STATISTICS ABOUT INTERNET USE IN ROMANIA

STATISTICI REFERITOARE LA UTILIZAREA INTERNET-ULUI ÎN MEDIUL URBAN ŞI RURAL ÎN ROMÂNIA

A. BĂNEŞ[*]

In Romania in the last years it turns out that a lot of people are using more and more the Internet. Anyway, from about 22.5 mil peoples, only 13% are using the Internet services. We are trying to show how much is this extension and what category of people are accessing this resources.

Key words: *Internet use, statistics*

At the end of 2000, the total number of Internet users in the CEEC was estimated at 9.467 million. Poland, Czech Republic and Romania are the three top countries in terms of Internet Users, all of these three representing 76% of the total number of users.

Also, at the end of 2000, the average number of Internet users per 100 inhabitants was 8.4 in the whole of the CEEC countries. In Estonia, Lithuania, Poland and Czech Republic where penetration rates range respectively from 26.3 to 10 per 100 inhabitants, in Latvia, Slovenia, Hungary and Romania from 8.2 to 3.1 per 100 inhabitants and in Bulgaria, FYR Macedonia, Bosnia and Albania from 1.24 to 0.16 to 0.3 per 100 inhabitants.

From 1998 (2%), the number of Internet users in Romania has increased in 2003 to 16%.

This increasing is according to the computer number. This number has also evolved from 700.000 in 2001, to 2.100.000 in 2003.

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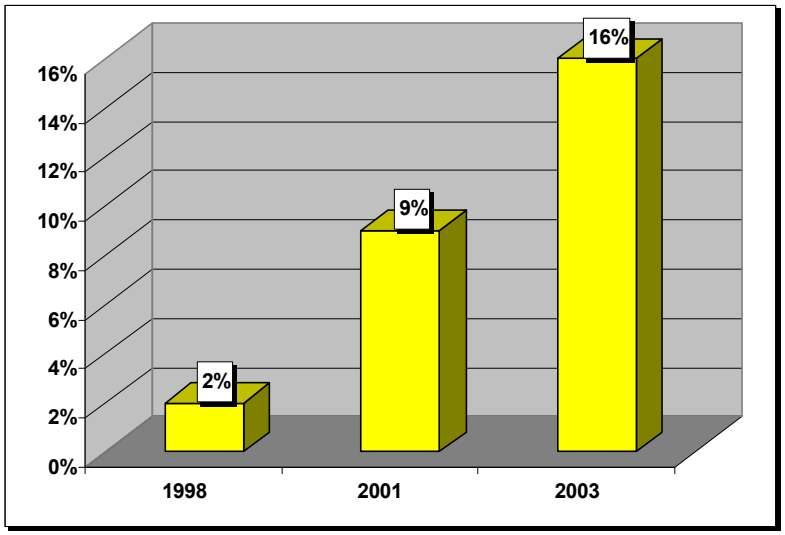

Figure 1. Internet users evolution 1998 – 2003 (%)

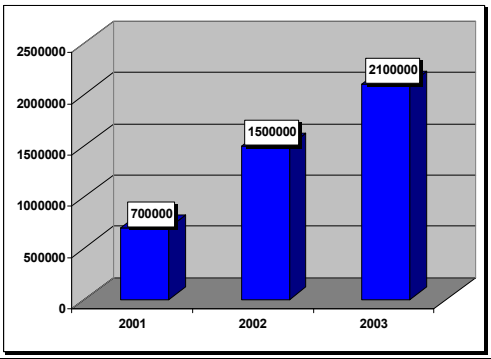

Figure 2. Computer number evolution 2001 – 2003

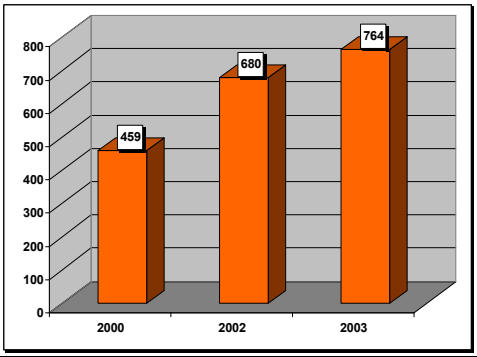

Figure 3. IT market evolution 2000 – 2003 (mil. euro)

The number of ISPs differs greatly between countries: from 6 ISP's in Bosnia up to 500 in Poland (year 2000). Poland, Romania, Bulgaria, which are part of the Top 5 in terms of number of inhabitants are also ranked in the Top 5 in terms of number of ISP's. Since 2000, the ISP number in Romania grows from 210 to 400.

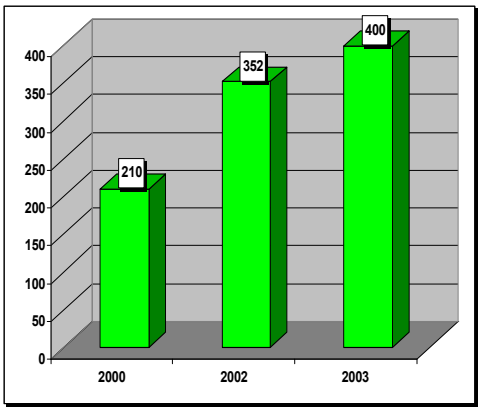

Figure 4. ISP number 2000 – 2003

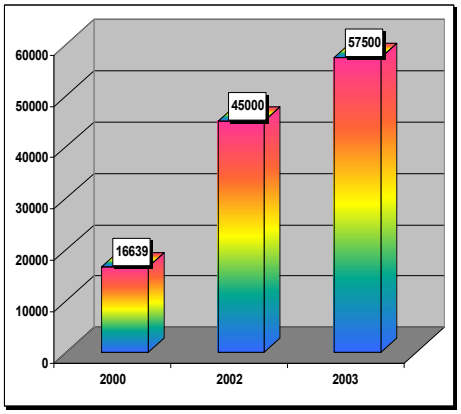

Figure 5. Domains .ro evolution, 2000 – 2003

Regarding the distribution of Internet addresses per countries domain, we can notice the prominent places of Czech Republic (44%) and Slovakia (39%) far ahead Romania (6%) (year 2000). In 2003 towards 2001, the .ro domains number has grow about 3.5 times, from 16.639 to 57.500.

Regarding recent studies 1/3 from Romanian population knows nothing about the Internet and 53% have never accessed it, but heard about. It's comforting, maybe, that, from this 53%, 16% want to learn and use the Internet in the next 6 month.

Actually users, utilize the Internet for: e-mail services (49%), chat (46%), information about events (37%), news (26%), jobs (21%) and interaction with the authorities (18%). A very small percent, 2%, are using the Internet for banking services. Most of them are accessing the Internet from public locations and a little number from learning institutions, the medium Internet use time in Romania is 5.8 hours/week. This is the situation in Romania. In US the Internet use is presented in table 1.

Regarding the telephone subscribers, the situation is presented in figure 6. The importance of studying this situation is necessary because a lot of people, especially in rural area are using telephone lines for Internet connection.

Table 1.

Personal Internet Use at Work (as a percentage of U.S. workforce)

Activity	Amount
Use search engines	89%
Check news/sports headlines	75%
Comparison shop	67%
Write/receive personal email	55%
Check stock market	49%
Personal reasons	46%
Make purchases online	45%
Play games online	22%
Bank online	14%
Visit adult sites	11%

Source: Angus Reid Group, September 2000

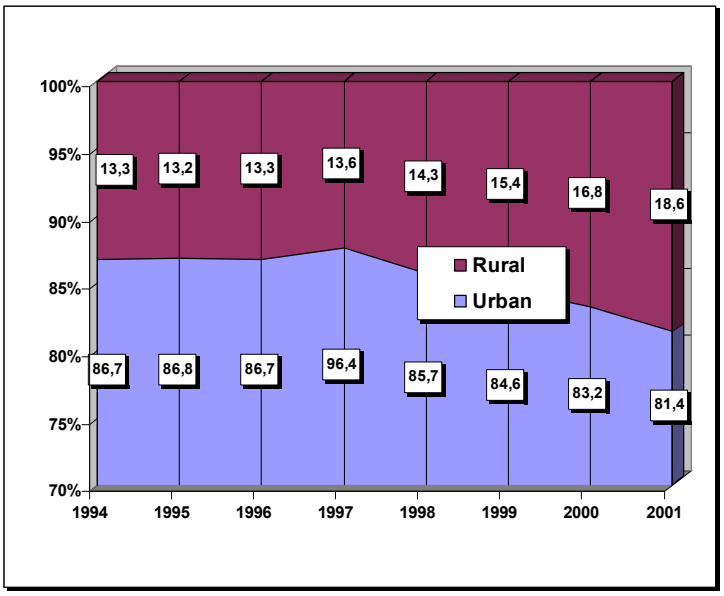

Figure 6. Urban and rural subscribers

Talking about the traffic, from figure 7 we can say that Internet traffic has increased from about 0 minutes in 1996 to 123 million minutes in 2001. This means that a lot of people in Romania are using more and more the Internet.

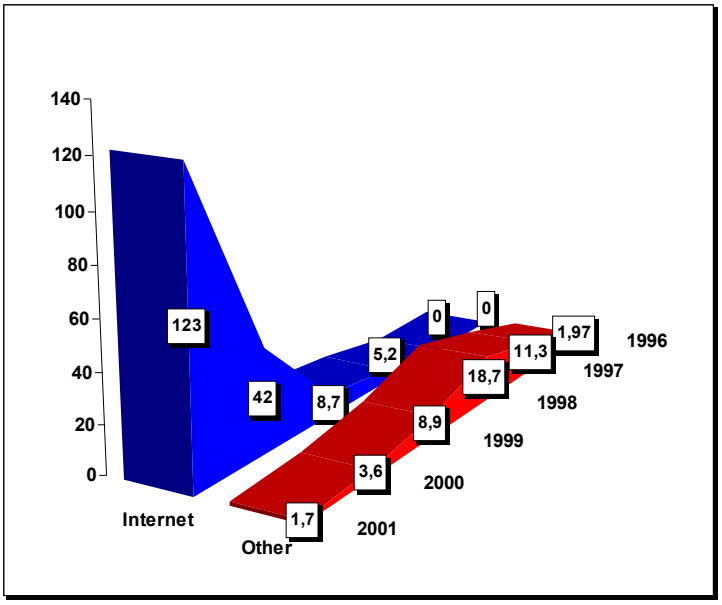

Figure 7. Traffic (million minutes)

CONCLUSIONS

In last years in Romania, it has been recorded a vertiginous growth of Internet users number, attenuating the discrepancy against other countries. This was a progress even if this use is done to a reduced level against the possibility, or what offers the Internet.

If some of the problems raised for institutions by the Internet connection can be solved rather easily, some other are more difficult to be solved. Within the first category one can consider computers price which is not inaccessible. Another such problem is represented by availability of experienced specialists. Romanian high schools and universities are preparing an increasing number of professionals in this field, providing

them with the most recent information available worldwide. Therefore Romanian companies which intend to employ such specialists will have to choose among those who better meet their employment criteria. Within the second category one can consider the Internet connection. Its high price makes it one of the most important obstacles for those who wish to have Internet access.

Although there is a great diversity of connecting methods the connection prices, which are rather high if they are compared salaries level, make the Internet connection inaccessible for most of private persons, especially for those living in rural area, where the access is provided mainly by long distance telephone calls.

When the price of the Internet connection will be more accessible, its utilization in Romania will be much wider.

All these date indicates a penetration more and more active of informations technologies in all sectors society, penetrate due the slow growth of life standards. Anyhow, we can say that "Roumanian Internet" began at last to take out "head in world".

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POSSIBILITIES OF USING EXPERT SYSTEMS IN AGRICULTURE

POSIBILITĂȚI DE UTILIZARE A SISTEMELOR EXPERT ÎN AGRICULTURĂ

A. BĂNEŞ*

The researches in direction of finding solution for problems involved the development of new reasoning method such as the analogic reasoning, the rationalization on probabilities theories and the rationalization from studies of case.
Conclusion were that knowledge based system has not to know absolutely everything about a certain area, but they can reason with an large data base using models, principles or causalities.

Key words: *agriculture, expert systems*

First generation of expert systems were characterized through reduced and slow knowledge base. The result was a diminished and a fragile performance. Many successful application in were developed on the strength of expert systems in year 1970 and 1980. These systems were definite as "intelligent programs using knowledge and different methods to solve difficult problems that required human expertise for solving". Results that an expert system is a system that emulate the ability of taking decision by the human expert".

Expert systems were built to can solve varied problem types, basic activities can be grouped in the table 1.

The applicability spectrum of expert systems to industrial and commercial problem is so large that defies a characterization. Their applicability founds path in most areas. The applications tending to be divided in seven major classes depending on the type of dominant activity:

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- Diagnosis and debugging problem in what looks the system of all types;
- Planning;
- Customization of object from subansamble;
- Take of final decision;
- Publication of knowledges;
- Tracking and checking of processes;
- Design and manufacture.

Table 1.

Basic activities of the expert systems

Activity category	The problem
Interpretation	Situation of interference correlated with data received from sensors.
Prediction	Interference of possible solutions in an assign situation.
Diagnosis	Interference with system errors.
Design	Objects configuration, keeping the given rules.
Planning	Actions configuration.
Tracking	Comparing the observations with the expected results.
Debugging	Prescription of remedy for the founded errors.

There are many reasons that justified the use of expert systems instead human experiences.

Table 2.

Comparison between human and artificial expertise

Human expertise	Artificial expertise
Perishale	Permanent
Difficult to transfer	Easy to transfer
Difficult to be documented	Easy to be documented
Unpredictable	Consistent
Expensive	Cheaply

There are also many reasons that justified the use of human systems instead expert experiences.

Table 3.

Comparison between human and artificial expertise

Human expertise	Artificial expertise
Creative	Characterless
Auto adaptive	Need to be learned
Sensorial experience	Symbolic input
Wide area concentration	Limited area concentration
Divers domain knowledge	Technical knowledge

Through these reason and others the artificial intelligence, the expert system are used by their capacity of consultants helps for human experts in certain problematic area.

The structure of expert system must contain three main modules:

- **Base of knowledge's:** consisting from the ensemble specialized knowledges entered by the human expert. Knowledge stored here contain in main the descriptions objects and the relations among these.

- **The mechanism (the engine) of inference.** He takes from knowledges base facts for reasoning's construction. Major objective are: choose the auditing strategies in depending on current problem, the elaboration plans of solving the problems, the commutation from an auditing strategy to another, the execution acts.

- **Facts base** he represents an auxiliary memory which contains all date users and intermediate output products. Facts base contain is stored generally in volatile memory (RAM), or on users demand, on harddisk.

Besides these, an expert system contains a series of module that assures the communication between the user and human expert (figure 1).

The communication module assures the specific interfaces for users and for knowledges acquisition. The user interface is who permit the cvasinatural dialogue between user and system, communicate to the mechanisms the user requests and to the users the output. The module of knowledges acquisition takes over the specialized knowledge from the human expert by the knowledge engineers in a unspecific internal form representation. The explanation module permits to trace the final road in the process of reasoning by the solving system and emit justifications for the obtained solutions, marking out the cause of eventual errors, or the failure reason.

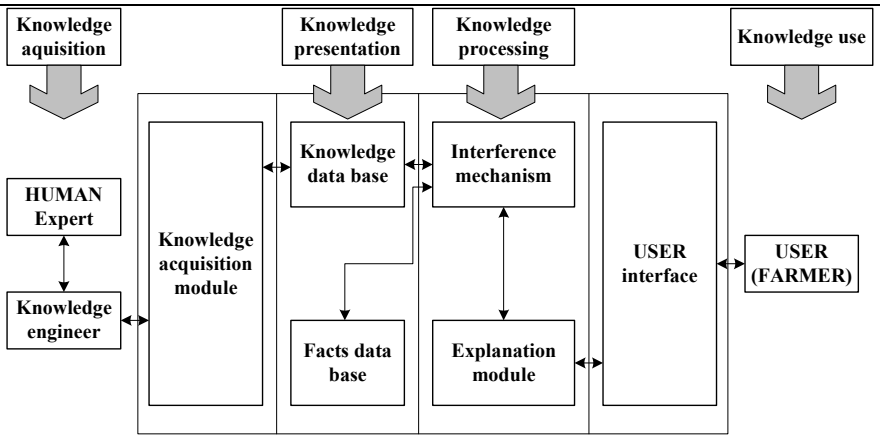

Figure 1. Communication between human expert and user (farmer)

CONCLUSION

The advantage of using expert systems in agriculture are:

- is a collection of valuable information;
- are indispensable in the absence of human expertises;
- can be cheaper, quicker and more efficient than the human experts;
- if there are flexible, can be easily updated;
- on demand, can explain the premise and line of reasoning;
- treat the uncertainty explicit, as opposed to the expert human case, can be inspected and certified.

There are also several limits of these system:

- can't reason on the strength of common sense;
- are restricted to a limitary area;
- the learn process is not automatic, for the knowledges updates is necessity of human intervention;
- knowledges stored in the basis are depending of the human expert which express them.

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THE EXTENSION SERVICES' PERSPECTIVE FOLLOWING THE ROMANIA'S EU INTEGRATION

PERSPECTIVELE SERVICIILOR DE CONSULTANȚĂ DUPĂ INTEGRAREA ROMÂNIEI ÎN UE

C. SĂLĂŞAN[*]

The current analysis of the extension services' market in Romania allows as elaborating a projection for the near future developments expected on this sector. The implication that the Romania's integration into the EU can have are substantial and producing benefiting results for the extension beneficiaries, farmers' community or rural householders. Private providers of agricultural extension and professional associations will play and increasingly role on the market and complete the offer parallel to the enhancement in services' quality.

***Key words**: extension services' perspective, Romania's EU integration, extension challenges, extension services' market*

The market of the agricultural extension services in Romania is underdeveloped but expanding continuously. When we address the dynamics of this process we have in view especially the private segment of these services. Even if the volume is relatively small the quality of the services and the transfer to the beneficiaries, and the perception of the farmers and the high satisfaction level are placing the private structures to a high ranked position far from the public structures.

The agricultural extension in Romania can be completely pictured by structuring it into public and private services. The public sector is represented by the National Agency for Agricultural Consulting (A.N.C.A.), structure with wide national coverage, present on the local level down to the farmers' community scale. Due to its national coverage and representing the

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Ministry of Agriculture, Forestry, Water and Environment through the role it should play in transposing the agricultural policy and by its position of vector for the future orientation of the agricultural development, this structure by its actual position and the possible future development of its services represent the main actor on the current extension market.

In order to complete the public services we should add the extension services for agriculture developed by the agricultural universities and the other research structures. Although the market share on agricultural extension services is reduced for these organizations their natural creation can be an important vector for future developments and completion of the services' package offered to the farmers.

Starting from the European tradition on this field, but especially from the North American experience, we can say that this pillar, represented by the agricultural universities is worth to be explored and exploited in the way of developing a specific university extension and consultancy structure, with major benefits, first for the farmers but not last for the developing organizations. The position that the two structures can develop in common or separately does not need to be necessarily a competition or concurrency position.

We consider that collaboration between the two public structures has advantages not only for the partners but especially for the farmers' community. The future developments will prove if this kind of partnership is possible and if the results of a common effort are justified. Considering the sufficient opening that the agricultural universities can have in this approach for a fruitful collaboration, we consider that the administrative difficulties can be overcome taking into account the relatively difficult position of the public extension services and the commitment of the universities in their involvement.

The private sector is represented by agricultural extension structures oriented only on providing means and services, often represented by Non Governmental Organizations. Their presence and coverage, both on geographical scale and developed activities is restraint and often limited to a production, a community or a region. Examples of such organizations with an important history for the last decade are represented by the structures developed by GTZ (Deutsche Gesellschaft fur Technische Zusammenarbeit GmbH), such as those addressing the training and the marketing of the wine production, or structures for pork or milk production.

Beside specific extension structures there are other forms of certain European organizations with a wider activities' spectrum for agriculture but who address a specific region which they cover entirely. The picture of the private segment is completed with the offer of the industries, private companies, and suppliers of inputs for agriculture. Their market weight is extremely low and the presence can be explained by the fact that they are locally structured following the general shape and organizational structure as the international companies, input producers / suppliers, to which they belong.

Consolidating the A.N.C.A.'s position as main service provider in the extension field and promoting functional and financial autonomy on long term depends critically on earning the customers' credibility, respectively, farmers and their community. At least for the moment, this position is privileged by the reduced volume of services provided by the competitors. Our analysis addresses the quality of the services on both sides – provider and beneficiary, filed on which the private structures are highly in advance compared to the public ones.

Even with an extremely high coverage level, secure financing, although not very important, with access to the specific tools of supporting the agricultural activity, disposing of publications and disseminating facilities, the A.N.C.A, through its County Offices for Agricultural Consulting and locally by offices or extension agents, does not succeed on convincing and acquiring the aimed and declared position. The feasibility of the structure does not convince on the central administration level to that extent to which the future of the functioning and structuring of the services on national level is under a large question mark today.

The creation of the Agency is a necessity in all states with an important agricultural sector. The form and the supporting frame of the services are shaped differently from country to country depending on tradition, history and development. The common element for all of them is represented by formulating the need and modeling the demand in a way to answer and suit the best to the farmers' needs and the possibilities of the administration, professional or private structures to support these services. Their efficiency raise mainly form the market oriented services, regardless the competitors, quality of the services, customer-provider relation its possible evolution.

Implementing a Customer Related Management (C.R.M.) allows the achievement or consolidation of a top position on the market of extension services. In order to balance such a situation it is necessary that the feedback from the farmers is at least on the same importance level with the acquired results of the extension agents. Not only earning the farmers' community trust is highly important but the constant level and the quality of the services together with agricultural policy support and professional representation.

The possible conflict of interests between the elements of the agricultural policy and the immediate action way identified by farmers should not constitute again cooperation barriers, which can drive to refuse and generate tensions between partners. Placing all participants to the agricultural extension on equal position, farmers and extension agents, drives not only to a closer cooperation but also to a correct assessment of the value of the exchanged or offered services.

Although aiming high through its general and specific objectives, the Agency did not succeed on imposing itself on the agricultural extension market until now. We consider that it is the moment when the advantage of the presence can be superiorly enhanced through services and extension programs, which can enhance the credibility from the farmers' community side. Modifying the approach and the current position, reconsidering the organizing and functioning way, a considerable higher added value to the offered services can drive to a sustainable re-founding of the Agency's activity.

The advantages of the partnership with the agricultural universities can be represented by a neutral based validation for the offered solutions, specialized consultancy for all expertise levels, an efficient transfer of the modern means and technologies, for production but also for communication, modeling, planning and decision making to the farmers' community with a guaranteed feedback.

In the balance of the extension services offered to agriculture today the ratio quality / price is determining the leader position. The current analysis shows with no doubts that the private services are superior from the quality point of view, in our days. The problem is solved only on the areas where these services are present and the number of those locations is restraint. Unfortunately, the perspective is not reserving any spectacular evolution on this field. And it is not expected as far as even in the countries with tradition in agricultural extension the private services developed as

business or as service for companies are not detaining important shares on the extension market. However, their presence as status indicator and as comparison element is necessary.

Considering the agricultural potential and the importance of the sector in the overall economy it appears obvious the place and the role that the agricultural extension services will play after the EU integration.

If we address the public extension services, their tasks will diversify and increase as a large number of administrative tasks and demands will be oriented towards them.

With all the specific measures to support and accompany the farmers, with detailed application forms and eligibility criteria, disseminating regulations and verifying the farmers conduct, an entire series of new tasks for which training is required today. Preparing the civil servants to assist farmers in the new EU context is a difficult and complex task. It requires time and competencies, permanent training and development.

We can estimate today that the administration on central, regional or local level is far from being prepared to assume all these tasks. Surprisingly, no urgent strategy is in place and no measures are taken to start the preparation. Therefore this paper is also aimed to raise the awareness of the concerned decision makers and emphasize the immediate character of these issues.

An important place on the extension market will be allocated to the private service providers of agricultural extension. Even if far from reaching an important target today due to the restraint area their services can cover, the effects and results of their input is considered superior to the public sector.

A second important advantage of the private extension is represented by the large credibility they have among the rural communities. The current image of the state extension is still far from the aimed level and it may require a severe restructuring process in order to restate them on the reserved place.

Having in view the importance of the complete assistance services for the farmers' community and the complexity of the tasks to develop it is expected that the importance of the private service providers will increase considerably.

Specific support measures may open to the private structures within the working frame of the EU institutions. Such models are functioning with remarkable results in the new German states and the model can be exported towards the Central and East European countries. The main asset of the private agricultural extension structures is represented by quality assurance and control regarding the extension act. Moreover, the beneficiaries are asked to contribute actively in assessing the final achieved results.

An important actor to come to the extension services' market, present in all countries with tradition in extension is the professional structures. Representing the interests of the members these bodies do not achieve necessarily the best performances but accumulates a large credit from the farmers. It is expected that such structures emerge on the Romanian extension services' market soon and that the EU integration is the perfect opportunity for these structures to rise.

Another element of critical importance to the extension market development is represented by the radical change in customers. The extension structures will have to deal with farmers and not only householders anymore. The demanding level and the content of the services will increase considerably and the expectations of the customers will achieve a higher level.

Considering the new member states of the EU and the fact that in Poland agricultural sector and the specific weight of the rural economy is comparable with the Romanian situation, it is of high interest to follow the developments concerning the extension services of this country. Learning from the others experience is a costless method and it can spare serious effort in the very near future.

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EXTENSION SERVICES' NETWORK – REGIONAL APPROACH

REŢEAUA SERVICIILOR DE CONSULTANŢĂ – ABORDARE REGIONALĂ

C. SĂLĂŞAN*

Region level can prove a different view and can shift the importance of the addressed issues. Moving forward to a superior level, by a bottom-up approach and introducing the networking concept in the extension services activity proves to be an important enhancing mechanism. Opening the involvement to all concerned actors in the rural and agricultural environment, to universities, research and business can complete the offer and improve the results down to the final customer – the farmer. A good reflection opportunity for an easy and accessible way to develop and maintain the extension benefits.

***Key words**: network, extension services, regional approach, extension services' market development, A.N.C.A*

The current development of the extension services' market in Romania enables a different approach in terms of coverage and structure. This paperwork aims to analyze and propose an extension network and to approach the current situation on regional scale rather than national or county level.

Before addressing the opportunity and the benefits of the networking in extension work, we'll focus on the regional scale, on the impact of extension and the effects of the extension programs.

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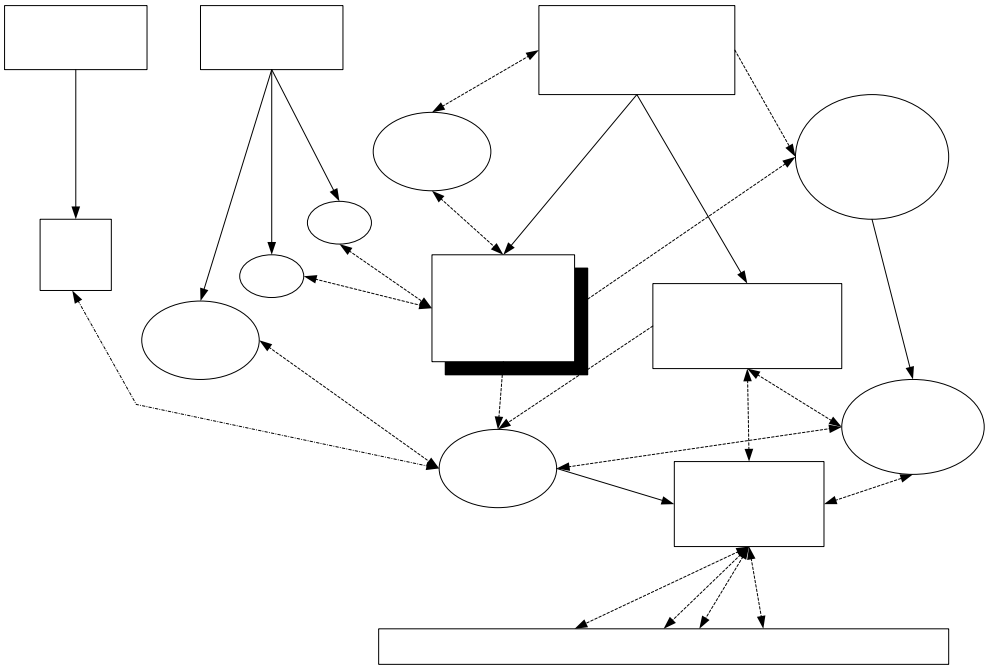
Due to the coverage in services and the presence in territory the other suppliers of extension services present on the Romanian market will not be considered in this first part of the analysis. Their input and results are often impressive but punctual if we address the national scale and impact. The National Agency for Agricultural Consultancy (A.N.C.A. - Agenția Națională de Consultanță Agricolă) fulfils this requirement but lacks in uniformity of service, quality and sustainability in most of the cases. In fact, we should rather address the exceptions as they are not that many in number.

Still, the fact they are present and furnished with young staff which can be educated and formed according to the specific needs and requirements. A.N.C.A. through its county offices represents the agricultural administration and it is asked to implement the agricultural policy. For all these reasons it comes in a central position in this brief analysis.

The organizational structure of A.N.C.A.



Source: A.N.C.A. Bucureşti 2000

Conceived as a structure on national level, the National Agency was designed to fulfill the basic demand for extension, to cover a developing market of services and join the competencies of all involved actors for the economical environment. We can see in the organizational structure the specific links established with other bodies in order to achieve the specific designed objectives.

One element was missing from the very beginning: the regional level. Why is the region so important? First of all, the county boundaries are not always separating different regions or zones. Common evolution and common problems do not count the administrative limits, sometimes moving every half century.

It is a waste of time and resources to replicate experiences in a neighboring village when they can work together from the beginning. Farmers can share effort and resources and try to solve together their common problems. But if they belong in two different counties they are covered in assistance by to different county offices of A.N.C.A. And the two offices don't have the same priorities or programs in their current extension activities.

The presence of a regional structure could easily solve such an issue and no imitative or demand would be refused based on administrative reasons. Continuing the logic of a regional body we could easily foresee all benefits derived from sharing common experience and successful programs, common problems or similar interests along the region.

The concerting activities on the regional scale will take an important place but will return wider impact and broader public. It will prove the interest in the community problems and can increase on this way the credibility of the farmers.

Extension agents will dispose of a larger group of clients and colleagues and the professional community will increase their chances to update and develop their professional skills and knowledge.

The current budgetary constraints on county level can be solved by a regional redistribution and the extension programs can reach a larger public. The list of benefits can continue for both, extension structures and farmers.

We fear that by the time this need will appear obvious to the central administration the regional bodies will be created only as an answer to a structural need. Whenever a change is coming as a top-down approach the effectiveness is reduced.

In order to overcome such a situation and to open the involvement to other local structures active in agricultural extension we propose an extension network.

The private extension structures have developed valuables experiences and detain competencies and credibility which can enhance the overall effect of the extension programs when involved. The "association" with the state extension services in the same network will greatly increase the confidence level of the farmers in public services. In return, they can benefit from financial support, such as specific subsidies for extension activities and can address a broader public.

The possible reserves in joining a common network will rather come from the pubic extension side which fears the competition and the competencies to share.

The network is designed to offer support and answer needs, both for their customers and for the institutions or offices themselves and not to screen out the less competitive services. Certainly, the further development of the network will induce that phenomena too as it is a natural law but the aim is to serve better and achieve the central goals of their activity.

The competition among the members of the network only improves the quality of the services which is a great benefit for the customers. At the same time, the network can guarantee a certain level of quality for their inputs and a minimum standard to be maintained.

Another great advantage of networking is represented by the possibility to communicate using direct and effective channels among regions or counties which are far from each other. Many experiences developed isolated can prove very useful when shared. The network frame can enhance both communication and resource sharing, again with benefits not only for the involved services but also, importantly, for the farmers and their communities.

The current structures or the future regional offices could allow communication, by official channels via the national agency or interregional exchange of information. The possibilities offered by networking are overcoming this difficulty even is the framework is less official.

A great opportunity created by the network is to involve directly international structures. This will avoid intermediate contacts and shorten the way to the final beneficiary. Following the current path, through

national, regional, county and local level is long and difficult and may discourage international initiatives.

An important aspect of networking in extension is brought by the possibility to attract external partners, such as universities, research institutions and even business sector. These actors have specific interests in developing the agricultural and rural markets, willingness to participate in joint programs and available resources.

The advantages of a partnership with the agricultural universities, research and business within the network can offer a neutral based validation for the solutions, specialized consultancy for all expertise levels, an efficient transfer of the modern means and technologies, for production but also for communication, modeling, planning and decision making to the farmers' community with a guaranteed feedback.

An important output of the networks is the creation of the resources and information centers. These centers can store important amount of relevant information and share or distribute it among the members or to the concerned public. A large amount of work can be transferred to the resource and information centers in terms of network coordination, information flows, hosting and processing data, producing disseminating materials, publications or organizing seminars or training sessions.

Among the results of a network activity the resources and information centers are the most concrete. Alone, the effort to create, supply and maintain such a center is an oversized effort. A network can contribute through its members and dissipate the effort and increase the diversity of the content or activities.

When organized on regional level, these centers can become involved in a broader range of activities and can supply the final consumer, the farmer, with extra items, parallel to his main production activity. The offer can include social and cultural items and can extend the extension from pure agriculture to leisure or family.

Thinking and acting on regional level and employing an extension network can highly improve the performances of the extension service today. It offers a new approach in the Romanian agricultural and rural landscape, both on institutional and execution level. It opens and explores new possibilities to enhance the position and to emphasize the role of the agricultural extension services as an engine of development.

Networking can be gradually introduced according to the risk they are prepared to assume and to the involvement scale. Meaning it can not be opened to all potential participants, but only to a certain type of structures, based on internal needs and defined strategy. Or it can be employed only to gather different structures or to supply the communication needs of the extension services.

Whatever the designation is, as far as networking contributes to the improvement of the results, to acquire specific goals, it should be used without any reserves. There are no obligations or compulsory items but it can strengthen the members and supply the missing parts.

Most of the elements of this analysis are meant to offer a real base of reflection for concerned actors, to prepare their options in developing solutions to improve their results or to optimize the structures they are managing today. It is a so called "free of charge" attempt and the analysis proves that benefits are dominant. If one of the core concerns of and extension structure is the wealth of its customers than networking can contribute to enhance this item.

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KNOWLEDGE TRANSFER AND ASSISTANCE IN EXTENSION WORK BASED ON A DEDICATED WEB PORTAL

TRANSFERUL DE CUNOSTINTE SI ASISTENTA IN ACTIVITATEA DE CONSULTANTA BAZATE PE UN PORTAL WEB DEDICAT

C. SĂLĂŞAN[*], A. BĂNEŞ[*]

The idea of developing a dedicated web portal to assist and support the extension workers comes from the information and communication specific needs, constantly growing. Employing web based technology, a complete set of supporting tools can be deployed virtually everywhere, providing information, detecting threads or completing analyses through an integrated decision making system. Design to assist and support, the portal aims to supply a complete range of services and data to extension agents, farmers or other partners in the agricultural environment.
Involving other structures than extension institutions and farmers, such as universities or business can increase the financial sustainability of this approach.

***Key words**: extension work, web based assistance, information and communication technology, dedicated portal for extension*

The development of the information and communication technologies recorded today allows us to evaluate their utility in many fields of activity considered earlier as having nothing in common with the above mentioned technologies. The dynamic of most processes in agriculture and theirs accompanying by the extension workers are demanding more fluent and feasible communication channels, an increased speed in the information flow and a broader range of information sources. Moreover, the quality of

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the processed information is critical in most situations and therefore specific tools should be employed in order to refine the content or to process even further the content.

Correlations and in-deep analysis are used almost on daily bases and relational investigations are demanded to support the extension agents on their field activity.

Another growing demand is coming from the farmers, especially for those who already benefited from assistance in the past and acquired qualifications and skills in dealing with information and decisions. These farmers are very demanding for information sources, for processed information or available decision assisting tools.

The communication between the farmers' communities or the farmers themselves and the extension structures would be another point supporting the idea that we intend to present below.

For all mentioned reason and the foreseen development speed we propose a working tool in order to supply all the described needs. This instrument, virtually available everywhere is a web portal dedicated to assist and help the extension agents on their day to day activity, including the field missions.

The basic idea starts from the availability of this working method. The employment of the proposed and designed portal is made possible practically, from everywhere. The minimum requirements are represented by electricity, phone and computer.

Even if computers are not readily present yet as common accessory in the rural areas of Romania, their introduction started several years ago and it is developing today. We do not intend to support our ideas on home computers necessarily, but according to the availability, contact points should be largely sufficient.

Considering that the main interest is focused on supporting the field agents of the extension structures, a notebook connected to internet services, even via a mobile phone, can supply the access for the requested purpose under feasibility constraints.

The commonly accessed parts of the portal including current and updated information can be made available by WAP (wireless application protocol) and a mobile headset (WAP ready) can replace the presence of the computer.

Moreover if these sections will contain information like, weather forecast, market price for selected products, pests or diseases attack or warnings, they can be made available for farmers, through the same described interface.

If the communication and access infrastructure is ready as described above we shall concentrate on the portal. Several aspects are to be described concerning the portal: design, accessibility, content, free or restricted access, supporting services, databases, maintenance and administration.

The portal's **design** has to be adapted to the specific needs of furnishing information. The web pages should be written as dynamic html and secure http (https) should be implemented in order to be related later with conditional access.

The principles that rein the design strategy refer to access facility, organizational structure and linking tree, visibility and harmonization of content and expression. It is necessary to develop a coherent philosophy and link the information and images, the content relevance and the structural skeleton. This initial base concept allows important economy of time and emphasize in the later site navigation. Categories and content should be relevantly connected in order to eliminate any possible confusion.

The **accessibility** of the portal has two main components: physical and substance. The physical accessibility is related to the access time to download the page components. In this respect, we recommend that graphic elements should be used only if necessary. Heavy content and rich graphic can drive to considerable time consumption. The substance accessibility refers to the limited knowledge and computer skills of the extension agents, and further, of the farmers.

It is not the form but the **content** which is aimed and designed to help and support in extension work. Therefore, all knowledge and information that is not part of the daily activity and basic job requirements for the extension workers can be stored and provided by the portal.

The **access** to the portal services can be established according to the extension structure or to the institution that provides the web server and its maintenance. The basic criteria in establishing the access rights are related to the costs and the degree of processed information requested. It can be entirely free when the institution can afford to cover entirely the running costs, it can be partially free, with public access and restricted access, or completely limited to members. The restricted access applies according to

the confidentiality of the contained information or to payment for services. This second type is developed for the farmers' access or others concerned by the content, such as universities, research institutions, administration or business. Our recommendation will be to grant public access to relevant information and reserve a members' area for extension workers and subscribers in order to preserve the privacy and the property over the content.

The **supporting services** that can accompany the portal can and should complete the basic offer of information provided. One of such services is represented by a forum. It proves very useful and constructive to share issues and success, to discuss problems or to submit for debate items to which the others can contribute with their knowledge or experience. Webmail access is very useful for the field agents and facilitates the communication under time restrictions and limited access from outside institution. Therefore an e-mail server behind the portal can support these services and complete the range of services provided by the portal.

A special supporting service is based on **databases**. We mentioned at the beginning of this paper the possibility of employing a remote or virtual decision-making assisting tool. The portal is the perfect hosting environment for such software. Although expensive and sophisticated internally it proves very useful when addressed through a web interface. This type of software relays on several databases, even outsourced. A special type of databases refers to the client (farmer/farm) details. Often, extension agents can't remember details about past missions on the same farm or other elements that can prove useful to the current situation. They are asked to remember all details or elements they collected from their filed work. Stored and structured in databases, and called through the web interface of the portal, the data become available instantly.

The entire philosophy and conception of the databases, their design and structure, conditions and regulations, use and completion are a different subject and it will not be addressed here. The relevant aspect is represented by the **maintenance** and the **administration** of these databases together with the entire portal.

The administration of the portal can be contracted with a specialized company but it is not recommended in terms of costs. If the initial volume of work is impressive, in order to ignite the portal, the further maintenance and administration does not require large competencies and therefore this

work can be completed or covered by the hired IT specialists from the extension structures. Going further, technical aspects related to the information, to the content, is far from the administrators knowledge. Therefore specialists in the field of agriculture should support them closely in order to avoid mistakes in interpretation.

An important side of the portal activity is represented by the screening activity. Only relevant information should be subject of insertion or further processing. Further more; updating and adding data to the existing databases should be supervised in terms of content by someone with enough competencies to detect eventual mistypes or mistakes.

Following all the above described recommendations will enable the utility of the portal in the interaction with the extension workers. From their office or from the field, they can access and use all information they need for specific purposes, they can proceed to enhanced processing of data, such as optimizations or analysis, and they can contact or be contacted by other farmers or extension agents.

A specific problem can be addressed to the consultant by completing a contact form on the website by any group or individual farmer or company. The questions can be tracked and retrieved in the discussion forum, where not only moderators but everyone can contribute with ideas or experiences.

The developing competencies of the extension structures and institutions are currently limited on the web developing and design fields. Therefore the cooperation or contracting should be the answer to formulate a team able to complete this initial work.

One very convenient cooperation form is to open a partnership with educational institutions, such as vocational schools and universities in the field of agriculture. Very often the agricultural higher education institutions have their own structures for extension. They also have enough competencies in the field of information and communication technologies. Such a partnership or cooperation will produce benefits for all members, joining the portal construction and maintenance and the field activity of the extension workers.

This partnership can be extended according to the possibilities and the specific needs, to the research institutions and even further to the business sector. Attracting strategic partners can greatly contribute to a financial stability of the project, and will increase the sustainability of the

approach. It will also have in return the contacting structures and the feedback needed by the potential partners.

In order to analyze the opportunity or the interest of the potential partners, after a promoting campaign, the portal will be analyzed by tracking the hits. The allocated time, the inquires and the navigation path should indicate where and what are the focal points of the external visitors.

These developments are possible and interesting but the core attention should remain focused on the basic concept, to serve and assist the extension workers on their activity, in the office but especially while completing a field mission.

The effects that the portal can produce on the mid and long term are considerably superior to any other investment in technology or communication. The future developments will prove if such an instrument can develop into a real working environment. The authors are supporting the idea of implementing a dedicated web portal and recommend a pilot project to test the feasibility.

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FIRMS' CREDIBILITY A BASIC FACTOR IN ENHANCING BUSINESS ENVIRONMENT

CREDIBILITATEA FIRMEI - FACTOR DE BAZĂ ÎN ACTIVIZAREA MEDIULUI DE AFACERI

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Testing our partners' credibility in a market economy is a managerial initiative of major importance, through which one can create the premises for eliminating business risk (temporary payment incapacity, merger, absorption, or bankruptcy).

Business environment is not always favourable to economical and financial activities in economic organisations. This explains why there is a need for taking into account a series of factors that mark firms' credibility once business is initiated.

In order to do so, we must bear in mind the influence of the following factors:

1. appearance, change, or disappearance of economic organisations in at a very quick pace, and the great number of firms that function on the market
2. fluctuation of economical and financial state of the firms, no matter their size (quick evolution from solvency to payment incapacity)
3. appearance of insolvency creates proper conditions for the chain transmission of negative effects (winding up of bankruptcy)

All this shows the necessity of institutionalising in market economy some specific practices for protecting partners against risk.

In this context, it is necessary to design some partner protection tools that are meant to diminish business risk. In order to avoid and to prevent

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partners' insolvency one must take into account some ways of diminishing financial risk. Among them:

- most firms accept delivery payment (be it for products or services) only with payment instruments whose sold should be confirmed by the paying bank (C.E.C.);
- in the case of delivery of agricultural products with high value and for which payment is done through bank transfer, firms check the partners' liquidity and they only deliver if payment and dead-lines are ensured;
- in the case of higher deliveries and payment on the spot, firms ask for credit letters and a blockage of the financial resources necessary to pay for the products to be delivered;
- private wholesale firms only sell for payment in cash.

In market economy they practice the following financial protection systems:

- protection by supplementary warranties granted by a third part;
- protection by acquiring some rights on the client's movables and immovable;
- protection by the use of economical information on partners.

The protection system consisting in using economical and financial information on your partners plays an important role in preventing business risk. Classical business protection forms through warranties from a third or through mortgages on movables and immovable are particularly sure but they also imply slow and inconvenient procedures that make it difficult to make business fluently and rapidly. Consolidating firms' economic potential, the existence of continuous and relatively certain merchandise flows are business protection elements. Without eliminating business risk such a positive trend of market economy created the environment necessary to reduce risk by obtaining and valorising information on one's business partners.

Are sources of information the following:

1. getting into touch with firms that have had or are having business relations with the tested partner (as a rule, trustworthy personswithwhich one has good relationships) on order to get as many information as possible;

2. gathering information on the financial state, on the economic potential, and on the behaviour of the future partner;
3. getting information from credit institutions – banks, order offices – that are partners of the future partner, in which case:
   a. the source of information, i.e. the credit institution, is the finance source of both partners: in this case, information has a higher degree of objectivity and can be a reliable source of information as the bank does not favour a client to the detriment of another one;
   b. when the financing bank of the tested partner is a different bank than the creditor's, or when the potential partner has a credit relationship with more banks, getting information is difficult and unreliable.
4. appealing to specialised firms, neutral ones, that can supply upon request economical and financial information, is a current practice in countries in which market economy is functioning: these specialised firms transmit information upon request, as their object of activity is supplying information.

Techniques and methods specific to firms specialised in gathering, processing, and supplying information on business partners, though different in some concerns, have all a common working system.

The practice widely used in developed countries in getting information concerning a partner is to become a member of an information firm, on the ground of an annuity, for which the firm supplies facilities in getting information. Information can be obtained by any firm upon filling in a form allowing the reception of necessary information by mail (in no more than 3 days), by telex or fax (within 48 hours), or on-line, as the client is connected to the informational net of the specialised firm.

In general, information thus obtained from specialise firms are standard and refer to solvency index, legal constitution form, history of the firm, social capital, management, object of activity, evolution of activity (order portfolio), number of employees, annual sale volume (for the last 3-5 years), immovables, active and passive of the balance, financing bank, payment behaviour, and recommendations.

Among standard information capable of emphasising economical and financial strength we could mention solvency index (credit payment

capacity). It represents the most important and the most usual synthetic index as it creates a global image of the partner firm. To have the quickest idea on the firm's state, they use in assessing solvency index a system of grades from 1 (maximum) to 6 (minimum), a system used in Germany, for example, where 1 reflects the maximum trust in a partner, and 6 indicates a particularly critical situation, which eliminates any business trustworthiness. In practice they consider that a partner that got 1.5-2.5 is a viable and trustworthy partner.

In order to assess a firm's solvency one must analyse certain factors. It consists of allotting grades from 1 o 6 to each risk factor. The calculus of grades for the factors under study is as follows:

1. Payment capacity: notes
   - very big – 1
   - big – 2
   - small – 3
   - very small – 4.

2. Firm's liquidity: notes
   - very big - 1
   - big - 2
   - small - 3
   - very small - 4.

3. Firm's solvency:
   - very big – 1
   - big – 2
   - small – 3
   - very small – 4.

4. Firm's profitability:
   - very good - 1
   - good - 2
   - null - 3
   - loss - 4.

5. Self-financing capacity:
   - very good – 1
   - good – 2
   - null – 3
   - precarious – 4

6. Evolution of income:
   - expansive – 1
   - positive – 2
   - stagnant – 3
   - declining – 4.

The calculus of solvency index is shown in Table 1.

We should notice that the way every calculus is detailed and the assessment criterion for the grades are, in fact, each firm's secrets, protected by licence.

Economical and financial information supplied by a specialised firm are not strictly confidential, but the system thus designed and protected is not prejudicial as it is within legal limits.

In principle, there are two ways to gather information, i.e.: public information sources and information sources obtained by a firm through its own canals.

Table 1.

Calculus of solvency index

Nr.	Risk factors	Share	Grade			
			1	2	3	4
1	Firm's payment capacity	25	0.25	-	-	-
2	Firm's liquidity	15	-	0.30	-	-
3	Firm's solvency	15	-	0.30	-	-
4	Firm's profitability	25	0.25	-	-	-
5	Self-financing capacity	10	-	0.20	-	-
6	Evolution of income	10	-	-	-	0.40
7	Total	100	0.50	0.80	-	0.40

Solvency index = 0,50+0,80+0,40=1,70

Public information sources are: commerce and trade register, balances and published activity reports, public announcements made by courts of law on debtors, bankruptcies, auctions, good partition, statistics, and press information.

Information gathered by the firm through its own canals are: information supplied willingly by contacted firms, information on a certain firm supplied by the soliciting firm upon previous experience, direct research by the firm's agents, etc.

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SUPPLY SYSTEMS ON AGRICULTURAL FIRMS

SISTEME DE APROVIZIONARE ÎN FIRMELE AGRICOLE

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In this paper we present supply systems that are also available in agricultural production. Implementing these types of supply in agriculture creates optimal conditions in making agricultural firms.

Supplying materials on agricultural firms for productive consumption is done depending on rhythm and structure of material resources necessary to supply agricultural production. Each agricultural firm uses supply systems that can adapt to the features of agricultural production so that they diminish or avoid unnecessary and/or supplementary expenses.

There are more supply systems for material resources used in agricultural firms, such as:

- programmed supply systems;
- dynamic supply systems;
- "just in time" supply systems.

1. THE PROGRAMMED SUPPLY SYSTEM

This supply system supposes previous assessment of amount and structure of material resources to be supplied in general constantly and relatively uniformly distributed during the production process. It also supposes delivery conditions (shipping, handling, quality control, wrapping, payment, etc.) to keep unchanged for a period of 1-3 years. The only element to negotiate between partners (sellers and buyers) is price, which can vary in market economy conditions.

Programmed supply systems are, therefore, conditioned on one hand by a constant and steady production by the seller, and on the other hand by an even and steady consumption by the buyer which is, in his turn, determined by a constant and steady productive activity.

Adjusting programmed supply systems can be done by:

- ensuring a permanent delivery rate;

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- creating long-term economic and legal relationships between seller and buyer;
- previously adapting production and consumption depending on material resource evolution on the market.

2. THE DYNAMIC SUPPLY SYSTEM

Dynamic supply systems are usually practiced in firms that have a short, uneven production process. In general, dynamic supply systems do not concern ensuring preventive supplies that could flatten delivery lot peaks on behalf of greater stocks, or result in supply lots that lead to an increase of necessary expenses for getting in materials.

This supply system has the following features:

- the size of material resource supply lots corresponds to the size of programmed product lots;
- the rhythm of receiving material supply lots equals that of processing them into products;
- supply requirements are launched for each lot, the moment the beneficiaries' orders are in and in accordance with the deadline proper to the technological process.

The following dynamic supply methods that help assessing both the size and the rhythm of supplying material lots are used in practice:

Variable demand at equal intervals. This implies re-supply material lots of variable sizes that have to be assessed at proper times (fall campaign, spring campaign). In this case, only the time for launching such orders are known for sure, supply duration being each time variable.

In order to avoid the lack of materials the dynamic supply system asks for the establishment of an alarm signal that warns and results in proper measures.

Constant supply demand at uneven intervals. In this kind of supply, the timings for launching orders are not initially known, as they have to be established by extrapolating depending on rhythm and consumption during production. The problem of assessing the maximum level of the supply lot to be delivered is also linked to the moment the order was launched, so that there are no supply gaps. Thus, it is necessary to create a safety stock so that its size does not create distortions in the agricultural technological process.

This supply model suits agricultural production process particularly in the field of material supply (fuel, lubricants, spare parts, etc.).

Variable demands and intervals. This supply model takes into account the fact that supply lot is constant, and launching new supply orders starts when the re-supply level is reached.

Dynamic supply systems specific to this model are also used in agricultural firms, when plant disease and sanitary and veterinary treatments are needed, that require materials (insecticides, fungicides, etc.).

3. THE "JUST IN TIME" SUPPLY SYSTEM

The "just in time" method has lately become very popular and is very much in esteem to specialists as a "sine qua non" condition for competitiveness in market economy. This method has as a starting point the diminution of raw material stocks and, implicitly, a diminution of the stocks, no matter the size of production. This method can be applied in no matter what kind of firm, as no sophisticated computing systems are required.

This method nevertheless supposes, among other things, buffer-stocks to protect production system from unpredicted events (cease of delivery, accidental cease of production, calamities, etc.). Raw materials and material deliveries are not synchronised with daily technological programmes, which results in the increase of material stocks and subsequently in the increase of immobile fund increase. Great stocks only seem to protect the business; in fact they are a source of supplementary expenses correlated to warehousing duration, losses, damages, immobilised capital, etc.

It would be ideal that any agricultural firm gets supplies as often as possible and to own stocks enabling it to produce for the buyer, and not to produce in advance hoping that his yield will be sold with the risk of stocking materials and finite products.

This method is based on the principle of an advanced production system correlated with the development of a technological process that tends to the ideal target, so that stocks have to be null and only in special cases should they last more than just a day. This method is also known as the "Zero stock" or "KANBAN" method.

Implementing this method requires changes at both the level of programming production and of technological process. In this case, planning production and getting information does not require automatic processing systems.

This method is applied in two cases: inside an agricultural firm and outside it (its relationship with the suppliers). Implementing the "just in time" method requires a good managerial team able to solve the multiple problems by analysing them and by making decisions.

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SOME ASPECTS REGARDING THE ADAPTING OF ROMANIAN AGRICULTURE TO THE REQUIREMENTS AND EXIGENCIES OF THE EUROPEAN UNION

UNELE ASPECTE PRIVIND ADAPTAREA AGRICULTURII ROMANESTI LA CERINTELE SI EXIGENTELE UNIUNII EUROPENE

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The paper has the purpose of tackling some aspects in regard to the adapting of Romanian agriculture to the requirements and exigencies of the European Union.

***Key words**: Romanian agriculture, landed property, animal and vegetal production*

In this sense we refer to :

- the increase of the number and percentage of commercial exploits in the total number of agricultural exploits;
- the increase of production and outcome in the main plant and animal agriculture produce.

At present there are 4.2 million agriculture estates in Romania, out of which 3.5 million belong to some proprietors who live in the country while 0.7 million estates belong to urban owners. Of the 3.5 million exploits situated in the rural area, 0.38 million do not have their own land (besides the kitchen garden) and only 3% have a surface of over 10 hectares. Of the total agricultural exploits 84% do not sell any products on the market or sell them accidentally, 16% sell products frequently and only 4& sell more than 50% of the obtained production. Also the surfaces held in property are very divided.

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The realization of viable exploits at dimensions close to those existing in the E.U. will be achieved in various modalities as:

- selling land to other proprietors who have bigger areas of land;
- leasing terrain;
- association by agriculture cooperation;
- giving land to older persons for a " ground rent" or " annuity";
- in other ways.

This is possible in the following cases:

- proprieties owned by the urban dwellers that are to be sold, leased or included in a agriculture production cooperative. This possibility is available for a number of about 700,000 properties;
- third age persons who cannot work the land by themselves may retort to the same solutions as the urban owners, and also to the temporary yielding of terrain for annuity.

This measure would be available for a pretty high number of properties because:

- in the rural area live 52% of the population aged between 55 and 64 years old; 59% of the population aged between 65 and 74; 61% of the population of over 71;
- the rural Romanian population of over 55 years old is on average of 29.3%;
- at present, the landed property is distributed as follows:

Table 1

Distribution of landed property

Households of	% of owned land	% of worked land	Ha/ adult
Pensioners	65.3	62.9	0.93
Workers	15.2	14.7	0.12
Peasants	16.8	18.6	0.63
Other categories	2.2	3.8	0.31

Source: " The Economic Truth", no. 19/ 2004

- in the rural Romanian area about 70% of the population works in agriculture; for the population aged between 55 and 65 years old the percentage is 84% and for the population aged over 65 it is of 100%.

In the process of adhering to the E.U. for Romania there are the following solutions:

- extension of subsidies for commercial type exploits;
- subsidizing small and average size exploits with a (proposed) source of 1000 E/ year, on condition of presenting a plan for transforming the property in a viable exploit. The question is: how many exploits in this category will be able to come up with such a credible plan?
- introducing the " yielding rent" for terrain for older people who temporarily or definitely give up working land;
- by association in a cooperative system.

This process would be possible especially in the case of older persons by taking in consideration the income structure in the rural area. At present, the average pension for people who worked in agriculture is of 13 E. Also, the income structure for the pensioners in this area is as follows:

- 31% from pension;
- 10% from wage;
- 8% from kind income;
- 50% from selling agriculture produce;
- 1% from other sources.

The concentration process for production in the vegetal and animal area is necessary for it to become close to that in the E.U. as average or in comparison with that existing in some member countries like Portugal and Greece.

So, at present in animal production the degree of concentration is roughly:

- 77% of the total head of cows is owned by proprietors who have 1-2 head;
- 14% by owners who have 3-5 head;
- 6% by proprietors having 6-10 head;
- 5% by those who own more than 10 head.

In order to make a factory for processing milk become lucrative, a quantity of 5000 l of milk is required daily. Taking into consideration the very small size of an agricultural exploit, the respective quantity might be collected from a very large number of farmers, which may go up to 500 households (on average a producer delivers 10- 20 liters of milk daily). In the case of pigs grown for meat only 49% of the meat production obtained yearly enters the marketing system at present, the difference of 51% being

destined for self consumption. Of the total number of exploits of this type, over 50% sell one pig per year and 15.3% only two pigs while just 27% of farms sell over 10 head of pigs. Also less than 10% of slaughterhouses that function on legal bases are at present corresponding to the norms in the E.U.

The same reduced process of concentration is manifested in the area of growing poultry. The number of " Avicola" type societies decreased considerably after 1990, although a tendency to re- concentrate in the domain of meat and egg production is manifested at present. If in the area of keeping sheep the degree of concentration is somewhat higher, the conditions under which milk is processed in the farm are far from being suitable for the norms and standards of the E.U., an aspect that will generate great deficiencies in selling these products on the E.U. market. All these aspects show us the necessity of concentration, of producing and processing produce of vegetal and animal origin to make them compatible with the norms existing in the E.U. Starting from the quotas that will be obtained in the process of negotiating " The Agriculture File" and also from the potential of Romanian agriculture, we believe it is possible that an important growth of agriculture produce will take place, both vegetal and animal, thus ensuring in a greater measure the satisfaction of our own needs and also creating an availability for export.

Table 2

The production of main vegetal and animal agriculture produce in the period 2005-2010

Crt No	Specification	m.u.	2005	2007	2010
1	Cereal- total	thousand tons	20000	22000	25000
2	Wheat	thousand tons	7000	8500	9000
3	Corn	thousand tons	11500	12000	14000
4	Potatoes	thousand tons	4000	4200	4500
5	Sunflower	thousand tons	1500	1550	1750
6	Sugar beat	thousand tons	3500	3700	4000
7	Vegetables-total	thousand tons	3000	3500	3700
8	Fruit total	thousand tons	2000	2500	3500
9	Beef	thousand tons	500-550	550-600	600-700
10	Pork	thousand tons	950-1000	1000-1500	1600-1700
11	Poultry	thousand tons	400-500	500-550	550-650
12	Cow milk	thousand tons	60000	75000	110000

Source: "The Economic Truth", no. 26/ April 2004

These productions are to be obtained not by increasing the cultivated land or the number of animals, but by increasing the outcome per hectare and fed animal. The results obtained by the year 2007 and the next period will depend- among others- by the making of an optimal structure variant for agricultural exploits in Romania.

In the vision of the specialists from the Academy of Agriculture and Forestry Science , this variant may be the following:

Table 3

The optimal variant for the structure of agricultural exploits in Romania

Forms of agricultural exploits	% of the agricol land	Optimal limits regarding the average surface for exploit (ha)
Cooperative associations (private associations)	55-60% (8-9 mil. Ha)	500-1000-2000
Private forms [1)]	14-15%(about 2 mil. Ha)	100-1000
Individual agricultural households	15-20% (2-3 mil. Ha)	0.5-5
State forms [2)]	7-10% (1-1.5 mil. Ha)	1000-3000
Forms of the public domain [3)]	4-5% (0.7- 0.8 mil. Ha)	100-500

Source: " The Economic Truth", form the 26th of April 2002

1) organization by leasing, granting, buying agriculture land
2) organized on terrain owned by the state
3) specific for scientific agriculture research, agriculture teaching, other public services

The integration and functioning of agriculture in Romania within the European Union will be possible to achieve only by a complex of programs that have in view the durable development and growth of this important branch of national economy.

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ROMANIAN RURAL POLICIES PRIORITIES IN THE AGRICULTURAL DOSSIER NEGOTIATION CONTEXT

PRIORITĂȚILE POLITICILOR RURALE ROMÂNEŞTI ÎN CONDIȚIILE NEGOCIERII DOSARULUI AGRICOL

IOANA ANDA MILIN[*], ANDREEA MIHAELA ZOMBORI[*]

The link between the rural policies and the "Agricultura" Dossier are given by:

- *the complexity of the "agricultural dossier" determined both by the type of agriculture practiced in our country and the changes suffered by PAC*
- *particularly complexes problems of the rural communities (poverty, low educational level, insufficient revaluation of natural resources from the rural communities)*
- *the incapacity of the rural community to build up the specific institutions, etc.*

Key words: *rural area, rural development, strategies, compatibility, and objectives.*

It is difficult to define what a rural area means in different countries. This can be defined depending on some criteria based on different aspects of rural from geographic, economic, cultural, social, etc., point of view.

In the European Union the definition of the rural area comprises:

- the population density and the number of inhabitants
- the demographic situation changes in time (natural spore, migration)
- socio – economical characteristics (gross national product per inhabitant, the share of agriculture in GNP, the share of the population in agriculture, unemployment rate, the share of the partial time persons, etc.)

The rural development term means the actions meant to improve the quality of life from the rural area, to maintain the natural and cultural scenery, etc.

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The Romanian rural area includes all villages from Romania and represents 89% of the country surface (212.7 thousands of km^2). The population living this territory is about 10.15 million of inhabitants (45.2% of the country population).

Table no.1.

The share of the rural area and of the rural population (Thousands of km and persons)

Development areas	Total		Rural		% rural area	% rural population
	Area	Population	Area	Population		
Romania	238.3	22.458	212.7	10155	89.2	45.2
N - E	36.8	3813.1	34.6	2140.7	94.0	56.1
S - E	35.7	2936.6	32.5	1260.5	90.8	42.9
S	34.4	3474.1	31.6	2023.2	91.8	58.2
S - V	29.2	2405.2	26.0	1311.3	89.1	54.5
V	32.0	2046.4	27.8	772.1	86.8	37.7
N - V	34.1	2848.8	30.2	1348	88.4	47.3
Center	34.1	2646.3	28.5	1044	83.4	39.5
Bucharest	1.8	2286.1	1.5	255.1	84.3	11.2

Source: CNS - Romanian Statistic directory 2000

In the composition of the regions a different number of villages is taken into account. Bucharest region has the fewest number of communes (38 villages), and the largest number has the S region (481 communes).

Table no.2

Development regions	Number of communes	Number of villages
Romania	**2688**	**13094**
N – E	463	2445
S – E	332	1455
S	481	2030
S – V	387	2080
V	267	1335
N – V	386	1823
Center	334	1823
Bucharest	38	103

Source: CNS - Romanian Statistic directory 2000

The agriculture is a dominant agent for the rural economy. The rural development depends mostly on the agriculture development.

In Romania's development strategy for middle term agriculture is considered "national strategic priority" which will lead to a lasting development based on the following objectives:

- creation of viable organization, production and administration structures of the agricultural exploitations
- technical and technological endowment of agriculture
- equitable adaptation of the price report industry/agriculture
- policies of supporting and stimulation for the agricultural producers
- stimulation for the diversity of agricultural production
- professional attestation for the agricultural producers and for the persons working in related activities
- agricultural consulting system improvement
- organization and development of agricultural and food industry research units
- reorganization of the agricultural education, etc.
-

For the lasting development of the rural area there are needed the following:

1. middle and long term strategies
2. pre – adhesion to the European Union strategies

These strategies request solutions to the following problems:

- definitive clarifying of the property rights
- implementation of structural adjustment policies (agricultural exploitations dimensional increase, the perfection of the legal and institutional conditions for the agricultural markets functioning, rural area development started with the SAPARD program, etc.)
- application of the National Program for Agriculture and Rural Development elaborated for 2000 – 2006 period which intends to solve the following aspects: Rural area diagnostic analysis, action instruments and objectives specification for 2000 – 2006,

specification of the structures and the authorities implied in the application of the program, etc.

- Applicationm of the territory arrangement and rural development policies, small and medium interprises sector consolidation policies and social policies
- Application of precise program as instruments for pre adhesion

- Phare program began in 1991 oriented on the prioritary development of agriculture, economical and cohesion development, the legislative institutions harmonization
- ISPA program – oriented to the envroment and transportation department, with effects on the rural communities too
- SPP program – institutions development financing, technical training and assistence for a rural development plan establishment or elaboration of rural development pilot-projects
- SAPARD program – dedicated to to the agriculture and rural development, following the European Fund for Guarantee and Guidance. This is a preparatory program for the adhesion to the

European Union with the following objectives:

- Agro – alimentary products processing and market functioning improvement
- Assurance of veterinary control and fito – sanitary compatible with the european standards
- Rural substructure improvement and development
- Land arrangement and farm consolidation; prioritary areas are: Alba, Arad, Arges, Bacau, Bihor, Botosani, Brasov, Buzau, Caras – Sverin, Cluj, Constanta, Covasna, Dambovita, Dolj, Gorj, Hunedoara, Iasi, Mahedinti, Mures, Neant, Olt, Prahova, Satu – Mare, Salaj, Sibiu, Suceava, Timis, Tulcea, Vaslui, Vilcea, Vrancea, Ilfov departments
- Re-actualization and perment actualization of the cadastral survey
- water resources administration in agriculture
- Grains and animal breeds improvement
- Enviroment protection and rural specific maintainance

- Development and diversification of economical activities from the rural enviroment in order to support multiple activities and alternative incomes for those who live in the rural enviroment
- The measures comprised in the SAPARD program are materialized in objectives for 2000 – 2006 period and further for 2006 – 2012. The main strategies for 2006 – 2012 period are:

- the dimension of agricultural exploitations surfaces by association, fusion, leasing, buying or selling, exclusion form the agricultural circuit of the degraded lands and forest them; cadastral survey introduction and territoy organization for almost 2000 communes
- enviroment situation evaluation, negative effects diminuation of the polution produced by the agricultural activities (untill 2008)
- agricultural producers support (annual programs untill 2012) by different ways like: agricultural technic aquisition, loans with subsidized interest, leasing system improvement, etc.
- Agro – alimentary sector support (programs untill 2012)
- Commercial sector support so that untill 2012 to creat the databasses regarding the demands, offers, stocks, prices for agricultural product, commercialization stimulation by commodity exchange, etc.

In conclusion, the creation of a rural development strategy based on the re – organization of the agriculture, social cohesion, the enviroment preservation, is difficult because:

- the modernization and development process is unequally realized on the regions
- there is an excessive dependency of the rural communities for agriculture, an occupational structure related to this dependency
- non – agricultural activities are inexistent or under developped in the rural enviroment, which could assure alternative incomes, ec.

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SUSTAINABLE DEVELOPMENT IN THE RURAL REGIONS

DEZVOLTAREA DURABILĂ ÎN MEDIUL RURAL

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Into a country where the rural environment prevails, as Romania is too, sustainable development of rural regions is an essential problem or even a strategic problem. All development strategies of the rural environment were dominated by the necessity of increasing the agricultural yield in order to provide food for the population in cities. These actions led to the rural environment degradation in various forms. At present, drawing up a sustainable development strategy is necessary.

Key words: *sustainable development, rural, community, and agriculture.*

The inhabitants of rural areas are considered as the population's most conservative segment and therefore, if we go to an isolated rural locality, we seem to return to the past, as the time stopped a few decades ago. More and more visitors in Western Europe see in these isolated rural areas an agriculture, which disappeared many years ago in their countries and many of them say that Romania's rural areas are like a museum as concerns Europe's agriculture.

Different ideas of development came over these states and left them almost untouched, but now there comes the sustainable development and many villagers ask themselves what it is.

The concept of sustainable development is the result of some social and macroeconomic analyses made over the last 50 years on some phenomena as follows:

a) Big differences regarding economic development world-wide, because there exist rich areas and poor areas, too;

b) Aspects concerning the environment; from the beginning of the 70s, the aspect of the environment problem enlargement became clear in

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larger and larger areas, enlargement referring to both their causes and effects (for example: the reducing of stratospheric ozone quantity or all climate changes due to an exaggerate industrialisation process and using chemicals in agriculture);

c) The enlargement of urban regions to a higher and higher extent by appropriating some important areas in the rural regions;

d) Replacing traditional, national, regional and local agriculture and crop items by a standardization process.

e) Financial, economic and social aspects as follows: unemployment rate increasing; labour force moving from agriculture and other fields to certain activities more attractive from a financial point of view; inflation;

In Brundtland Report the sustainable development is defined as being the rearrangement of technical, scientific, ecological, economic and social resources for the heterogeneous system resulted may be kept in space-time equilibrium.

According to other authors, the sustainable development is defined as being a development, which is compatible with both current and future needs.

The sustainable development refers to entire planet and involves the co-ordination of social-cultural, economic, technological and environment protection requests.

Schutz (1996) said that excluding the economic and ecological problems, the sustainable development has cultural particularities as follows: customs, myths, and beliefs.

Any definition of sustainable development must be culturally accepted in order to be successfully implemented.

The concept of sustainable development in the rural environment wishes to keep this area closer to its natural state as much as possible and promotes the adjustment of lifestyle to the natural circumstances instead of adjusting the natural circumstances to a certain lifestyle.

The word “value” is subordinated to the concept of sustainable development. A value becomes significant only in individual and social context.

The society draws up rules for both individual behaviour and that of different communities, rules influencing the entire society’s survival.

Values should be assessed regarding the neighbours, human, animal and vegetable populations or the future environments.

Thus, there appeared the concept of sustainable development. This dominated the debates on environment problems over the last two decades. The endeavours for improving the quality of life resulted in spoiling the environment. As the climate is changing, the forests are disappearing, the pollution is increasing, it is obviously that we should pay more attention to the environment in order to avoid paying a higher price, that is to live without the environment support.

The rural area is a complex one of an extraordinary diversity. It is characterised by the co-existence of the traditional agriculture and inestimable natural values. Hence, practising this traditional agriculture allowed keeping the values, which represent an extraordinary potential in the future. Traditional agriculture, considered as being subsistence agriculture for the moment, cannot be competitive comparative to the large plots of land. However, if the villagers are both farmers and beneficiaries of the complex area they live in and the purpose of their activity is not to obtain a higher yield but to achieve a higher quality of life, practising traditional agriculture is very well settled. Besides, preserving bio-diversity and natural values are motivated concerning the environment protection, have future purposes and must have medium and short-term advantages for villagers.

The rural environment, with its biological diversity, means values and we ought to take care of them. With these values, we may come out on the market. Otherwise, the market demands increasingly organic produce, without using chemicals. To obtain these produce is possible in an unpolluted environment only. Therefore, a farmer of Romania who deals with a traditional agriculture may by easily compared to a farmer of Western Europe who obtains organic produce. At present, the turning to the best of the obtained yield and also the entire rural areas are missing.

Why sustainable development?

- To improve the quality of life, the more generous definition of welfare and happiness, including elements related to the environment and communities and also to economic elements;

- Because the social, economic and environment problems interfere and they have to be approached in an integrated way in order to attain sustainable keys based on harmony;

- Because the concern for the needs of the present and future generations and the attempt of avoiding future problems by means of present operations is very important.

- Because the environment and its resources for backing up the people's activity must be taken into account;

- To focus all activities for improving things on long-term;

- To see the environment as a luxury which must be preserved and protected.

If formerly, the city meant development and rural areas / villages were unable to develop, at present, there comes the time to value the rural areas going through a radical changing process that should be based on a sustainable development strategy.

To draw up a sustainable development strategy, there should be organized working teams consisting of: agronomists, social scientists, economists, hydrologists, biologists, priests, experts in territory arrangement who would be able to determine the elements necessary to a sustainable development of the communities in rural areas. Thus, every community is able to identify its human and natural resources and then make plans for the future.

Romania's integration into the European Union means a healthier environment, preserving our natural and cultural values.

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SOCIAL – ECONOMIC CONCEPTS IN AGRICULTURAL MANAGEMENT

CONCEPTE SOCIO - ECONOMICE ÎN MANAGEMENTUL AGRICOL

F. FENIŞER[*] , CRISTINA FENIŞER[*]

Of the concepts appeared in the agricultural management we mention: food safety considered a constitutive part of the national safety in order to support the domestic agricultural yield; agricultural-food economy consisting of the entire chain which takes part in the final agricultural-food produce, upwards and downwards the agriculture; sustainable agriculture which synthesizes the relationships between man and nature, including in the economy system the natural elements of resource evolution and even the problem of environment; agricultural co-operation based on the principle of mutuality.

Key words: *food safety, sustainable agriculture, co-operation.*

When the food situation worsened in the world and there occurred difficulties in providing economies with agricultural raw materials, the concept of "food safety" came out. The United Nations Organisation and other international organisations define food safety as being the possibility for all the people on Earth to ceaselessly have a sufficient quantity of food in order to lead an active and healthy life. The essential elements of food safety consist in the existence of food reserves and in capacity of purchasing them.

The concept of food safety operates at more levels as follows: individual, family, regional, national and global. Food safety ensured at one of these levels does not guarantee that one at the other levels. The notions of hunger, malnutrition and food uncertainty are aggravating steps of the same process: restrictive access to a sufficient supply of food.

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The importance of this concept is also demonstrated by means of scientific meetings on this subject, which took place. Therefore, at the Second International Congress of the International Association of Agro-industrial and Food Economy (Cordoba, Spain – 1994) the subject was "Food Safety on long and short term". The congress was an opportunity to assess the development of the concept of food safety towards national policies and strategies of different countries and groups of countries, differentiated on development types.

For the Eastern European Countries one could perceive the indirect message of suggesting some important policies for self-supporting the supply by developing especially the delivery and adopting competitive and aggressive production strategies, marketing channels – ordered by the great tradesmen.

The most important and of large interest idea, as a result of processing the flow of scientific signals, is to establish, at state level, some coherent, flexible and efficient agricultural and food strategies and policies as main means of achieving food safety in order to ensure the necessary and healthy food without poverty and starvation, thing that is possible by means of an efficient and successful management of agricultural lands.

The concept of food safety supposes producing foodstuffs in sufficient quantities in order to satisfy personal needs or currency cashing to be sufficient to permit the import of the necessary agro-foodstuffs. So, at national level, food safety is not synonym with the national food self-satisfying.

In the undeveloped countries, ensuring funds for increasing the import of food makes the external debt go up, debt that may exceed many times the bearable floor. Being in this situation the countries in debt are not able to pay the loan interests.

At national level, food safety is necessary but not sufficient to guarantee that the entire population will have enough food for consumption. It depends on both income level and population's purchasing power, which are conditioned by the dimensions of the gross domestic product and the cost of foodstuffs.

Agriculture's contribution to the satisfying of social needs is present over the last years through the "food safety rate" or "self-supplying rate" indices, which indicate to what extent food independence and export reserves are ensured, the latter bringing about currency surplus. Food

independence or food autonomy became for all the countries an option of fundamental economic policy.

For the developed countries food autonomy is not an essential goal because most of them ensure their food needs by means of the domestic output and agricultural surplus is used as means of economic expansion. For the third world countries, increasing the food self-supplying rate stays an essential target on which depends the improvement of living and defence against nature catastrophes conditions, resulted in millions of victims of starvation every year.

In contemporary economic thinking, there appears more and more the trend of approaching the agriculture within the social-economic system consisting of three subsystems as follows: agriculture's economy, agro-foodstuffs economy and rural economy.

The concept of "agro-foodstuffs economy" consists of the entire chain that takes part in the final agro-food produce, upwards and downwards the agriculture. Because this sector has over 50% of the employed population and over 50% of the gross domestic product for consumption, one of the main problems of the transition strategy is increasing the labour productivity in agro-foodstuff sector.

Agricultural activities combine with other economic activities and one can talk about the existence of a rural society with own characteristics, as a subsystem of the global society. In the research field of the rural economy, the rural communities as a whole are also included for improving the quality in the rural areas.

Although recently appeared, the concept of "sustainable agriculture" is used worldwide. The president of the International Association of Agrarian Economists, the Australian economist John W. Longworth, defines the concept of "sustainable agriculture" in accordance with its components: economic growth, delivery and environment.

The concept of "sustainable agriculture" is scientifically based on the concept of "bio economy". This concept draws up a synthesis of relationships between nature and human species, including in the system of economy natural elements of resource development and also the problem of environment.

The main components for settling and developing a "sustainable agriculture" are:

- Developing a competitive agriculture in order to bring an economic surplus necessary to its development and the general economic equilibrium;
- Inserting the agriculture within "generalized economy", working through market forces;
- Developing an ecological agriculture in order to produce clean food raw materials and not to be an agent or a victim of pollution;
- Developing an agriculture that should ensure a parity between farmers' incomes and other social-economic groups' incomes and increase farmers' quality of life.

Establishing a "sustainable agriculture" is a long process whose basis must consist in integrating economic targets with ecological and environment preserving targets.

Otherwise, the concept of "agricultural co-operation" should not be neglected. On the basis of this concept must lie the principle of mutuality, agricultural co-operative/ co-operative farm being considered a continuation of agricultural land functions, upwards and downwards, the activity is productive and complementary to agricultural activities, but non profit.

These co-operatives will be able to establish county, regional or national co-operative associations or unions for promoting farmers' produce on the farther-off national markets, at farm produce stock exchange and on export.

The main actors of this action should be the young farmers. They have to learn to co-operate, talk together in order to identify the problems of common interest, determine the aspects they are able to solve themselves and the aspects requesting a helping hand. These things are learned step by step, carefully and with qualified assistance. Only in these circumstances, the construction of the new structure may have strength and perspective.

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THE MARKET OF POULTRY MEAT IN ROMANIA DURING 1998 - 2002

PIAŢA CĂRNII DE PASĂRE ÎN ROMÂNIA IN PERIOADA 1998 - 2002

ELENA SOARE*

In order to resolve the problem of food security in Romania it is necessary between others measures, and the development of agriculture.
The demand of poultry meat for consumption it is not constant along the year, but has a seasonal character.
The yearly medium consumption of poultry meat per habitants in our country is 12,9 kg comparing the European medium level, which is 20 kg.

Key word: *poultry, agro-food sector ,the approval of standard.*

Romania holds 2,8% from European production of poultry meat and eggs. This percent places Romania on the place eleven in Europe.

The biggest percent form the total of European production belongs to France and is 17,6%, followed by Great Britain with 13,1% and the third place is occupied by Italy with 9,9%.

The main source of poultry meat is the broiler in percent of 70%-75%.

Table 1

The production of poultry meat in period 1996 – 2001

-thou tonnes-

Specification	**1996**	**1997**	**1998**	**1999**	**2000**	**2001**
Meat, total live weight	1868	1705	1672	1521	1414	1415
From witch in private sector	1372	1349	1353	1419	1373	1383
Poultry meat, total live weight	373	318	340	342	327	360
From witch in private sector	242	239	258	316	318	353

The source: The statistical yearbook of Romania 1999, 2002.

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The private sector represents an important supplier of poultry meat; this production of poultry meat from private sector represents 80-90% from total production of meat weight live.

If an analyze is made to the table number 1 we can establish that in period 1996-2001 the total production of meat has been diminishing from one year to another, form 1868 thousands tons live weight in 1996 to 1415 thousands tone live weight (-24,3%) in 2001.

Also in the case of poultry meat the production has been diminishing form 373 thousands tons weight live in 1996, to 360 thousands tons weight live in 2001.

This diminish of the production is strong related with the dynamics of poultry effectives.

Table 2

The evolution of poultry meat production in the industrial sector between years 1996-2003

-thou tonnes-

Year	Quantity produced (carcass)
1996	**112**
1997	**105,6**
1998	**70**
1999	**104**
2000	**130**
2001	**130**
2002	**152**

The source: THE UNION OF POULTRY BREEDERS FROM ROMANIA

The production of poultry meat in industrial sector has had a fluctuation evolution, so: in 1996 the produced quantity was 112 thousands tons decreasing till 70 thousands tons in 1998, when it is registered the lowest value of the analyzed period, and then increasing till 152 thousands tons in 2002.

The increasing of acquisition prices for poultry meat, from one year to another is due to galloping increasing prices for fodders, electric power and biological material.

There is a similarity between poultry meat and eggs situation, in year 2002 the prices were fluctuating between 53550 and 42650 lei/kg.

Table 3

The evolution of meat medium price (with value-added tax)

YEAR	PRICE LEVEL (lei/kg)
1996	5742
1997	16324
1998	15936
1999	23021
2000	40461
2001	50210
2002	48227

The source: THE UNION OF POULTRY BREEDERS FROM ROMANIA

This situation was influenced by some markets–by importation meat, which represented 40% form market stock. The promoted policy responsible for this situation is to produce in high quantities freezes meat. The freeze meat obtained in our country hardly resist to the competition made by the importation meat that enter only in this form in Romania.

There are some centers of poultry breeding in our country (Crevedia, Buzau, Focsani) who are delivering a considerable quantity of refrigerate meat.

If romanian poultry breeders will induce to the population to consume only refrigerate meat, then on the roumanian market no poultry freeze meat form importation will be found.

We can estate that in the present time the poultry breeding producers are interested from the economical point of view to produce and deliver refrigerate meat, but the merchants refuse it invoking the lack of conditions and the fear of deterioration.

Every year Romania imports poultry meat.

Table number 4 shows the evolution of poultry meat importation in period 1998-2002.

Table 4

The evolution poultry meat importation
In during 1998-2002

-thou tonnes-

YEAR	QUANTITY PRODUCED
1998	48,0
1999	24,3
2000	25,8
2001	93,0
2002	93,0

The source: THE UNION OF POULTRY BREEDERS FROM ROMANIA

In accordance with the dates displayed in table number 4, the quantity of poultry imported meat has varied form one year to another.

In year 1998 the importations quantity was 48 thousands tons.

The lowest value of importations it is registered in year 1999 when touches the level of 24,3 thousands tons.

In year 2002 was imported the biggest quantity of poultry meat from the analyzed period, 93 thousands tons.

The yearly evaluation of consumption demand for poultry products it is made taking into consideration the yearly commands and contracts of the main beneficiaries.

The demand for consumption of poultry products is not constant all year, but has a seasonal character with variable periods of time along the year. The character anuniformly of the demand for consumption influences directly the technological flux, and also on the level of payments and cashing along the year.

Another important aspect of the analysis demand for consumption of poultry products is referring to phasing in time, very important process because assures the fulfilling of a technological high tide and contributes to a more rapid retrieving of the expenses.

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ON THE EVOLUTION OF VEGETABLE OFFER IN ROMANIA

EVOLUȚIA OFERTEI DE LEGUME ÎN ROMÂNIA

ELENA PEȚ*

There are in Romania particularly favourable pedo-climate conditions for developing truck farming, for increasing its share of national wealth, for meeting vital food requirements of the population, or for increasing exports.

***Key words**: offer, cultivated area, mean production*

Vegetable offer as volume and structure should correspond primarily to domestic demand. Domestic vegetable offer is determined by the area cultivated with vegetables and by mean productions per hectare.

The evolution of areas cultivated with main vegetable crops is shown in table 1.Analysing the data in the table, we can draw the following conclusions.

The cultivated area in Romania diminished during the period under study with 942 000 ha, which represents a diminution of 9.5%. The year 1999 was the year with the smallest cultivated area (8494000 ha). The share of the private sector of the total cultivated area increased from 12.1% (1989) to 91.1% (2001), an increase due to the effects of the Law 18/1991 concerning the reconstitution of ownership right on agricultural lan.

The area cultivated with vegetables diminished from 253000 ha (1989) to 229000 ha (2001). To note that the area cultivated with vegetables in the private sector represented, in 1989, 28.1% of the total area cultivated with vegetables in Romania, a share indicating that private truck farming was pretty important compared to other crops. Areas cultivated in the private sector evolved from 71000 ha (1989) to 223000 ha in 2001, which means an increase of 214%, i.e. a share of the private sector in truck farming of 97.3% in 2001.

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As for tomatoes, as main crop, it shares 20.04% of the total area cultivated with vegetables in 2001. Areas cultivated are relatively constant, as it still is the most demanded on the market. The private sector shares 15.3% in 1989, while in 2001 it reached 44.8% of the total area cultivated with vegetables.

Dry onion is one of the few crops that increased during the period under study with 32%, together with cabbage and root edible vegetables, which increased with 76% in cabbage and 38.2% in root edible vegetables. The highest increases are in the private sector. The shares of the private sector of the total areas cultivated with these crops are of 98.1% in dry onion, 98.9% in cabbage and 97.5% in root edible vegetables.

In dry garlic, cultivated areas diminished during the first years, after which it starting increasing slowly reaching 14700 ha in 2001, a diminution due to the decrease of the state-owned sector compared to the private-owned sector. The private sector has an overwhelming share in 2001, reaching 99.3% of the areas cultivated with dry garlic.

As for green pepper, due to the more sophisticated production technologies and correlated with the increase of areas cultivated in the private sector, garlic cultivated areas diminished during the period under study with 39.7%. In this case too, the greatest share is that of the private sector – 98.8% of the total area cultivated with green pepper.

The evolution of mean yields per ha in the main vegetable crops is shown in table 2. Data in the table show the following characteristics.

Mean yields per ha in tomatoes decreased from 15546 kg/ha in 1989 to 14175 kg/ha in 2001, i.e. 9%, except for 1995, when mean yield per ha was higher than in 1989 (15712 kg/ha). In the private sector, mean yields per ha oscillated between 10594 kg/ha (1997) and 15741 kg/ha in 1995.

In dry onion, mean yields decreased during the same period of time from 13677 kg/ha to 10686 kg/ha, i.e. with 21.8%, a diminution due exclusively to the decrease of mean yields in the public-owned sector compared to 1989, even if in the private sector there was an increase of production with 36.6%.

The positive effect of land exploitation in the private sector was best noticed in dry garlic crops, where mean yields per ha increased from 3437 kg/ha in 1989 to 5658 kg/ha in 2001, i.e. with 64.6%, the increase being even higher in the private sector, where yields increased from 3157 kg/ha to 5661 kg/ha during the same period of time, i.e. with 79.3%.

In cabbage there are the highest mean yields per ha of all crops under study, reaching in 2001 a mean yield of 19629 kg/ha, smaller with 10% than that in 1989.

As in dry garlic, mean yields per ha in green pepper increased from 8316 kg/ha to 10342 kg/ha, i.e. with 24%, an increase that is 26% higher than in the private sector.

Mean yields per ha in root edible vegetables are relatively constant during the period under study, i.e. about 12000 kg/ha with an increase of the yields in the private sector of 23.5%.

Domestic vegetable production is the main component of vegetable offer in a country. Meant to answer domestic demand, it should be compared to the total vegetable amounts and structured on the main component products as shown in table 3. The data in the table show the following.

Total vegetable production in Romania has known during 1989-2001 pretty significant fluctuations: first a diminution from 3725000 t in 1989 to 2214000 t in 1991, then an increase to 2872000 t in 1993, followed by a new diminution, reaching in 2001 2877000 t, i.e. a production 23% smaller compared to 1989.

The greatest share in vegetable production is that of the private sector – 97% of the total production in 2001.

Field vegetables have the greatest share of the total vegetable production in Romania, reaching 2826000 t in 2001, i.e. 98.2% of the total production, compared to 95.4% in 1989. Greenhouse production diminished during the period under study mainly due to the diminution of greenhouse areas and to the diminution of mean yields per ha.

Tomatoes are still the vegetables with the greatest share of the total vegetable production, reaching in 2001 a share of 23% of the total production, compared to 27% in 1989.

The private sector has a share of 96% of the tomato yield, a share which is due to the high productivity per ha in the private sector compared to the that in the state-owned sector and to the areas allotted to this crop.

We should mention that tomato yields diminished during the period 1989-2001, reaching a share smaller than that of total vegetable yield (35%), even if in the private sector the yield increased.

Dry onion recorded a slight 4% diminution of yields during the same period of time together with an increase of the share of the private sector from 14% in 1989 to 98% in 2001 and of yield in this sector from 58000 t to 389000 t.

In dry garlic, yield increased during the period of time under study with 76%, an increase due totally to the increase of mean profitability per ha. The private sector contributes 100% its share to this production.

Domestic production of cabbage, though decreasing considerably in 2000 compared to 1999, increased in 2001 with 87000 t. for this crop too, the overwhelming share of the total production is due to the private sector – 99% of the total cabbage yield in 2001.

In green pepper, there is a slight diminution of the total production from 253000 t to 184000 t, due to the decrease of areas cultivated. The private sector has a great share of production here too – 99% in 2001.

As for root edible vegetables, there is an increase of total production with 16%, an increase due to the increase of cultivated area with 27%, while mean productions oscillate from year to year.

In the private sector, the increase of total production is determined mainly by the increase of areas cultivated in the private sector and less to the increase of mean yields per ha.

As a conclusion, we should mention the fact that in a series of crops, total production diminished – tomatoes, onion, and green pepper – while in the rest of the crops, except for garlic, the increase of total yields was determined by the influence of the quantitative factor, i.e. by the increase of the areas cultivated with vegetables.

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FEATURES OF WOELDWIDE WINE CONSUMPTION

COORDONATE ALE CONSUMULUI MONDIAL DE VIN

ELENA PEȚ [*]

Worldwide wine market is characterised by a sinuous evolution marked by two opposite tendencies: on one side, the effort of wine producers and exporters of stimulating consumption and implicitly demand, including by majoring high-quality wine offer; on the other side, the unite efforts of companies of diminishing alcohol consumption, including by stimulating demand for non-alcoholic or low-alcohol beverages.

***Key words**: consumption, markets, offers.*

Worldwide wine consumption oscillated during the last decade between 240 and 218 million hl.

The evolution of worldwide wine consumption reflected the changes in consumer's preferences as well as the adoption of some domestic and foreign policies and measures.

From the point of view of wine consumer's level per capita one can distinguish three categories of countries:

- Great wine consumers, with an average consumption of 40 l/capita/year, including traditional vine cultivating countries such as France, Italy, Portugal, Switzerland, and Argentina, countries that record nevertheless a slight decrease of consumption;
- Medium consumers, including producing countries, but whose vine cultivating tradition is lesser, such as Germany, Holland, and a series of East-European countries (Hungary, Romania, and Bulgaria);
- Small consumers constituting a heterogeneous group of countries that produce their own wine, but in relatively small amounts compared to consumption level; in these countries, wine consumption is between 6-10 l (U.S.A., South Africa, Poland, and Finland) and between 1-2 l (Brazil and Japan).

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In the first two groups of countries, wine consumption tends to increase slightly, maintaining its occasional character. Taking into account the demographical potential of the 3rd group components, there is an interesting trend in expanding the wine market. However, up to now, consumption increase in these countries could not compensate the decrease of this index in traditionally producing and consuming countries.

Wine consumption per capita (people over 15 years) was, in 2003, as shown in figure 1.

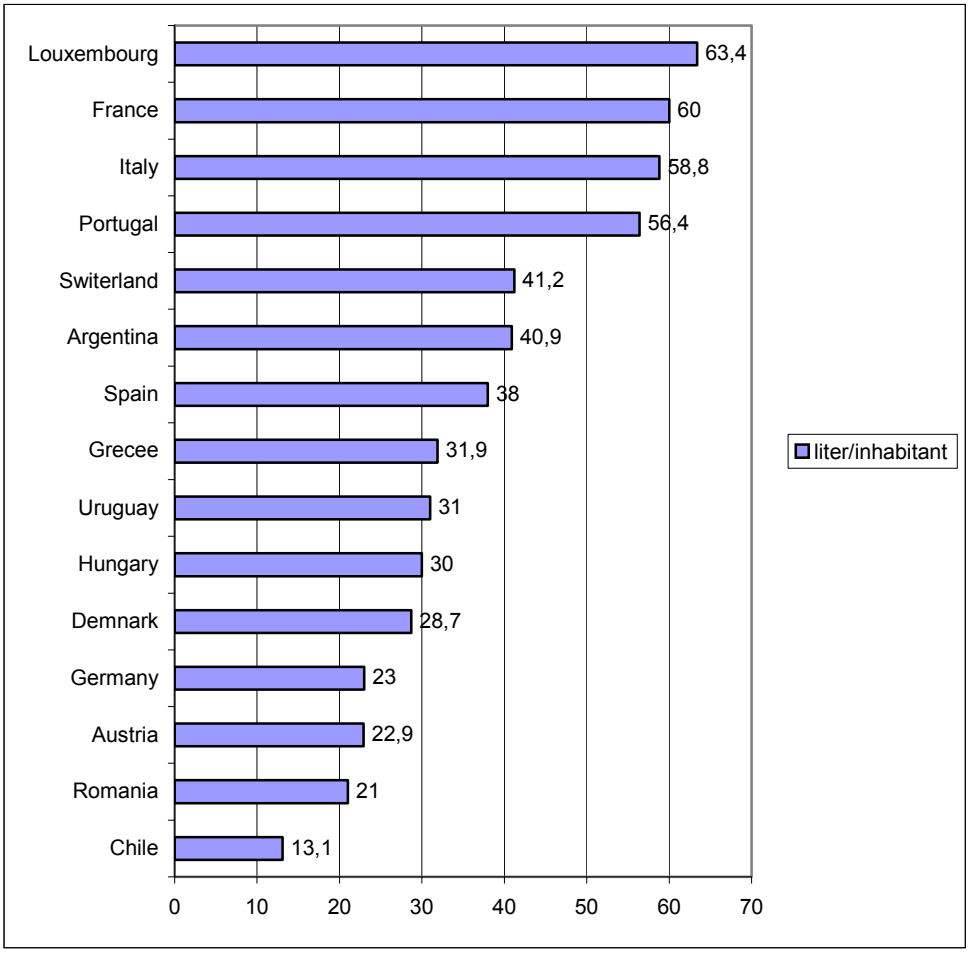

Figure 1. Annual wine consumption (l per capita)

In some cases, such as Luxembourg, the very limited demographical level, (about 400000 inhabitants, of which 320000 over 15 years) and the existence of consumption customs lead to very high indices in wine consumption (63.4 l / capita).

In the wine consumers' top, the Romanians rank 14, with only 21 l / capita, very far from the French, the Luxembourgers, and the Italians, who consume almost the double.

Of the 21 l / capita, only 14 l are noble vine wine.

The penetration of wine in the population's consumption has different degrees even in traditional consumer countries.

A selective study conducted at the end of the last decade separates the two components of the penetration degree in "consecrated consumers" and "occasional consumers" (table 1).

Table 1

Wine penetration in the population's consumption in different countries (% of the total)

Country	Degree of penetration (consumers)	Constant consumers	Occasional consumers
Germany	86	25	61
Austria	76	27	49
Great Britain	74	22	52
Belgium - Luxembourg	83	29	54
Holland	62	16	46
Denmark	94	39	55
Finland	85	31	54
Italy	66	46	20
Spain	62	39	23
Switzerland	87	45	42
U.S.A.	44	-	-
Japan	52	20	32

Source: Buletin informativ nr. 779-780/1996

Countries with a high degree of wine consumption penetration, such as Germany (86%) show a smaller share of constant consumers (25%) compared to countries with a lower degree of penetration, such as Spain and Italy (62% and 66% respectively), but with a higher share of constant wine consumers (39% and 46% respectively). The share of occasional consumers is of major interest, particularly in countries with a high demographical potential in market expansion.

Worldwide red wine market recorded the highest share of the total wine consumption (figure 2), its population increasing due to intensive promoting and advertising campaigns concerning the beneficial effects of the assortment:

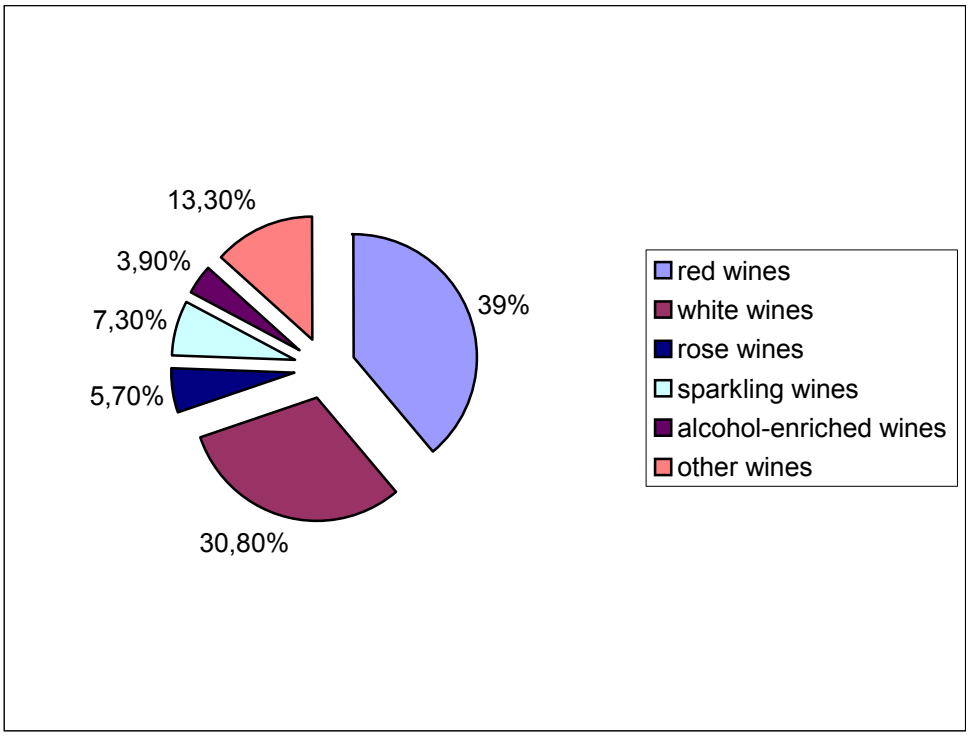

Figure 2. Worldwide wine market per assortments

Red wines have increased the most lately (4.3%), while white ones have only reached half of this share.

Stimulating wine consumption and promoting sales are still facing a series of problems, among which:

- Consumption taxes, including both the AVT (16-25% in European countries) and excises (8.5-15%) to which they also add the so-called publicity taxes;
- Anti-alcohol lobbies of some independent organisations (in Italy, in English-speaking countries);
- Anti-alcoholic governmental actions (limiting sale at certain hours, delay of sales in service-stations or in places visited by children, sale prohibition to persons below a certain age (16 years in Europe, 21 years in the U.S.A., and 20 years in Japan).

Despite all these impediments and limitations, specialists anticipate a relative stability in worldwide wine consumption until the middle of this decade. The perspectives in wine sales per capita worldwide are shown in table 2.

Table 2

Perspectives in wine consumption in 2005 (l per capita)

Specification	1995	1996	2000	2005	Changes (%) 2005/1995
Western Europe	34,61	35,18	35,09	34,38	-0,65
Eastern Europe	8,37	8,41	9,1	9,85	17,69
Asia – The Pacific	0,37	0,38	0,4	0,46	24,98
America	6,69	6,68	5,92	5,7	-14,67
Other countries	3,65	3,63	3,43	3,53	-3,12
Mean worldwide	5,22	5,26	5,06	4,9	-6,17

Source: Drinks International World Wine Report 1997-2005

As for consumption, Western Europe will still be the leader.

According to these provisions, the world mean in wine consumption per capita will be within 5 l per year, as Western Europe limits are around 0.34 l / year and Asia – The Pacific "symbolic" limits are below 0.5 l / year.

Compared to these global values (total wine consumption per capita) the structure of wine demand will undergo significant mutations, the dominant trends being of increasing the red wine share of the total consumption and the interest of purchasers in quality produce.

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CONTRACTUAL INTEGRATION - FARM CONTRACT

INTEGRAREA CONTRACTUALĂ – CONTRACTUL DE FERMĂ

ELENA PEȚ [*], AURORA VENIG [**], S. MOISA *, TABITA CORNELIA ADAMOV*

By its content and by the role it plays, contract is an important element in regulating economic relations among agricultural producers and all other economic agents specialised in purchasing agricultural products.

***Key words**: contractual agriculture, farm contract, and farmers.*

Contractual relations between agriculture and other sectors of activity take different aspects, more or less developed depending on the sector of activity.

Integrating agriculturists and processing companies through contracts is called contractual integration or contractual agriculture.

Contractual agriculture provides agriculturists a relative security of incomes and a market organised on the ground of agreements between isolated producers and sale groups or organisms.

Agreements can even stipulate for one of the parties advance money from the contracted amount represented by credits and consultancy access.

The ground of such agreements implies obligations on both the producer (who is bound to ensure the amounts of products stipulated by the contract and at standard quality parameters established) and the contractor (who is bound to supply a support in the acquisition of the product).

The general frame of display of a farm contract is shown in figure 1.

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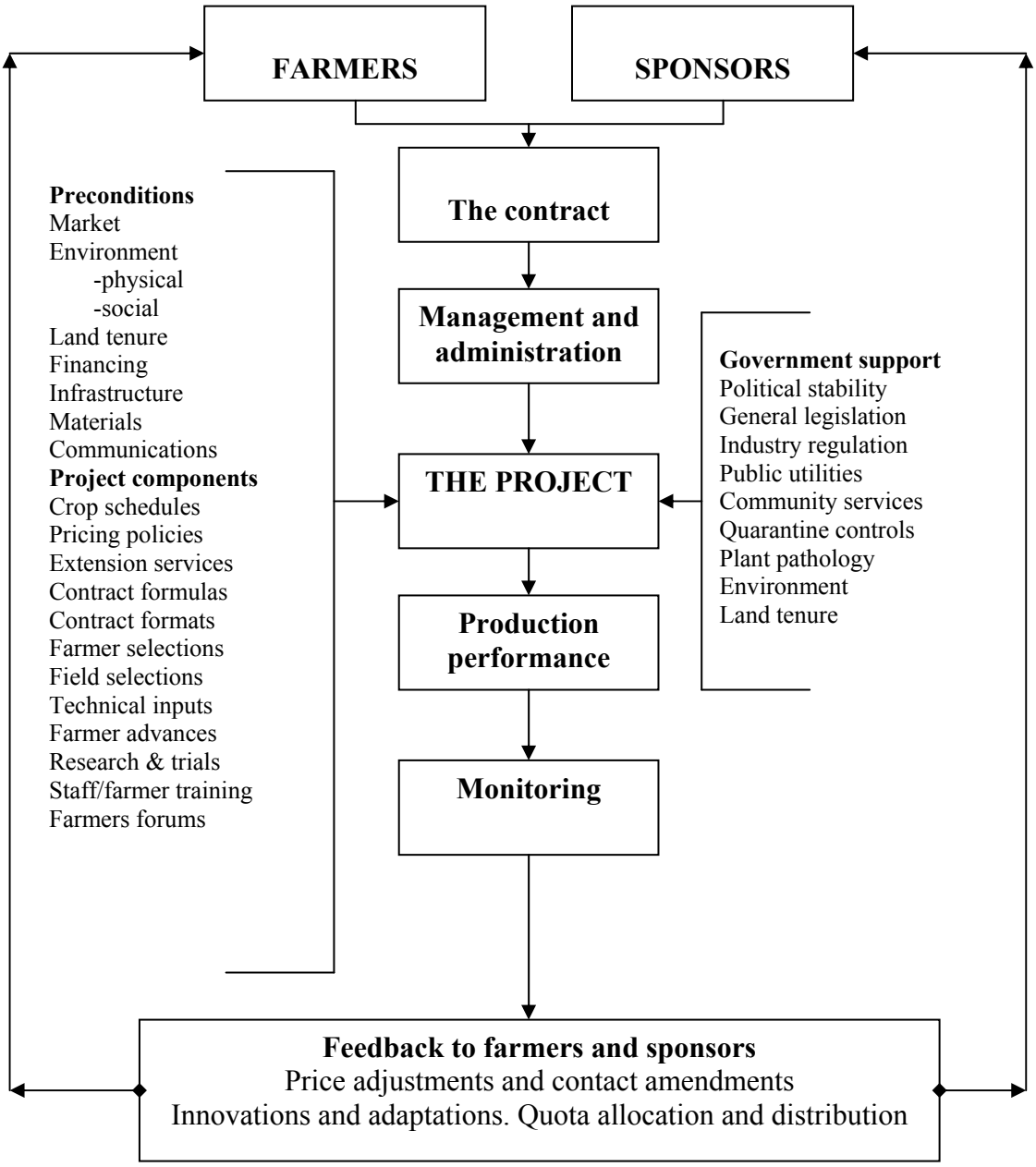

Fig. 1. A contract farming framework

Concluding farm contracts depends on the satisfaction of a wide series of pre-conditions, which normally ensure the efficiency of the transactions. The contractor's efficiency potential should be calculated on the ground of payments by the farmers, which should ensure an attractive income. Contractual pre-conditions cover a wide range of aspects including natural, social, and economic environment, availability of facilities and of communication, availability of land, and availability of incomes demanded. An essential condition is to ensure a negotiator team that ensure a good display of the contracts implying small-size farm activity. Without all these, a contract is a failure. On the other hand, it is also necessary to have Government's support, i.e. the existence of laws and of an efficient legislative system.

Table 1 shows the rights and obligations of a contract's parties within a smallholder contract.

Table 1

Rights and obligations of farmers and authorities in smallholder contracts

Farmers' obligations	**Authorities' obligations**
1. Use of land as stipulated in the contract	1. Ensuring inputs and specific credits
2. Observance of production directions as stipulated in the contract	2. Ensuring technical and managerial support
3. Maintenance and use of access ways to and from the farm	3. Maintenance of the infrastructure
4. Sale of crop through authorities involved in the project	4. Purchase of the whole crop at an acceptable quality standard
5. Reimbursement of loan	5. Payment of the farmer according to the pre-established formula
	6. Maintaining accounts in an accessible and transparent form
Farmers' rights	**Authorities' rights**
1. Access to payments and specific services from the authorities involved	1. Recuperating payments for services supplied
2. Compensation from authorities in case of problems	2. Purchase of the crop according to contract stipulations and penalties in case of failure

Source: Pari Baumann, Equity and Efficiency in Contract Farming Schemes, 2000

A contract should, in theory, stipulate in detail all the rights and obligations of both the producer and contractor, including penalties for

breaking contract clauses by any of the partners. Despite all this, very few contracts are "perfect", most of them being vulnerable.

Farm contracts can be classified after several criteria, depending on produce, objectives and resources of the contractor, farmer's expertise, etc.

Structural features of farm contracts are shown in table 2.

Table 2

Structural characteristics of different contracting models

STRUCTURE -MODELL	SPONSORS	GENERAL CHARACTERISTICS
0	1	2
Centralized	Private corporate sector State development agencies	Directed contract farming. Popular in many developing countries for high-value crops. Commitment to provide material and management inputs to farmers.
Nucleus estate	State development agencies Private/public plantations Private corporate sector	Directid contract farming. Recommended for tree corps, e.g.oil palm, where technical transfer through demonstration is required. Popular for resettlement schemes. Commitment to provide material and management inputs to farmers.
Multipartite	Sponsorship by various organizations, e.g. •States development agencies • State marketing authorities • Private corporate sector • Landowners • Farmer cooperatives	Common joint-venture approach Unless excellent coordination between sponsors internal management difficulties likely. Usually, contract commitment to provide material and management inputs to farmers.

0	1	2
Informal developer	Entrepreneurs Smail companies Farmer cooperatives	Not usually directed farming. Common for short-term crops ; i.e. fresh vegetables to wholesalers or supermarkets. Normally minimal processing and few inputs to farmers. Contracts on an informal registration or verbal basis. Transitory in nature.
Intermediary (tripartite)	Private corporate sector State development agencies	Sponsors are usually from the private sector. Sponsor control of material and technical inputs varies widely. At time sponsors are unaware of the practice when illegally carried out by large-scale farmers. Can have negative consequences.

Source: Pari Baumann, Equity and Efficiency in Contract Farming Schemes, 2000

One of the most important problems debated in literature in the context of contract study is that of transaction costs. Transactional costs are expenses associated with concluding transactions, and they include: enough information concerning the terms of the transaction, the choice of the best price, negotiation, the monitoring of the agreement, and the costs of re-transmitting vertically integrated information.

The economics of transactional costs can be used in the study of the relationship between a raw material producer and a processing unit when there are agreements of contractual nature. Research shows that there is s direct relationship between the duration of the contract, the size of production, and the exclusivity of the production. For some produce, the relationship producer – processor has a high degree of specificity of the capital and we can say that the larger the production volume, the longer the duration of the contract.

Contracts are used as an economic tool in order to establish links between upstream and downstream in agriculture.

Contracts are important not only as an income source, but also as it helps farmers in better managing their financial resources.

A contract is an important means of regulating and controlling agro-

alimentary networks and of adjusting final demand. Sale by a simple or complex contract is one of the most used ways of delivering by the farmers.

A contract can help in ensuring agricultural produce offer uniformity, in producing high-quality produce, and in easier managing stocks.

Contracts are a good means of answering consumers' demands.

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RESEARCH UPON THE EFFECT OF SOME BIOSTIMULANTS ON FORAGE BIOMASS QUANTITY OF ORCHER GRASS (DACTYLIS GLOMERATA L.)

CERCETĂRI PRIVIND EFECTUL UNOR BIOSTIMULATORI ASUPRA CANTITĂŢII DE BIOMASĂ FURAJERĂ LA GOLOMĂŢ (DACTYLIS GLOMERATA L.)

I. PEŢ [*]

Research was developed in the period 2002 –2003, it's scop was to establish the productiv effect of some growth biostimulants on orcher grass. After the determinations were effected in the year 2002 the bioproductiv effect of the biostimulants which were used was put in evidence, the registered production spor was over 25,23%. In 2003 the biggest quantity of forage biomass was obtained at the variant to which we aplyed the product Bionat (12,20%).

***Key words**: production, biostimulants, orcher grass*

INTRODUCTION

From the effected research we prezent the influence of some growth biostimulants, extraradicular aplications to orcher grass. Effected research tried to show the biostimulant effect of the used products. Research was developed in the period 2002 – 2003.

MATERIAL AND METHODS

Research was realized in the period 2002 – 2003 at the Research and Development Center for Pasture Culture from Timisoara, jud. Timis, in the conditions of a brauwn eumezobazic, strongly gleizat, moderly dicarbonated, luto-argilos.

Effected research had as a scop to put in evidence the biostimulant effect which was pursued by the utilized products on orcher grass, thru the quantity of obtained biomass vegetation after aplying these products.

Biostimulants used were synthetically composed and also naturally extracts. Used doses were: Green fuse 0,250 l / ha; Stimupro 1 l / ha,

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Agrostemin 0,750 Kg / ha, Sea start 4 l / ha, Super plant 0,2 l/ha, Bionat 3 l/ha, Mega Grow 0,5 l/ha.

RESULTS AND DISCUSSION

The obtained results in the first year of production (2002) demonstrated that in all the variantes of aplying biostimulants production spores are realized compared to the whitness variant. (Table 1). In the realized order level of production the following production spores were registered compared to the whitness: when we aplyed biostimulant Bionat the realized production spor was 1,86 t SU/ha (also 25,23%); when we aplyed biostimulant Stimupro the registered production spor was 1,64 t SU/ha (also 22,2%); when we aplyed biostimulant Agrostemin the realized production spor was 0,96 t SU/ha (also 13,02%); when we aplyed biostimulant Super plant the realized production spor was 0,8 t SU/ha (also 10,85%), all of these production spores were assured from the statistic point of view.

Table 1.

Biostimulant influence upon the medium dray matter production on orcher grass in the year 2002.

Variant	Medium production t/ha	Difference t/ha	Difference %	Semnification
Control	7,37	-	100	
Green fuse	8,02	0,64	108,8%	-
Stimupro	9,01	1,64	122,25%	***
Agrostemin	8,33	0,96	113,02%	*
Sea start	7,66	0,28	103,93%	-
Super plant	8,17	0,80	110,85%	*
Bionat	9,23	1,86	125,23%	***
Mega grow	7,44	0,07	100,94%	-
DL 5%	0,70	*		
DL1%	0,97	**		
DL 0,1%	1,34	***		

Neuniform distribution of precipitations in the vegetation period of the year 2003 also influenced the production level of orcher grass (*Dactylis glomerata L.)* from the second year of production, these being smaller than those given in specialty literature (Table 2).

With all these looking upon the aplying products with a biostimulant roll, we established that these realized smaller spores than in the first year of production which were between 0,07 t SU/ha and 1,05 t SU/ha. In this sens we remark the following variants: when we aplyed the product Stimupro a production spor of 12,32 % was realized compared to the whitness, followed by the variant to which we aplyed the product Bionat were the realized production spor was with 12,20% bigger compared to the whitness variant. The variant to which we aplyed Mega grow realized the smallest production spor, it was only 0,70%.

Table 2.

Biostimulant influence upon the medium dray matter production on orcher grass in the year 2003

Variant	Medium production t/ha	Difference t/ha	Difference %	Semnification
Martor	8,52	-	100	
Green fuse	9,04	0,52	106,11%	-
Stimupro	9,57	1,05	112,32%	*
Agrostemin	9,29	0,77	109,03%	-
Sea start	9,12	0,60	106,50%	-
Super plant	9,17	0,66	107,62%	-
Bionat	9,56	1,04	112,20%	*
Mega grow	8,58	0,07	100,70%	-
DL 5%	0,80	*		
DL1%	1,12	**		
DL 0,1%	1,55	***		

The length of the forage production is given by a series of morfological plant characteristics under the influence of different systems in aplyed tehnology. So we can evidence the nature of biomass increase production. We can do a series of determinations on some ecophysiological parameters, one of them would be the foliar surface index. In this sens our research demonstrated that by aplying some growth biostimulants to the orcher grass culture a big enough growth happenes compared to the untreated variant variant (Table 3). If the IAF at the whitness variant is 3,99 m2AF/m2 field, when we aply growth biostimulants it varies between 4,12 – 5,22 m2AF/m2 field. From the biostimulant that register the biggest growth in ISF we evidence Bionat with an IAF of 5,29 m2AF/m2 field,and

Stimupro with ISF of 5,22 m2AF/m2 field, and the biostimulant Mega grow registered the most decreased index level 4,12 m2AF/m2 field.

Table 3

Biostimulant effect used upon the foliar surface index (IAF) to orcher grass.

(m^2A.F./m^2field)

Golomăț	Martor	Green fuse	Stimupro	Agrostemin	Sea start	Super plant	Bionat	Mega grow
1	4,10	4,30	5,10	4,70	4,40	4,50	5,00	4,20
2	3,80	4,20	5,30	4,60	4,20	4,60	5,40	4,00
3	3,60	4,50	5,00	4,70	4,70	4,80	5,20	4,10
4	4,00	3,90	5,40	4,80	4,40	4,50	5,50	4,00
5	4,20	4,40	5,20	5,00	4,30	4,30	5,40	3,90
6	4,10	4,50	5,40	5,20	4,80	4,20	5,40	4,40
7	3,90	4,40	5,30	4,60	4,50	4,40	5,10	4,20
8	4,00	4,00	5,00	4,70	4,30	4,70	5,20	4,00
9	4,20	4,40	5,20	4,60	4,40	4,60	5,70	4,10
10	4,00	4,40	5,30	4,60	4,20	4,60	5,00	4,30
x	3,990	4,300	5,220	4,750	4,420	4,520	5,290	4,120
Sx	0,059	0,065	0,047	0,064	0,063	0,057	0,072	0,049
s^2	0,034	0,042	0,022	0,041	0,040	0,033	0,052	0,024
s	0,185	0,205	0,148	0,201	0,199	0,181	0,228	0,155
s%	4,644	4,779	2,827	4,240	4,500	4,012	4,315	3,760

CONCLUSION

Aplying growth biostimulants to Dactylis glomerata in the year 2002 brought to a forage biomass production up to 22,25%.

After we aplyed biostimulants in the year of production 2004 we registered spores up to 12,32% bigger than at the whitness variant.

By interpreting the foliar surface index variance we concluded that the variablety of the foliar surface index is smaller than 10%.

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RESEARCH DONE ON THE EFFECT OF SOME BIOSTIMULANTS ON THE CHEMICAL COMPOZITION OF ORCHER GRASS (DACTYLIS GLOMERATA L.)

CERCETĂRI PRIVIND EFECTUL UNOR BIOSTIMULATORI ASUPRA COMPOZIȚIEI CHIMICE LA GOLOMĂȚ (DACTYLIS GLOMERATA L.)

I. PEȚ [*]

Plant chemical composition is depending on various factors like: species, cultivars, plant age, pedoclimatical conditions and soil management. Biostimulants application has a positive influence both on the productivity and chemical composition of plants. Use of different biostimulators in orcher gras, can induce increases in crude protein content, up to 27,24%, crude fat content up to 140%.

Key words: *biostimulators, chemicals composition orcher gras.*

INTRODUCTION

Generally, plants contain water and dry mater. Dry mater can be divided also in mineral substances and organic substances like: proteins, fat, glucoses and different other organic substances with low content. Differences can be observed in quantitative analysis regarding the participation of different substance categories.

From the organic substances plants are riche in glucides, but few plants can be richer in protein. Participation rate of these different substances in plant composition is depending on various factors like: species, cultivars, and also by plant age. In the same order of idea, chemical composition is depending also on pedoclimatical conditions and soil management.

MATERIAL AND METHODS

Researches were done at the Research and Development Center for Pasture Culture from Timisoara, and Animal Nutrition Laboratory from the Faculty of Animal Sciences and Biotechnologies Timisoara.

[*] Banat's University of Agricultural Sciences and Veterinary Medicine, Timisoara - Faculty of Animal Sciences and Biotechnologies

Biostimulants used were synthetically composed and also naturally extracts. Used doses were: Green fuse 0,250 l / ha; Stimupro 1 l / ha, Agrostemin 0,750 Kg / ha, Sea start 4 l / ha, Super plant 0,2 l/ha, Bionat 3 l/ha, Mega Grow 0,5 l/ha.

RESULTS AND DISCUSSION

After research was done we established that by applying growth biostimulants to orcher grass (Dactylis glomerata L.) a growth was established in the dry substance (DM) production, but also a better quality, this happened thru some modifications in the chemical composition.

Thru the determination made in the chemical compozition we observed a growth in the brut protein quantity at the variations were we used growth biostimulants. So, by comparing the whitness variant which was untreated, the brut protein quantity was 10,68% but at the variantes were we aplyed biostimulants this quantity varied from 10,74 – 13,59% and also with a growth progress compared to the whitness variant between 0,56 – 27,24% (Table 1).

Table 1

Biostimulant influence upon the chemical compozition of orcher grass

Nr. crt.	Specificare	DM %	CP %	CF %	FB %	SEN %	Ashî %
1.	Martor	87,47	10,68	1,72	29,49	39,84	5,74
2.	Green fuse	87,38	10,74	3,95	34,71	32,54	5,53
3.	Stimupro	87,35	11,20	2,92	31,87	36,34	5,02
4.	Agrostemin	87,86	12,25	3,42	29,64	37,43	5,12
5.	Sea start	87,95	13,03	4,14	26,28	38,96	5,54
6.	Super plant	87,93	13,59	3,81	32,22	32,34	5,97
7.	Bionat	88,43	10,80	3,83	34,15	34,9	4,75
8.	Mega grow	87,92	12,41	3,85	30,67	35,26	5,73

From this point of view we show that were we applied biostimulants Super plant and Sea start the determined crude protein (CP) quantity was 13,59% also 13,03%.

From the point of view of brut fiber (FB) we can observe that at the control variant brut fiber quantity was 29,49% and at the experimental variants to which we administered biostimulants brut fiber quantity varied between 26,28 – 34,71% in function of the applied biostimulant. The most decreased quantity of brut fiber was determined at the variant were we applied the

biostimulant Sea start (26,28%). The most increased quantity of brut fiber were we administered the biostimulant Green fuse (34,71%) and Bionat (34,15%).

Thru the determinations made at the chemical compozition of forage we can see that brut fat (FB) has values between 1,72 – 4,14%. The most increased values in brut fat were registered at the variants were we applied the biostimulant Sea start (4,14%) and Green fuse (3,95%), the variant to which the brut fat in forage increased with 140% also with 129%.

Forage quantity in neazotate extraction substances had values between 32,34 – 39, 84%. The most increased value of neazotate extraction substances was determined in the control variant.

The obtained results of the chemical composition at the control variant are comparable to the table values relate by Burlacu and colab. 2002.

After the determinations were done, differences were observed between variants and in the macroelement quantity in forage. (Table 2).

Table 2

Macroelement quantity in orcher grass

Specificare	P g/kgSU	Mg g/kgSU	Ca g/kgSU	Na g/kgSU	K g/kgSU	Ca / P
Martor	2,5	1,6	3,4	0,7	21,2	1,36
Green fuse	2,2	1,9	3,7	0,9	20,4	1,68
Stimupro	2,6	2,3	3,9	0,6	22,3	1,5
Agrostemin	3,1	1,7	4,3	1,2	20,8	1,38
Sea start	2,8	1,5	3,9	1,08	21,7	1,39
Super plant	3,2	1,8	3,8	1,3	22,1	1,18
Bionat	2,9	2,1	3,9	1,6	21,6	1,34
Mega grow	2,7	1,9	3,4	0,8	21,1	1,25

Phosphor quantity in forage varied in the limits between 2,2 – 3,2g/kg DM. The most increased level of phosphor was determined at the variant to which we administered the biostimulant Super plant (3,2 g/kg DM), variant to which phosphor quantity was increased with 28% prior to the control variant.

Limits of phosphor quantity in forage are given by Milos and colab. 1990 they are between 1,7 – 3,1 g/kg DM.

Calcium quantity in forage varied in the limits between 3,4 – 4,3 g/kg DM. The most increased calcium level was determined at the variant to which we applied the biostimulant Agrostemin (4,3 g/kg DM) and the smallest calcium quantity was found at the control variant (3,4 g/kg DM).

By applying the biostimulant Agrostemin the calcium quantity in forage increased with 24,67%.

Magnesium quantity in forage varied in the limits between 1,6 – 2,3 g/kg SU. The most increased magnesium level was determined at the variant to which we applied the biostimulant Stimupro (2,3 g/kg DM), this variant had the magnesium quantity in forage with 43,75% more increased than at the control variant.

The most increased potassium level was determined at the variant to which we applied the biostimulant Stimupro (22,3 g/kg DM).

Sodium level in forage varied in the limits between 0,6 – 1,6 g/kg DM.

The most increased sodium level varied in the limits between 0,6 – 1,6 g/kg DM, the most increased sodium level was determined at the variant to which we applied the biostimulant Bionat (1,6 g/kg DM).

From the point of view of the Ca/P relation we can observe that the most increased relation was determined at the variant treated with biostimulant Green fuse, to which the Ca/P relation was 1,68 prior to the control variant at which the Ca/P relation had a value of 1,36. The optimum Ca/P relation at orcher grass hey after Milos and colab. has values between 2,22 and 1,22.

CONCLUSSION

By applying growth biostimulants the brut protein quantity at experimental variants increased with values between 0,56 – 27,24% prior to the control variant which were untreated.

By applying the biostimulant Sea start the brut fiber quantity in forage decreased down to 10,8%.

The brut fat contents increased at some experimental variants with values over 140%.

After aplying growth biostimulants the calcium quantity in forage increased up to 26,4%.

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THE COMMON AGRICULTURAL POLICY AND THE ROMANIAN AGRICULTURAL MARKET

POLITICA AGRICOLĂ COMUNĂ ŞI PIAŢA AGRICOLĂ ROMÂNEASCĂ

IOANA ANDA MILIN*

In the adhesion process to the European Union for our country, the alignement of each product market to the european market requests and exigencies was imposed. Each product has to fullfil certain specific conditions. These requests are presented for the arable cultures, meat, wine, sugar, etc.

In the preparation of Romanian adhesion process to the European Union it is necessary to align each market, for each product, to the requests of the same markets in the European Union. The adoption by our country of product conditions in conformity with PAC implies a succession of uncertainties.

Fro each product the market is presented as follows:

Arable cultures – have a major importance for Romanian agriculture. In 2000 these represented 23% of the agricultural production value.

Among the eligible for support cereals, the wheat and corn are dominant, followed by oil producing plants and sugar beet.

In the European Union, the arable cultures (cereals, oil producing plants, vegetables) received a single set of direct payment, this payment depends on the total cultivated area and on the average production per hectare. The PAC reform includes a reduction of the cereals and oil producing plants price subvention. It was introduced a direct payment

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system according to the area for cereals, oil producing plants and vegetables production.

The most important instruments of PAC aplied in 2000/2001 for the arable cultures was:

- common market organization (CMO) for cereals (Council Rgulation 1766 – 1992), based on guaranteed intervention prices, price limits (for importations) and refinancing (for exportations)
- for the other arable cultures a subventioning system for production (Council Regulation 1251 – 1999)
- a large number of regulations concerning the quality standards, technical details for importations and exportations, etc.

In conformity with PAC conditions, the internal prices of European Union for cereals are supported by:

- a customs fee system at importation, which can not exceed 155% of the intervention price
- the acquisition by designated specialized centers, at the intervention price of a certain quantity of cereals
- refinancing for the exportation, varrying according to the market and destination conditions (international prices)

The intervention price decresed considerably in the European Union during the "Mc Sharry" reforms. The 2000 Agenda anticipates a continuous decrease of 15%, in two stages. The intervention price for the market year 1999 – 2000 was 119.9 euro/tone, in 2000-2001 was 110.25 euro/tone and in 2001 – 2002 dropped to 101.31 euro/tone. There are such regulations for the cultivated area, for the maximum subventioned production.

The sugar. The sugar beet culture represents for our country almost 10% of the total vegetable production and 0.4% of the total agricultural production.

For this product, in the European Union is practised the production system quotation. Each member country receives a quota of sugar type A and B and only this quota is supported on the market by the intervention price. The over production of sugar is classified quota C and must be exported outside the European Union without subventions. Starting with 1995 –1996 some conditions regarding the decrease of quota A and B were introduced. The minimum prices for the sugar beet type A was 619.26 euro/tone and for type B was 382.30 euro/tone.

Knowing this requests is verry important for our country. Nowadays our country is importing sugar type C from the European Union. In the negociation process it is verry important to obtein cultivated areas with type A and B in conformity with the Romania's possibilities for this culture. It is estimated that 393 – 588 thousand tones could be obteined annually of type A and B. At 393 thousand tones level the importation would be of 143 thousand tones annually and at 588 thousand tones the importaion would disappear, the needs being covered by the internal production.

Adopting the PAC regulations an annually loss of 40 million euro is estimated in the case where the consumption per inhabitant remaines at 1999's level (almost 20 kg/year).

The wine. Romania is the 5th country in Europe for the wine production and owns 2.3% of the international production, with an average annual consumption of 25 littres per inhabitant. Even the exportation is 5% of the wine production, Romania is on the 15th position among the exporting countries (0.8% of the international wine exportation).

The wine sector of the European Union operates according to the Council Regulations 1493/1999 concerning the market organization and has as main objectives:

- market determination and equitable life standard assurance for the community by adjusting the resources to the needs
- adoption wine potential quality control policies

This sector includes the following products: grape juice, must of grapes, wine of fresh grapes (even fortified grapes), fresh grapes, wine vinegar, residues, wine yeast, wine spirits.

The mechanisms that the member countries should monitor are:

- the control of the wine production potential (cultivation and replantation rights, abandon bonus, re – organization and conversion support)
- market mechanisms (private storage support, distilary support, processing support, price system, importation/exportation licences, refinancing for exportation)

The European Union offered in 2000 a financial support of 707 million euro for this sector, representing 1.74% of the FEOGA fund.

The EU stipulates some conditions for the wine trade with the third countries – EU members, like: exportation licences for quantities exceeding 1hl, reference prices for importation in order to protect the native producers,

custom fees for importation, drawings (importation fees) if the importation is lower than the reference, exportation licences, etc.

In Romania, during the EU adhesion, in the wine and the acoholic drinks case, the following measures are imposed, resulting from the communitary support:

- the foundation of the Wine, Alcohol and Alcoholic drinks bureau
- the elaboration of the national reserve for cultivation rights
- the inventory of the wine production potential
- the classification of the vine cultures destined for the wine production and classification of the wine types
- the elaboration of the re-organization and conversion structures of the vine cultivated areas
- the participation at the elaboration of the wine communitary registry
- the estimation for a certain period of the total and per hectare productions
- the recognition of the wine producers
- the approval for alcoholic wine factories
- the approval for distileries, etc.

THE MEAT
BEEF AND VEAL

This sector represented in 1990 – 2000 period between 15 and 20% of meat production in Romania. Because of the reduction of animal effectives, the quantity destined for processing reduced from 310 thousand tones in 1990 to 180 thousad tones in 2000 and the living weight was about 300 kg.

In the EU, the common agricultural policy includes the following measures:

- a common market organization based on intervention prices, limit prices for importation and exportation refinancing
- a subvention system for direct payment to the producer for certain types of bovines,
- a large number of the European commitee regulations concerning the quality standards and the technical details for importation and exportation

- starting with 2000 (July) were introduced:
    1. intervention acquisitions for the sacrificed animals under age of 2 years
    2. support for private storage
    3. special bonus
    4. nursing bonus
    5. sacrificing bonus
    6. aditional payments, etc.

In Romania's case, according to the chapter "Agriculture" debates, the subventioned production quota and subvention level for the pre-adhesion period will be specified.

PORC

Represents the main type of meat produced in Romania (almost 50% of the total meat production). However the annual consumption per inhabitant (27kg in 1990 – 2000 period) is lower that in the EU – 45.1 kg or in USA – 88.4kg

In the EU, the applied PAC mechanisms for the porc meat sector are:

1. internal market support by: intervention societies acquisition (for overplus periods), support for private storage
2. external trade policy by: fee drawings, exportation refinancing, fee quotation

For the prices field it is used:

- the basic price (annually fixed)
- support for private storage
- custom measures for EU internal market protection, according to OMC

In Romania's case, in the pre - adhesion period, the following measures will be established:

- weighting indicators (for the internal price)
- selling prices (for the products destined to the EU)

During the adhesion process, the following measures will be established: the effective of animals destined to be sacrificed for the market and the meat quota for the market. The most important is that Romania, during the negociation process, obteins high quotation.

FOWL AND EGGS

The intensive grow of fowl was strongly affected in the transition period because of the shut down or restriction of the large poultry complexes. In 1999 the number of fowls diminished almost with 60% compared to 1990, the fowl meat with 38% and the production of eggs with 30%. The commercial producers represent about 20% of the neat production sold on the market.

Nowadays, the fowl meat represents 26 – 30% of the meat consumption, in Romania (13.7 kg/inhabitant/year) comparing to 21.6 kg/inhabitant/year in EU.

The 2000 Agenda do not establish any measure regarding the fowl meat and eggs price, so we assume that the prices from 1999 in EU will be practised.

These prices were for the fowl meat between 1668 and 1318 euro/ tone and for the eggs between 66 and 43.1 euro/ 1000 pieces. In Romania these prices were in 1999 about 1255 euro/tone for the fowl meat and 47 euro/1000 pieces for eggs, lower prices for meat and higher prices for eggs compared to the EU average. The EU integration would generate a positive effect in the meat case and also the request of alignement to the EU prices for eggs.

MUTTON AND GOAT MEAT

This product represents almost 3% of the Romania's meat production. Generally the muttons are grown especially for meat production, but there are mixed species (for meat, milk and wool).

For example, in 1999, 40% of the mutton meat was destined for the market, 57% for self consumption and 3% for the specialized processing units. In EU the mutton meat producers receive an annually support based on a bonus system for each animal according to the animal species. The growth of mutton and goat is, also, encouraged in the pour regions.

The prices on the Romanian market are under the EU average price (eg. 2262 euro/tone in 1999 compared to 3305 euro/tone in the EU). In the case of acquisitions for exportation the price was only 1594 euro/tone.

The EU bonuses for this product are between 17.3 – 21.7 euro and they are offered to the producers having 1000 heads or 500 heads in the pour areas.

For the goat production the quotation is 80% of the mutton's quotation. Nowadays Romania exports in EU 2875 tones of mutton/year, free form custem fee.

Milk and milk products.

"Milk and milk products" sector is one of the most important of the Romanian agriculture. The milk value represented in 2000 almost 40% of the zootechnical production and almost 15% of the entire agricultural production.

The annual productivity of 3000 – 3100 l/ cow obteined in our country is much lower than in EU, almost 5600 – 6500 l/cow.

In EU, the milk and milk products market organization is conditioned by the Council Regulation no. 1255/1999. PAC for the milk products includes:

- price maintainance on the internal market with intervention prices (for butter, milk powder without fat, milk with 3% fat, considered raw materials for the processing companies)
- a quotation system for milk delivery with processing and direct trade destination, excluding the quantities used in farms for self consumption
- additional payments starting with 2005 and including: a direct bonus, milk standard, offered directly to the producer / tone of milk from the milk quota offered to each eligible exploitation + a supplimentary bonus or a direct payment for hectare of grazing field
- border protection measures (importation and exportation licences, importation fees, exporation restreints)

The subventions offered for the fresh milk delivered for processing will decrease from 30.98 euro/hl in 2000 – 2005 to 25.72 euro/hl starting with 2007.

For Romania, the most important and the most sensible subject of negociation is related to the determination of the quotations, because as higher this quotations will be, the Romanian producers will be more satisfied.

It is presumed that (it is necessary) in the future our country decrease the direct milk selling and increase the selling for processing, fact which should be reflected also in the quotation assigned to our country.

These requests will be included in the EU adhesion process:

- control and exclusion of the animal contagious desease
- animal identification and registration
- veterinary products usage in conformity with the EU standards
- genetical adjusting process continuation for different animal species
- stimulation and support for animal breeders (cows for milk) by eficient zootechnical exploitations foudation

In Romania, to estimate the milk quota destined for processing, were used the following conversion coefficients: for the consumption milk with 1.8% fat – 1.004; for butter – 22.649; for cheese – 7.5; for milk powder - 9.5; for casein – 33.5; for milk powder without fat – 11.5; for fresh milk products – 6.55. The negociations will establish an appropiate price related to the target price from the EU.

In conclusion, during the EU adhesion process, some aspects are verry important for the "Agriculture" Dossier:

- the market quotation to be subventioned on the internal market
- the market quotations to be exported to the EU and outside the EU
- the internal price adjustment to the EU market and to the international market
- the possible restreints (transitorial) regarding the Romanian exportation
- stimulation and protection measures for the internal producers

During the negociation, in the agriculture case, the following aspects of risk for Romania, should be taken into consideration:

- the low level of the rural substructure
- the high level of portioning the agricultural exploitations
- the subcapitalization of agriculture
- the high level of emploiment in agriculture and the low level of its training
- the necessity of promoting an integrate concept for the rural area

During the adhesion process some important measures should be taken into consideration, like:

- custom fees suppression for the relations with the EU and maintainance of those admitted by OMC and EU agreements
- Romanian custom fees adjustment to those practised in the EU with third countries outside the EU
- agro – alimentary sector subvention limited by the EU agreements

- investigation and information concerning the effects of price adjustment for the Romanian agricultural products to the EU, during and after the adhesion
- request and negociation of the corrective measures advantages, during the discussions for adhesion, like: direct support for farmers, exportation subventions

After the EU adhesion, the support for Romanian agriculture and rural areas would be necessary because in all rural areas the gross national product per inhabitant will be lower than 2/3 of the average gross national product in the EU and this support should cover three main aspects:

- direct payments from the EU budget in comformity with the PAC agreements (additional payments, grants, loans, exportation refund, etc.)
- structural adjustment co-financing for agriculture and for rural areas
- National Program measures co-financing concening the agricultural policies

Both during the pre - adhesion period and after, the increase of international competitivity of the Romanian agro – alimentary sector will be controled, considering the following measures:

- stimulation and support for the agricultural producers by creating optimal dimension farms: by association, leasing, granting and agricultural land selling
- the radical reform of markets and producers financial support policy, by using identical mechanisms as in the EU
- support policies for those who process the agricultural product by offering financial facilities for technological improvement
- application of a stable organization concerning the external trade with agro – alimentary products, with a moderate protection against importation and without restreins for exportation, limited by the EU and OMC agreements
- material and financial backgroud assurance to realize in optimum conditions the agricultural works, to store and to preserve the agricultural products
- re-organization of the agricultural services (veterinary assistance, grain quality control, pest and desease control, agro – alimentary products quality control, etc.)
- land improvement policy development considering the enviroment protection

- passage from the exclusiv agricultural policy to the rural development policy by: villages substructure re-organization, non agricultural activities development (small industry, workmanship, rural tourism, etc.)
- facilities offer for the youth settlement in the rural areas by attracting it in agricultural and non agricultural activities, etc.

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THE USE OF MODERN FINANCIAL INSTRUMENTS IN AGRICULTURE

UTILIZAREA INSTRUMENTELOR MODERNE DE FINANŢARE ÎN AGRICULTURĂ

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This paper describes the various ways in which financiers could structure credits around such non-traditional collateral. In some cases, it will be possible to arrange such structures with individual farmers, without a need for the support or intervention of a farmers' association. But in most cases, farmers' associations probably play a major role either as financing intermediary or as facilitator of the transaction. Financing can come from banks, but conceivably also from the capital market (institutional investors).

Key words: *agricultural finance , financing instruments*

Agricultural producers often sell a significant part of their crop soon after harvest in order to obtain cash to cover expenses and other financial obligations. At that time, the prices of the harvested products are most likely lower than later in the season (with the difference being higher than normal storage charges). With efficient financing, farmers do not need to sell their product immediately after harvest to obtain cash. If goods already in storage can themselves become a vehicle for obtaining credit, pressure to sell will be greatly reduced. The situation of farmers would improve even further if crops still in the field could be used as collateral. Unfortunately, banks, even if they are interested in financing agriculture, rarely accept collateral other than land or real estate.

Over the past decades, various ways to deal with this problem have been attempted, mostly with little success.

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Financing can come from banks, but conceivably also from the capital market (institutional investors) – in the latter case, an operator procures funds to invest in an operation from investors, by selling them formalized rights to future production.

1.TRADITIONAL METHODS OF AGRICULTURAL FINANCING

1.1. FORMAL FINANCING MECHANISMS

Commercial banks and institutions such as merchant banks, development banks, saving banks, insurance companies, etc., are engaged in providing credit to farmers. Credit in the formal sector is either subsidized or on a commercial basis.

Subsidized credits. In virtually all developing countries, government intervention in rural credit markets has been highly prominent. In many cases, subsidized agricultural credit programmes were set up to provide farmers with low-cost loans and to promote agricultural development by supplying more credit to the rural sector. The main characteristics of these credit programmes were subsidized or low interest rates, imposed government lending targets and credit quotas, high operational costs and difficult bureaucratic and administrative procedures. While these programmes caused a tremendous financial burden to Governments, they did more damage than good to the development of rural credit markets.

Commercial credits. Commercial banks tend to be uninterested in agricultural finance, unless farmers provide collateral such as tangible assets - land, buildings - or any income-providing assets. This is linked to the perception that the agricultural sector is a highly risky area for lending.

1.2. INFORMAL FINANCING MECHANISMS

The informal sector, represented mainly by traders, moneylenders, landlords, grain-millers, shopkeepers, relatives, etc., meets much of farmers' credit needs. Informal loans tend to have no or few collateral requirements, relatively simple bureaucratic procedures, low transaction costs, and great flexibility in terms of reimbursement.

However, although demand for informal credit is often high, supply is limited, to a major extent because informal lenders do not have access to

the formal sector to borrow money for on-lending. Lenders in the informal sector charge rates which range from zero nominal interest rates, often charged by friends, relatives and neighbours, to up to 100 per cent per month by some moneylenders. Most loans are short-term (up to one year, as the informal lenders do not have the capacity to provide long-term financing).

1.3. SEMI-FORMAL FINANCIAL INSTITUTIONS, CREDIT UNIONS AND COOPERATIVES

To link the formal and informal financial markets, Governments and donor organizations have promoted the development of semi-formal institutions bound together by mutual solidarity. These institutions often provide services beyond mere credit provision. Farmers' cooperatives have been one way of delivering credit to farmers, with credits often tied to agricultural inputs and machinery. However, like other semiformal institutions, they have suffered from the same controls, lack of independent decision-making, inflexibility, repression, and high administrative costs as formal financial institutions. Another approach has been the group lending scheme: small farmers are grouped together for the purpose of attaining a common goal (acquiring credit). Formal banking institutions support the formation of such groups and provide them with agricultural credit. The group is held liable and responsible for the total loan in case any of members' defaults. This technique leads to better performance in respect of loan recoveries and a decrease in lending transaction costs compared to other traditional mechanisms.

2. WAREHOUSE RECEIPT FINANCE

In warehouse receipt finance, a bank or trader relies on goods in an independently controlled warehouse to secure the credit that it provides. The warehouse operator issues warehouse receipts, in one form or another (depending on a country's legal and regulatory system), which then form the basis of financing. Rather than relying on the producer's (or exporter's) promise that the goods exist and that the proceeds of their sale will be used to reimburse the credit provider, the goods are put under the control of the independent warehouse operator (the credit provider still needs to ensure

himself that the goods have not been pledged previously). The warehouseman becomes legally liable for the goods he stores. If these goods are stolen, damaged or destroyed, through any fault of his, he and his insurance companies have to make up for the value lost (additional insurance can be obtained for catastrophic events). The integrity of this warehouse operator is secured by government licensing and controls and by outside guarantees that the warehouseman has obtained from bonding companies (subsidiaries of banks which provide against defaults) and insurance companies (for a variety of risks, including the risk of fraud by the warehouse company's employees).

Compared with a simple bill of sale (which gives title to commodities to the credit-providing institution), the use of warehouse receipts as collateral provides the additional advantage that the commodities are no longer in the possession of the borrower, and hence if the borrower defaults, the lender has easy recourse to the commodities. Banks or trading companies normally have few problems with advancing funds against commodities that are being stored in a reliable warehouse and

have been assigned to the bank or trading company through warehouse receipts.

Processors and traders have made far more use of warehouse receipt finance than farmers. Farmers' use has mostly been through cooperatives engaged in exports. There are good possibilities to enhance not just the use by farmers' associations of warehouse receipt finance, but also, because of improvements in communications and smart card technology, direct use by individual farmers.

3. REPO FINANCE

Another innovative form of agricultural finance is the use of repos (repurchase agreements). Repos are of major importance in securities markets, where they consist of a sale of securities for cash with a simultaneous commitment to repurchase them on a future date; the buyer will apply a certain interest rate (the 'repo rate') to calculate the current purchase price as compared to the future repurchase price.

This mechanism is now being used in commodity markets, primarily in the United States and some Latin American countries. In this case, the repo is the temporary sale of a commodity by the farmer to the bank in

exchange for immediate cash, and the simultaneous commitment by the farmer to repurchase the commodity at a fixed future date for a pre-arranged price. The bank usually has title to the commodity for the period of the credit, and would only exchange the commodity for cash at maturity. Thus, as in the case of warehouse receipt finance, a small-scale farmer who is short of money does not need to part with his crop in times of low prices, but rather can turn to a formal financial institution for credit at a reasonable price - reasonable because the bank runs no credit risk. Repos are relatively easy to arrange and present no legal obstacles (however, in some countries they can give rise to unfavourable tax treatment – a sales tax is applied). The more sophisticated tool of warehouse receipt finance offers more flexibility, but also requires stricter preconditions. Repos can be provided on the over-the-counter market, or traded through exchanges.

A crucial element for undertaking repo transactions is the availability of reliable warehouse operators.

Warehouse companies need to be financially strong, and the operators need to have the technical and business skills to store the commodities in a safe way, protecting their quality. In some cases, banks may deem it appropriate to set up their own warehousing subsidiaries to carry out a range of collateral management activities.

4. ASSIGNING FUTURE RECEIVABLES

If farmers produce a regular stream of commodities and there is relatively little risk that they will stop doing so, then a financier could ensure loan reimbursement through the offtaker of the farmers' products.

For example, a sugar mill or a cotton ginnery could act as a conduit for loan reimbursement. Farmers who produce under contract with supermarkets could similarly assign their future revenue to the reimbursement of a loan. Similarly, farmers who export high-value products to an international auction could assign the payments that they will receive on the auction to the reimbursement of a loan. In all these cases, the assignment of receivables converts a credit risk on a farmer into a production risk (will the farmer be able to produce) combined with a credit risk on the offtaker (if the farmer indeed delivers, will the offtaker be able to pay?); in general, this will reassure the bank that the loan will in effect be reimbursed, and enable it to improve credit conditions. While the financing

does not necessarily pass through a farmers' association, such an association can still play an important role in regrouping farmers so that they can deliver the quantity and quality of products required by a buyer.

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THE IMPACT OF THE INTERNATIONAL FINANCIAL REPORTING STANDARDS UPON THE ROMANIAN ACCOUNTANCY

IMPACTUL STANDARDELOR INTERNAŢIONALE DE RAPORTARE FINANCIARĂ ASUPRA CONTABILITĂŢII ROMÂNEŞTI

L. CERNUŞCA [*]

The international accountancy harmonization has concerned those states with a developed market economy. The Eastern Europe countries want to attract foreign investments and they prepare in order to join the European Union. In the second part of the Romanian accountancy reform, there is interest regarding the comparison of our accountancy system with the evolutions that take place in an international level. Romania could find its place in the global economy. Starting from this point , the ways of accountancy development in our country were established in assimilation of European Union Fourth Company Law Directive and the International Accounting Standards.

Key words: *accounting harmonization, financial statements, International Financial Reporting Standards, capital market, market economy*

INTRODUCTION

OMF 94/2001 and OMF 306/2002 mark an important step in the development of the Romanian accounting system. After 1990 there were a series of concerns for the development of the capital market in Romania. The capital market board group that include all the potential investors and lenders, organized stock markets, venture capital, banks, industrial partners, banks, international financial institution.

The presence of the European component in the Romanian accountancy is a commitment that our country has taken after signing the

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Fourth Company Law Directive. It's a good thing the presence of the international in the Romanian accountancy. Our country wants to harmonize with the International Financial Reporting Standards. Some of the standards will be easy to apply in practice, such as IAS 2, IAS 7 , etc but others will be a bit difficult to apply in practice , for example IAS 12, IAS 36, etc. There are standards that will not be applied immediately. There must be a preparing period in order to apply them to practice , as for example: IAS 19, IAS 26, IAS 39. The motives of the implementation of the International Financial Reporting Standards in our accountancy is due to our desire to integrate in the European Union, and the countries that to be a part of the EU would have to conform to the laws of the single market.

In the accountancy point of view , the legislation would have to be harmonized with the Fourth Company Law Directive. Only some of the Romanian enterprises would have to harmonize with the International Financial Reporting Standards. These are the enterprises that fulfil the conditions in the OMF 94/2001. The small enterprises will apply the law OMF 306/2002. IAS is the only international accounting framework and provides all the characteristic of financial information outlined before. The standards are increasingly geared towards the reporting issued of today's industrial environment. IAS can be a passport to the capital markets.

OPINIONS ON THE IMPLEMENTATION OF IAS IN THE ROMANIAN ACCOUNTANCY

By introducing OMF 94/2001 and OMF 306/2002 there are important changes in the Romanian accountancy , displaying a new manner of approach of the conception activity , elaborating and fundament of the accounting information that will be addressed to a large number of users of the financial statements.

We consider that is highly important that the accountant professionals pay an important attention to the accounting conceptual frame. We have to overcome the mentality according to which the financial statements and their audit will be oriented and destined to the state in fiscal purposes and statistics and in a less important manner for the other categories of users of the financial and accounting information. One of the French legacy is the presence in OMF 94/2001 and OMF 306/2002 is the presence of the General Accounts Plan.

In the fist stage of the Romanian accounting reform , the accounting system is based on the accounting conceptual frame. Interesting is the fact that the Accounts Plan exits with the accounting conceptual frame. Important is that in the future is preferred the accounting conceptual frame and the International Financial Reporting Standards. We consider that now, we should keep the Accounts Plan, but it should be allowed to the enterprises the opportunity to build their own Accounts Plan adopted according to the enterprise's activity , its strategy and its policies.

There are modifications in what concerns the annual financial statements. According to OMF 94/2001 , the annual financial statements of the enterprise should contain:

- The Balance Sheet;
- The Profit and Loss Account;
- The Situation of the Equity Modifications;
- The Situation of the cash flow;
- Enterprise's accounting policies.

The enterprises that apply OMF 306/2202 will build up the annual financial statements composed of:

- The Balance Sheet;
- The Profit and Loss Account;
- Enterprise's accounting policies;
- The Situation of the cash flow (facultative).

In the first stage of the Romanian accountancy reform, the Romanian legislators chose the French model of the Profit and Loss Account, using financial information relevant for the state. In the second stage of the Romanian accountancy reform, it was chosen the vertical model of the French Profit and Loss Account with a classification of the expenses in operating, financial and extraordinary , according to the Fourth Company Law Directive and IAS 1 "Presentation of financial statement". The option of the Romanian legislators was surprising.

The inflation has a negative influence on the financial statements of an enterprise, in the way that they won't offer the true image , clear and complete of the patrimony , financial position , performances and modifications of the equity and cash flow.

In our country , where the accountancy in connected to tax payment there weren't any interest in the treatment of the delayed taxes. In the

General Accounts Plan approved by OMF 94/2001, there are accounts 4412, 6912 and 791 referring to the delayed taxes.

IAS 15 "Property, plant and equipment" and IAS 36 "Impairment of Assets" won't be easy to apply in the Romanian accountancy. The depreciable amount of an item of property, plant and equipment should be allocated on a systematic basis over its useful life. The depreciation method used should reflect the pattern in which the asset's economical benefits are consumed by the enterprise. The depreciation charge for each period should be recognized as an expense unless it is included in the amount of another asset. The statements in the IAS 16 regarding the depreciation of fixed assets are different from the Romanian legislation. Therefore, the management of the enterprise will fundament its depreciation policy of the fixed assets, in the way that it will decide upon the method which would be according to the depreciation rate of the future economical benefits.

The accountant profession will have to pay an important part in implementing IAS in the Romanian accountancy. It's important for the Romanian accountancy reform to have a chance of success in the future.

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THE ACCOUNTANT TREATMENT AND THE PRESENTATIONS RELEVANT TO THE AGRICULTURAL ACTIVITY

TRATAMENTUL CONTABIL ŞI PREZENTĂRILE AFERENTE ACTIVITĂŢII AGRICOLE

L. CERNUŞCA [*]

IAS 41 „Agriculture" is the last standard published by IASB and is specially written for this segment. The article presents a series of aspects linked to the accountant treatment and the presentations relevant to the agricultural activity. The main problems presented refer to the domain upon which IAS 41 acts "Agriculture" , recognizing the livestock/ agricultural products , the loss and profit treatment and the financial situations. In the end , the article presents a short example that deals with one of the main problems: recognizing the purchases and sales of the livestock in the financial situations.

Key words**:** *agriculture, livestock, true value, agricultural products, recognition*

INTRODUCTION

The present Romanian society which is in a permanent transition tries to solve its problems by using the solutions proposed by the International Financial Reporting Standards. As an evidence that this problem is of international interest and not only an academical debate stands the Ministry of Finances elaborating the accountancy rules of harmonizing the Romanian accountancy system with the 4th European Directive and the International Financial Reports Standards.

Harmonizing with the International Financial Reporting Standards represents a positive aspect as long as Romania wants to be in UE. From 1973, when IASC was created, this organism has created 41 standards (IAS 1-41). IAS 41 "Agriculture" represents the last standard published by IASB , that is used since the 1 st of January 2003, being approved in December 2000.

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IAS 41 introduces a model of true value in the agricultural accountancy. IAS 41 , art. 2 says : "evaluating at the true value, less the estimated costs at the point of sale , from the initial recognition of the livestock till the growing of the crop , differently from the procedure applied when the true value can't be evaluated in a credible manner at the date of the initial recognition.

IAS 41 doesn't set any new principals for the lands used in agriculture. But, an enterprise applies IAS 16 "Property , Plant and Equipment" or IAS 40 "Property Investments", depending on the circumstances. The embracement of IAS 41 is characterized according to IAS 8 "Net profit or loss for the period. Fundamental errors and changes in accounting policies".

AREAS UPON WHICH IAS 41 "AGRICULTURE" HAS AN INFLUENCE

Areas upon which IAS 41 refers to the agricultural activities:

i) livestock:

- animals or live plants (example: sheep, trees in a plantation, cultivation, porcine, shrubbery, grape vine, fruit farming):
- together with agricultural activities (an enterprise administrating the biological transformation of the livestock in order to sell them, transforming them into agricultural products or livestock new created:

ii) agricultural products at the moment of the end of the crop growing

iii) governmental subvention granted in certain conditions.

It's important to know that IAS 41 doesn't contain any prevision referring to:

- lands used in the agricultural activity (for their accounting we use: IAS 1 "Property , Plant and Equipment", IAS 17 "Leases", IAS 40 "Property Investments");
- intangible assets associated with the agricultural activities, for example licenses (treated according to IAS 38 "Intangible assets";
- agricultural products obtained by processing the agricultural production at the moment of the end of the crop growth: wool, logs, cotton, milk, grapes (treated according to IAS 2 "Inventories");

- the agricultural activities that aren't manageable (for example: ocean fishing).

RECOGNIZING THE LIVESTOCK / AGRICULTURAL PRODUCTS

The counting of the livestock /agricultural products is possible when the following tests are accomplished:
i) control: the enterprise controls the assets as a result of past events;
ii) value: the economical benefits resulted from the assets control are in the enterprise;
iii) evaluation: the true value or the assets' cost to be measured correctly.

The three criteria of recognition respect the conceptual accountancy rules.

EVALUATING THE LIVESTOCK / AGRICULTURAL PRODUCTS

At the initial recognition and at every Balance Sheet, the livestock will be evaluated at the true value less the costs estimated at the moment of the sale. The exception is when the livestock can't be measured in a correct mode.

At the initial recognition we can have: a profit in the Profit and Loss Account (when a calf is born); a loss in the Profit and Loss Account (when the estimated sale costs are grater then the true value of the assets).

Example: An enterprise has bought at a sale 70 sheep worth 70.000 lei on 15.05.N. The transport cost was 500 lei. The sale fee is 1% form the purchase cost of the sheep, paid by the buyer. On 31.12.N, the sheep's market value raised to 80.000 lei.

♦Recognizing the purchase of the livestock in the financial situations

1) Paying the sum of 70.500 lei for the sheep's purchase. The transport cost is included.

D: Livestock (sheep) 70.500
C: Cash 70.500

2) For the decrease of the book value at the level of the true value, less the expanses at the point of sale , on the date of the first recognition.

D: Loss from the initial value 1700*
C: Livestock (sheep) 1700*

* 1700 = 70.500 –[70.000 –(500+70.000 x 1%)]

3) For the future sale:

D: Livestock (sheep)	9900**	
C: Profit from modifying the market value (less the estimated cost at the point of sale)		9900**

** 9900 = [80.000 –(500 + 80.000 x 1%)] –68.800

♦ Recognizing the sale of the sheep in the financial situations. On 01.02.N+1, the enterprise sold 20 sheep at a sale with a price of 22.000 lei, transport cost 100 lei.

1) The cash from the sheep sale

D: Cash	21.680*	
C: Livestock (sheep)		21.680*

* 21.680 = 22.000 – [100 + 22.000 x 1%]

On 30.04.N+1 the market value of the 50 sheep is 50.700 lei. 25 sheep have been slaughtered that same day, the total costs being 2.000 lei. The market value of the mutton that same day was 27.000 lei, and the transport costs estimated for the mutton sales 300 lei.

2) Transferring the livestock into inventory

D: Inventory	26.430**	
C: Livestock (sheep)		24.430
Cash		2.000

** 26.430 = 27.000 –[300 + 27.000 x 1%]

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STATE AND AGRARIAN POLICIES

STATUL ŞI POLITICILE AGRICOLE

ELENA VOLLONCS[*]

This paper describes the role of the state in levelling the path to market economy by applying legislative, economic and social measures, and directing and controlling the privatisation process. The agricultural policy is part of the general policy that is based on the interventionist concept according to which public powers control the production and support the farmers' income with statutory mechanisms and instruments in order to influence the supply-demand relation and determine the market equilibrium.

Key words: *state, agrarian policies, farm, protection, income*

Along the time, the notion of state has been interpreted in various ways: the territory - a space delimited by borders; the nation - the population that lives within the borders; the political/public authority - the structure at the basis of political unity.

Here are several arguments sustaining the implication of state in economy:

- the necessity to eliminate the dysfunctions in allocating the free market; such dysfunctions are caused by: incorrect information, natural or technical monopoly, demand or supply monopolisation, collective goods and external effects;
- the necessity to eliminate serious economic inequalities caused by the competition mechanism;
- the necessity to regulate some market relations;
- insufficient private initiative as regards general or national interest activities or goods (collective goods such as: national

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defence, justice, road infrastructure, power supply, atomic power or exterior effects like pollution);

- the state's acquired right to intervene in economy unconditionally, i.e. as a of goods and service consumer (for national defence, administration etc.);goods and service producer (power supply, transport, mail, telecommunications etc.)

In developing countries, most of the population lives and works in rural areas; agriculture gives a large share, if not the largest, to the national income; however, working efficiency in agriculture is still low.

The increase in the farmers' incomes is made possible by the productivity of a larger market for farm produce and industrial goods consumption. Farm produce export brings currency that can be used for industrial development. The role of agriculture in market economies is different. However, agriculture is a relatively small sector of the economy. The productivity is high and the food necessities of the non-farming population can be satisfied easily, even if the farming labour force is low.

During the transition to the market economy, the state must level the path to market economy by applying legislative measures, creating mechanisms that match the free market, directing and controlling the privatisation process, monitoring the economic, social and ecological protection.

To reorganise and modernise agriculture is:

a) to create a new modern structure of farm producers equipped with adequate technology, professional knowledge at European standards and able to make good decisions and become involved in their work;

In the future, support from the state is needed to concentrate land ownership in economically and socially viable farms. At present, there are approximately 42.000.000 owners who owe areas between 0.5 and 10 hectares. The average surface is 2.4 hectares (of which 1.9 ha are arable). Of these, only 2.6 million are real farms. The rest of the properties are rented or part of family associations or agricultural cooperative associations.

b) to create an economic environment able to provide own accumulations and to attract foreign capital as an additional source for the technical base and a higher degree of production capitalisation. The protection of native farmers through grants, export bonuses, import taxes, an optimum fiscality degree etc. is also required.

c) to ensure farm food produce security by stimulating the supply must cover the internal needs and create export disponibilities.

d) to increase farm produce efficiency and competitiveness on the domestic and foreign market at the same time with accessible prices for consumers and stimulative prices for producers.

e) to relaunch the industrial production necessary for agriculture with support from the state (tools and machinery, fertilisers, irrigation equipment).

f) to develop and modernise the rural areas that demand state support, by developing central and local rural developing programmes.

Agrarian policy is part of the general policy that is based on the interventionist conception of the public powers to control production and support farmers' incomes through statutory mechanisms and instruments in order to influence the supply/demand ratio and market equilibrium.

The reforms applied to agrarian policies have stressed the orientation of agriculture towards the market, changing the application instruments and promoting the progressive disengagement of the public powers in making and guaranteeing the farmers' incomes.

For agriculture to become more competent and modern, national agrarian policies must be directed towards the regional ones and concord with the international treaties to which other countries have adhered. The biggest differences were noticed during the transition to the market economy and were caused by different levels of reform development.

Here are several agrarian policy goals subordinated to the general goals of economic policies:

- an increase in farm production in the case of scarce products of domestic consumption or export;
- a decrease in farm production in the case of surplus products to avoid market disequilibrium and budget costs;
- to provide food self-satisfaction and increase food security;
- to increase and stabilise the farmers' incomes through a permanent agricultural and integrated rural development;
- to develop ecological farm produce and preserve natural resources;
- to apply an incentive income and import/export tax system that will increase the budget incomes;
- to stabilise the balance of payments with the help of saveable currency;

- to increase the role and contribution of the agricultural sector within the permanent economic progress.

As far as the recent evolution of agrarian policy is concerned, it just be pointed out that although the government is now developing reform programmes, the budgetary constraints limit the actions. The unfavourable circumstances in the first transition years and particularly the degradation of the trade balance have led to the application of protectionist policies meant to protect the domestic market and encourage export through subventions. Here are some of the agrarian policy measures applied in Romania:

- farm produce price liberalisation was conditioned by a limitation to the basic produce in consumption;
- agricultural input price liberalisation that has led to higher prices and low and unstable incomes for the farmers;
- the elimination of subsidies for farmers before creating farm produce market institutions and legislation, which led to lower fertilising, quality seed acquisition and fewer investment loans because of high interest rates;
- the application of the direct subvention system for all agricultural producers, actually the arable land owners, which is a system that sends the budget resources to millions of owners and generates social production instead of using them for economic purposes.

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FINANCIAL POLICY WITH IMPLICATIONS IN AGRICULTURE

IMPLICAȚIILE POLITICII FINANCIARE ÎN AGRICULTURĂ

ELENA VOLLONCS*

This paperwork, Financial Policy with Implications in Agriculture, defines financial policy and sets its goals and the methods used for their achievements. The international experience of applying economic and extraeconomic methods is also pointed out. The economic methods include the economic-financial levels, while the extraeconomic ones include the directing and regulatory means applied by the public authorities.

Key words: *goals, measures, financial system*

Financial policy represents the set of principles and norms formulated on their basis and the procedures applied for creating and utilizing the public funds. Any financial policy must pursue a goal, a restrictive system that aims at achieving it and adequate achieving methods.

Based on the financial realities and the principles that guide the state financial activity, financial policy can be defined as an integrating activity of organising, directing and orienting public finance; this activity is carried on with the help of several methods, techniques, levels, measures, regulations and institutions with a view to achieving the goals of the field. Financial policy is elaborated at a macroeconomic level by power and state administration bodies for financial categories, but also at a microeconomic level, through financial levels and regulations.

Financial policy has always reflected the government point of view. The financial measures and decisions are marked by the social group in power. Therefore it is like a programme with objectives and methods and means used to achieve them and the social categories they address. In short,

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politically speaking, financial policy is the set of strategies elaborated and pursued by the government in order to obtain and spend money.

The objectives of financial policy concern the distribution of activity results, absolute employment, a general equilibrium between supply and demand and the adjustment of salaries and prices.

By nature, financial policy considers obtaining and using the resources required to satisfy public needs on account of producing by public services. Such an action allows for a economic income redistribution process, because the resources the government uses are directed towards new recipients that will use them in a different way than those who have created them. Allocating the public incomes to different activities and services is a complete and exclusive attribute of the executive power.

At present the free competition mechanisms are no longer operative, as economy has lost its self-regulation capacity. It is this state of affairs that accounts for the state interventionism in economy in order to avoid more and more frequent cyclic deregulations. In this process, the financial levels play a significant role; unemployment elimination and overcoming economic crises and constant economic progress are pursued at a larger scale. The orientations have in view both the corrective anticyclical measures, insufficient and somehow obsolete, and the preventive measures (avoiding the deregulations and stimulating the increase).

Transition economy countries, Romania included, have particular financial policy goals. These only cross parts of the goals pursued by the financial policy modern capitalist governments, as they have to answer other difficulties and urgent matters. On the other hand, as they reflect the strong national specificity, the common goals of the financial policies of the transition to the market economy are characterised by variable evolutions. From this point of view, Romania's experience is common up to a certain point.

The financial policy of transition must be elaborated according to the state tasks and subordinated to it. This means that:

- public finance reform must outrun the changes in other economic fields, because it is the main instrument and the material premise for their reform;

- the combination of the immediate goals with the medium and long-term ones generates continuity in financial policy and in the public finance operations in social life;

- the hyerarchisation according to task priority;

- categorising the objectives according to economic, not technical criteria, because not everything that is technically possible is also economically possible.

Public finance reform aims at adapting the financial system to the maturing market economy; it must start with the elaboration of a set of basic financial legislative regulations that creates the legal framework for the functionalities of the state finances during and after the transition. The process does not stop when this ends, as it is a continuing one; new laws will add to the initial set as the economic reform goes on, while others, null, will be abrogated.

In order to achieve the settled goals, the elaboration of financial policy makes us eof several specific methods.

According to the objectives, the concrete conditions and the traditions of a country, the financial policy methods can be economic or extraeconomic. The former include the set of economic-financial levels, while the latter are made of the directing and reglementation instruments through which the authorities intervene in constituting and financial resources fund directioning activities. Therefore the framework of the financial policy methods is economy leadership; through these methods, the leadership factor intervenes in economic phenomena and processes and influences them to achieve certain objectives. The economic-financial level is an economic category used by the state to act upon the economic interest of a given collectivity or each of its members individually in order to achieve a goal.

The mentioned levels are meant to act automatically when certain economic phenomena occur or when they are started by public decision bodies.

Financial policy uses numerous financial elements reflected in financial categories: taxes, fees, loans, interest, payments, grants, transfers, tariffs, prices etc. With their help, the state obtains its financial resources and distributes them to different destinations to finance public utilities. Used only for this purpose, they are not financial levels. They become as such only if they serve as leading instruments in the hands of the authorities.

State interventionism through economic-financial levels uses one or several such instruments that it usually combines. Whatever the levels and the way they are used, they are factors of economy and implicitly of its

dynamics, without hindering the market mechanism which it only directs towards the desired direction. This means that the intervention by economic methods will last, but the action of the methods is rather slow, because economy needs time to react to the impulses it receives. But the effects are lasting and intense. These characteristics are the starting point in choosing the intervening economic-financial levels. The most used are: the state budget, fiscality, state loans, currency, prices etc.

State budget interventionism as a strict accounting aspect that compares incomes with expenditures (the difference between them is either a deficit or a surplus balance) is one of the instruments used either to stimulate or to slow down economic progress, unemployment, prices etc.

Broadly speaking, the state budget includes the general state budget, the auxiliary budgets and the special treasury accounts. The general state budget or the ordinary budget includes the set of departmental income and expenditure budget and those that are not registered in these two categories. The auxiliary budgets are an exception from the principle of budget unity imposed by the special public services; these are separate and voted separately from the general state budget; every service elaborates a balanced budget determined y subventions to cover the expenses. The special treasury accounts have a number of particularities, i.e. they are nor definite; thanks their particular aspects, they become self-balanced when they are used correctly.

In contemporary economies and especially in transition economies like in Romania, the economic role of the budget is more and more important, as it is used as an instrument of influencing economic progress or correcting market mechanisms in order to prevent and attenuate possible crises. State intervention through budget proves that the public finances are no longer neutral and the role of the public expenditures as a means of influencing economic activities has increased. This state of affairs comes from the double position of the state as an arbitrator and economic agent. Through public expenses, the state is an "employer" and a "customer" As an economic agent, the state provides jobs for an important number of working people.

As a conclusion, it can be said that in contemporary economies, the budget has maintained its financial role and has contributed to resource mobilisation and redistribution according to its tasks. However, the budget has been given another major economic role, that of contributing to the

influence of the national economies and ensuring the general economic equilibrium.

The developed countries intervene in economy through fiscality (fees, taxes). The fiscal system includes a set of concepts, principles, methods, processes about a multitude of elements (taxables, quotas, fiscal subjects) among which relations occur as a result of tax planning, legiferating, settling and gathering and are managed according to the fiscal legislation in order to achieve the goal of the system.

The tax can represent a very important financial level through which the state can intervene in economy; it can encourage certain types of activities or limit others.

The economic policy principles refer to state intervention in economic life; the state intervenes either by introducing new taxes or by redimensioning the existing ones, the final aim being to obtaining new incomes.

The tax is a complex financial product created by man by extracting and combining simple elements. Operating in economy, it generates various effects at the financial and economic-social level. Administrative structures are organised to monitor, control and analyse the way the fiscal legislation is applied. These structures are part of the fiscal system.

The fiscal system has the following objectives: to finance the budgetary institution (resource distribution) to regulate the exchange economy (anticyclic). Its social goal is to redistribute wealth and protect the socially defavoured.

Unlike any other financial level, fiscality has proved its operating capacity in influencing circumstances, balancing the increase, controlling the consumption and production, incomes and prices.

The adjustments obtained with the help of fiscality are ample, immediate and lasting. The scope of the financial level is wide and includes any of the taxable activities.

With the help of the taxes, the government intervenes in production in order to extend, limit, reorganise or reorient it in view of certain objectives. The influencing method consists of increasing or reducing fiscality. Fiscality also regulates consumption; if it must be reduced, the higher taxes lower incomes and the solvable demand implicitly. When demand reorientation is intended, then by (indirect) taxes discriminations are introduced to limit the access to certain goods and services (which

become more expensive as the tax in included in the price). By an adequate customs tax elasticity, the states influence their economic exchanges abroad. Therefore the fiscal level regulates and directs the market mechanism in certain limits and the private finances are controlled by the state.

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THE PARTICULARITIES OF THE AGRICULTURAL CREDIT IN ROMANIA

PARTICULARITATILE CREDITULUI AGRICOL IN ROMANIA

DANIELA HARANGUS[*], RODICA BLIDISEL*

The particularities of the agricultural credit are determined by the specific of the economic agents activity in agriculture. Starting form the fact that agriculture is governed by specific laws , the agricultural credit should be adapted to this, so that it would have specific forms, different from other credit categories destined to other economic sectors. In its present form, we think that the Law of Agricultural Credit no. 150/ 2003 will not significantly support the Romanian agriculture.

***Key words**: particularities, agricultural, credit, Romania*

The agricultural credit being given and destined to economic agents in the area of agriculture has specific particularities regarding the activity of these credit beneficiaries.

In this transitional period towards market economy, agriculture, which is the main branch of material production, cannot be left aside the credit awarding process.

The solution for the present problems of credit in agriculture and the lack of perspective in the Romanian agriculture must arise from the consideration that agriculture is a strategic economic activity conditioning the development of Romania as a whole.

The specific of the agricultural credit is given by:

- the temporary character of agricultural production;
- the action of some natural and biological factors that come up in the agricultural production process;

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- the production period does not correspond with the work period, a specific that enforces a high degree of risk upon the agricultural credit;

- the different time periods (the time gap) between expenses and revenues by valuing the agricultural products;

- the long production cycle in agriculture, with implications upon the establishment of pay- back terms for agricultural credits, and also for the limit periods given by the banks;

- the low rentability in agriculture, which means giving credits with small incomes.

Also, the particularities and the specific of the production processes in agriculture lead to a higher need for credit in this sector than in the other sectors of national economy. Many times, the agricultural credit represents the only solution for an agricultural exploit which does not possess from the start the production means and the necessary work force.

The need for credit in agriculture is higher than in other economic sectors because of the following:

- the biological laws governing the production process in agriculture determines the regeneration of funds, of capital, to be made much slower than in other production areas and thus the need for credit is higher;

- the immobilization of funds in agriculture is also higher than in other sectors and the capital held by agriculturers is not sufficient;

- the land is expensive, but necessary and represents the main mean of production. The purchase of land becomes a higher and higher necessity for farmers because large family farms (10 to 30 hectares) are more viable and favorable for a national, market agriculture.

Besides the long or average term land credit, the agricultural credit also has other components, out of which the most important is the production credit or the exploitation credit, which is in fact the short term credit for the agricultural production of each year.

In Romania, in the transition period towards a market economy, the agricultural credit is a huge necessity because of the lack of technical and material base, inventory and capital , but mainly it is necessary for the new agricultural exploits newly founded after the revolution.

One of the the main problems with which the Romanian agricultural exploits have been confronted was the insufficiency of financial resources. The need for financial resources posed the following problems to the specialists, mainly after the year 1999:

- the continuation and perfection of the subvention system or,
- the awarding of credits for production and investment in the agricultural sector, with a small, supported rate.

The issues were somehow solved, at least at a theoretical level, by the issuing of the Agricultural Production credit Law no. 150/ 14.04.2003, a law destined to ensure the creation of modern agricultural exploits, exploits that are modern, efficient, oriented towards obtaining agricultural production for commerce and trade.

Beyond these arguments, and respectively the need to finance the Romanian agriculture, for Romania to enter the structures of the European Union, this cannot be achieved without an adequate legislation in the area, and especially without the Law of the Agricultural Credit, a law that would ensure the possibility of creating an efficient agricultural exploit, capable of producing competitive products.

Mainly, the Law of Agricultural Credit pursues the sustaining of current activities in the agricultural production, which are established on priority basis by the Ministry of Agriculture, Food and Forests by means of the agricultural credit. This support is materialized in the fact that the beneficiaries which return the credit and pay the income in terms stipulated in the loan contracts drawn with the banks, benefit of a budgetary allowance of maximum 30 % of the credit volume, computed at the level of allocated installments, allowance that will be established in differential manner, each year, by a decision of Government, at the proposal of the Ministry of Agriculture, Food and Forests.

It is remarkable that any delay in ripping and valuing production can lead to not respecting the terms for repaying credits and paying income, and therefore to the loss of the allowance from the state budget. It is to expect that the banks, using legislation, will impose to the beneficiaries credit terms that are strictly correlated with the period of valuing the production and the exigent unraveling of the crediting process.

We believe that, within the law, the formula that would provide beneficiaries of agricultural credits with the receiving of the allowance from the budget if they reimburse the credit in maximum 360 days from the release would have been more appropriate. So, the particularities and specific aspects of agriculture and the risks to which it is submitted would have been taken into account, together with the assurance of more flexibility in the crediting process, in the sense that the banks and the beneficiaries

alike would have had more freedom in negotiating the reimbursement terms, without the risk that the credit beneficiary would lose the budget allowance.

The banks anyway are very prudent in crediting agricultural activities and more than that, in the case of subvention credits, the banks strictly respect the law, preferring not to give such credits, invoking the lack of credit vocation in the client.

Thus it is very important that these credits destined to agriculture to have in view the specific and particularities of agriculture, because in this way they are inoperative and do not fulfill the task for which they have been created.

Another particularly important aspect to underline is that, in the present Romanian banking system, the credit beneficiaries have the obligation to pay monthly the calculated income, because commercial banks compute and register the income for the credits on a monthly basis, these incomes representing in fact the revenues of the bank. This aspect is non-concordant with the provisions of the no. 5 article in the Law of Agricultural Credit for production, which stipulates that " the reimbursement terms for loan installments and payment of resulted income are to be established in connection to the specific agricultural technologies, correlated with the period of production valuing." But it is difficult to presume that an agricultural exploit will have the monthly amounts necessary to pay the rate, before the valuing period for production. The issue is how will the bank proceed in the situation in which it gives credit to an agricultural exploit? If the credit beneficiary does not have the monthly liquidities necessary for the income payment, the bank will compute and register on a monthly basis the income in the beneficiary account, and it will constitute unpaid income as far as the bank is concerned, affecting, besides the priority order in payments for the beneficiary, also the agricultural exploit and the bonus indicators for it.

So the unpaid income in due term affects both the bank (the unpaid income is no revenue for the bank) and the agricultural exploit which benefits form that credit. In this situation, the banks will impose that the credit applicant to have his own funds at the time of the loan, and also to have his own funds to acquit the monthly payments, a fact that will restrain more and more the acces to agricultural exploits (especially for those with sole activity in the plant domain) to bank credits.

Starting form the fact that agriculture is governed by specific laws, the agricultural credit should be adapted for those laws; it should respectively have different forms form other credit categories destined to other economic sectors. In reality in this transition period, especially after 1999, the commercial Romanian banks treated agriculture in the same equal conditions with any other economic activity. This situation has led to disastrous results and to the further restraint of acces to bank credits for agriculture, having negative implications in the entire national economy. In the conditions in which the financing necessities for agriculture are high and insufficiently covered, the agricultural credit may constitute an instrument of stimulating the development of agricultural production, ensuring the premises for the profit of agricultural exploits.

Besides the fact that commercial banks are not interested to support agriculture by crediting, in nowadays Romania the system of credit cooperation (credit cooperatives) is very weak and confused by all sorts of reorganizing and downsizing, and does not represent a solution for the crediting of agricultural exploits, having in view that there is a very small amount of credits given to the agriculture workers by these cooperatives, namely under 1%.

The specific of the agricultural credit is also underlined in the Law of Agricultural Credit no. 150/ 2003. The agricultural credit is defined as an economical and financial instrument given by commercial banks for:

- the planting, sustaining and ripping of agricultural crops, and also for the sustaining and ripping of plantations;
- the acquisition from internal production or the production of chickens for meat and eggs, of pigs for fattening and of young sheep and cattle for fattening;
- the supply and processing of food, the insurance of medication and medical treatment necessary for animals, of current expenses for the maintenance and functioning of shelters, devices and necessary installations;
- the assurance of cultures and plantations against the damaging effects of natural risk factors and also the assurance of animals against the damaging effects of natural risk factors, diseases and accidents.

In its present form, we believe that the Law no. 150/ 2003 will not support the Romanian agriculture in a significant manner because:

- it does not specify how long after the reimbursement of credit and payment of income will the budget allowances be paid to the agriculture entrepreneurs;

- the credit is too little accessible for agriculture entrepreneurs who do not h ave the necessary resources to pay the monthly income;

- it leaves to specialists of the General Agriculture and Food Industry County Departments the obligation to verify, in the agricultural entrepreneurs, the destination of given credits in the conditions of the present law, an obligation which should imply the commercial bank which has given the credit;

- the documentation necessary to obtain the public funds (budget allowances) which is given to the beneficiary of the agricultural credit is very complex and difficult to realize by the agricultural entrepreneurs. It contains typified request forms, forms accompanied by documents regarding the use and reimbursement of credit, issued by the commercial banks;

- for the agricultural entrepreneurs it is difficult enough to obtain a guarantee from the Guarantee Fund of the rural credit, whose guarantee may represent up to 50% of the credit volume on short term and respectively up to 70% of the credit value on long term and average term.

The aspects mentioned above will make acces difficult for agricultural exploits to agricultural credit, slowing therefore the modernizing process of these ones.

The low rentability of the Romanian agriculture, the use of old methods and production technology, the lack of biological material that is suitable, etc, is due also to the insufficiency of the agricultural credit in what the volume and diversity are concerned.

The Romanian agriculture has a stringent need for credits. No country in the world can afford to neglect or let only at the chance of the market the agricultural activity and the food industry that ensure nutrition for the population.

Food security depends on agricultural prosperity, and agricultural prosperity is dependent on the flexibility and efficiency of the credit system for sustaining the agricultural activity in general, and especially on the flexibility and efficiency of the agricultural credit.

SUSTAINABLE AGRICULTURE AND RURAL DEVELOPMENT

AGRICULTURA SUSTENABILĂ ŞI DEZVOLTAREA RURALĂ

F. SALA*

Sustainable agriculture integrates three main goals: environmental, economic profitability, social and economic equity.
The agricultural sustainability concept moves beyond emphasis of farm level practices and microeconomic profitability to that of the entire agricultural system and its total clientele. This muss be one lever for rural development

Key words: *sustainable agriculture, rural development, economic profitability, social and economic equity*

Agriculture represent one activity to rural space and in many occurrence it is the major benefit source of this human community.

That basis component of the rural space, agriculture can participate to development this space and for this is necessary sustainable agriculture development.

Sustainable agriculture is much more of a process and a mindset than it is a specific set of procedures or rules. It is the development of a system that will take care of our present needs for food, fiber and other live resources without destroying or degrading future productivity, fig.1.

Sustainable agriculture to include a commitment to satisfy human food and fiber needs and to enhance the quality of life for farmers and society as a whole.

Due to intensive use of chemical substances like pesticides and chemical fertilizers for plants protection and growing the agricultural outputs (specific for intensive agriculture), the agricultural system has been stricken by serious environmental pollution. These methods to affected environment (soil, water, flora and fauna, agricultural outputs) and in ultimate the stability of human community live quality.

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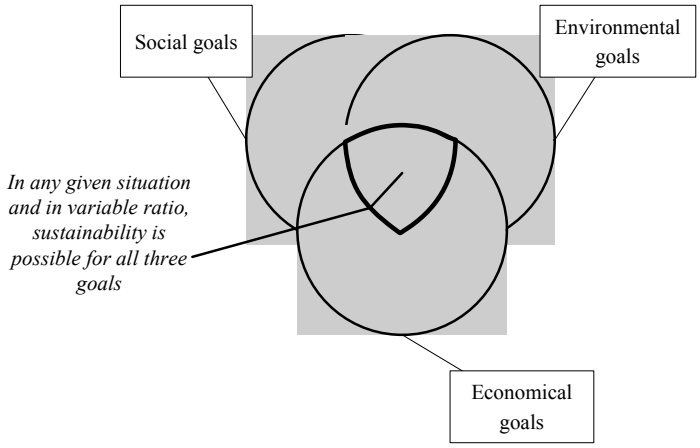

Fig. 1. Schematic representation of agricultural sustainability.

But the chemically substance excluding, to bee affected the agricultural system productivity and in ultimate the economic and social stability of the human community.

Therefore how is better and what must to make?

Every country, especially industrialized and economic developed ones, has been studying strategies to make the rural system self-sustainable, that is able to relay on natural processes and on renewable energetic resources, available in nature.

Sustainable agriculture must integrate environmental concerns with economic, social and cultural concerns.

Patricia Allen, in her papers 1994, considers sustainable agriculture to include a commitment to "satisfy human food and fiber needs" and to "enhance the quality of live for farmers and society as a whole".

Perhaps the most fundamental is *who and what do we want sustain* ? That is, which people and what structures are being sustained in our current system and which people and what structures do we sustain in our vision of the future?

Which is primordial: environment aspect, economic aspect or social aspect ? In human absentia, in the natural ecosystems the ecologic equilibrium is one question which are resolving by means of self-regulation mechanisms.

Out the human society the economic components are not.

In human community at first place are the social aspects. The environment and the economic components are a means and the social components, the human needs, are the intent.

Achieving agricultural sustainability requires recognizing that social, economic and ecologic systems are dynamic product of human choices, definitions, priorities and uses.

Environmental context. Agricultural practices specific to intensive agriculture, ranging from the development project to the use of pesticide and fertilizers agrochemicals, have often had negative environmental impact. Substituting environmentally sound inputs for those which are damaging is an important step in addressing the problems. But ecological sustainability requires intensive management and substantial knowledge of ecological processes, which go far beyond substitution and cannot be achieved merely by substituting inputs.

Social context. Agriculture both effects and is affected by the larger society. Farmer production decision determine the diversity and quality of foods available to consumers, and farm size and technologies have been associated with economic and social vigor of rural communities. At the same time, society determines what is possible at the farm level.

Economic context. Agriculture's reciprocal relationship with the overall economy is clear. The agricultural industry is a significant portion of the nation's economy: jobs were in some aspect of food and fiber production, distribution or service.

Studies and research to this trend, I have identified a set of key indicators of agricultural sustainability, fig. 2.

Each indicator is accompanied by a set of measurable attributes that provide the basis for sustainability assessments.

Thus, agricultural sustainability not only is a difficult concept to define but also is difficult to implement and monitoring. This complexity is illustrated in fig. 3 by showing the expected interaction among the three components of sustainability and five levels of influence.

It can see, economic and social components priority position for rural community and this components of agricultural sustainability determine actions with ecologic component.

CONCLUSIONS

The concept of sustainable agriculture present in this papers emphasizes that social goals are as important as environmental and economic goals, and widens the opportunity to move beyond the narrow agricultural priorities expressed in the past for the rural development.

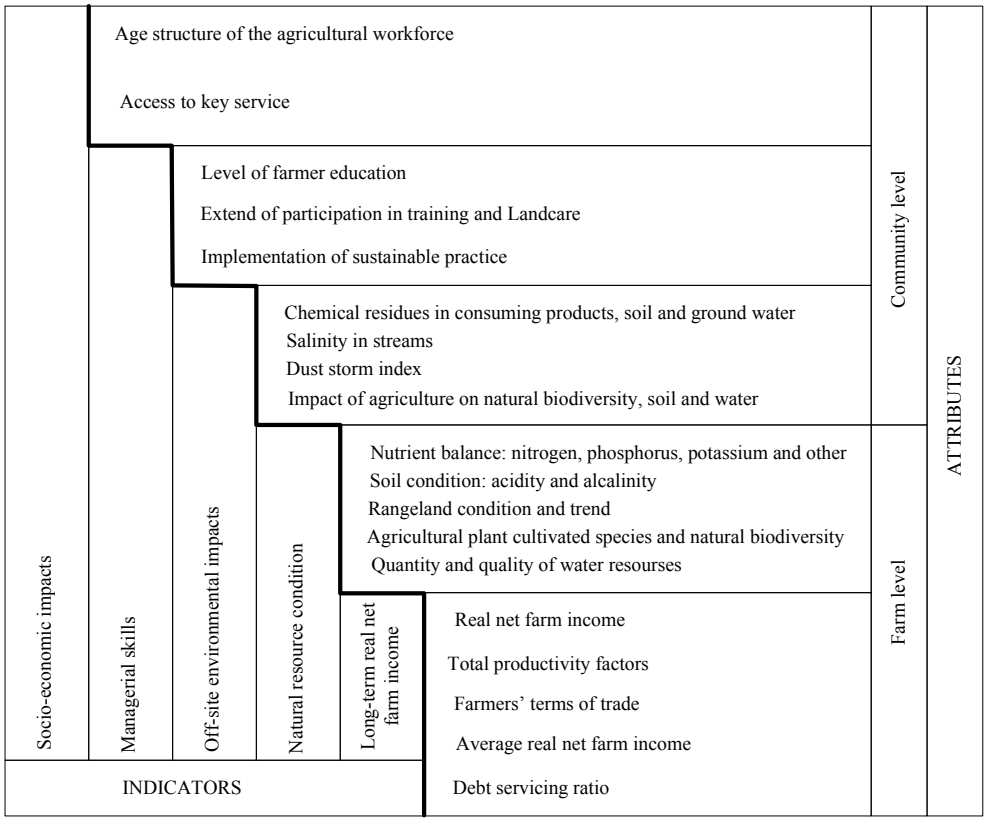

Fig. 2. Key indicators of agricultural sustainability.

Level of influence		Ecologic	Economic	Social
	International	**	**	**
	National	**	**	*
	Community (Rural community)	**	*	*
	Agricultural system	*	*	*
	Field	*	**	**
Primary * / Secondary **		Components of sustainability		

Fig. 3. Priority and interacting components of sustainability.

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WEB ADVERTISING

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Following the tradition of the media empires, the advertising advanced rapidly as a method to sustain the information web sites with revenues from the online advertising.

Key words: *Internet, Advertising, WEB*

Internet, today biggest global network of interconnected computers, was created to offer free information access. But after changing from a system used mainly by the education, reasearch and government sectors, to a commercial entity that can generate new business opportunities, the companies started to create business-oriented web sites. The first method of the online promotion were the web sites themselves. The next step was represented by the banners published on a web site, to attract visitors for another web site, followed by new models like sponsorship campains and pop up windows.

We observe an important online advertising spending growth, fuelled mainly by the e-commerce expansion, and also more and more web sites looking for advertising support. The Romanian internet market has the highest annual growth rate in the South-East Europe. Online advertising, like other promotion methods, tries to spread information in order to influence the existent or potential customers. The visitors can click on a banner to receive more information or they can do even the next step, buying the product in the same online session. Every element of the web page can have an interactive behaviour, becoming an advertising.

Internet is a marketing media that requires some rules and regulations to comply with, in order to to business in an efficient way. Online marketingul has completely changed the traditiona methods of

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transmitting the advertising messages, because the consumers are looking for information and advertising. They, and not the advertising sponsor, are initiating the communication.

SPACE

Traditional Advertising: The space is a good to be bought. It is expensive and finite. Whatever the size, you have to give up to information because of the cost and the limited space.

Online Advertising: The space is almost infinite and cheap. You can define different messages for different visitor types: those who are looking for information, those who are looking for the best price, or are value-oriented and so on. The text can be paired with images, video clips, statistics, etc.

TIME

Traditional Advertising: Time is also a good that can be bought on television or radio. It is expensive and limited.

Online Advertising: Time is what the visitors are spending. It is a good full of value for them for two reasons: they are spending to be online and they are also spending real time.

PICTURES

Traditional Advertising: Pictures are static or moving, with music, lights or action. The pictures are the main part, the information is secondary.

Online Advertising: Pictures are created with information. Since the tools for audio and video over Internet are at well defined, it has the advantage that the selling scenarios and product information can be presented like hypertext, allowing the visitor to change from an information to another at wish.

COMMUNICATION DIRECTION

Traditional Advertising: The television is transmitting pictures and messages for which the consumer's response is not available immediately. Some commercial are showing a free phone number for starting a relation with the consumer.

Online Advertising: The consumers are looking for the company's message but theya are also having access to information. They also expect to have an interactive communication, establishing a communication link with the company and receiving quick reponse, for example by email.

ACTION

Traditional Advertising: The requests are based on emotion

calling. For example "This offer ends this weekend!" or "Buy one and get one free!"

Online Advertising: The requests are information based. The consumers are searching answers for their specific questions. When the appropriate product exists and is correctly described, you have a higher chance to sell it than if you are calling for emotions.

The problem we have is to understand if the online advertising is more alike the traditional advertising that is based on the brand market awareness, or with the direct marketing that tries to establish links that generate sales.

Online advertising has three distinct advantages:

- Online advertisers can use new and precise tools to segment the market and customize the message to certain consumer types.
- Watching: you can know the way the consumers interact with the promoted brands. You can measure in the same time the answer to a commercial, that is very difficult to do using the traditional methods.
- Broadcastinc capability and online flexibility, an advertising is available 24 hours a day, 7 days a week, 365 days an year. More, an advertising campaign can be updated or cancelled immediately. An advertiser can monitor every day the results of the campaign, and if he observs that during the first weej there are few answers, he can change it with another one.

For many companies, the firs experience with Internet advertising was the definition of their own web site. The first sites were like brochures, basically printable materials published online, but they evolved to sites using advanced tecnology elements for their design.

Email promotion is more lika an electronic version of direct mailing.

For developping the best campaigns with high response rates, you have to elaborate plannings, considering a certain number of results of the e-marketing techniques:

Segmented lists: The database is segmented, based on the consumer preferences and behavior.

Oriented offers: The potential customers will answer to the messages that are suited to their interests. So we have to create specific messages for different types of targets that were previously identified.

Quality and not quantity: The answer rate can grow by offering useful and accessible information, specia prices and gifts.

Action request: The main objective of the campaign should be the future actions, for example: "Click on... (link toward more information)", "Buy", "Enroll in a contest", etc.

Text VS. HTML: The consumers should be able to receive text or HTML formatted messages, as they want. Some people prefers text instead of graphics.

No spam: Unsolicited emails are not recommended, because they can degrade the image of the company.

The newsletter is an electronic publication, usually periodical, that includes different information on a theme. The newsletter is also known as: e-zine, internet newsletter, webzine, etc.

Newsgroups are considered by some experts as the biggest communication systems existing today. Newsgroups can be used to send advertising messages by email or to create a database of online contacts.

Web advertising started with the rectangular graphics areas located in the web pages, called banners. There are three main categories of banners: static, animated and interactive.

Static Banners*:* are still pictures in a site. There were the first type of banners used.

Animated Banners*:* are pictures that move, rotate, change and have a certain form of action.

Interactive Banners: ***HTML Banners*** offer the consumer the possibility to insert data in the banner and select from a pull-down or radio button menu.

Rich Media represents an advanced technology banner, allowing the consumer to close a transaction inside the advertising, without leaving the site.

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REDUCING THE TRANSPORTATION DISTANCES, AN IMPORTANT MEASURE IN OPTIMISING THE MEANS OF TRANSPORTATION IN AGRICULTURE

REDUCEREA DISTANȚELOR DE TRANSPORT, O MĂSURĂ IMPORTANTĂ ÎN OPTIMIZAREA MIJLOACELOR DE TRANSPORT ÎN AGRICULTURĂ

ANCUȚA SIMONA PANEA*

Improving the use of means of transportation has complex economical consequences, of great importance both for each agricultural enterprise as well as for the entire national economy. The transport distance is one of the main factors for day by day productivity of the transport means. The organisational measures that may contribute to reducing the transport distances may be divided into three groups:
a. drawing closer the production place to the usage (storage place) of the products;
b. drawing closer the usage place (storage place) to the production place;
c. choosing the most corresponding movement runs..

Key words: *distance, reducing, optimising, mathematical methods*

Improving the use of means of transportation has complex economical consequences, of great importance both for each agricultural enterprise as well as for the entire national economy. The usage degree of the means of transportation in an agricultural enterprise is influenced by factors of subjective nature, as well as by objective factors. Among the latter we mention: the territorial dispersion, the low degree of mechanisation of loading and unloading works, the weak maintenance of field roads, neutralisation of different transportation modern methods (such as palletisation), the lack of some means of transportation adequate to the agriculture conditions etc. Below, we shall analyse how the reduction of

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transport distances operates over the rational use of means of transportation and the measures that have to be taken in order to optimise the use of means of transport in agricultural enterprises.

Reducing the transportation expenses, as a measure to lower the price of agricultural products, may be achieved in two ways:

1. reducing the transport work volume (the number of t/km);
2. reducing the transport expenses on the working unit (t/km).

But, the volume of the transport works is given by the quantity of products that need to be transported and the transport distance. Or, in order to reduce the transport expenses, the reduction of products quantities that shall be transported cannot be accepted (for example, the quantities of fertilisers or of seeds that must be transported in the field, or the quantities of harvest etc. cannot be reduced). So it results, that we must act upon the reduction of transport distances. On the other hand, we must take into account that the transport distance is one of the determining factors of the daily productivity of the mean of transport and of the level of transport expenses on the product unit.

The organisational measures that may contribute to reducing the transport distances may be divided into three groups:

a. drawing closer the production place to the usage (storage place) of the products;

b. drawing closer the usage place (storage place) to the production place;

c. choosing the most corresponding movement runs.

All these ways are in close connection, many times getting the desired result being achieves only by using in the same time the three measuring groups. In practice, the evolution of productivity and profitability determines (indicates) the method that must be used. You should always use that method which, with reduced expense of live and unmaterialized works ensures the best result. So, one of the measures that lead to reducing the transport distances is drawing closer the production place to the storage one (usage one). This can be achieved mostly by organising the agricultural enterprises, as well as with the occasion of collective farms field organisation. By collective farms organisation, as well as by inner organisation of the field, the surface is reduced and, by this, the transport distances of the products.

In order to reduce transport distances by organising the territory, a special attention must be given to the emplacement of tree and vine enterprises in proportion with the production centre, because moving away the land leads to increasing the expenses, especially to the highly productive species, to the intensive plantations and to those whose fruit is sensitive towards the transport distance.

The influence of transport distance on productivity of the transport mean and on transport expenses:

Transport distance	Duration of a two way run in minutes	Number of courses on a day	Quantity carried on one transport (t)	Quantity which is carried on a day (t)	Consumption of time on transport ed tone in minutes	Transportation expenses	
						Thousands lei/t	% towards the transport on 1 km
1	93,7	5,77	2,8	16,15	33,43	19810	100,0
2	97,4	5,56	2,8	15,57	34,68	20550	103,7
3	101,1	5,34	2,8	14,95	36,12	21400	108,0
4	104,8	5,15	2,8	14,42	37,44	22190	112,0
5	108,5	4,98	2,8	13,94	38,74	22960	115,9
6	112,2	4,81	2,8	13,47	40,08	23750	119,9
7	115,9	4,66	2,8	13,05	41,38	24520	123,8
8	119,6	4,51	2,8	12,63	42,75	25330	127,8
9	123,3	4,38	2,8	12,26	44,04	26100	131,2
10	127,0	4,25	2,8	11,90	45,40	26890	135,7

Besides the rational placing of tree and vine plantations, in order to reduce transport distances, the attention must be focused on the distribution of the culture on the enterprise territory (placement of crop rotation). In the case of field cultures, the forage and the organic fertilisers rise special problems, which represent quite a large volume of transportation. The task of forage transport is so much the bigger as the great volume that is being transported contains reduced quantities of nutritional unites. This must not lead to the conclusion that you must give up on the transport and forage use which contain small quantities of U.N. and A.D.(of the secondary vegetal products). As far as the cultures which are cultivated especially for forages are concerned, you must watch and analyse, the most economical way of

transporting them: in green condition or as hay. Thus, the production expenses with green forages are lower than those for hay, as a consequence of saving the expenses with tossing over the hay, gathering it, etc.

As far as the products to be transported from outside to the enterprise are concerned you can act in order to reduce the transportation distances, too. First of all, we think that you should watch that products that are difficult to be transported, those which have a relative small value from the economical point of view (or have a reduced transportability), should be obtained in each enterprise within the consumption limits. Thus, the needs of bulk forages and organic fertilisers must be covered from own production.

Finally, we must also add that a good organisation of transportation works removes useless transportation, leading thus to reducing the transport distances. In the same way acts, very strongly the choosing of the most rational runs for the means of transportation.

In reducing the transportation distances a special importance is given by the right placement of road network. A special attention should be paid to field roads, because they are projected as a supplement of the classified roads, so as the network of all the roads on the unit territory should ensure the easy movement of people, cars, charge transportation during the agricultural works, a good service of tractors used in field works and especially in product transportation from the respective field. It is not obligatory that every crop rotation device or field be served by roads, ensuring thus, the must economical transport distances.

The reduction of transportation distances and by this the transportation expenses, too, may be achieved by choosing the most corresponding runs. In this respect, the use of mathematical methods is of a real interest, as they find several applications in agriculture.

In solving the transport problems with the help of mathematical methods (linear programming) we suppose the homogenous products are transported, that is they can be used in the same purpose, no matter they are brought from. The methods of linear programming (of optimisation) allow finding an optimal solution in many transportation issues. They offer us the opportunity to determine with precision the most rational composition of the means of transportation that should correspond to the nature of the transported products and to the transportation ways, as well as to an optimal plan for the transportation of the products within the enterprise.

Below we present the way of introducing the problem and the construction of the mathematical model, concerning the reduction of transportation distances of the products in an agricultural enterprise (equivalent to the reduction of t/km that must be done).

The efficient use of the mathematical methods for the optimisation of transportation is possible only in the cases where there are at least three places of production and three places of consumption. In the cases where these limits are lower, the quantities of products may be distributed without optimisation calculations, too. The optimisation calculations may be done according to the solution way pursued, that is if a complete or an approximate solution is being pursued.

Let's suppose that an agricultural enterprise has on 6 lots cultivated green mass (that we mark with A1, A2, A3, A4, A5, A6) and it must be transported in 5 consumption places (that we mark with B1, B2, B3, B4, B5) . The problem suggested is to establish the transportation runs so that the transportation distances be the shortest and by this minimal expenses should be minimal.

The mathematical formula of the problem is the following, using the symbols listed below:

A_i (i = 1,2,…,6) –represents cultivated lots with green mass;

B_j (j = 1, 2, …,) – consummation places;

a_i - green mass production on crop rotation A_i;

b_j - the necessary of green mass at the consumption place;

m_{ij} - the distance from A to B;

x_{ij} - the quantity of green mass, to be transported from A_i to B_j.

The following conditions must be fulfilled:

(1) $\Sigma a_i = \Sigma b_j$ (i= 1,…,6; j=1,…,5)

This condition requests that the total of green mass quantity of crop be equal with the total of quantities that will be consumed at the respective places (marked with B_j). If the necessary for the consumption overpasses the production, then the possibility of reducing the consumption will be studied or if there may be other sources to cover the deficit. In the case where there are other places from where it could be gathered (for instance a natural hay field) then this shall be included, too in the optimisation calculation.

Another condition that is requested is the following:

(2) $\Sigma x_{ij} = a_i$ $\Sigma x_{ij} = b_j$

This condition shows that the green mass on any lot a_i as well as x_{ij} gets to one or several consumption places, and on the other hand, every consumption place needs the quantity x_{ij} from one or several lots, which is requested as necessary b_j. Finally, another condition that is requested is that none of the quantities x_{ij} that must be found, can't be smaller than zero, so it cannot be negative.

(3) $x_{ij}>0$

Only when these conditions are fulfilled, the solution corresponds to the final function to obtain the minimal total distance:

(4) $Z = \Sigma\Sigma\ m_{ij}$ $x_{ij} \rightarrow$ minimum

that is: the quantities of green mass found (x_{ij}) that must be transported from the lots A_i to the consumption places B_j result by multiplication with the respective distance coefficients (m_{ij}), the minimum of total covered distance.

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COMPETITIVITY OF AGRICULTURE-ALIMENTARY PRODUCTS

COMPETITIVITATEA PRODUSELOR AGROALIMENTARE

LIANA PATER[*], NICOLETA BUZILĂ[*]

The measuring of agricultural-alimentary competitivity is imposing, first to define the corelation quality-functions-competitivity for those products, correlation based on which is based the simplest evaluation of competitivity, by the fraction global quality / economical quality (price, if the complete information about economic performances of competitors are not availeble).

***Key words**: quality, functions, competititvity*

1. THE CORELATION QUALITY-FUNCTIONS-COMPETITIVITY FOR AGRICULTURE-ALIMENTARY PRODUCTS

In the world market competition the products have to be considered as global products on any market. This is the case for agriculture-alimentary products for which the global product can be distinctly defined (fig.1) for two moments of time.

- *The improved product* P_u, at actual moment, sold in the market, and
- *The potential product* P_p, at a future moment, when the new generation of product i will contain in P_u new components and new advantages for the final user/consumer SU and for the outside environments.

The measuring of agricultural-alimentary competitivity is imposing, first to define the corelation quality-functions-competitivity for those products, correlation based on which is based the simplest evaluation of competitivity, by the fraction global quality / economical quality (price, if the complete information about economic performances of competitors are not availeble).Table 1

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The correlation quality – functions – competitivity for a agriculture-alimentary global product *i*

<table>
<tr><th colspan="2" rowspan="2">Quality categories of global product i</th><th colspan="2">The groups { y_{ic}} of the global product characteristics i</th><th colspan="3" rowspan="2">Functions categories of global product i</th><th colspan="2" rowspan="2">Quality categories of global product i (after competitivity)</th><th rowspan="2">Compe-titivity K_i</th></tr>
<tr><th>Potential (t)</th><th>Availabili-ty (0...t_s)</th></tr>
<tr><td rowspan="9">Total quality N_i (y_{ic}) (c=1,..z)</td><td rowspan="5">Nutritive tehnical quality N_{ti} (y_{ic}) (c=1,..t)</td><td>Material caracteristics and component conexions j</td><td>Fiability</td><td colspan="2" rowspan="2">Intermediary functions {F_{ii}}</td><td rowspan="9">Global functions {F_{gi}}</td><td rowspan="9">Global quality N_{gi} (y_{ic})</td><td rowspan="10">Total quality N_i (y_{ic})</td><td rowspan="10">(1) Series proce-ssing

$K_{ims} = N_{gi}/N_{ei}$ (N_{gi}/P_{vi})

(2) Unique proce-ssing

$K_{iu} = N_{ei}/N_{gi}$ (P_{vi}/N_{gi})</td></tr>
<tr><td colspan="2">(requested by i product)</td></tr>
<tr><td>Structural nutritiv caracteristics and the connections with the outside environement (requested by SU)</td><td colspan="2" rowspan="2">Final functi-ons {F_{fi}}</td><td rowspan="4">Performance functions {F_{pi}}</td></tr>
<tr><td>Ecological characteristics (requested by MN)</td></tr>
<tr><td>Ergonomic characteristics (requested by MU)</td><td colspan="2" rowspan="3">Colate-raly functi-ons {F_{ci}}</td></tr>
<tr><td rowspan="4">Social-economical quality N_{sei} (y_{ic})(c=t+1..z)</td><td>Estetic characteristics (requested by MU, MS)</td></tr>
<tr><td>Social-culturale characteristic (requested by MS)</td></tr>
<tr><td colspan="2">Economical caracteristics (requested by ME)</td><td colspan="3">Costs and economic efficiency to the producer consumer and national economy determined by F_{gi}</td><td>Economi-cal quality N_{ei} (y_{ic}) (c=v+1,..z)</td></tr>
</table>

Legende: SU – user of the product i; MN – natural environement for the product i; MU – human environement for the product i; MS – social-culturaly environement for the product i; ME – economical environement for the product i

$$N_i = N_{ti} + N_{sei} = N_{gi} + N_{ei} \text{ [points]}$$

2. EVALUATIONS METHODS OF AGRICULTURE-ALIMENTARY PRODUCTS COMPETITIVITY

Generaly, the evaluation of the products competitivity is done with dvarious methods, being prefered the performances agregation method.

The corelation quality-functions-competititvity for a product i (Table 1) allows us to define **the „standard" components categories of total quality**, corelated whith standard functions of the product F_1,….,F_7:

- N_1 – the availability label, determined by the quality caracteristics y_{ic} of the materials and conections of the product components, of the accesibility, change parts, fiability etc. (correspondence $N_1 \leftrightarrow F_1$),
- N_2 – product identity quality level, determined by quality characteristics y_{ic} structurally – operable specific (correspondence $N_2 \leftrightarrow F_2$),
- N_3 the operable connection quality level of the product with its outside environment determined by the quality characteristics (in connection with energy networks, informatics and informational networks, connection embedding infrastructure elements (correspondence $N_3 \leftrightarrow F_3$),
- N_4 ecologic quality level of product determined by the quality characteristics y_{ic} which could alter the naturals environment (correspondence $N_4 \leftrightarrow F_4$),
- N_5 ergonomic quality level of the product determined by the characteristics y_{ic} which refers to the connection of the products with the human operator (correspondence $N_5 \leftrightarrow F_5$),
- N_6 the aesthetic quality level of the product determined by the quality characteristic y_{ic} which are defining the closeness to the subjective ideal perfection (correspondence $N_6 \leftrightarrow F_6$),
- N_7 the level of the socially cultural quality of the product determined by the quality characteristics y_{ic} which generates such effects (correspondence $N_7 \leftrightarrow F_7$),
- N_8 economic quality level of the product, determined by the quality characteristics y_{ic} : costs, price, producer's and user's economic efficiency, national economy.

Because of the big amount and diversity of the quality characteristics y_{ic} of the products, characteristics generally incomparable, the evaluations of the global or partial quality is done by aggregation, on the basis of the principal which has been described earlier at the competitivity quantification level. The absolute level of global quality will be determined based on arithmetic mean (N_{ga} – when the values of y_{ic} / y_{0c} and y_{0c} / y_{ic} with small variance) or based on geometric mean (N_{gg} – when the values of y_{ic} / y_{0c} and y_{0c} / y_{ic} with big variance):

$$N_{ga} = K\left(\sum_{c=1}^{m} g_c \frac{y_{ic}}{y_{0c}} + \sum_{c=m+1}^{v} g_c \frac{y_{0c}}{y_{ic}}\right) \qquad \text{[points]} \qquad (1)$$

$$N_{gg} = K[\prod_{c=1}^{m}(\frac{y_{ic}}{y_{0c}})^{g_c} \cdot \prod_{c=m+1}^{v}(\frac{y_{0c}}{y_{ic}})^{g_c}] \quad \text{[points]} \qquad (2)$$

where:

K = 1.000 (or K = 100) is the quality level of the 0 product of reference

c = 1,...,m is the amount of performances y_c whom values are increasing with the increasing of the quality level,

c = m+1,..., v is the amount of performances y_c whom values are decreasing with the increasing of the quality level,

g_c is the fraction of importance of the quality characteristic y_c for determining the quality level having obviously $\sum_{c=1}^{v} g_c = 1$

y_{ic} is the quality caracteristic of the studied product,

y_{0c} is the quality caracteristic of the reference product, usualy of the market/segment lider.

The confidence degree of the quality characteristic cnoledge y_c has to overcome a minimum level of about 60% of the total number of characteristics (v = 10 – 1.000), and the products i and 0 has to be from the same dimensional group (such as weight, format, installed power, useful volume etc.).

In order to determine the absolute level of quality N_{gi} the necessary information can be organized after the modal described in table 2. the fractions determination g_c is done with the method described in table 3, and the evolution of the quality characteristics y_c in comparison with the evolution of the global quality level N_{gi} is noted by: ↑ increase; ↓ decrease.

Table 2

Quality characteristics and functions for product i

Quality characteristic y_c		**Functions and quality characteristics y_c of the products**	**Quality characteristic identifications y_c**		**Products values**	
C. No.	**Fraction g_c**		**M.U.**	**Evolution N_{gi}**	**studied i**	**reference 0**
….	….	….	….	↑	….	….
….	….	….	….	↓	….	….

The steps of the functions fraction determination are:

1) It is assigned the fraction 1 to all the defined function (the lowest level) marking the 1 figure on the matrix diagonal,

Table 3

The principle of functions fractions determinations (importance) in the global function of the product (hypothetic)

The direction of comparison ←

	F1	F2	F3	F4	F5	F6	F7
F1	1	1	1	0	1	0	0
F2	0	1	0	0	0	0	0
F3	0	1	1	0	1	0	0
F4	1	1	1	1	1	0	0
F5	0	1	0	0	1	0	0
F6	1	1	1	1	1	1	0
F7	1	1	1	1	1	1	1
p_F	4	7	5	3	6	2	1
c_{isn}	0,3	0,3	0,15	0,05	0,1	0,05	0,05
p_{Fsn}	1,2	2,1	0,75	0,15	0,6	0,1	0,05

2) Is successively compared the "column" function with the "row" function from the point of view of a non-differentiated market, marking in the appropriated case:

- 1 figure if the "column" functions is considered more important then the "row" function,
- 0 figure if the "column" functions is considered less important then the "row" function,

Applying when needed the chronology principle, according to which, to equal fractions of the two compared functions it becomes more important the functions who must be realized earlier so as the global function to be accomplished ("the availability of the product" is less important that "the identity of the product" because the fiability exists only if the product exists and works),

3) It is obtained for the non-differentiate market the fractions p_F of the functions of the global function by summing the matrix columns, comparing when needed for the fractions p_F be distinct (the fractions array 1,2, ,n),

4) The global function of the product F_{gi} is measured by summing the component fraction functions $F_{gi} = \sum p_F$,

5) When needed, for the differentiated market/segment, the fractions p_F of the functions in the global functions is corrected with importance coefficients c_{isn} (obviously, $\sum c_{isn} = 1$), being possible the differentiated orientation of the conception, production and sale of the global product by the segment fractions $p_{Fsn} = p_F \cdot c_{isn}$ of the respected product functions,

6) The presented methods being a statistic study of the requested (needs & pay capabilities) from markets/segments, results the necessity of consulting a representative sample of users and statistical processing of the studied results of the market.

In the hipotetic case presented it shows clearly the different importance of the product functions in the non-differentiated market and in the segment „n" considered.

The evaluation method assembling the global quality level N_{gi} allows a very good positioning of the product in the market.

The global quality relative level is determined in function of absolute levels of determined quality $N_{r0i} = N_i / N_0$.

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MARKETING RESEARCHES THAT CONCERN THE MARKET OF BEER

CERCETĂRI DE MARKETING PRIVIND PIAŢA DE BERE

CAMELIA CIOBAN[*], I. JIANU[*]

In this paperwork it is presented a drawing up and application pattern of a questionnaire used as a marketing working instrument that concerns the market of beer in Timis County.

Key word: *market research, questionnaire, and sample.*

PROBLEM PRESENTATION

In order to determine the customer's buying habits, and to study the way they perceive the brand and the packing, there has been elaborated a certain questionnaire. This questionnaire has 12 questions that have been applied all over the county, in the urban as in the rural environment. The subjects have been chosen by random.

QUESTIONNAIRE DRAWING UP

When the questionnaire was set up, there came up the problem in establishing the themes, then the types of the question and the way they are to be questioned. It is very important the way the questions are formulated. Each question has been evaluated according to a list of references before; it got included into the questionnaire.

The questions were as follows: relevant – there were included only the questions which offer certain data that help to fulfil the objectives, clear – there has been avoided the jargon, complex terminology, long words, and ambiguous expressions so that the responders should understand the questions were invited to answer, harmless – the questions connected to sensitive subjects as the income, age, job, could be considered aggressive and they are usually asked at the end of the questionnaire, harmless , short – the questions

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with more than 20 words can very hard be understood by the respondent immediately, accurate – each question has been addressed to only one subject.

The following types of questions have been used when the questionnaire got drew up:

1. Closed known questions and as "sharp answer questions" that offers a limited number of answers.

2. Questions with tidy multiple closed answers

3. Open questions, for which the answer hasn't any fixed alternatives where to join, and so the respondent would formulate his own answer.

In the enclosed annex it is presented the questionnaire used for market research concerning customers buying habits and the way they perceive the brand and the packing.

RESULTS ACHIEVED/ACQUIRED

In the study accomplished, 81.95% out of those questioned drink beers, and the rest of 18.1% do not drink beer, (Q1).

According to the consumers' options for the brands of beer (Q2), the results have been as follows: 10.5% out of those who answered the question have not any special prefer for a particular brand, 32.7% always drink the same brand of beer, so they are loyal consumers, 56.8% prefer one or two brands of beer.

The most consumed brand of beer from the brands existing on the market of county Timis, is Timisoreana trademark (24,7%), followed by Tuborg trademark (16.4%), Stella Artois (11%) and Skol (7%). For the other brands that the consumers mentioned, the options go between 0.2 to 4.4% (Q3).

According to the frequency of the beer consumed during summer, the answers have been as follows, (Q4): 18.5% drink beer every day, 25.5% drink beer every two or three days, 22.4% drink beer every week, 27.5% drink beer occasionally.

The quantity of beer consumed every week varies in large limits from 100ml to 21 litres. The greatest proportion represents 1 litre consumed /week/each person, meaning 22.1% out of the total consumers of beer, (Q5).

The oriented criteria in choosing beer are as follows: taste 58.6%, flavour 14.9%, alcohol content 14.9%, price 15.2%, (Q6).

From the point of view of the tendency in choosing the beer, and after the packing or the brand, (Q7) the consumers' options were as follows:

30.4% out of the consumers guide according to the packing, 69.6% guide according to the brand.

According to the brands of beer with nice packing that exist on the market, the consumers' options have been as follows, (Q11): 37.9% out of the responders consider that there are not such packing, 38.6% think that there are brands of beer with nice packing.

81.7% out of those questioned consider that the existing packing are at the level of the high developed countries, while 18.3% believe that there still exist some differences, (Q8).

The brands of beer that draw attention through packing are Tuborg with 29%, Stella Artois 13.3%, Timisoreana 8.9%, Becks 6.9%, Liffe 6.5%, Ursus 5.6%, Carlsberg 4.4%, Corona 4.0%, Skol and Bergenbier 3.6%, (Q12).

Another very important aspect of this market study was to get information, that refer to packing attributes, size, form, colour, graphics and manufacturing material.

Concerning the materials used to manufacture the packing, 70.1% out of those questioned declared that the glass bottle is the most appropriate packing for beer, than the aluminium can with 21.3% and PET with 8.6%, (Q9).

Suggestions for packing perfecting, (Q10) refer to: size revising, shape diversification, more suggestive graphic for each brand in part, greater pallet of colours, an up-to-date design.

Materials the packing are made of: must not give out strange substances 15.7%, have to be easily handed and transported 6.9%, need to maintain the freshness of the liquids 6.9%.

It is desired to reduce the weight of the bottle 21.6%, to improve PET quality 33.2%, to improve the closing systems of the aluminium cans 6.9%, a greater diversity of the materials used to manufacture the packing 4.9%, recyclable packing 3.9%.

CONCLUSIONS

The packing has a very important part in the promoting, informing and protection functions.

Quality and cheap products, the products with a good aspect attract the consumers. They do not want to give up the conditioning advantages and modern pack: weight reduce and of the packing size, stocking and transportation facility, attractive presentation, product preserving and

protection.

The consumers, from the high levels, where the quality and the constancy of the image goes first, give a less attention to the packing and are less sensitive to its changing.

The greatest receptivity of the change of the packing reports to the persons from the middle market segments.

Part of the consumers are conscious that the environment protection means also packing recycling or reuse. As a result these consumers are to use glass bottles, which are considered to be the easiest to recycle. They also consider that the glass bottle protects the beer at its best quality, it is more hygienic, but unfortunately it is heavier and more fragile.

The aluminium can is considered to be fashioned, but also of a lower quality to preserve the beer than the bottle.

In the beer consumer's point of view, PET bottle is considered non-prestige packing, also because it came recently on the beer market.

As a result of the answers, we noticed that the consumers appreciate the quality of the existing packing. Although, there is required a slight/light modification in packing design. It is suggested to keep the classic line, and there will be added improved system of closing the bottles. And also there will exist more fashioned accents to the graphics, daring colours, more suggestive graphics for each brand of beer in part, and special graphics for holidays.

Also, it is desired to reduce the weight of the bottle and a non-conventional form for the bottle, an improvement to the quality of the bottles from PET concerning the properties if tightening, a greater variety of packing forms, specified to each brand in part, small capacity packing that can be emptied soon after the first opening.

There are made options for transparent packing that can visualise the content, packing that would not give up toxic substances, handled, transported and stored easily, made of recyclable materials.

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ANNEX

QUESTIONNAIRE

Q1) Do you drink beer?

1. Yes, I do.
2. No, I do not.

Q2) Which situation fits you the best, when you drink beer?

1. I always drink the same brand of beer; pass to Q3
2. Most of the time I drink one or two brands of beer; pass to Q3
3. I do not prefer a certain brand of beer; pass to Q4.

Q3) What brand (brands) of beer you usually drink? (no more than two choices) 1. _____

2. _____

Q4) What is the frequency of drinking during summer months?

1. every day;
2. at 2-3 day;
3. weekly;
4. monthly;
5. occasionally.

Q5) What the quantity (1) of beer you drink during summer months?

Q6) What criteria do you use when you choose to drink a beer? (hierarchy, the first 3, according to their importance)

1. taste;
2. flavour;
3. alcohol content (strength);
4. price;
5. another criteria, which one? .....

Q7) When you choose to drink a beer you look to:

1. packing
2. brand?

Q8) Do you consider that the packing of beer is at the level of the high-developed countries?

1. Yes, I do.
2. No, I do not.
3. If not, why? .....

Q9) Which of the following packing seems the most appropriate to (prefer) you for beer?

1. PET;
2. Glass bottle;
3. Aluminium can.

Q10) What suggestion can you give us to complete these packing in?

1. size;
2. shape;
3. colour;
4. graphic;
5. materials they are made of.

Q11) Is there any brand of beer that draw you attention especially because of its packing?

1. Yes; pass to Q12
2. No; pass to Q13
3. I don't know; pass to Q13.

Q12) If yes, which one?

ASPECTS REGARDING THE CHEMICAL COMPOSITION OF OSTRICH MEAT COMPARED TO OTHER SPECIES

ASPECTE PRIVIND COMPOZIȚIA CHIMICA A CĂRNII DE STRUȚ COMPARATIV CU ALTE SPECII

GH. NISTOR[*] , ELEONORA NISTOR[*]

Ostrich meat became a delicacy in Europe and USA, mainly due to the cow madness disease in the last decade. Ostrich meat has low intramuscular fat content relative to other species, which is one of the most promising characteristics of ostrich meat in marketing strategies of this product. Meat cholesterol content does not differ largely between species. Ostrich meat has between 76 and 96 mg cholesterol in a 100-gram serving steak, is higher in polyunsaturated fatty acids than either beef or fowl and is quite low in calories, with only about 120 to 140 calories in a 100-gram serving.

***Key words**: ostrich, meat, cholesterol, fat, calories*

INTRODUCTION

Nutritionists and doctors recommend decreasing consumption of several meats due to their high fat content. In contrast to many other meat products, ostrich meat is low in fat. There are only two or three grams of fat in a 100-gram serving.

Ostrich meat is high in iron and consistent with other lean meats with high protein. Ostrich meat like all other animal meats has cholesterol and it is somewhat typical in cholesterol levels with other lean meats. In contrast to other species where meat is sold as cuts or portions, ostrich meat is usually sold as individual muscles. Except for the neck and a pair of muscles from the back, all usable meat is situated on the hindquarters. Separable lean

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meat is 62.5% of the ostrich carcass, which compares with 65% for broiler fowl, 71% for turkeys and 64% for beef. In table 1, are compared the fat, calories, cholesterol and protein content in raw meat of ostrich and other species.

Table 1

Chemical characteristics of raw meat in different species/100g (data from Douglas R. –2001)

Species	Calor.	Prot. %	Fat g	Fat/acids			Choles-terol (mg)	Carbo-hydrates	Ca g
				Satu-rated %	Mono-unsat. %	Poly-unsat. %			
Ostrich	104	25.41	1.21	0.23	0.7	0.2	38.1	2.42	5.2
Chicken	161.7	31.2	3.46	1.04	1.27	8.1	84.3	0	15.0
Veal	277.2	26.6	17.3	7.4	8.0	0.7	89	0	10.4
Pork	317.2	27.7	14.1	8.9	10.1	2.5	97	0	3.5

As it can be seen in the table above, ostrich ranks well among other lean meats. In addition to total fat, the percentage of saturated fat is very low in ostrich meat. As regards the monounsaturated and polyunsaturated fatty acids, values for the ostrich meat are at the lowest among the other lean meats.

Ostrich meat is also quite low in calories, with only about 104 calories in a 100-g. In raw meat the cholesterol content in ostrich is much lower than in other meat. It is possible that the commonly held belief that ostrich meat is low in cholesterol arose because of the low intramuscular fat content. But this fat content however, is poorly correlated to cholesterol content. Cholesterol is mainly a structural component of cell membranes. Due to differences in the subcelluar distribution of cholesterol in muscle tissue, its content does not increase as intramuscular fat content increase. Ostrich meat is poorer in Ca content than chicken and beef but higher than pork.

Proteins content of the ostrich meat of 25,41% ranks among the other lean meat. The carbohydrates content in the ostrich meat is the highest among the other lean meat. Differences between ostrich meat and other lean meats exist also in case of cooked meat. Table 2 shows the main chemical composition of cook lean meats.

Table 2

Chemical characteristics of cooked lean meats /100g (data from San Giovanni in Marignano and Douglas R. –2001)

Species	Protein %	Fat g	Calories kcal	Fe mg	Cholesterol mg
Ostrich	26.9	2.8	140	3.2	83
Chicken*	28.9	7.4	190	1.2	89
Turkey*	29.3	5.0	170	1.8	76
Beef	29.9	9.3	211	3.0	86
Pork	29.3	9.7	212	1.1	86
Veal	31.9	6.6	196	1.2	84

* without skin

In case of cooked lean meats it can be observed that fat content of ostrich meat is the lowest among the others. The same thing is also justified for the cholesterol and fat content. In fact, ostrich meat may be used as a substitute for beef in almost any product, but due to the low fat content, it is often necessary to increase the pork fat content in recipes when used as a replacement for beef. However, the absence of fat causes a loss of sustained juiciness during chewing, largely due to the stimulatory effect of on salivation. As table 2 shows, only the turkey meat without skin has lower cholesterol content than ostrich meat. Ostrich meat has the highest iron content among the other cooked lean meat. Even in the cooked meat, ostrich has a lower protein content, except for a few amino acids, the consistency of the amino acid pattern between species remains markedly consistent. Table 3 shows the mineral composition in ostrich (in a few muscles), veal and broiler fowl meat. The low sodium content of ostrich meat has a distinct advantage for people who have to maintain a low-sodium diet. For the other minerals, as it can be seen the ostrich meat ranks well among the veal and chicken meat,with the mention that the magnesium content is higher in ostrich then in the other two lean meats.

Table 3

Mineral composition (/100-g edible portion) of ostrich meat compared to beef and chicken (data from Sales and Hayes-1996; Hollarnd –1993)

Minerals	**Ostrich**	**Veal**	**Chicken**
Ca	8	6	12
Fe	2.3	2.2	0.9
Mg	22	23	25
P	213	201	173
K	269	358	229
Na	43	63	77
Zn	2.0	4.4	1.5

CONCLUSIONS

1. The ostrich meat has the lowest cholesterol content among the other lean meats, is very safety and can be consumed by any category of people, even of those who have to maintain a diet.
2. Ostrich meat is very low in calories, among the other lean meats with limits between 104 raw meat and 140 in cooked meat.
3. The fat content is also the lowest among lean meats. The oil made from fat can be used in cosmetics and first aid –products (ex.burn creams).
4. The mineral composition of ostrich meat ranks well among other lean meats, except sodium which is lower which is an advantage for the ostrich meat consumers who has to maintain a diet.

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ASPECTS REGARDING THE CHEMICAL COMPOSITION OF THE OSTRICH EGG COMPARED WITH OTHER BIRDS EGGS

ASPECTE PRIVIND COMPOZIȚIA CHIMICĂ A OULUI DE STRUȚ COMPARATIV CU OUĂLE ALTOR PĂSĂRI

GH. NISTOR*, ELEONORA NISTOR*

The infertile eggs, those which are slightly damaged, or those with poor shell quality which are unacceptable for hatching can be available for human consumption. The contents of ostrich eggs constitute around 80-85 per cent of the egg mass, with the shell comprising the remaining 15-20 per cent of the whole egg mass. Fat content of ostrich eggs is somewhat lower than that of fowl eggs. However, the cholesterol content of ostrich yolk is in the upper range described for fowl yolk and the levels of saturated acid are higher in ostrich than in fowl yolk.

Key words: *egg, ostrich, amino acids, cholesterol*

INTRODUCTION

The ostrich egg is unusual for its large size, averaging 1500 g. This make the ostrich egg the largest laid by a living bird, yet is also the smallest in proportion to the body mass of the female. The ostrich egg averages maximum length of 15,3 cm and a maximum width of 12,3 cm. Ostrich eggs take approximately 48 hours to form and are laid
every two days on average. The number of eggs laid in a season can reach 100 if eggs are removed after oviposition. The chemical composition of the yolk and albumen of ostrich egg is very similar to that of the fowl egg (Table 1).

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Table 1

The chemical composition in ostrich and fowl eggs(Sales, J. –1999)

Nutrient (dry matter content)	**Ostrich**		**Fowl**	**Ostrich**		**Fowl**
	albumen			yolk		
	%	g	%	%	g	%
Moisture	88.7	802.1	87.9	50.6	160.6	48.7
Protein	8.9	80.5	10.6	15.0	47.6	16.6
Fat	-	-	-	31.3	99.2	32.6
Ash	0.87	7.9	0.6	1.9	6.0	1.0

As table 1 shows, the composition of the ostrich egg for moisture, protein, fat and ash, is very similar to that of the fowl eggs. However, there is considerable variation, in the protein, vitamins and mineral composition of the albumen, between eggs from ostrich and fowl, as it can be seen in table 2.

Table 2

A comparison of the nutrients in ostrich and fowl eggs (yolk with albumen combined without shell –Angel, 1993; Reiner &al. 1995)

Component		**Ostrich**	**Fowl**
	Moisture	75.1	74.7
	Protein	12.2	12.0
	Fat	11.7	12.3
Essential amino acids	Arginine	0.527	0.771
	Leucine	1.336	0.998
	Isoleucine	0.672	0.600
	Lysine	0.947	0.851
	Threonine	1.013	0.597
Non-essential amino acids	Alanine	0.316	0.644
	Serine	0.832	0.921
Vitamins	Vitamin A	5.79	6.15
	Vitamin E	0.04	0.01
	Pantothenic acid (mg)	0.75	0.38
Minerals (mg)	Ca	64.7	58.5
	Fe	2.51	2.25
	Mg	13.92	12.41
	P	196.71	237.9

Cholesterol content in the ostrich egg yolk has the lowest values among the eggs of others birds (Fig. 1). The cholesterol content in the yolk is average 1.98 (fresh matter) and 2.94 in dry matter. Cholesterol contents were found to be in the upper range in the chicken yolk and clearly over the content in quail egg yolk. Also duck and turkey eggs have higher cholesterol contents. According to Ternes et.al. (1994), average values for cholesterol in yolk dry matter are 2.5%. Corresponding contents of ostrich eggs were 3.94%. This values to be viewed in regard to yolk portion of the egg. Yolk portion of fowl eggs has mean values between 26 and 30%. A cholesterol portion in dry matter of the total egg in ostrich is about 2.39% compared to 1.6% in the fowl.

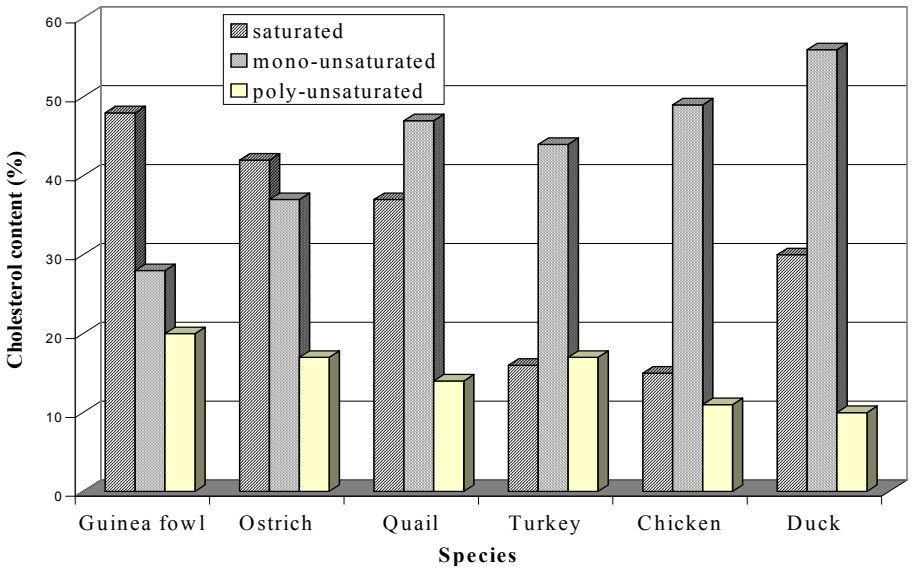

Fig.1. Cholesterol content in the yolk (data from Rainer et. al. 2000)

As figure 1 shows, in the ostrich and guinea fowl egg yolk prevail the saturated fatty acids, while in the quail, turkey chicken and duck egg yolk prevail the mono-unsaturated fatty acids. Only guinea fowls showed about 6% higher amounts than the ostrich. A similar picture can be drawn regarding to poly-unsaturated fatty acids. Ostrich yolks showed 6% higher values compared to chicken yolks and 7%

higher values compared to duck, for poly-unsaturated fatty acids. Mono – unsaturated fatty acids showed a vice versa behavior. With 28%, guinea fowl yolks contain the lowest portions, followed by the ostrich with 11% higher values and itself exceeded by other poultry yolks by 7 to 10 and even by 19 by the duck. As in the case of cholesterol, fatty acid profiles in fowl depend widely on food composition, age, laying performance and breed.

CONCLUSIONS

1.The composition of the ostrich egg for moisture, protein, fat and ash is very similar to that of the fowl eggs.
2.There is considerable variation, in the protein, vitamins and mineral composition of the albumen, between eggs from ostrich and fowl.
3.In the ostrich egg yolk prevail the saturated fatty acids, while in the other bird species egg yolk prevail the mono-unsaturated fatty acids.
4.The ostrich yolk egg contain less mono- unsaturated fatty acids then most of the other bird species eggs, and the most important higher polyunsaturated fatty acids, which help lower total blood cholesterol and are organism protectors.
5.An ostrich egg weighing 1500 g contains about 18 times as much of protein, 16 times as much of fat and 19 to 24 times as much cholesterol than a 58-g chicken egg.

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ALGORITHMS FOR SOLVING OPTIMIZATION PROBLEMS WHEN THERE ARE NO CONDITIONS REGARDING THE SIZE OF THE PRODUCTION FACTORS

ALGORITM PENTRU REZOLVAREA PROBLEMELOR DE OPTIMIZARE ÎN CAZUL ÎN CARE NU SE IMPUN RESTRICŢII ASUPRA MĂRIMII FACTORILOR DE PRODUCŢIE

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In this paper we have proposed an algorithm for solving the optimization problem if there are no restrictions regarding the costs of production factors.

***Key words**: optimization, production function*

1. INTRODUCTION

Difficulties often occur in practical problems especially when we try to find the extremes of a function of many real variables. Therefore it is necessary to study the algorithms and then to convert them into software.

2. MATHEMATICAL MODELS OF OPTIMIZATION PROBLEMS

Let's begin with the definition of extremes of real function of many variables. These are the points: $\left(x_1^{\,0}, x_2^{\,0}, ..., x_n^{\,0}\right) \in \mathbf{R^n}$, so that, if $\left(x_1, x_2, ..., x_n\right) \in \mathbf{R^n}$ we have:

$$f\left(x_1^{\,0}, x_2^{\,0}, ..., x_n^{\,0}\right) \geq f\left(x_1, x_2, ..., x_n\right)$$

for maximal points, and:

$$f\left(x_1^{\,0}, x_2^{\,0}, ..., x_n^{\,0}\right) \leq f\left(x_1, x_2, ..., x_n\right)$$

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for minimal points.

In most cases, in agricultural problems, a parabolic function is used and the variation limits of the production factors are known.

In order to present the problem, we consider a bifactorial production function, $z:A\subset\mathbf{R}^2\rightarrow\mathbf{R}$, $z=y(x,y)$.

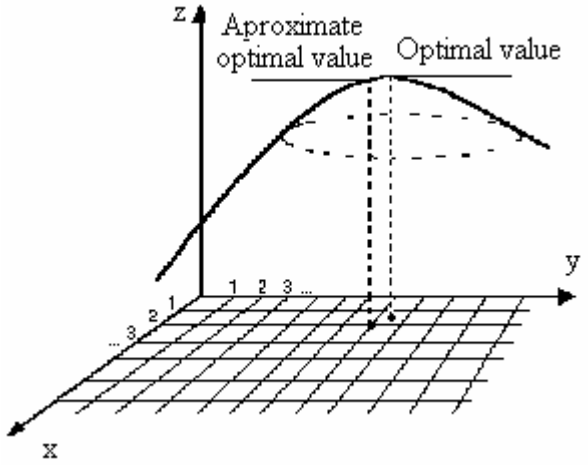

Figure 1

If we consider on the Ox and Oy axis, a division of "n" points, then Oxy plan, is divided in "n^2" squares with the surface identical with one unit.

It is obvious that we have too many points for an uncontrolled seeking of optimal in all these points, even if we limited the definition domain.

For example, if we have a division with n=200 units (the quantities of nitrogen or phosphorus doses for one hectare is often from zero to 200 kg. Thus, the number of squares is:

- for monofactorial functions,
$$n=200=2\cdot10^2$$
- for bifactorial functions,
$$n=200^2=2^2\cdot10^4$$
- for function with three variables,
$$n=200^3=2^3\cdot10^6\ldots$$

So, if we want to reduce the solving times, the seeking can be executed for a larger division than one unit. In this case the optimal values obtained are evidently distant of the exact optimal points. But we have found an approximate value regarding the optimal point, and thus we can seek the exact value near this point, using a shorter division.

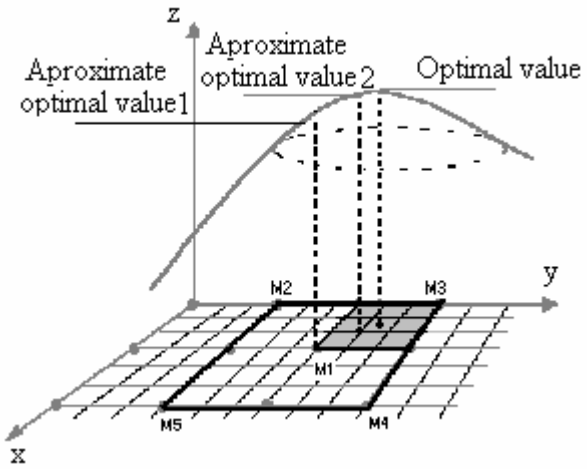

Figure 2

Thus, if we choose a constant division, which is equal to "p" units, and the approximate optimal returned value is the point $M_1(i,j)$, then the seek must be done for the values of the square $M_2M_3M_4M_5$, for:

$M_2(i-p,j-p)$,
$M_3(i-p,j+p)$,
$M_4(i+p,j+p)$,
$M_5(i+p,j-p)$.

For a function of three variables, y=y(N,P,K), we have proposed the next algorithm:

```
For N←1…100 repeat
        For P←1…100 repeat
                For K←1…100 repeat
                {if y(p*N,p*P,p*K)>max then
                        {max← y(p*N,p*P,p*K)} }
For N←1…100 repetă
        For P←1…100 repeat
                For K←1…100 repeat
                {if y(p*N,p*P,p*K)=max then Stop}
                write {Na=p*N,Pa=p*P,Ka=p*K}
For N←Na-p…Na+p  repeat
        For P←Pa-p…Pa+p  repeat
                For K←Ka-p…Ka+p  repeat
                {dacă y(N,P,K)>max atunci
                        {max← y(N,P,K)} }
        For  N←Na-p…Na+p  repeat
                 For P←Pa-p…Pa+p  repeat
                        For K←Ka-p…Ka+p  repeat
                                {if y(N,P,K)=max then Stop
 write max, (N,P,K).
```

3. EXAMPLE

a) Given the next production function, when, Y represents the corn production, N and P, the nitrogen and phosphorus doses. We have :

$$Y=2200+19.14N- 0.0832N^2+8P-0.05P^2.$$

Let's determinate the optimal point using classical mathematical methods :

$$\begin{cases} \frac{\partial y}{\partial N} = 19.14 - 2 \cdot 0.0832N = 0 \\ \frac{\partial y}{\partial P} = 8 - 2 \cdot 0.05P = 0 \end{cases}$$ and we have: $N = \frac{19.14}{0.1664} = 115.024;\ \ P = \frac{8}{0.1} = 80.$

If we apply the algorithm we have : N=115; P=80.

b) For the next production function

$$B=404+12.09N-0.0682N^2+4.06P-0.041P^2$$

that represents the variation of profit, if we assign various values of nitrogen and phosphorus doses, we obtain:

$$\begin{cases} \frac{\partial B}{\partial N} = 12.09 - 2 \cdot 0.0682N = 0 \\ \frac{\partial B}{\partial P} = 4.06 - 2 \cdot 0.041P = 0 \end{cases}$$ and, $N = \frac{12.09}{0.1364} = 88.636\ \text{kg/ha};\ P = \frac{4.06}{0.082} = 49.51\ \text{kg/ha}$

Using this algorithm we have: N=89 kg/ha, P=50 kg/ha.

CONCLUSIONS

Due to the undoubted progress in IT, or more exactly due to the increase of computers' performance (processing speed), solving the optimization problems in agriculture can be regarded under a new aspect: creating algorithms to lead to a much better solving of the problem, without being extremely focused on the algorithm convergence speed.

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TYPES OF ASSOCIATION AND COOPERATIVES IN ARAD COUNTY AGRICULTURE

FORME DE ASOCIERE ŞI DE COOPERAŢIE EXISTENTE ÎN AGRICULTURA JUDEŢULUI ARAD

R. GHERMAN[*], T. IANCU[**]

Agricultural association in general and agricultural association in Arad County in particular plays a major role in the county's economy, as this is the only way to excellent results in agricultural production not only in the present, but also in the future. The paper presents the results of one of the most representative associative structure in Arad County - Curtici Agroindustrial Farming.

Key words: *agriculture, association, cooperative*

Our farms are small and spread all over the territory and with little economic power, while our farmers are now in the situation of some inexperienced merchants who buy small batches of agricultural inputs from distant places, transports them using inadequate means, and then sell their production to intermediaries that are not yet organised in the logistic chains required by a modern market economy. It is true that the farmer must not concern himself with the agricultural input supply and production selling, so that he can focus on production exclusively, but it is also true that he cannot ignore the quality and price levels of his inputs and produce.

The idea of association and/or cooperation is a logical sequence of the fact that the farmer must focus only on the production process and also manifest a complementary interest in supply and delivery. Association has proved necessary to work out the marketing problems at the macro- and microeconomic level.

Although not as significant as in other counties, the place and the role of the associative system in Arad's current agriculture reveals the fact

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that agricultural association represents a way of improving agricultural production efficiency and capitalization.

The present paper describes and analyses the results obtained by a representative association for Arad County and even for the whole country — *Curtici Agroindustrial Farming.*

Curtici Agroindustrial Farming is an important cereal production unit with large land surfaces and an impressive global production and output per hectare. The unit has good output in technical plant growing, especially sun-flower, sugar beet and in the past years also soy bean.

The company was founded in 1991 on the framework of the former Curtici cooperative farm. At present it possesses over 5,000 hectares of arable land owned by 2,000 families, a capital of 5,450 million lei and a turnover that exceeds 14.078 million lei. The legal form of organisation — joint-stock company — according to Law 36/1991 has about 2,200 shareholders. Its registered share capital is 100% private. In 2002 the company had 2,192 associated members, 226 employees and 107 day workers.

Table 1 shows the park of tractors and farming machinery of the company:

Table 1. The park of tractors and farming machinery Curtici Agroindustrial Farming

Specification	Number	Specification	Number
U650 Tractors	38	Class combines	6
U445 Tractors	4	Balers	5
A1800 Tractors	1	Trailers	25
Fenalt tractor	1	Fodder combines for animal breeding	1
Challenger tractor	2	Trucks	9
PP3-30 Ploughs	36	Tanks	1
Drawn ploughs	2	Refrigerating tanks	3
Harrows	13	Harness	25
Adjustable-teeth harrows	1	Horsch sowing machine	1
Clod crushers	3	Gruber Horsch cultivators	1
Cultivators	13	Cereal drier	1
Rotary hoes	2	Aro	3
Fertiliser spreaders	2	Dacia	3
Manure spreaders	2	Jeep	1

Source: Curtici Agroindustrial Farming - internal data

As shown in the table above, the company has extended its park of tractors and farming machinery. Thanks to the productive performances obtained every year, it is among the very few, if not the only company in Arad County that is able to expand its farmland, park, directly productive employers and the activities that precede and follow the production (materials and raw material supply, extended product procession and capitalization.)

The total cultivated land in 2002 was 5.035 hectares. Table 2 shows the main crops:

Table 2. Crops, area and average yield in 2002 — Curtici Agroindustrial Farming

Crop	Cultivated area (ha)	Average yield (kg/ha)	Average yield (kg/ha) - Arad County
Wheat	1,615	4,862	2,538
Two-row barley	527	4,744	2,659
Oat	8	4,000	1,750
Maize - consumption	1,861	7,425	3,621
Sun-flower - consumption	268	3,507	1,669
Mustard	76	1,598	—
Field vegetables	5	19,000	10,538
Fodder plants	251	39.554	15,266
Maize - seed	141	1.773	1,000
Sun-flower - seed	120	1.283	850
Lucerne	62	935	—
Fruit-trees	101	5.102	—

Source: Curtici Agroindustrial Farming - internal data

The data in Table 2 indicate that the productions obtained by the company are definitely higher than the county's average productions. This is the result of the modern production technologies applied, the modern tractor and machinery park and the superior management of the company.

The economic and financial indicators shown in Table 3 reflect the company's impressive performance. The table also indicates that the company had the highest profit in 2002.

Table 3. Economic and financial indicators in US dollars— Curtici Agroindustrial Farming

	Indicators	Years			
		1993	**1998**	**1999**	**2002**
		1 USD = 1,276 lei	**1 USD = 10,951 lei**	**1 USD = 18,255 lei**	**1 USD = 33,500 lei**
1.	Share capital	17.379	138,138	82,867	45,156
2.	Turnover	1,231,457	1,682,129	1,576,110	3,357,069
3.	Total expenditures	754,123	2,153,684	2,435,640	4,402,065
4.	Total income	1,295,617	2,215,322	2,502,032	4,977,476
5.	Profit	541,494	6,1638	66,392	575,411

Source: Curtici Agroindustrial Farming - internal data

CONCLUSIONS

1. The form of agricultural association and cooperation in our country are still underdeveloped and limited to agricultural production. This is because farmer association is not supported enough and the capital is low. Solutions for developing and improving the efficiency of the associative forms must be found; such solutions could be the promotion of farm cooperatives in the field of agricultural production marketing, service processing, credit and insurance.

2. Agricultural association is the only way to obtain excellent productions both in the present and in the future.

3. Curtici Agroindustrial Farming, famous not only in Western Romania but also in the entire country, illustrates a perfect combination between the agricultural production and the activities that precede and follow it. The company has its own farm production processing units (a bakery, a slaughter house, and sausage and cheese manufacturing units), as well as shops that sell processed farm produce in Curtici and the city of Arad.

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QUANTIFIZIERUNG DER ÄNDERUNGEN UND AUSWIRKUNGEN DER AGENDA 2000 FÜR RUMÄNIEN

CUANTIFICAREA MODIFICĂRILOR ŞI EFECTELE AGENDEI 2000 CU PRIVIRE LA ROMÂNIA

I. BRAD[*], T. IANCU*, COSMINA TOADER*, P. MERGHEŞ[**]

This paper shows some of the changes all Romanian agricultural structures will have to undrego in order to acces the European Comunity.This is why the autor have approched some political strategies that are meant to make the agricultural from Roumanien, viable and, last but not least, to turn them into forms whose yield E. C. standards

***Key words*:** *Agenda 2000, Marktordnung, Prämien,Quoten, Szenario*

Die hauptsächlichen Änderungen, die für die landwirtschaftlichen Betriebe im Falle einer Integration spürbar werden, beziehen sich auf die Produkt- und Faktorpreise, auf die Direktzahlungen, auf unter Umständen einzuführende Quoten im Milch- und Zuckerbereich sowie auf die Flächenstillegung. Während in der Ausgangssituation in Rumänien nur eine Betriebsmittelprämie in Abhängigkeit von der Fläche in Höhe von knapp 50 DM/ha gezahlt wurde, sind es in den Szenarien auf die einzelnen Kulturen bezogene Hektarprämien. Darüber hinaus ist gemäß den Beschlüssen der **AGENDA 2000** eine obligatorische Flächenstillegung von 10 % der Marktordnungsfläche vorzunehmen. Ausnahmen fallen unter die Kleinerzeugerregelung, die bis zu einem Getreideertrag von 92 t je Betrieb reicht (BMELF, 1998). Diese Schwelle wurde auch im Modell formuliert, da sie gerade für die Betriebe auf dem günstigen Standort von großer Bedeutung ist. Bei der Umrechnung der Mengengrenze und auch bei der Festlegung der Prämienhöhe ist der regionale Durchschnittsertrag je ha

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Getreide heranzuziehen. Dieser wird von der Europäischen Kommission festgelegt und bezieht sich auf den Mittelwert eines fünfjährigen Referenzzeitraumes vor Beginn der Zahlungen, wobei das jeweils beste und das schlechteste Jahr unberücksichtigt bleiben (BMELF, 1998).

Da wie bereits besprochen die derzeitigen Erträge auf einem nicht befriedigenden Niveau liegen und in Zukunft vor allem bei Unterstellung von wirtschaftlichem Aufschwung von einer deutlichen Steigerung auszugehen ist, können die Durchschnittserträge der letzten Jahre, die bei Getreide etwa bei 3,3 t/ha für Rumänien liegen (COMISIA NATIONALA PENTRU STATISTICA, 1998), nicht zum Vergleich herangezogen werden. Auch die Erträge vor der Wende lagen mit ca. 3 t in den Jahren 1987 bis 1989 (FAO, 1989) auf diesem nicht repräsentativen Niveau und sind daher nicht verwendbar. Statt dessen wurde von einem Durchschnittsertrag von 5 t/ha ausgegangen, der multipliziert mit der Prämie von 63 EURO/t die Prämie für Getreide und Ölsaaten und multipliziert mit einer Prämie von 72,5 EURO/t (EUROPÄISCHE KOMMISSION, 1999B) die Prämie für Eiweißpflanzen ergibt. Auch für die Milchkühe sind Prämien vorgesehen, diese betragen 3,37 Pfennig je kg Referenzmenge (KOMMISSION DER EUROPÄISCHEN GEMEINSCHAFTEN, 1999). Da es in Rumänien noch keine Referenzmenge gibt, wurde bei der Bemessung eine Milchleistung von 4 500 kg/Kuh und Jahr vorausgesetzt. Die Prämie beträgt demnach 150.-/Kuh und Jahr. Die Rindfleischprämien kommen im Modell nicht zum Tragen, da die Nachkommen gemäß den formulierten Verfahren nach drei Monaten verkauft werden.

Von der Integration von Sonderregelungen wie beispielsweise der Unterteilung der Region in verschiedene Kleinregionen oder der Einführung einer Maisprämie und sich daraus ergebender Prämiendifferenzierung wurde abgesehen.

Bei den Interventionspreisen für die pflanzlichen Produkte sowie für Milch und Rindfleisch wurde von der Endstufe der AGENDA 2000 im Jahr 2002/2003 also nach Beendigung der Übergangszeiträume von der derzeitigen zur zukünftigen Agrarpolitik ausgegangen. Die sich daran anschliessende Frage bezieht sich darauf, welche Erzeugerpreise bei gegebenem Interventionspreisniveau tatsächlich entstehen. Hier wurden historische Daten aus den Jahren 1997 und 1998 aus Deutschland zum Vergleich herangezogen und entsprechende Abschläge gemacht (AGRARWIRTSCHAFT, 1999). Die Preise im Getreidebereich beziehen sich

auf die jeweilige Ernte, also dem Zeitpunkt an dem die Preise am niedrigsten im Jahresgang sind. Eine Erhöhung der tatsächlichen Preise ist allerdings auch nicht auszuschließen, vor allem dann, wenn die Weltmarktpreise ansteigen. Im vorliegenden Modell wurde auf die Formulierung dieser Überlegungen verzichtet. Die Preise für Ferkel und Schweinefleisch verbleiben auf demselben Niveau wie vor dem Beitritt, da es hier keine Intervention gibt. Es ist zwar erwartbar, dass mit Ansteigen der Getreidepreise auch die Schweinepreise in die Höhe gehen müßten, um die Rentabilität der Produktion zu sichern. Jedoch wurde in den Verbesserungsschritten bei den Produktionsverfahren der Schweinemast und der Ferkelerzeugung auch von deutlichen Produktivitätssteigerungen ausgegangen, so dass sich diese Effekte wieder aufheben.

Im Bereich der Zuckermarktordnung wurde davon ausgegangen, dass die derzeitige Marktordnung der EU beibehalten wird, obwohl diese im Jahr 2001 ausläuft und neu verhandelt werden muss.

Im Modell wurden die gültigen Interventionspreise (ca. 9,36 DM/dt Rüben) zuzüglich etwaiger Zuschläge und Schnitzelrückvergütungen angesetzt, so dass ein Endpreis von 10 DM/dt Rüben eingesetzt wurde. Die Einführung der Zuckermarktordnung würde bei Übernahme des derzeitigen Systems auch die Einführung der Quotenregelung nach sich ziehen. In welcher Höhe die Kontingentierung den jeweiligen Einzelbetrieb trifft, ist aufgrund der derzeitigen Verhältnisse nicht genau absehbar, da bei den neu entstandenen Familienbetrieben keine historischen Anbaudaten auf einzelbetrieblicher Ebene vorhanden sind. Da beide Standorte geeignet sind Zuckerrüben anzubauen, würde diese Produktpreiserhöhung von 4,50 auf 10 DM/dt die Rübenproduktion zweifellos zur mit Abstand rentabelsten Kultur machen, die Deckungsbeiträge würden in Abhängigkeit vom Standort und der Intensität auf Werte zwischen 2 600 und 3 900 DM/ha ansteigen. Die logische Konsequenz wäre eine Ausdehnung der Rübenproduktion bis zur Fruchtfolgegrenze, was im Anschluss daran zu deutlichen Überkapazitäten führen würde.

Um diese unrealistischen Annahmen zu vermeiden wurde der Anbauumfang je Betrieb sukzessive mit der EU-Integration auf 10 % der Ackerfläche beschränkt. Dies ist sogar mehr als es vor der Wende gewesen ist. Im Jahre 1989 wurden in der Region nämlich nur 17 500 ha Zuckerrüben, das sind etwa 3 % der Ackerfläche, angebaut.

Neben den Produktpreisen und den Prämien werden im Zuge der Integration Rumäniens in die Europäische Union auch die Faktorpreise, die Lebenshaltungskosten und damit die Löhne ansteigen. Zusätzlich werden neue Kosten entstehen, die bisher noch nicht existiert haben. Dies bezieht sich vor allem auf Versicherungen und Steuern. Den verwendeten Faktorpreisen liegen folgende Annahmen zugrunde

VERBESSERUNGEN IN DER PRODUKTIVITÄT

Dieses Szenario (PRODUKTIVITÄT) soll die Möglichkeiten umsetzen, die auf einzelbetrieblicher Ebene bestehen, wenn sich während der Planungsperiode keine Verbesserungen der Rahmenbedingungen ergeben würden. Es beinhaltet die Möglichkeit der Intensitätssteigerung in der Pflanzen- und Tierproduktion durch den verbesserten Einsatz der vorhandenen Produktionsmittel..Für sie gelten bei Mais und Soja dieselben Fruchtfolgerestriktionen wie in der Ausgangssituation für Körnermais und Leguminosen

Für die Zuckerrüben wurde zunächst eine Obergrenze von 25 % der Ackerfläche vorgegeben. Es werden allerdings keine Nettoinvestitionsaktivitäten und ebensowenig ein Fremdkapitalzugang zugelassen. Das Szenario stellt insgesamt nur einen Zwischenschritt zum folgenden dar.

VERBESSERUNGEN IN DER VERMARKTUNG UND FUNKTIONIERENDES KREDITSYSTEM

In der Referenzsituation haben die Betriebe nur begrenzte Lagerkapazitäten, die sich aus den empirischen Erhebungen ergeben haben. Außerdem erfolgt die Vermarktung der Erzeugnisse ausschließlich im Erntemonat. In diesem Szenario ist es möglich, die Verkaufsaktivitäten auf das gesamte Jahr auszudehnen. Damit sollen zusätzliche Erlösmöglichkeiten durch die Ausnutzung von Preiseffekten simuliert werden. Gleichzeitig sind Investitionen in Lagerkapazitäten möglich, um ausreichend Platz für die Lagerung der Produkte zu schaffen.

Weiter sind in diesem Szenario Investitionsaktivitäten für die Tierproduktion und die Möglichkeit des Einkaufs westlicher Maschinen für die Pflanzenproduktion vorgesehen. Dadurch werden auch beschriebenen

Verfahren mit der höchsten Intensität freigegeben. In der Tierproduktion wird als zusätzliches Verfahren die Möglichkeit des Ferkelverkaufs vorgesehen. Bei allen Szenarien, bei denen Kredit gewährt wurde, sind keine Mengenrestriktionen vorhanden, die Kreditverfügbarkeit besteht.

Die Szenarien gehen von einer Agrarpolitik der rumänischen Regierung aus, die bis zu einem Beitritt konsequent in Richtung der gemeinsamen Agrarpolitik der EU gerichtet ist. Dies schließt im Wesentlichen die Umsetzung der AGENDA 2000 sowie der beschriebenen Rechtsvorschriften mit ein.

Hierbei wird bei allen Szenarien die Verbesserung der Produktivität, eine verbesserte Vermarktung sowie praktisch unbeschränkter Zugang zu Fremdkapital in die Berechnungen mit einbezogen.

Die innerbetrieblichen Alternativen für die Betriebe, die in der vorherigen Szenarien formuliert wurden, wurden in die EU-Projektion vollständig übernommen. Außerdem wurde im Bereich der Tierhaltung eine GV-Obergrenze von 2,0 GV/ha angesetzt. Schließlich wird in den Beitrittszenarien unterstellt, dass die bestehenden Stallplätze ab dem Zeitpunkt des Beitritts zu ersetzen sind.

Die Weltmarktbedingungen repräsentieren bereits jetzt mehr oder weniger die Preis- und Kostenverhältnisse in Rumänien. Daher sind diese Bedingungen bereits in den Szenarien mit den verbesserten Verhältnissen auf betrieblicher Ebene repräsentiert und brauchen nicht gesondert berechnet werden.

Die Anpassung der Arbeitskräfte wird als zusätzliches Szenario mit abgebildet. Dies ist jedoch nur in den Fällen realistisch, in denen Wachstumsprozesse mit einbezogen sind, da nur in diesen Fällen auch davon ausgegangen werden kann, dass es genügend außerlandwirtschaftliche Arbeitsplätze gibt, die die Abwandernden aus der Landwirtschaft auffangen können.

Schließlich sind für die jeweiligen Anpassungen noch Varianten zu rechnen, welche die Möglichkeit des Flächenwachstums mit einbeziehen. Damit sollen insbesondere die Wirkungen eines weiteren Strukturwandels dargestellt werden, wobei auch der erwähnte mögliche Abbau von Arbeitskräften mit berücksichtigt wird.

Zu diesen Themen wurden zwei unterschiedliche Szenarien formuliert (INV. U. VERMARK-TUNG (+) und BEITRITT (+)). Diese beinhalten ab dem Zeitpunkt t_3 unter sonst gleichen Bedingungen wie die vorherigen, eine Freigabe der

Anzahl der Fremdarbeitskräfte und gleichzeitig der Möglichkeit, die vorhandene Nutzfläche um jährlich 10 % auszudehnen. Die Flächenausdehnung bewirkt, dass der jeweilige Betrieb, wenn von einer maximalen Ausschöpfung der Zupachtmöglichkeit ausgegangen wird, am Ende der Totalperiode etwa die doppelte Nutzfläche zur Verfügung hat wie zu Beginn. Ein Teil dieser Fläche könnte von den aufzulösenden Staatsbetrieben kommen. Ein anderer Teil von aufhörenden Privatbetrieben. Da die im Rahmen dieser Arbeit betrachteten Betriebe den oberen Größenklassen angehören, würde eine solche Verbesserung bedeuten, dass von t_3 bis t_{10} also in sieben Jahren voraussichtlich mehr als die Hälfte der Klein- und Kleinstbetriebe aufhören müßte, damit diese Situation eintreten könnte. Zu diesen Annahmen wurden insgesamt zwei unterschiedliche Szenarien gerechnet, eines mit und eines ohne EU-Beitritt.

Schließlich wurden noch zwei Szenarien gerechnet, die von einem EU-Beitritt ausgehen und eine modifizierte Agrarpolitik beinhalten. Kern dieser Betrachtung ist die Ausnahme von den Prämienzahlungen, und damit verbunden auch der Wegfall der Stillegungsverpflichtungen. Damit wird sichtbar, ob die Betriebe im Falle eines Beitritts auch ohne Direktzahlungen existenzfähig wären. Auch in diesem Fall wurden die Berechnungen ohne (BEITRITT O. PRÄMIE) und mit (BEITRITT O. PRÄMIE (+)) der Möglichkeit, die Flächenkapazität auszudehnen und die Arbeitskräfte abzubauen, angestellt.

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CONTRAVENTIONS TO THE HYGIENIC-SANITARY NORMS FOR FOOD AND TO THE HYGIENIC NORMS REGARDING THE PRODUCTION, PROCESSING, STORING, PRESERVATION, TRANSPORTATION AND DELIVERY OF FOOD

CONTRAVENŢII LA NORMELE IGIENICO-SANITARE PENTRU ALIMENTE ŞI LA NORMELE IGIENICE REFERITOARE LA PRODUCŢIA, PROCESAREA, DEPOZITAREA, PĂSTRAREA, TRANSPORTUL ŞI LIVRAREA ALIMENTELOR

STELA HAMZA*

The numerous and diverse prejudices brought to the natural persons in their quality of consumers, by ways of not observing the essential features regarding the quality of products and services, has determined the necessity to enforce some legal dispositions which would bring certain improvements with a view to defect and secure the rightful interests of the consumers. In this way was enforced the O.G. no. 87/2000 regarding the producers' responsibility for the damages induced by the defective products, by way of which are settled the judicial terms between producers and the injured or harmed persons because of the defective products marketed, is established the civil responsibility for the damages caused by these products, as well as the right of legal action in mending the injuries.

The economic agents who put in practice contraventions to the hygienic-sanitary norms for food and to the hygienic norms regarding the production, processing, storing, preservation, transportation and delivery of food, through which they may affect the life, health and safety of all consumers, are responsible for any deficiency concerning the food products quality and abide by the judicial consequences enforced by the legal dispositions, according to the art. 22 from the H.G. no. 681/2001, under which they are sanctioned in the following way: with a fine of lei 1,000,000 to lei 6,000,000 for – using the maintenance and cleaning personnel from

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the sanitary annexes and courtyards to maneuver the food or to preserve the cleanness of the tools or facilities used to process or store the food, as well as to keep clean outside the production facilities, within the sanitary annexes, courtyards and others with the help of the personnel working in the technological operations of food production, processing or handling; not performing the operations of hand cleaning the working sites, outfits, tools and packages according to the hygienic standards in force, as well as for laying down, even for the time being, directly on the sidewalk, within the courtyards or on the floors of the rooms, of the artificial ice, as well as of the containers and trays used to convey the bakery and confectionery products, meat, meat products and culinary semi-finished goods, for non-observing, within the collective nourishment units, the obligation to keep for 48 hours in a cool place, within clean containers, covered and labeled, one sample from every meal waited on, for not securing the endowment of the permanent and seasonal collective nourishment units with plates and dishes in number at least equal with the totality of the everyday consumers, when the cleaning and disinfecting are not provided for after each conveyance of the motor vehicles used to carry the food, when the provisioning of the food units that make and process food easily liable to deterioration is done in quantities that exceeds their capacity for storing and processing, as well as in case of not training and not certifying the workers of any unit in the food sector, in what concerns acquiring the basic notions of hygiene, accomplished through educational units authorized by the Ministry of Health and the Ministry of National Education. – On the basis of the Art. 23 from the same H.G., the following contraventions are sanctioned with a fine of lei 3,000,000 to lei 10,000,000: non-observance by the units or natural persons using hand trucks and stalls for trading goods, of the hygienic-sanitary conditions to deploy such activities, conveying and storing food as raw materials or semi-finished goods along with the finite products, which are consumed without technical processing, without ensuring the adequate conditions for the first category, non-observance by the food unit manger of the obligation regarding the daily check of the individual hygienic and health state of the personnel under his command, receiving within the unit the sick or recovering employees affected by catching diseases and without having a medical note (such a working place imposes certain rules of individual hygiene all around the working table by the persons dealing with maneuvering, conveyance, processing, sorting and delivering the food,

which the employees must know), also using the natural ice within the food units to preserve the food, without the notification of the territorial direction of public health, except for the fish, keeping the food in direct contact with natural or artificial ice or water originated from melting the ice, waiting on the drinks, fruits and vegetables cooled through direct contact with natural or artificial ice, except for the ice cubes made in the freezers, or the water for human usage, failing to isolate the sewerage pipes that go through the food production, processing, storing, waiting on and delivering facilities, as such to prevent the food spaces contamination with used waters, as well as environment pollution, conveying the food with vehicles unauthorized for this purpose, unfit and unequipped to ensure, all along transportation, keeping unaltered the nutritive, organoleptic, physical-chemical and microbiological features, just as the protection against dust, rain, insects, rats and any other possibility of pollution, degradation and tainting the products and packages, failing to assure and to observe the measures set by the norms in force regarding the sanitary protection of the products and consumers at the street delivery points of food and beverages, or displaying the pre-packaged food to sell in damaged packages, using within the laboratories and public food units of duck eggs to bake cookies, creams, ice-cream or any other products, as well as not requesting the notification from the territorial direction of public health in order to establish the place for gathering the natural ice and its storing conditions, not assuring the continuous functioning of the cooling spaces within the food units, control and recording the temperature, maintaining these spaces through the periodical performance of the repairs, sanitizing, debugging or, if the case, deratization, not providing with the adequate tools (pliers, spoons, forks etc.) for waiting on the unpacked food which is consumed without a technical processing, storing the packages within the facilities used for selling, production or processing, the spaces for walking, lockers or on the due sidewalks, the usage for collective nourishment of damaged kitchen dishes and tools, as well as poorly organizing the food production process, failing to achieve the one-way technological flow and favoring the crossing between the wholesome and unwholesome phases. Also, the art. 24 indicates the minor offences that are sanctioned with a fine of lei 3,000,000 to lei 30,000,000, like the checking on delivery and introduction in the production and processing phases of raw materials, auxiliaries, semi-finished or finite goods, with alterations and without ascertaining their

wholesomeness by the authorizes persons, on the basis of the quality certificates issued by the purveyors, nonobservance of the hygienic norms in force concerning processing and preserving the egg creams, mayonnaise and special meat products, non-observing the measures stipulated in the hygienic norms in force regarding ice processing, keeping, conveyance and waiting on, not assuring by the service and delivery units of the storing, show and handling conditions to preserve unaltered the nutritive, organoleptic, physical, chemical and microbiological features, not taking charge to fit the food units with equipment and technological furniture, to manufacture at the hygienic standard in force and to maintain the outfits in a continuously working condition; the same punishment is stipulated for not securing within the collective units of public feeding of the spaces and functional circuits set up by way of hygienic standards in force to storing, food processing and consumption, for not assuring, in all the food units, of accurate and continuous functioning of the apparatus for checking and recording the parameters that determine the wholesomeness of processing and keeping the raw materials, semi-finished and finite goods through sterilization, pasteurization, cooling, freezing, etc., as well as not taking care of storing and keeping the food in conditions to forestall the altering of the nutritive, organoleptic and physical-chemical characteristics and microbial contamination, packaging, conveying, storing and delivering to the population of salt inadequately iodized, without the fabrication date on the package or with the term of validity expired; the same punishment is applied for not securing within the units working in the food sector of production, processing, waiting on, storing, conveyance and selling of the running water for human usage fitting the quality status in force, distributed in hygienic conditions wherever is necessary and in sufficient quantities to cover the technological needs and for keeping clean the outfits, furniture and endowments, not performing periodically or as necessary the works for hygiene and revision of installations and equipment or the works for reconditioning and repairs of the food units buildings, in case of not observing the conditions set up by the hygienic standards in force regarding the fitting out, equipping and maintaining the food markets, fairs and cattle markets, not assuring within the food units of the cleaning, debugging and deratization operations, not providing the endowments and provisioning the food unit with outfits, tools and specific materials for cleaning, disinfecting and, when necessary, debugging and deratization, also displaying for sale or

placing in consumption food products with the validity term expired, using without a sanitary notification of inks and dyes to print or paint the packages of the food products, as well as the direct contact of food with the printed side of the packages, the usage to make the packages or to packaging food of materials sanitary uncertified, keeping in zinc-coated metallic vessels of liquid and half-liquid food, except for water, ethyl alcohol and edible fats, reusing the dishes and glasses for one use within the units of public feeding, as well as marketing the dishes and glasses for one use after having used them. According to the art. 25, it is contravention and is sanctioned with a fine of lei 10,000,000 to lei 50,000,000 – placing in consumption the counterfeited food or that which shows organoleptic signs of tainting, signs of infestation with parasites, remnants or symptoms of parasite activity, except for some products for which there are notified certain limits in the hygienic norms or state standards or marks of contact with rats, or show a taste and smell alien to the nature of the product, possibly taste, smell or mould spots, expect for the selected and admitted moulds, or content of chemical substances uncertified or above the limits allowed by the hygiene standards in force, or content of foreign bodies, except in cases when the norm stipulates a maximum permitted limit, content of alpha toxins B1 over the allowed level for cereals seeds and flours, dry vegetables, oleaginous seeds, ground nuts, nut kernel, concentrated hazelnuts and protean isolates of vegetables, etc., also the same punishment is stipulated for reconditioning the food products redrawn from consumption (being inadequate to the quality conditions), reusing as raw material the finite culinary products, mingling the forcemeat with the one with a heat treatment, as well as using repeatedly the edible fats for cooking and incorporating in products the fats used for frying, or using in the process of cooking the food products of adjutants or other chemical substances uncertified or banned by the Ministry of Health, or outrunning the concentrations in the case of those certified, using the industrial water for some technological operations within food industry units without having the recommendation from the territorial direction of public health, using materials of any type to make packages and containers for storing and conveyance, as well as outfits, tools and coverings for anti-corrosive protection meant to the food sector, and which do not show physical-chemical stability, which affect the organoleptic features of the food product and which do not provide an effective protection for it; in the same way are also sanctioned the use of packages, containers, tools and

outfits that are not in a perfect state of cleaning or sterilization, or using such items for food is case that they were previously used in other purposes than the direct contact with food, using to pack the food products of packages made out of offal, as well as using to get the pigments meant for the household items of cadmium sulphide, mercury, lead and chromium oxides.

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THE LEGISLATIVE SETTING REGARDING THE FORMAL CONTROL ORGANIZATION OF FOOD

CADRUL LEGISLATIV PRIVIND ORGANIZAREA CONTROLULUI OFICIAL AL ALIMENTELOR

STELA HAMZA*

The food control is accomplished through the inspections made by the authorized state's inspectors belonging to the qualified authorities, according to the art. 38, point 1 of the H.G. no. 681 from 2001 regarding the food control, who have the obligation to guard the secrets of manufacture and the data they came to know about the controlled units.
With a view to organize the official control of food, the Ministry of Health and Family, the Ministry of Agriculture, Food and Forests and the National Authority for the Consumers' Protection are qualified to adopt common settlements concerning the formal control of food.

The legislative and institutional setting in the field of the consumer's protection was set up to protect the consumers against some illicit commercial activities, to protect the public health, to certify the quality of products and services, the means of indicating the prices for the products offered to the consumers, as well as to make the producers responsible for the damages inflicted by the products with flaws, and there certainly is in the same time a necessary support to the economic agents, makers, importers, distributors, sellers, services deliverers in order to be able to detail the responsibilities, obligations, behavior and procedures that need to be followed for deploying a civilized commercial activity according to the law and in full respect toward the consumer.

The qualified authorities in executing the official food control are: - the medical-veterinary, phytosanitary and of technological control

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authorities, appointed by the Ministry of Agriculture, Food and Forests; the sanitary authorities, assigned by the Ministry of Health and Family; the authorities for the consumers' protection, appointed by the National Authority for the Consumers' Protection. The qualified authorities control the food on its entire circuit, from making to selling, according to the legal attributions and competencies in force.

The inspection includes the check of the raw materials, ingredients, technological auxiliaries and other products used to prepare and produce the food, the blank and finished articles, the check of the preservation methods, of the placing and hygiene conditions in which the food is been processed, the provision of drinking water, the check of the technological means used in food processing, labeling, the materials used in contact with the food, the means, procedures and materials used to sterilize units and equipment and to remove the residues. According to the legal dispositions stipulated in the art. 38, lines 4 and 6, the inspection contains checking the food safety and/or quality through laboratory analyses performed only within the official laboratories of the qualified authorities to carry out the formal food control, and the equivalent of the analyses is imposed according to the normative acts in force. Also, for the safety of the people's health, the inspection encompasses checking the people who work within the units that produce, process, store, transport or market food, in order to establish if they fulfil the health and hygiene conditions and, as a general rule, the inspections will be done without a preliminary warning. The art. 39 embodies the state's inspectors duties and prerogatives in the food control and entitle them to make copies of the materials and documents within the possession of those inspected or of references about them, but in the same time, they have to guard the professional secret and not to disclose to a third party the confidential or private information acquired during or in connection to the inspection, unless they are requested to do so by a judicial authority or by the inspected party. The inspectors who find or suspect any breach of the legal dispositions in force, will take actions according to the stipulations of those and can request during the control, if necessary, personal protection and support from the police forces.

In case it notices disobeying the legal stipulations of the normative deeds in force according to the art. 40 of the H.G. no. 681 from 2001, the authority appointed with the food control is entitled to ban the activity of the units that produce, process, store, transport or market food, as well as the

use of raw materials, additives, adjutants, packing materials, equipment, tools, outfits and decontamination substances; to declare the food improper to consume or unfit in quality, to limit or ban their use and market, to direct them toward conditioned consumption, use or commercialize in other purposes and to command their destruction according to the legal stipulations in force; to withdraw the working authorization of the makers and marketers of food, to notify the criminal investigation authorities in case that the ascertained facts can stand for offences; to temporary interdict the food batches marketing doubtful under qualitative aspect. The holder of the temporary banned to market food must secure suitable keeping and preservation conditions until their situation will be clarified. Also, the authority assigned to food control may apply fines for minor offences and the value of the applied fines is set according to the stipulations of the normative acts in force, whose infringement brings about civil, contraventional or criminal responsibility, as is the case, for instance, to make specious or counterfeit food is a crime and is punished in accordance with the Criminal Code.

INTER-MINISTERIAL AUTHORITIES WITH A ROLE IN CONSUMERS' PROTECTION

According to the stipulations of the art. 107 from the Romanian Constitution and of the art. 30 from the Government's Ordinance no. 21/1992 regarding the consumer's protection, approved and altered by the Law no. 11/1994, republished, with the subsequent modifications and completions, the Romanian Government adopts the H.G. no. 681/2001 concerning the setting up, organization and working of the Interministerial Committee for Supervising the Market of the Products and Services and the Consumers' Protection, denominated the Interministerial Committee and being a body without a law personality that runs by the National Authority for the Consumers' Protection, with a view to secure the reconciliation of the mechanisms and instruments regarding the domestic market of products and services, as well as to take charge of the consumers' protection.

The Interministerial Committee is directed by the State Secretary , the President of the National Authority for the Consumers' Protection, as President and, by default, the lead of the Interministerial Committee is

fulfilled by one of the Vice-presidents, appointed through an order of the State Secretary, President of the National Authority for the Consumers' Protection.

According to the legal dispositions by way of the art. 2 of the H.G. no. 681/2001, the Interministerial Committee takes charge of the collaboration between the bodies of the central public administration, on one hand, and the collaboration between these authorities and the civil structures, on the other hand, in order to develop and perfect the National system of supervising the market of the products and services, concept that symbolizes the total of the institutions, mechanisms, methods and procedures of control, needed to protect the life, health, safety and the economical interests of the consumers, as well as the environment, the improvement in the legislative and institutional setting in the field, that will fulfil the requests for the integration in the European Single Market, and the acceleration of the process of reconciliation between the national legislation and the communitary legislation in the field. The main attributions of the Interministerial Committee are to analyze and assess the current system for supervising the market in Romania and to study the current system for supervising the market of the products and services in the European Union, also, based on the accomplished analyses and evaluations, to make sure that the National system for supervising the market of products and services answers to the following requests: setting the responsibilities for the economic operators, clear delimitation of the attributions for the qualified bodies of control, demarcating the laboratories and the specialized personnel for control on the market of authorities that certify the concordance of the goods with the legal stipulations, during conception and production; stetting up the methods and techniques for control; transparence for the procedures and security for the mechanisms of inspection and control, as well as training the specialized personnel in controlling the market of goods and services and perfecting the procedures of informing and collaboration among the institutions competent in the field. In the exercise of its attributions, the Interministerial Committee works out reports concerning the development and perfection of the national system of supervising the market of products and services, as well as of the legislative and institutional setting in the field, which are presented to the Government by the President of the National Authority for the Consumers' Protection. The Interministerial Committee is ruled by the State Secretary, the President of

the National Authority for the Consumers' Protection, as president, and, by default of the president, the management is taking charge of by one of the vice-presidents, appointed through an order of the State Secretary, President of the National Authority for the Consumers' Protection; within the Interministerial Committee, the secretariat will be provided for by the National Authority for the Consumers' Protection. The Interministerial Committee meets quarterly and as many times as necessary, if summoned by the president, or, by his default, by one of the vice-presidents. The decisions of the Interministerial Committee are carried out by the authorities represented within it, according to the attributions that devolve upon them in accordance with the lawful settlements in force.

COMPOSITION of the Interministerial Committee for Supervising the Market of the Products and Services and the Consumers' Protection

CRT. No.	The name of the institution	The position in the institution of the representative in the Interministerial Committee	The representative's quality in the Interministerial Committee
1	The National Authority for the Consumers' Protection	State Secretary, President of the National Authority for the Consumers' Protection	President
2	The Ministry for the Small and Middle Side Businesses and Co-operatives	State Secretary For Co-operatives, Domestic Trade and the Relation with the Parliament and the Non-governmental Authorities	Vice-president
3	The Office for Competition	Chief of the Office for Competition	Vice-president
4	The Ministry for the Small and Middle Side Businesses and Co-operatives	Director	Member
5	The National Authority for the Consumers' Protection	General Secretary	Member
6	The Ministry of European Integration	Director	Member
7	The Ministry of Waters and Environment's Protection	Director	Member
8	The Ministry of Industry and Resources	Director	Member
9	The Ministry of Tourism	General Manager	Member
10	The National Authority for the Consumers' Protection	Director of the Board of Control and Supervision of the Market	Member
11	The Office for Competition	General Manager/Vice-General Manager	Member
12	The Ministry of Health and Family	Director	Member
13	The Ministry of Health and Family	State Sanitary Chief Inspector, the State Sanitary Inspection	Member
14	The Ministry of Agriculture, Food and	Director	Member

	Forests		
15	The Ministry of Domestic Affairs	Director	Member
16	The Central Financial Guard	Commissary-Chief	Member
17	The General Board of Customs	Director	Member
18	The Ministry of Public Administration	Director	Member
19	The Ministry of Public Works, Transportation and Dwellings	Director	Member
20	The Ministry of External Affairs	Director	Member

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THE FINANCIAL POLICY AND THE FINANCING DECISION

POLITICA FINANCIARĂ ŞI DECIZIA DE FINANȚARE

OANA MATEUȚ*

The financing represents the option of the enterprise to cover the needs of financing of its projects either through own funds, or through loans, or participation. The financing decision, though specific to every particular project, is in every case subordinate to the investment decision.

Key words: *Financing, financing decision, auto financing, financial policy*

The financial policy assumes the accommodation of economic entities to the conditions in which the society unfolds its activity, especially from the point of view of the rate and the means of capital growth, of the financing ways, of the use of the existing excess in some periods and the organizing of the power structure, of its internal lead.

At microeconomical level, that is the level of economic agents, the financial policy decision relies on the financial structure of the societies, on the profitableness and growth objectives, regarding also the possible risks. The decision regarding the way of financing on middle and long term of exploitation needs are decisions of financial policy, since they affect the financial state of the society, its profitability or risks for a period o many years.

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The financial policy is efficient if it manages to implement and correlate a double strategy: solvability and profitability. The successful achievement of this interdependence is influenced by a series of factors: constrains from the public power, inflation, energetic crisis, political frame in every country, etc.

The devising of a financial policy concerns the prompting of the financing needs for a certain time period, the choice of a indebting variant, of a financing manner through own funds or credits and relation between short term and long term financing needs.

In case of long term loans it is necessary for the society to have a clear view not only of the total needs of funds in order to purchase them in due time, but also of the way of purchasing, that is of the choice o the financing type which best meets its needs.

For the society it is rational to cover its immobilized actives and a part of its circulating actives through financing with permanent character. The use of credits to cover certain exploiting needs creates the possibility of growing the financial profitability of the society, but induces also a rise of the risk. The attitude towards credits, the choice of the loan policy of the society depends on its financial policy, that is on the objectives and the attitude of the administration of the society towards risks and the disponibility of different financing resources.

The financing decision represents the option of the society to cover its financing needs, the projects considered, either through own funds(internal financing), or through loam or participation(external financing).

The internal financing includes the monetary flows afferent to the retained profit and the amortization included in the periods expanses.

The financing decision belongs to every society and every specific program, and differs from one society to another, and from one project to another.

If the society is profitable, regardless of its financial structure(the ratio between the own funds and the loans used), it will not have trouble in obtaining the financing. It will be also easier to obtain financing if the obtained or previsioned profitability is higher than the financing costs of the project.

The choice of a financial decision consists in the choice between own funds and bank loans, the decision being taken by the administration.

Still the decision does not depend exclusively on the society, but also on the financer, on the facilities which the society can obtain in the transaction of the loans or from the auctioneers and the availability of these to subscribe to capital rises, on the demand and offer on the loan capital market, on he existence or nonexistence of availabilities on this market, etc.

If a society is profitable, it will find easier financing for its projects, even if its financial structure is indebted. The indebtness effect may act positively on the general profitableness of the society if the profitability rate is higher then the interest rate. if the investment is less profitable, that is if on the whole it does not cover easily the cost of the loan, then the own capital may seen cheaper than the loan; this estimation may often be deceiving because by giving the loans up, the society may deprive itself of a profit bringing economic growth. If the investment is profitable, the own capital seems expensive, because in this case the financial expenses do not diminish the taxable profit.

In order to elucidate the choice between the two financing ways, certain indicators have to be analyzed: the profitableness, the solvability, the liquidity, their incidence on the financial decision being:

-if the expected profitableness is higher then the interest rate, one can resort to loans, since the indebting contributes to the growth of the benefit mass and the rise of efficiency of the own capital;

-the financing decision through indebting has casually a positive influence over the solvability, but in case of losses the solvability deteriorates faster;

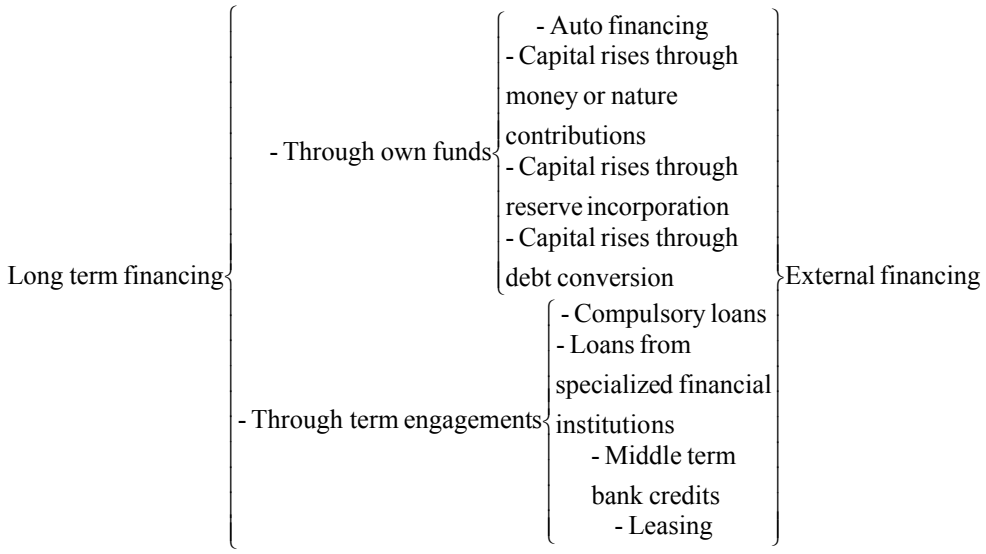
-the financing through indebting has positive influence also over the liquidity, but since the sources received through indebting have a limited time, it is necessary that the duration of use of the resources obtained with these does not surpass the term of the borrowed sums.

The long term financing of a commercial society assumes the covering of fund needs with permanent character or for long time periods. These funds may be obtained in different ways, depending on the concrete conditions of the society and the financial market. The long term financing ways are in close connection with the investment ways, forming altogether the financial policy of the respective society.

From the point of view of fund pertainance, we distinguish financings through own funds(auto financing, capital rises through money or nature contributions, capital rises through incorporating of the social

capital reserves, capital rises through debt conversion) and financings through term engagements(compulsory loans, bank credits, leasing).

In function of the effort lain in order to obtain them, the financing sources may be grouped in two categories: internal financings(auto financing) and external financings(capital rises and different loans).



The obligations of the commercial society which follow from its indebting policy translate into regular interest payments, which, together with annual reimbursements, constitute financial expenses. The more indebted the financial structure is, the bigger are the annual financial expenses, reducing benefits and auto financing possibilities.

From financial view, the connection between auto financing and indebting is more complex. Auto financing is almost every time a necessary

condition in order to obtain a loan, being at the same time a warranty and a reimbursement mean. In order to approve the requested credits, banks demand from the societies to respect certain indebting limits. In case of medium and long term credits, the condition is that the debt does not excel a certain multiple of the indebting capacity:

$$\frac{\text{term debts}}{\text{auto financing capacity}} \geq 4$$

Auto financing represents the capital gathering obtained during the accounting exercise. Auto financing is based on the auto financing capacity after dividend payments.

The auto financing capacity is generated by the size of the ammortisments and of the computed and not yet used provisions, as well as by the size of the net profit not yet distributed(reserves)([6]).

The more the auto financing capacity grows, the more rises the possibility of applying for credits. the societies which use credits hope to obtain positive indebting effects, in order to afford not only principal and interest payments, but also to obtain a profit which could eventually be used to finance new projects, that is to grow the auto financing capacity. This is accomplished in the moment when the economic profitability rate is bigger then the interest rate. From this point of view, the loan appears as an anticipated auto financing.

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ON THE EVOLUTION OF ROMANIA'S MAIN MACRO-ECONOMIC INDICES

EVOLUȚIA PRINCIPALILOR INDICATORI MACROECONOMICI ÎN ROMÂNIA

ELENA CLAUDIA SÎRBULESCU[*]

In order to characterise the economic development stage of Romania, we should analyse an ensemble of macro-economic indices that speak about condition, potential and economic level, economic structure, efficiency of production factors, degree of international competitiveness, and living standard.

***Key words**: macro-economic indices, internal revenue, economic development, and economic growth.*

Romania's economic activity has enrolled, these last years, a descendant trend, determined by the lack of consequence of macro-economic policies, by the maintenance of arrears in economy, and by the lack of firmness in the attempt of eradicating non-performing enterprises and of restructuring huge enterprises of the public sector and autonomous companies.

Nevertheless, the reform process has not had the desired consistency, which resulted in the persistence of macro-economic lacks of balance with echoes in the structural evolution of some indices and, particularly, in the evolution of efficiency at a macro-economic level.

During the last decade, the decline of the internal revenue was a significant one, its level in 2000 reaching only 82.9% of the one in 1990, as a result of diminishing activity and, therefore, added value in economy.

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Diminishing internal revenue was the result of decreasing production in the main branches of economy, together with decreasing labour productivity and increasing the share of intermediary consumption. The annual mean decrease rate of the internal revenue was of –1.9% between 1990 -2000.

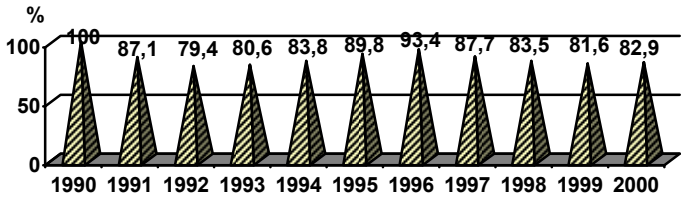

Figure 1. Evolution of internal revenue between 1990 - 2000 (1990 = 100)
Source: National Institute for Statistics

During the last decade there was a steady trend of raising the share of activities in the service sector to added value, unlike other branches. In 2000, industry and agriculture contributed 43.8% to added value constitution, compared to 67.8% in 1990.

In 2000, the greatest contribution to the constitution of added value was that of services (52.2% compared to only 28.8% in 1990). Industry contributed with only 31.0%, much less than in 1990, when its contribution was of 44.1%. A positive aspect is that in 2000 internal revenue came 64.5% from the private sector, 4 times more than in 1990, confirming the expansion trend of this sector, a steady one after 1990.

In agriculture, in building, and in services, the private sector is predominant (over 97% in agriculture, 80.9% in building, and 76.6% in services). In industry, due to higher costs in creating jobs and in maintaining development, privatising process had a slower evolution, its corresponding added value by private sector representing only 56-5%.

As for the use of internal revenue during the last decade, the final consumption of households increased from 65.0% in 1990 to 70.0% in 2000. The final consumption of public and private administration reaches levels 0.9% higher than in 1990. The increasing trend of this kind of consumption in the first years of the last decade steadily decreased, costs in this sector decreasing after 1995.

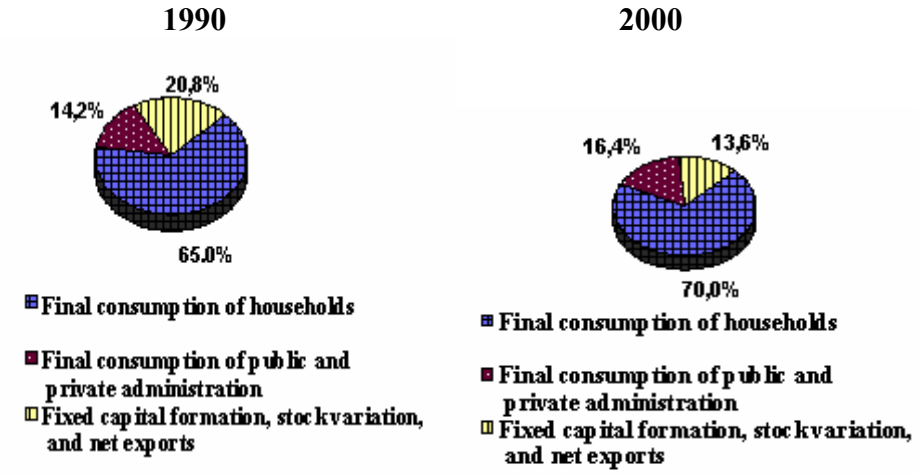

Figure 2. Structure of internal revenue per use categories in 1990 and 2000 Source: National Institute for Statistics

As a result of the increase of final consumption, fixed capital formation seriously decreased after 1990. This share has started lately to increase: 5.5% higher in 2000 than in 1999. The consequence was that the investment rate, representing the ratio between fixed capital formation and added value, reached 20.7% in 2000 compared to 20.2% in 1999, but still below 1996 (24.5%).

After a period of decrease of investments in economy, they have increased again in 2000 with 5% compared to 1999. The increase in 2000 represented exclusive contribution of the private sector, its investments having a 115.7% raise. Investments in national economy were done particularly on the ground of public funds and of funds from economic agents that together reached 67.6% of the total financing sources. Budget credits diminished their share in financing investments from 17% in 1999 to 12.5% in 2000.

Table 1

Evolution of the main macro-economic indices between 1990 - 2000

	1990	**1991**	**1993**	**1994**	**1995**	**1996**	**1997**	**1999**	**2000**
Internal revenue									
-Thousands of billion ROL, current prices	0,9	2,2	20,0	49,8	72,1	108,9	252,9	539,4	796,5
-Billions of ECU/EURO	:	25,1	22,6	25,3	27,4	28,2	31,3	33,1	39,9
Internal revenue growth rate % (compared to previous year)	-5,6	-12,9	1,5	3,9	7,1	3,9	-6,1	-2,3	1,6
Internal revenue per inhabitant									
-Thousands of ECU/EURO	÷	1,08	1,00	1,11	1,21	1,25	1,39	1,47	1,78
Internal revenue growth rate % (compared to previous year)	-5,8	-12,8	1,7	4,0	7,4	4,3	-5,8	-2,1	1,7
Contribution of private sector to internal revenue %	16,4	23,6	34,8	38,9	45,3	54,9	60,6	63,3	64,5

Source: National Institute for Statistics

Analysis of synthetic indices emphasise a few defining traits of economic evolution in 2001, leading to the conclusion that during this period – though a relatively short one – there was an important improvement of macro-economic balances. The **growth** is also significant as **economic development** in the first semester was accomplished within a less favourable international context, characterised by a slow economic raise in the developed countries.

Romania's development during this period of time has two major features:

• Economy is recovering growth as a result of regress, concretised in a decrease of the internal revenue of about 13% in 1997-1999 (it is the only

country in Central and Eastern to record such a decrease of the internal revenue during these last years);

• Economy is in a transitory phase, if we take into account the restructuring/adjustment processes.

Significant fluctuations of the internal revenue after 1990 and the long recession periods are the partial result of improper management of economic policy and of objective difficulties in accomplishing a massive restructuring of the State sector. The amplitude of problems that had to be solved and their possible social impact have acted as restrictive factors of competitiveness.

Romania's economy has recorded significant progress from many points of view. The role of State in economy substantially decreased due to the privatising process that has steadily accelerated, its share being important only in processing industries. For a long period of time increase of the private sector was accomplished in commerce and services, fields with a small added value, while delayed privatisation in the productive sector resulted in insufficient investments in this sector, in general, and in branches with high added value, in particular. These last years, however, the process of capital constitution has resumed, due to the increase of private property share in the productive sector.

The structure of the internal revenue (see Table 2) shows structural lack of balance that Romania's economy still has to face.

After 1990, internal revenue had an oscillating evolution, the periods of increase failing to ensure recuperation of losses in added value during decrease periods. In 2000, internal revenue increased – in real terms – with 2.1%, this year being the first one of economic growth after 3 years of economic activity decline. The increase of the internal revenue in 2000 was the significant result of the higher activity volume and, implicitly, of higher added value in industry (+5.9%), building (+6.3%), and services (+5.5%), that together reached about 70% of the internal revenue.

Table 2

Evolution of the internal revenue (calculated upon the exchange rate ROL – EURO/ECU at the end of the year) between 1998-2001
Millions of ECU/EURO – current prices

Categories of resources	**1998**	**1999**	**2000**	**2001**
Agriculture	4.082,91	3.843,59	3.528,56	5.378,14
Forestry, forest domain and hunting, fishing and fish culture	122,04	128,16	162,28	170,65
Industry	7.680,08	7.383,43	9.100,37	11.797,44
Building	1.488,05	1.493,48	1.628,98	2.051,80
Trade	3.941,45	4.069,60	4.204,67	5.105,53
Transportation and warehousing	1.865,99	1.853,86	2.075,16	2.452,43
Mail and communications	912,16	1.107,79	1.256,57	1.516,77
Finance, banking and insuring	517,88	518,25	512,63	619,09
Real estate and other services	3.319,85	3.794,55	4.327,90	4.926,48
Government, general level	1.003,57	996,97	1.434,62	1.796,09
Education	783,26	891,57	964,45	1.197,83
Public health and social assistance	644,39	588,78	653,66	796,90
Financial intermediation services, indirectly estimated	-435,15	-458,61	-355,90	-412,51
Added value	25.926,46	26.211,41	29.493,95	37.396,64
Product taxes	3.112,81	3.360,78	3.651,39	4.360,94
Import taxes	458,20	395,10	375,31	324,17
Production subventions	-267,08	-196,01	-193,49	-216,86
Total internal revenue	29.230,39	29.771,28	33.327,16	41.864,88
Internal revenue per capita (EURO)	1.298,97	1.325,64	1.485,48	1.868,27
Share of private sector of the internal revenue (%)	61,4	63,7	65,6	67,9

Source: Statistical Yearbook of Romania, 2002

In 2001 and 2002, as a result of maintaining a higher level of industrial and building activities, and particularly on the ground of the development of services, the internal revenue recorded spectacular increases – 4 times higher than the mean in the E.C – the internal revenue recorded in 2002 thus reached a record value of 1,512,256,600 billion of ROL, i.e. about 43.3 billion EURO (1 EURO = 34,919 ROL).

Despite all this, the internal revenue per capita (standard buying power) was in 2001 of only 5,620 EURO, i.e. 4 times smaller than the average in the E.C. (15) and 2-3 times smaller than in the new member states (The Czech Republic – 17.180 EURO, Slovakia – 16,830 EURO, Hungary – 13,455 EURO, Poland – 9,406 EURO).

From a structural point of view, the share of the branches to the creation of the internal revenue indicates an improvement of the proportional state, but also an evolutionary trend to modern structures,

characteristic for developed economies. Thus, in 2002, agriculture and forestry contributed with 11.7% to the formation of the internal revenue, industry with 29.1%, building with 5.0%, and services (trade, transportation, mail and communications, tourism, hotels and restaurants, public administration and defence, health and social assistance, etc.) with 44.7%.

Table 3

Role of agriculture in national economy (%)

	1995		**2001**	
	Romania	**UE**	**Romania**	**UE**
Contribution to the internal revenue	19,3	2,2	12,8	1,7
Share of employed population	33,6	5,5	40,8	4,3
Share of export	:	6,8	2,52	6,2

Source: *Statistical Yearbook of Romania, 2002*

Compared to 1990, services – both those destined to the population and to enterprises – directly conditioned by the increase if incomes and by the improvement of the functional feature of market economy have recorded a significant process in 2002. This sector has increased its share of the added value, its level increasing with almost 13% (from 32.3% in 1990 to 44.7% in 2002).

Between 1990 -2002, the private sector has recorded a significant progress contributing, in 2001, with 67.1% to the internal revenue, and in 2002 with 69%, compared to only 16.4% in 1990. Thus, the share of this sector in **economic growth** has become comparable to that in the main candidates accessing the E.U. (in 2002, the contribution of the private sector to the internal revenue was of 62% in The Czech Republic, of 63.2% in Poland, and of 71.7% in Hungary).

Fixed capital constitution increased in 2002 with 8.3% compared to 2001, the investment rate resulting from rationing fixed capital formation to internal revenue being over 21%. Within it, investments in economy increased with 7.4% compared to 2001, due to the increase with 12.4% of investments in the private sector and to the decrease with 1.5% of investments on the state sector. Investments in equipment and transportation

means increased with 10.3%, the share of imported equipment in equipment investments representing 35.9%, which reflects the capacity and the availability of economy of assimilating modernising investments.

As for fixed capital formation, compared to the new member States of the E.U., the increase recorded in Romania between 2000 -2002 was superior to the values recorded by The Czech Republic, by Hungary and by Poland, but inferior to those of the Baltic States.

Real individual consumption from the population increased in 2002 with a rate smaller than internal revenue, and especially smaller than that of the real salary, i.e. 3.7%.

If we take into consideration that in 2002 real salary increased with about 6%, it is clear that part of the incomes was no longer destined to consumption, but saved and invested.

Real collective consumption of the public administration had a moderate increase, i.e. 2% in 2002, in agreement with the restrictive budget policy and oriented towards investments.

As a result, **total final consumption** recorded in 2002 an important diminution of the share of internal revenue, i.e. from 86.2% in 2000 to 82.7% in 2002.

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ROMANIA'S ECONOMIC DEVELOPMENT DURING THE 90S

EVOLUȚIA ECONOMIEI ROMÂNEŞTI ÎN ANII '90

ELENA CLAUDIA SÎRBULESCU*

The start of transition was much more difficult in Romania than in other ex-socialist Central European countries.The hyper-centralised management system conflicting with rational criteria had stopped reacting to any real stimulus. The existence of oversized productive capacities had rendered the economy highly rigid. Its inefficiency increased during the 80s due both to further investment in largely energy-intensive industries and the discontinuing inflows of Western technology caused by the policy of forced, early repayments of foreign debt.

***Key words**: macro-economic indices, internal revenue, economic development, and economic growth.*

An analysis of macroeconomic indicators between 1990-1999 highlights the existence of significant economic and social changes, but also that of delays in promoting market mechanisms and in paving the way for ensuring a long-lasting development of the Romanian society.

The essential change that the Romanian economy underwent over the past decade, offering real opportunities for durable future development, resides in the opening-up of the former autarchic social and economic system towards the rest of the world and in Romania's starting to align with the recent trends in Europe and across the world. The European Union became Romania's main trade partner in terms of both exports and imports of goods and services and inflows of foreign investment.

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Table

Main indicators in 1990 – 1999

	1990	1991	1992	1993	1994	1997	1998	1999
GDP growth rate (%)	-5.6	-12.9	-8.8	1.5	3.9	-6.1	-5.4	-3.2
Annual inflation rate (%)	5.1	170.2	210.4	256.1	136.7	154.8	59.1	45.8
Annual depreciation rate of average ROL/USD exchange rate (%)	50.3	240.6	303.1	146.8	117.8	132.5	23.8	72.8
ROL/USD exchange rate index / Consumer price index (1990=100)	-	126.0	163.7	113.4	104.3	96.6	75.2	89.1
Wage earnings index / Consumer price index (October 1990 =100)	-	81.7	71.3	59.4	59.4	56.3	58.2	58.4
Employment – total (thou. pers.)	10,839.5	10,785.8	10,458.0	10,062.0	10,011.6	9,122.7	8,812.6	8,425.3
- Agriculture	3,153.5	3,112.3	3,448.8	3,621.1	3,653.0	3,389.6	3,554.3	3,589.1
- Industry	4,004.7	3,802.9	3,300.9	3,030.6	2,881.7	2,449.6	2,316.9	2,261.9
- Construction	705.9	500.9	579.2	574.0	562.7	474.4	439.2	391.0
- Services	2,975.4	3,269.7	3,129.1	2,836.3	2,914.2	2,837.4	2,744.3	2,750.4
Unemployment rate - %		3.0	8.2	10.4	10.9	8.9	10.3	11.5
Broad money (annual average) - bill. lei -	478.0	603.5	1,209.6	2,764.4	6,652.2	45,116.4	70,212.5	106,348.3
Broad money (annual average) - growth against previous year - %	17.0	26.2	100.4	128.5	140.6	103.0	55.6	51.5
Broad money (M2) / GDP - %	55.7	27.4	20.1	13.8	13.4	18,0	19.1	2044
Total gross foreign debt (mill. USD)	-	2,131.0	3,240.0	4,249.0	5,563.0	9,502.7	9,807.0	8,589.0
Total gross foreign debt per capita (USD)	-	91.9	142.2	186.7	244.7	421.5	435.8	382.5
Consolidated general government budget deficit in GDP - %	1.0	3.2	-4.6	-0.4	-2.4	-3.9	-4.1	-4.0
Exports fob (mill. USD)	5,775	4,266	4363	4892	6151	8,431	8,302	8,505
Imports fob (mill. USD)	9,202	5,372	5,784	6,020	6,562	10,411	10,926	10,552
Net exports fob/fob (mill. USD)	-3,427	-1,106	-1421	-1128	-411	-1,980	-2,624	-1,087
Net direct investment (of non-residents) – millUSD	-	37.0	73.0	87.0	341.0	1,224.0	1,040.0	961.0

Source: Statistical Yearbook of Romania, 1990- 2000.

For instance, the share of exports to EU member states in Romania's total exports increased, from 24.8 percent in 1989 to 65.5 percent in 1999, while the share of imports coming from EU countries accounted for 60.4 percent of Romania's total imports in 1999, compared with 13.1 percent in

1989. The components of foreign trade underwent several noticeable changes, with exports increasing from 20.9 percent of GDP in 1989 to 30.1 percent of GDP in 1999, whereas imports increased from 18.2 percent of GDP in 1989 to 34.3 percent in 1999. EU countries made up for 56.6 percent of total cumulative foreign direct investment in Romania.

The persistence of high inflation rate was one of the main reasons behind the fall in investment rate, due to the higher risk attached to the Romanian business environment (plagued by difficulties arising from legislative and institutional inconsistency, widespread bureaucracy, and the expansion of the informal sector). The decline in domestic saving rates caused by the sharp drop in household real income and high lending interest rates added to the negative effects.

The low infusions of new technologies entailed by the falling investment rate contributed to the sluggish pace of restructuring. This development was also due to the relatively low amount of foreign direct investment flows, since Romania has joined the group of poorest-performing transition countries in this area (at end-1999, the stock of foreign direct investment amounted to around EUR 240 per capita, compared with EUR 1,900 per capita in Hungary and EUR 1,518 in the Czech Republic).

Another characteristic of the Romanian economy during the years of transition, was the emergence of the twin deficits (fiscal and current account) following the liberalisation policies pursued against the backdrop of a weakly structured economic system. The current account deficit was mostly the result of the trade gap. The policy of regular intervention in the managed floating of the exchange rate was driven by the need to improve the competitiveness terms with a view to narrowing the trade deficit in the short run.

With industrial restructuring well under way, the competitiveness of the Romanian exports entered an upward drift due both to the structural changes and the real depreciation of the domestic currency. For instance, although the manufacturing sector contracted by 8 percent in 1999 versus 1998, the share of exports of manufactured goods in total exports increased from 30.7 percent to 35.1 percent, while the annual growth rate of exports equalled 5.9 percent. The drop in the income elasticity of imports acted to narrow the current account deficit. The sustained uptrend in competitiveness and the prospective favourable effects on the Romanian economy brought

about by the larger inflows of foreign direct investment are consistent with Romania's fulfilment of the Copenhagen criteria.

The budget deficit was generated by the growth of budgetary expenditures in a context of economic decline, by poor revenue collection and by the insufficient transparency of budget execution, which enabled the inefficient funnelling of financial resources. The authorities pursued tight fiscal policies, aiming at control of the budget deficit. The process of bringing these policies in line with the requirements set by EU and international bodies was initiated, thus paving the way for the declining GDP share of the consolidated general government deficit.

The labour market was affected by imbalances in terms of the ratio between the working population and the jobless, as well as in terms of the employment rate. The decline in the number of people employed in the economy occurred, particularly in the industrial sector; the population engaged in agriculture still holds a large share in the total of working population (38 percent). The poverty coverage rate (the poverty line is equivalent to 60 percent of the average monthly spending requirements for an adult) hit 33.8 percent of the total population (28.2 percent in the urban area, 40.5 percent in the rural area, respectively). Despite imbalances between supply and demand on certain labour market segments, as well as the still low level of labour force migration, human resources enjoy a high degree of adaptability to the standards of the European labour market.

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EURO – A STRONG CURRENCY?

EURO – O MONEDĂ FORTE?

SIMONA CRISTINA CONSTANTINESCU*

The single currency of Europe seems to be the sollution for the overcoming of the crisis and monetary union is organised with a precision that values more than just defining the general orientation. After it was created, the single European currency had a period of weakness. This trend was reversed begining with 2002, when Euro became stronger than dollar and the process was inevitable. After 5 years, the ambition of the single European currency to replace the dollar is still very far because the American currencyis heading the market of devices and it is still the top reference for the international exchange and a valuable reserve.

***Key words**: Single currency, monetary market, integration.*

The European single currency was introduced in the internationl monetary system in 1971, by the so-called „European monetary snake"experiment. It was partially broke down in 1974 by the „little snake" – surrounding FRG – and born again in 1977 after the Bremen conference and it succeded to survive. The crisis between 1992 – 1993 concluded to the total change of the Europena monetar system, by adopting new rules of the game, enlarging the limits of the ups and downs. The permanent orientation, by the Dellors report, juridically sustained by the Maastricht Treaty, was still on its way despite the difficulties. The last problems had succeded only to accelerate the process and the single European currency is the sollution for overcoming the crisis.

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The monetary debate has been, for a long time, in the public attention, focusing discussions and projects which are related to the economical european integration. Within the last period of the setting of the European and Monetary Union, the single European currency was the winner.

The positive perspectives of the single currency are, definitely, exciting. In brief, these are:

- the uncertainities concerning the monetary intraeuropean exchange are gone, and the diminuation of the costs of the transactions;
- the disparition of the crisis that come with the instability of th monetary courses and the loss of the reserve;
- the national monetary politics, which became more and more empty are replaced with the monetary politics of the BCE. This will lead to a growth of the credibility, important for its consequences in mantaining the stability of the prices and the fight against the inflation;
- the establishing of the prices in a single currency within entire Europe, will lead to diminish the uncertainities that affect the investments decisions;
- changing Euro in a strong, international currency to compete the american dollar

After its birth the European currency had a period of weakness. This trend was reversed begining with 2002. The Euro became stronger comparing to dollar. Considering the problems that the American part is dealing with, the growth of the European currency is considered to be inevitable. Despite the rumours concerning a depresive effect of the process, the growth of the European currency is just connecting the monetary exchange to its historical evolution.

The growth of the European currency began two years ago. This can be better seen comparing to dollar, but this is alco true comparing to the japonese currency. The negative consequences already exist: the diminuation of the prices and of the exports and loss of the market segments, up to 8%. A growth of the European currency up to 1,40 dollars comes with another loss between 5 – 7%. Globally, the continous growth of the European currency had negative consequences on the European economy. Considering the standard limits of the limit prices of the production units, the risks of an adjustment of the prices is high. The growing predictions for 2004 can be unpredictible.

Considering the growth of the European currency, some observers expect a reaction of the Central European Bank, especially on the exchange market. Indeed, these kind of interventions are used by the central banks of the main industruialised countries, because, despite abandoning the Bretton Woods system, these did not give up the administration less or more active of their currency. The real impact of the exchange intervention is, nevertheless, uncertain. The academic literature and the historical experience suggest that Central European Bank should not proceed to uncoordinated intervetions with the US. Nevertheless, the US have no economic interes for such a coordination. Central European Bank will have to act by itself. There are two posibilities: an unsterilised intervention for a monetary adaptation or pushing down current prices. Robert Mundell, who is considered to be the spiritual fathe of the single European currency, thinks that the industrialized countries will have to fight more actively against the exchange fluctuations, especially by interventions and stability agreements between the three important monetary zones.

Mundell confirma the succes of the single European currency, but he insists on the fact that Euro is, for now, not very strong copmpared to dollar because the US are able to manipulate the exchange rates of their currency depending on the evolution of their national economy. Finally, Mundell reminds the Pact of Stability, which he considers to be necessar, but not flexible enough.

If Euro was created for the development of a feeling of a comon identity, to contribuite to the process of European integration, another ambition was equally presented: the growth of the role of Europe on the international scene, creating a strong rival for the dollar.

Five years after its birth, this ambition is far from beeing a reality: dollar remains the main currency for the international trade, a valuable reserve. This fact is not a surprising one. There are four reasons for it, according to Benjamin J. Cohen: the slow motion of the monetary behaviour, the cost of the monetary transactions, the anti – growth trend specific to the economic and monetary union and the lack of determination of the government of the union.

We can conclude that the industrialised countries will have to fight more actively with the frequent changes in the exchange field mainly by stability agreements and interventions between the three main monetary zones.

Consequently, Euro cannot, for now, replace the dollar because the US can manipulate the exchange levels of their currency, according to the evolution of their national economy, maintainig the dollar on a dominant position.

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THE PRESENT STATUS OF THE IMPLEMENTATION OF THE ENVIRONMENT COMMUNITARIAN ACQUIS IN ROMANIA

STADIUL ACTUAL AL IMPLEMENTĂRII ACQUIS-ULUI COMUNITAR ÎN ROMÂNIA ÎN DOMENIUL PROTECȚIEI MEDIULUI

S. STANCIU[*]

The harmonization between the Romanian legislation and the communitarian one concerning the environmental protection is an important chapter in the Romanian Accession Partnership to European Union. Our country will have to continue transposition of framework legislation, establishment of detailed approximation programmes and implementation strategies related to individual acts, planning and commencement of implementation of these programmes and strategies. Environmental protection requirements and the need for sustainable development must be integrated into the definition and implementation of national sectorial policies.

The Accession Partnership indicates that Romania will have to address all issues identified in the Opinion, the environmental protection being one of the most important points.

Key words: environment, treaty, implementation, standards

The European legislation regarding the environment protection was initiated at the presidents and prime ministers conference that took place in 1972. On the occasion of this meeting it was established that for environment protection it is essential to promote a common policy.

At the present time, there are 588 valid communitarian normative acts regarding environment protection, 223 of which are directives, 112 regulations and 253 decisions. This legislation has as background a serious of plans and programs for action in this field. On the 15 and 16 of December 1992, the EU Council has adopted „The Communitarian program of policies and measures regarding the environment and the stable development". The

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legal basis of the communitarian policy concerning the environment has been the CE Treaty – art. 174 up to 176 (130 r up to 130 t) since the Roma and Maastricht treaties have been changed.

The change operated on the article 2 B (preamble) in the EU Treaty, underlines the principle of stable development which represents at present time one of the EU's main objectives. Article 6 (3C) of the CE treaty clearly states the necessity to integrate the problem of environment in all the sectorial policies of the Community. This new clause has an extended area of action; by moving it from the article concerning the environment at the beginning of the treaty on an outstanding position, the EU leadership intended to outline its engagement towards the stable development objective. In the final act the commission takes the responsibility to do studies of assessing the impact in cases of proposals that may have serious repercussions on the environment.

According to art. 174 from the CE Treaty, the environment policy of the community are based on the following principles: caution, prevention the removal of the polluting source, and the principle "the polluting agent pays". Art. 95 especially mentions that "health, security, environment protection" have to be based on an increased degree of protection if we only take it into consideration the latest evolutions sustained by scientific discoveries.

The European Parliament and the Council will supervise the attainment of this objective within the limits of the powers they have been invested with.

Thus, the Union is fully engaged in the implementation of an active policy regarding soil, water, climate, air protection. However, in accordance with the principle of subsidiarity, the union will take course in the environment problems only when it could act more efficiently than the national or regional governments.

Together with domains such as economics, politics and social, the environment one represents one of the most difficult and expensive sectors. The reform of this domain is increasingly necessary for Romania, in its efforts to adder to the EU. This extended reform includes, among others, the harmonization of the national legislation to the Communitarian one, in order to fulfill the communitarian environment aquis, which has profound financial and economical implications and also institutional and social ones.

The efforts regarding the process of harmonization and improvement of environment legislation, as they have been reflected in the last years experience, have proved that the protection and the improvement of environment quality are both difficult and expensive.

In one of its communicates, the EU Commission has warned that "none of the Central and East European candidate states will be capable to completely fulfill the environment acquis in the short and medium term". Preliminary studies have shown that "the environment will be the most expensive domain in the context of the EU extension". To this matter, provisional estimations show that the harmonization to the European environment standards will cost the candidate states aprox. 120 billions Euro, which represents apox. 1/3 of the total cost of communitarian acquis implementation in these states.

Moreover, as the researches have shown even if the candidate states had these huge founds, the finalization of the investments in the environment infrastructure in order to align the Communitarian standards would last 20-30 years.

The environmental reform and the progress in what its protection and improvement is concerned, interests not only the candidate states, but also the member states. Actually, the last ones have implied themselves in the effort to reform this domain, both financially and managerial. Moreover, European Union admits that it would be beyond reality to require the candidate states to align to the already existent standards in a short term. This requirement would most probably cause high levels of not conforming to the standards, which would put serious problems concerning the political trust in the acquis.

The necessary costs for Romania in order to respect the communitarian acquis, including those related to the legislation harmonization, investments in the environmental infrastructure as well as the institutional reform – at central and local level – have been estimated to aprox. 20 billion Euros.

Concerning the efforts for harmonization and completion of the national jurisdictional order in the last decade, several essential normative acts have been adopted. The timing of their implementation was, however, far from the expected and necessarily. This is the result among other things, of the delay with which the bills of law regarding the environment have been elaborated and then discussed in the Parliament or of the lock of

political agreement required for a positive vote in the process of adopting the normative acts. Moreover, some new implemented normative acts required completions or modifications either because their implementation was not possible or because the previsions of the new normative act were in contradiction with the legislation already put into practice. This is the case, for example, of the Law 73/4 from May 2004 regarding the National Fund for the environment which is impossible to put into practice due to the lack of the implementation norms.

The implementation of this law was awaited with very much interest, as much as it would allow the discharge of international financing sources, which are developed through programs such as ISPA, PHARE, SAPARD, LIFE, a.s.o.

As these programs require generally the participation also with funds from the beneficiary state, the effects of the legislative reform and the effective fulfillment of the environment acquis can nothing but be delayed. This is also a consequence of the bad thing in adopting implementation norms and in creating national or local institutions to administrate the use of these funds.

The lack of the adequate institutional framework – both at central and local level – the lack or the reduced number of specialized stuff, the poor training of the existing one are aspects which also contribute negatively to the implementation and control of environment legislation.

These elements are interrelated and the environment policies and programs built on the basis for the implementation of the environment legislation, continuously submitted to modernization and harmonization to the communitarian one, must take them into consideration because they can contribute to the increase of quality in decision making and in obtaining efficient results.

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STUDY REGARDING THE OVERVIEW OF THE IMPLEMENTATION OF RURAL DEVELOPMENT POLICY IN THE PROGRAMMING PERIOD 2000–2006

STUDIU PRIVIND SUPRAVEGHEREA IMPLEMENTĂRII POLITICII AGRICOLE RURALE ÎN PERIOADA 2000-2006

S. STANCIU*, C. TABĂRĂ-AMÂNAR*, SIMONA OPREA[*]

Rural areas cover 80 % of the European Union's (EU) territory and are home to approximately 25% of its population. These range from restructuring of the agricultural sector, remoteness, poor service provision and depopulation to population influx and pressure on the natural environment, particularly in rural areas near to urban centres.
In the following a short overview of Community expenditure on rural development is given for the first half of the programming period, i.e. 2000–03. The figures for 2004-2006 are estimated. Some further information is then given on two of the more popular (in financial terms) rural development (RD) measures: agric environment and less favored areas.

Key words: *programmmes, expenditure, agric environment.*

The expenditure data has been aggregated at Member State level over the different types of programmes (Figure 1). The table also shows the maximum Community contribution per type of programme for the 2000–2006 periods.

The Accession States currently have their pre-accession aid for rural development in the form of Sapard and as new Member States they will have their own programming for 2004–06. They are not included in this overview.

As the programmes reach cruising speed total annual Community expenditure on rural development has been increasing and is expected to largely exceed EUR 6 billion in 2003. Total expenditure under Community rural development programmes is double this figure as on average each Community euro is matched by a national euro.

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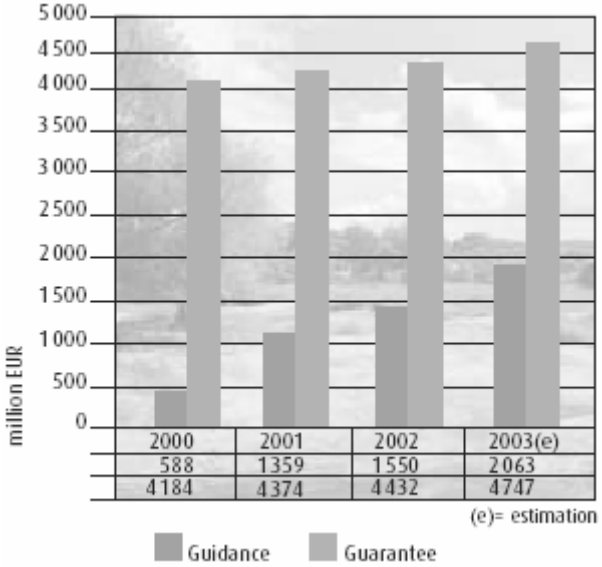
Figure 1: Programming types EU-15 2000–2006

	No. of programmes	cofinanced by EAGGF section	Community contribution (billion EUR)
Rural development programmes	68	Guarantee	32.9
Objective 2 programmes with RD measures	20	Guarantee	
Objective 1 programmes with RD measures	69	Guidance	17.5
Leader+ programmes	73	Guidance	2.1
Total	230		52.5

Source: EU Commission, Study regarding Programmes in Eastern countries, 2003

Figure 2 shows how expenditure patterns have been developing. The more marked build-up in Guidance expenditure is mainly due to the different financial management systems for Guarantee and Guidance.

Figure 2: EAGGF expenditure on rural development

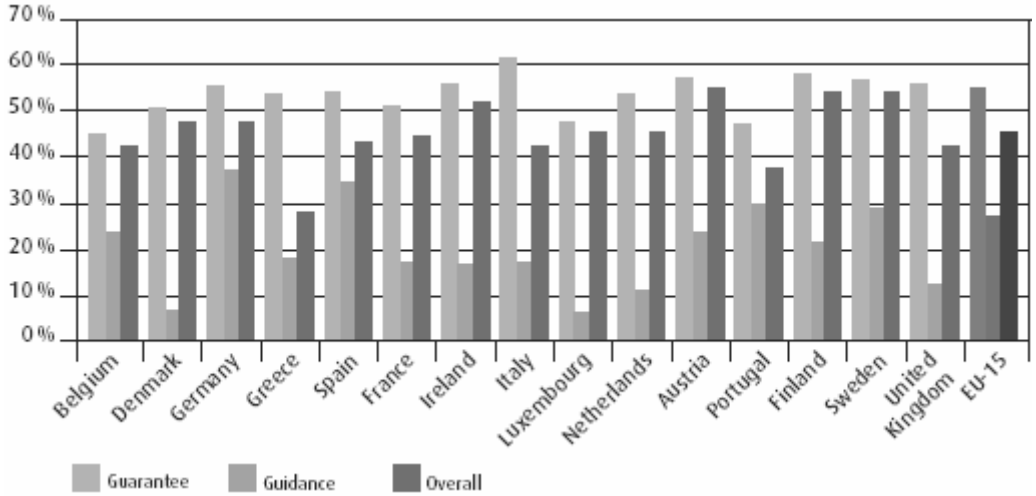


Source: European Union Guidance 2002

Guarantee works with non-differentiated budget appropriations (commitments and payments take place in the same year, any unused money is in principle lost), while for Guidance, payments can be made up to two years following the commitment (n+2). While for Guarantee, expenditure on rural development for this programming period will stop in October 2006, for Guidance payments can follow until the end of 2008. Overall, the Guarantee section has seen a relatively high level of uptake of available appropriations already from year 2000, whilst that for Guidance was initially slow but is now improving.

A second element to be taken into account is that within the so-called accompanying measures, which throughout the Community are co financed by EAGGF Guarantee, two measures, i.e. support for less favored areas and agric-environment entail annual payments to farmers, while the non-accompanying measures, which in Objective 1 areas are co financed by EAGGF Guidance, often have a longer lead time for their implementation.

Figure 3: Programme realization by end of 2003



Source: Graphic representation after European Union statistic

Figure 3 also shows the same data in terms of realization, what does the expenditure made so far represent as a share of the overall Community amounts included in programmes for 2000–06. Of the total Community

amount programmed for 2000–2006, EUR 52.5 billion for the EU-15, 45% has been realized (in four of the seven programming years or 57% of the programming period), but with a much higher rate for Guarantee (55%) than for Guidance (28%) that has two extra spending years and is midway in the spending period. At the level of individual Member States the situation is mixed. Italy has the highest level of realization for Guarantee (over 61%) and Germany

The range of 22 measures available to Member States to include in their rural development programming can be grouped into three main categories:

The following figures show the share of each group in the programmed and realized EAGGF expenditure. For the whole programming period more than half of the Community contribution has been programmed for group 2, environment and land management, followed by 38% for the measures targeting restructuring and competitiveness and 10% for the measures going beyond the farm.

Group 1: restructuring/competitiveness

• Investments in farms
• Young farmers
• Vocational training
• Early retirement
• Investments in processing/marketing
• Land improvement
• Reparcelling
• Setting up of farm relief and farm management services
• Marketing of quality agricultural products
• Agricultural water resources management
• Development and improvement of infrastructure related to agriculture
• Restoring agricultural production potential

Group 2: environment/land management

• Less favored areas and areas with environmental restrictions
• Agric-environment
• A forestation of agricultural land
• Other forestry

• Environmental protection in connection with agriculture, forestry

Group 3: rural economy/rural communities

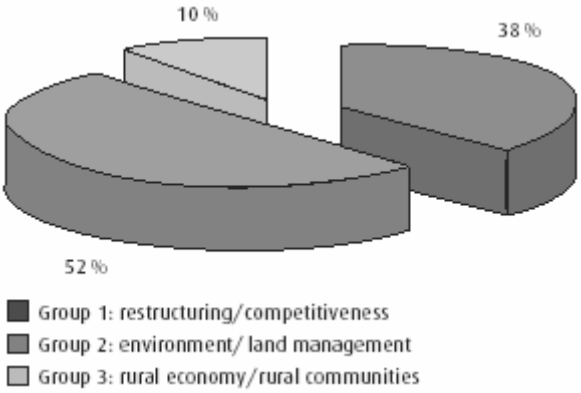
• Basic services for the rural economy and population
• Renovation and development of villages
• Diversification of agricultural activities
• Encouragement for tourism and craft activities
• Financial engineering

The spending patterns thus far vary per Member State, although the 2nd group tends to take up a high share of expenditure in most Member States. At the EU level group 2 takes up 64% of the cumulated expenditure in 2000 to 2003, followed by 29% for group 1 and 6% for group 3.

The high share of the second group in the early years of this programming period can in part be explained by still ongoing agric-environmental commitments from the previous programming period with the new measures under the new rural development Regulation (EC) No 1257/99 taking some time to be implemented in full.

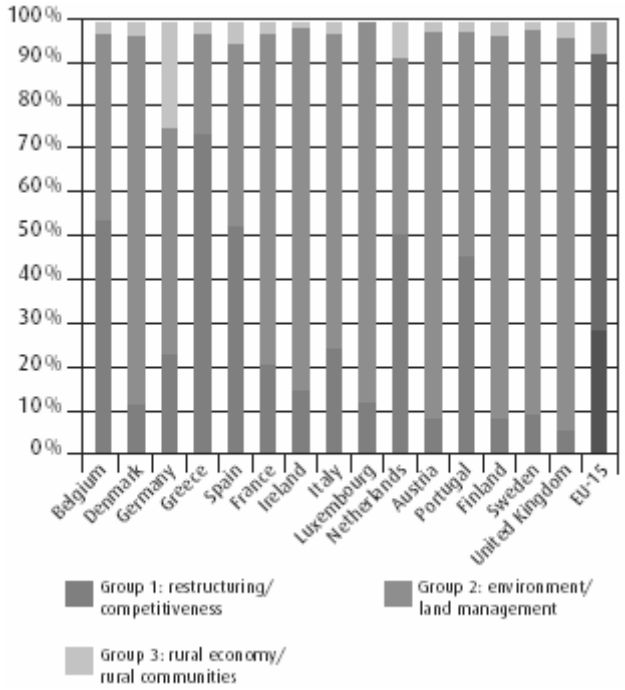
Based on the monitoring data for 2001 submitted by the Member States for their rural development programmes, the total number of hectares under contract in that year amounted to 19.3 million in the EU-15 of which 1.3 million were for organic farming contracts 3.

Figure 4: EAGGF programmed expenditure 2000–2006 EU-15



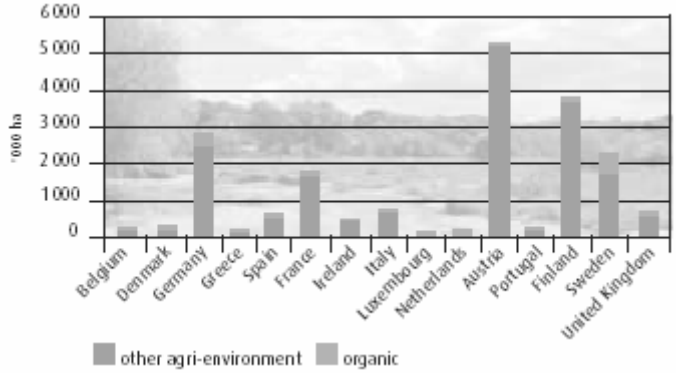
Source: Source: Graphic representation after European Union official statistic

Figure 5: EAGGF realized expenditure 2000–2003



Source: Graphic representation after European Union official statistic

Figure 6: Hectars under agric-environment contracts in 2001



Source: Graphic representation after European Union official statistic

The average agric-environment premium in the EU amounted to 89 EUR/ha with wide variations between Member States4, in part reflecting the wide diversity of agric-environment measures. Premia are calculated according to the level of income a farmer foregoes by changing his farming practice, and the additional costs associated with the agric-environment commitment he signs up to. There is also the possibility for Member States to offer a maximum 20% incentive payment.

Figure 7: Average annual Agric-environment premium

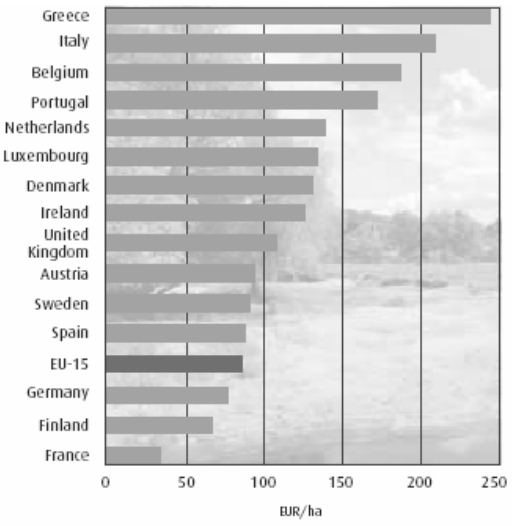
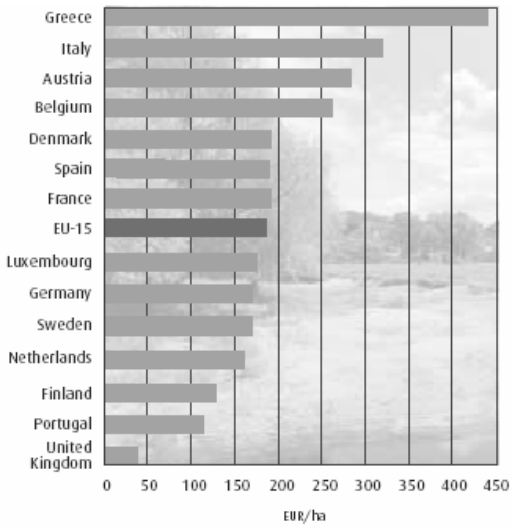


Figure 8: Average annual 'organic' premium



Source: Graphic representation after European Union official statistic

In 2003 over 1 million holdings and 33 million ha benefited from less favored area (LFA) payments in the EU. These payments are intended to compensate farmers for the additional costs associated with farming in such areas and to ensure the continuation of farming and viable rural communities in what are often more remote areas. The average LFA payment amounted to EUR 2319 per holding and 71 EUR/ha.

The average organic premium amounted to 186 EUR/ha with an even wider spread between Member States. For organic farming a conversion and a (lower) maintenance premium can be given, but not all Member States provide the maintenance premium.

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ROMANIA'S RELATIONS WITH EU

RELAŢIILE ROMÂNIEI CU UNIUNEA EUROPEANĂ

C. TABĂRĂ – AMÂNAR[*], S. STANCIU[*], SIMONA OPREA*

The idea of promoting a strategy for preparing the associated states from Central and Eastern Europe for the future integration was accepted on the occasion of Essen summit from December 1994. The preadhesion strategy was elaborated, two stages being the most important.
According to the Center of Social and Economic studies from Warsaw, in 1999, Romania needed 36 years to reach the status of Greece, Portugal and Spain, the least developed EU members if we take the income into consideration. The same study revealed that the Czech Republic needed 11 years, Slovakia 15 years, Estonia 16 years, Poland 18 years and Bulgaria 29 years.

Key words: association pact, negotiations chapters, acquis

After the collapse of the communist block formed after the Second World War in Central and Eastern Europe, the new liberated states have reoriented their external politics towards Western Europe.

If up to year '89, Romania, Bulgaria, Hungary, Poland, Czechoslovakia, and also others who gained their independence after 1990 - we may mention here the Baltic States, Slovenia and Croatia - did not wish to "upset the big neighbor state – Russia -", later on, after the events that took place at the end of 1989, this fact has changed. The former subjugated states have taken a serious of measures that changed their status in the eyes of NATO an EU.

Although initially all these states wished to enroll in the Western Organization and political structures immediately this thing was not possible because in order to be part of EU each state had to get over several stages that would bring them to closer level to the EU one.

The economical status of the new states wishing to adhere to EU was not good at all. Being based on a centralized economy the typical

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communist one, the economy reorientation towards the capitalist one was imperiously necessary.

In several sates, this transition was realized faster, in others however this stage lasted much longer.

We include in the category of states that undergone the transition period in a relatively short time: Hungary, Poland, The Czech Republic and the Baltic States. In what Slovenia is concerned this former component of Yugoslavia federation was always considered Yugoslavia's engine. Tourism was one of the principle advantages of Slovenia's success in EU integration. Another issue that contributed to this was the medium income per capita which at present time is over 1000 EU being equivalent to the one existent in several EU member states.

The idea of promoting a strategy for preparing the associated states from Central and Eastern Europe for the future integration was accepted on the occasion of Essen summit from December 1994. The preadhesion strategy was elaborated, two stages being the most important.

The first stage between May 1995 and July 1007: The White Book and Agenda 2000. The White Book comprises the preadhesion strategy (May 1995), mentioning also the necessary to instruments for the implementation of the association pact and for developing permanent dialogue.

Agenda 2000 – July 1997 – approaches the problems to be solved by EU itself (economical improvement, the increase of competitively, problems linked to labor force occupation, policy modernization).

The second stage, December 1997 – December 1999, comprised: the Reunion of the European Council from Luxemburg that took place in December 1997, the adhesion partnership, the elaboration of national programs for adopting the acquis, European Commission reports, regarding each candidate state; negotiations with the first group of candidate states and the Reunion of the European Council that took place in Helsinki in December 1999.

Romania kept tight relations with the European Community even before of the fall of Ceausescu regime as it results from the below table:

Romania's intention to be integrated in the EU was made public right from the beginning of 1990, though the trade and cooperation pact was enforced only in 1991.

Table 1

Before 1990	01.01.1974: Romania is included among the beneficiary of customs privileges.
	1978: The perfection of two sectorial pacts in steel and textile domain
	1980: The first bilateral commercial pact between a communist country and the European Community.
Between 1990-2004	October 1990: The trade and cooperation pact (the granting of the most favorite country clause)
	01.02.1993: Romania association pact to EU
	1994: interim act on trade (the establishment of a free trade area for industrial production)
	22.06.1995: Romania lists its official request for adhesion
	1999: the beginning of the negotiations for EU adhesion
	December 2004: The limit date for negotiations seizure

Source: EU Commission Barometer, 1992 and 2003

The first certain steps were made in 1993 when the European pact for Romania's association to European Community was signed. This pact was enforced only on 01.02.1995 practically after two years. It represents the starting point for our country integration in EU structures. The European association pact is formed of nine titles as it results from table 2:

The free circulation of workers, the right of establishment, services delivery represents the next title and establishes the basic rules to be applied to Romanian citizens that wish to work within the Community, the way in which they can establish there and last but not least it pervades the means through which Romania and EU assume the obligation to adopt certain measures in order to increasingly allow the services delivery between them.

This title, like all the other ones contains general previsions concerning the means of implementing the law previsions and regulations regarding the right to enter, establish and work in EU.

The political dialogue must be realized, according to the Pact, through meetings at superior official level between representatives of

Romania and EU ones, by using diplomatic means in order to gain access to information linked to the political and economical cooperation.

Tabel 2

Title number	Name
I	Political dialogue
II	General principles
III	Free circulation of goods
IV	Free circulation of workers Right of establishment Services delivery
V	Payments Capital Competition Other economical previsions Legislation harmonization
VI	Economical cooperation
VII	Cultural cooperation
VIII	Financial cooperation
IX	Institutional general and final previsions

Source: Own research regarding the Ministry of Integration

By analyzing each of these titles we would discover that every one of them imposed the way which Romania would have to undergo for its future integration in the EU.

According to title II, General Principles, the period in which Romania will have to conclude the transition to a market economy is of maximum 10 years divided in 2 equal stages. The association Pact pervades that after the closure of the first stage, the Association Council would have to meet in order to grant the right to pass at the next stage. Actually, the Association Council is the EU organism responsible with monitorizing the implementation and fulfillment of the pact by each candidate state, including Romania.

The free circulation of goods, title III, requires the establishment between Romania and EU of a free area of trade, during the transition period, based on mutual obligations that would not trespass the Association

Pact. The goods that beneficiate of these privileges include: industrial products, agriculture, fish products.

The following titles of the Pact, namely V, VI, VI, VIII settle the way of cooperation in the economical, competition, capital, cultural and financial domains. They represent the part without which none would conceive the adhesion to EU. We cannot speak of a market economy that lacks capital and its free circulation.

According to the European Association Pact, three new monitorizing organisms have been created in order to ensure its fulfillment. These organisms are: The Association Council, The Association Committee and the Communitarian Association Committee.

One must not understand that by signing the European Association Pact, Romania has ensured its integration in EU. This pact represents only the juridical framework for the relationship between the two parts and is meant to prepare Romania for its integration. As a result of this new organizational and monitorizing system, there have also been established the domains in which Romania and EU must come to an agreement necessary for this integration.

These are the domains in which Romania must make serious efforts for solving the existent problems. In each one of them Romania has to adapt its legislative and organizational framework to EU requirements, making thus possible the seizure of the negotiations by the end of this year. These negotiation points contain recommendations and opinions to which Romania must react and implement.

A whole team of high dignitaries and specialists work together within each domain of activity presented above. The Public Ministry of finance and The Ministry for EU integration participate in all the work groups together with representatives of the implied Ministry.

As we mentioned earlier, Romania started its way towards integration with great disparities from the other candidate states. According to statistics Romania's economical status, when it was invited to adhere was seriously weakened. Romania had the lowest income per capita from all the candidate states and a negative economical growth 1997 – 6, 6%, 1998 - 5, 5%, 1999 - 5, 0%. The rate of industrial development placed Romania on the last place with 17% in 1999. The inflation rate was over 50% almost every year.

In 1999 the national coin's devaluation reached over 65% and the medium income per capita was of 120 USD per month, situation that placed us only ahead of Bulgaria.

According to the Center of Social and Economic studies from Warsaw, in 1999, Romania needed 36 years to reach the status of Greece, Portugal and Spain, the least developed EU members if we take the income into consideration. The same study revealed that the Czech Republic needed 11 years, Slovakia 15 years, Estonia 16 years, Poland 18 years and Bulgaria 29 years.

The conclusion is that EU does not require Romania to attain the economical status of all the EU member states by night. It does not require not even the medium level. What it demands though is that the way Romania chose to follow to be an upward one in all the domains. This is Romania's starting point in 2007, the year assumed for Romania and Bulgaria's integration.

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THE LIFE CYCLE OF A PRODUCT AND THE FACTORS WHICH INFLUENCE THE LENGTH AND STRUCTURE OF THE LIFE CYCLE

CICLUL DE VIAȚĂ AL PRODUSULUI ŞI FACTORII CARE INFLUENȚEAZĂ DURATA ŞI STRUCTURA CICLULUI DE VIAȚĂ

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An important place in synchronizing the organic researches of enterprises, especially in determining the main directions, in the marketing strategy of the product is given to the knowledge of the life cycle of the products.

Key-words: *Product, Life cycle, Quantity, Quality, Price*

An important place in synchronizing the organic researches of enterprises, especially in determining the main directions, in the marketing strategy of the product is given to the knowledge of the life cycle of the products.

The notion of life cycle of a product considers the time interval between the moment of appearance on the market and that of its definitive disappearance from the market. This interval is divided into several stages, which in length and intensity depending on the nature of every product, stages that build the phases of the life cycle.

The life cycle of a product is not to be mistaken for the time interval in which the product is in utilization process, it refers only to the period from the moment of launching into production until its withdrawal from the sphere of merchandise circulation.

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The life cycle allows the recognition of the different distinct stages in the history of the sale of the product. According to these stages, one can highlight different opportunities and problems which occur while the product exists on the market.

The essential element that characterizes the evolution of the product in different phases of its life cycle is the level of its sale volume. Beside this, a series of elements, specific to every phase may intervene, giving to the life cycle an extremely complex character.

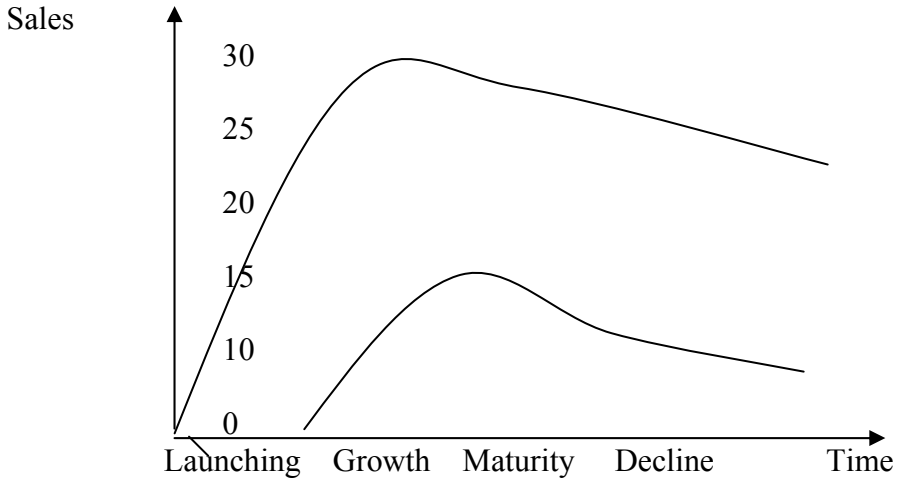

Figure 1. The phases of the life cycle of products

In the most articles on the subject there are presented four phases of the life cycle of products: launching, growing, maturity and decline. Seldom, in some papers one talks about five stages – by dividing the third into maturity and saturation.

In the sequel, we present a short characterization of the phases of the life cycle:

- The Launching – is characterized by few sales, while the product is launched on the market. The introduction costs of the product being high, the profits are very reduced.

- The Growing – the period of quick acceptance on the market; the sales and profits rise high; but the sensitivity to the high elasticity of the demand towards the price of the product becomes evident. The promotion activity is very much eased. Since on the market there also present offer ants of the competition, the weight of the promotion moves slightly from the product to the innovating firm, to her brand, the development of own distribution channels becomes possible, the ample process of development and perfecting of the initial product starts.
- The Maturity – the period in which the level of sales stabilizes, because the product has been accepted by most of the buyers. Profits maintain at the same level or start to fall, because the expanses for publicity are rising, in order to protect the product from the competition.
- The Decline – the period in which sales and profits are dropping vertiginously.

The length and structure of the life cycle of products are determined by a series of general and specific factors. The general factors are present in all activity fields and include:

a) The technical and scientific progress;

b) The rise of the population's purchasing power.

The specific factors are present and act only for certain categories of products, and differ in intensity and the consequences of their action:

a) The nature of the product;

b) The enlargement of the gamut;

c) The capacity of receiving new improvements, of entering new segments of the market;

d) The existing juridical frame;

e) The quality, the strategies efficiency and the mix of marketing developed and translated into practice, for each specific product.

Not all products have a classical life cycle curve.

In the sequel, we have accomplished a short presentation of these models, which we have highlighted through figures 2 and 3.

a) The "growth – diminution – stabilization" curve – the diminution is explained by the insatisfaction of some consumers which do not renew their buys; the stabilization is due exactly to those consumers which are satisfied by the product and renew their buys, as well as to the late adopt ants, which adopt the product with considerable delay.

b) The "two humps" curve or the "cycle-recycle" curve, which describes the wavelike sales of some products. In this case, the second intense promotion campaign intervenes after a beginning of decline and proves a success. The product has a smaller amplitude and length.

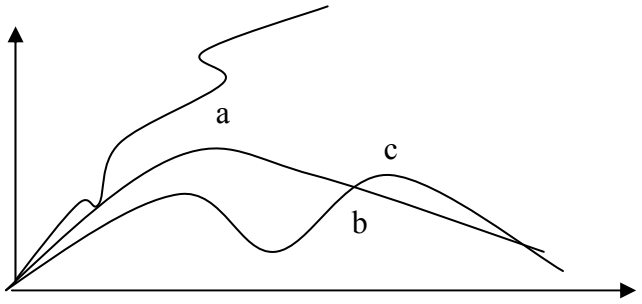

Figure 2. Atypical types of life cycle of products

c) The wavy curve characterizes the life cycle of products for which at certain time intervals one discovers new properties, new functionalities, new application domains, and so the sale volume rises gradually.

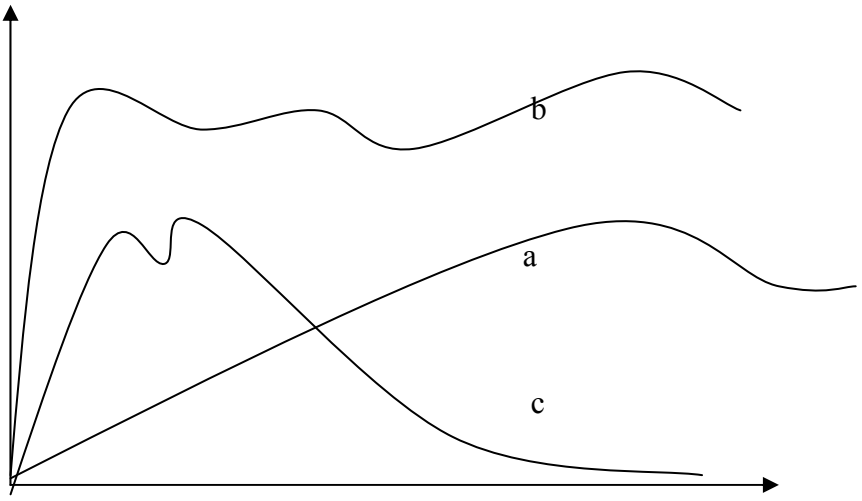

Figure 3. Other atypical types of life cycle of products

Due to their high frequencies, one can often meet yet other life cycle curves, emphasized in figure 3.

a) The style like cycles relate to ordinary products. The style represents one of the main manners of expressing the tendencies, the human aspirations. Once appeared, a style may serve many generations, may come into fashion or get out of fashion.

b) The fashion type cycles refer to "fashionable" products. Fashion is the dominating style in a certain domain, in a certain time interval. In these cycles, the growth, as well as the decline, is slow.

c) The mood type cycles view occasional products; moods can be considered fashion cycles with very fast rise and decline; the number of imitators, respectively adopt ants, is reduced.

One of the important aspects of enterprise activity is the knowledge of the "age of the product", respectively the life cycle stage in which the product is at a certain moment.

There are several methods of estimating the evolution of the product on the market and its degree of development, like the examination of the sales curve, the testing of the structure of the users population, the analysis of the image of the brand and of the fidelity towards the product.

An efficient method of researching the above mentioned phenomena is represented by the examination of the sales curve, which depends on the nature of the products, the structure of the market, the product policy of the enterprise.

The options regarding the structure and dynamics of the gamut of products, which are produced(commercialized), reflects in the product's strategy. This subordinates to the market strategy and correlates to the price, distribution and promotion strategies.

The enterprise uses the product strategy in order to meet certain objectives: reinforcing the position in the frame of present consumer segments, the growth of the spreading degree of the product on the market, the differentiation from similar or close products of the competition, a better placement in the gamut.

The product strategy is influenced by the human, material and financial potential of the firm, by the nature of goods which make its object, by the position detained on the market, the market to which it addresses and the profiles of these markets.

Thus, the importance of the product's life cycle specific strategies distinguishes itself among other product strategies.

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THE BRAND OF BIOPRODUCTS IN EUROPEAN COMMUNITY

MARCA PRODUSELOR ORGANICE ÎN UNIUNEA EUROPEANĂ

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The logo of a product represents a support of the consumer's fidelity. However, it is very hard to determine how a logo can determine the consumer's preference for a product. The existence of logos for organic products is an important reason for the organic sector development in European Union countries.

The logo plays a major role in the communication between the agroalimentary products and the end users in modern trade. Agroalimentary manufacturers must know how a logo "works" very well and need very much information. Consequently, they must create their own logos that ensure increased product sales. In this context, we can say that the logo is a concentration of information.

For the end user and the product, the logo is not just a name. It is useful because it helps the consumer understand the product especially when he has to shop very quickly, in self-service food shops.

The logo image is based on a qualitative distinction that characterises the product and on its perception supported by advertising communication. For agroalimentary goods this constitutes the basis for the consumer's preference and recurrent buying until he becomes loyal to a logo. Specialised literature for luxury products or consumer goods provides a large number of demonstrations that each individual has a clear idea of what one logo or another may represent to him. The logo is more difficult to perceive in the case of food products. It is usually perceived in two ways: either through innovation or quality differentiation that the manufacturer introduces and maintains in the case of a generic product as compared to its competitors.

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In addition to information on food logos, the consumer asks for information on how to use a product before deciding to buy it. Although the words "natural", "biological product" and "no additives" are well perceived, they are not enough to make the consumer buy the product if it does not match his opinions on price and quality/price ratio. Price is almost always a primordial factor in the consumer's decision making process.

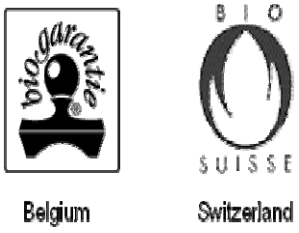
The protection of both consumers and producers has come with the European Union Regulation 2092/91 concerning organic production. In December 1999, the European Union Commission has established the logo of organic products that can be used for products obtained according to EU Regulation 2092/91 (Figure 1).

Figure 1. European Union logo for organic products

There are two reasons for which many consumers in the European countries have not heard about the European Union regulation 2092/91 regarding organic products or their logo. The first reason is the poor communication of the regulation and the second concerns the fact that the European Union logo for organic products was not communicated to consumers in the product promotion campaigns. If a logo is not known to consumers, then it has no practical value.

From the EU-Commission's point of view, another serious problem of these national common logos is that their utilisation is connected with different national standards in addition to the EU-Regulation 2092/91 so that they can be used (and have been used) to hinder international trade.

In Europe a distinction can be made between the national logos of organic products (Figure 2).

a) Governmental logos	b) semi-governmental logos
	
c) Logos of umbrella organisation for organic agriculture movements	d) Labels of private certification bodies for organic products

Further more, the organic products from countries outside the European Union must be protected legally. At present, national organic regulations are being established in Norway, Switzerland, Hungary, Slovenia, Poland and the Czech Republic. A number of European Union countries have elaborated their own national laws and logos for organic products (Table 1).

Belgium (private)	**Denmark (state)**

Netherlands (state)	**Norway (private)**
Switzerland (private)	**Finland (state)**
Spain (state)	**Czech Republic (state)**
Germany (state)	**Austria (state)**

France (state)	Sweden (private)

Table 1. Common Logos for organic products in Europe

For example, consumers trust national logos in Denmark or Austria very much. In Switzerland, where the private logo Knospe is the only important one for organic products, the level of consumers' trust in such products is very high. The same goes for Sweden where there is only one organic logo (KRAV-Logo).

In the autumn of 2001, the German state launched its new logo for organic products and in 2002 the German minister of agriculture decided to promote it in an important image campaign.

These examples prove that although UE Regulation 2092/91 has strengthened consumer's protection considerably, additional national measures must be taken to increase consumer's trust in organic products.

Communicating with the consumer must be a central point of an European Action Plan for organic agriculture. No consumer will be ready to pay premium prices for organic products (or taxes to support organic agriculture), if he is not informed about the benefits of organic agriculture, if he is not sure whether an organic product is really organic, and if he cannot find organic products in the market. An action plan should include:

- An information campaign about the security the EU Regulation 2092/91 and following regulations provide to consumers that offered organic products are really produced under the strict standards for organic farming methods;
- the introduction of a new EU-logo for organic products which is easily distinguishable from other logos;
- broad public relation campaigns to make the new EU-logo for organic products well-known to the majority of consumers in all EU-countries;

- communication campaigns about all the benefits of organic products and organic farming according to the production standards and results from research studies;

- financial support for organic suppliers which invest in general communication campaigns for organic products and in training courses for salespersons.

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THE ROLE OF INFORMATION IN THE CONSUMER'S DECISION MAKING PROCESS

ROLUL INFORMAŢIEI ÎN PROCESUL DECIZIONAL AL CONSUMATORULUI

GABRIELA POPESCU*

Having in mind the fact that information is priceless, it can influence, more or less, the consumers behaviour, more exactly a persons attitude towards buying a certain product or visiting different places where one can purchase goods.Information is valuable, but its acquisition costs. The consumer's time is the primary cost of the information search stage. Consumers can learn about the quality and attributes of a search product before buying it.

***Key words**: information, consumer, decision*

In the past years, information has been given an increasing importance. Since consumers are never perfectly informed on the products they buy and consume, more information about them will enhance their decisions and satisfaction. But obtaining information is a time consuming activity. A common supermarket displays 30,000 individual products, so being a perfectly informed consumer is an impossible task to carry out. It is very hard to be a well-informed consumer either. For a better understanding of consumer's behaviour and particularly the impact of advertising the role of information and its acquisition by the consumer can be analysed.

Information is valuable, but its acquisition costs. If the consumers have improved information, it will be easier for them to establish an adequate correspondence between the product characteristics and the attributes they search and thus they will gain more utility with the same dollar expenditures. If they possess complete knowledge about the prices of a certain product in different retails outlets and about trade-off between price and quality among the items in a product group, like frozen dinners,

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the consumers can save money without sacrificing their satisfaction or they can increase the utility without spending additional money.

Data collection and evaluation which the economist call information search is, on the other hand, a costly process. In order to make good decisions, the consumer has to search, mentally evaluate and retain the relevant data or raw information. Specifically, the information search and the decision-making process involve a series of stages 1) to acknowledge the need for information; 2) to search relevant information; 3) to evaluate information; 4) to make the purchase decision and 5) to evaluate the product after it has been bought and used.

INFORMATION SEARCH

The consumer's time is the primary cost of the information search stage. As a matter of fact, consumer information may be considered a household or a consumer-made commodity. The major input data necessary to produce information are time, human capital (previous knowledge), information sources (either free or purchased) and transportation cost, if the product must be evaluated personally in different shops in order to collect reliable data. The information searching process is not necessarily as organised as it may appear. Only in rare cases will a consumer decide to allocate a certain amount of time to the information search for a certain item, like a new fridge or car. Specifically, the information search process takes places at the same time with other activities like reading the newspaper and watching advertisements, buying from a grocery and seeing a new product accidentally.

What exactly specifies how much information consumers collect or should collect? George Stigler, who won the Nobel Prize in economics, wrote a fundamental article on this theme. According to him, consumers should collect additional information until the cost of acquiring it equals its expected value. The value is measured in terms of the expected price cut from searching a lower price or in terms of the enhanced utility (satisfaction) from other product attributes. Like all economic decisions, this is a matter of balancing costs and benefits. If the expected benefits exceed the costs, then more information is economical; if they don't, then too much has been invested in the information search process.

The factors that increase the informational value or decrease their acquisition cost will increase the amount of information that is economically efficient to acquire. The higher the price of a product, the more it lasts; or, the higher the quantity one has to buy, the higher the value of information. This makes it easy to explain why the person in a grocery who shops for a family of six or more is more likely to look for less expensive products than a person who buys for a family of one or two members. What is more, when the food budget share becomes as small as in the case of many American families, the buyers are less concerned with searching better food products. Their returns on information are also affected by price variations and product quality in retail stores. If each grocery sold a certain item for the same price, there would be no returns on the lower price. If information is seen as a production process, then education or experience (human capital) can improve its efficiency. For people with higher education levels the information search cost should decrease, as "information can be assimilated faster and accurately". A positive correlation has been seen between the educational level and the search for information on a certain product before its acquisition. Nevertheless, higher education is usually associated with high incomes that have a compensating effect. High incomes increase the opportunity cost of time, which can compensate and even exceed the increased efficiency of information search.

The relevant experience must also increase search effectiveness by reducing the time required to obtain information. Most people could do their grocery shopping faster in a supermarket from where they have bought before than in an unfamiliar store that they have visited only occasionally. On one hand, shoppers know where most of the products they want to buy are situated; on the other, they might spend a lot of time searching for products. This explains why consumers do not change shops so often.

An important aspect in connection with information is the fact that knowledge tends to become old. The best price for a product in a week may change the next one. The most economical place to go shopping for a certain family may differ from month to month. Further more, new products are displayed permanently and the attributes of the existing ones may change. This explains the constant need for information search.

People who say that information solves certain consumer problems are naive. People simply do not have time to become as well informed as they want or as others say to be. If the strategic objective is to increase the

level of public knowledge about a certain topic regarding products or consumers, then the way of achieving this objective is to increase the benefits or the information value or to reduce the acquisition cost. For instance, most people are much better informed about the connection between diet and health and how to improve their diet than they were several years ago. This happened because people have grown to perceive a high return associated with such information, since the public has heard repeatedly that the authorised sources emphasise the role of diet in most chronic diseases. At the same time, the costs required by being well informed have been reduced substantially. The fundamental information about changes in diet (such as reduced fat consumption) has been largely and repeatedly spread by the mass media, so that the public can't miss it.

Words like "information overload", "information anxiety" and "too many possibilities to choose from" have started to be used in order to describe the situation that consumers have to face. Some are overwhelmed by so many variants and consequently consider that shopping in annoying.

In this situation, most consumers resort to what Linder called "the rationale of growing irrationality" in order to save money and possibly their sanity. For a rational use of time, they make apparently "irrational" decisions, not so well-informed or weighed as they should be. Anyone who spent time weighing all alternatives before putting every article in his cart would waste hours if not a whole day in the supermarket. In order to avoid the time required by "rational" or well-sustained decisions, many consumers rely on their habits (they buy what they have bought before), inner reactions or other empirical rules. Some rely on the brand, a sign or a clue of the product attributes or quality. The clue is any information that helps predict other information. If consumers possess too much information, it will be harder for them to make a decisions than if they know too little. They have to select the significant data from the masses of data, but in this way they may ignore the essential factors. Our capacity to obtain information is limited by our mental processing and retention capacity, and the special knowledge required by data evaluation and time. Today many consumer goods are complex enough that special knowledge is needed to evaluate them. The ingredient lists on the labels of processed food give chemical the consumer has never heard before. The consumers cannot process such data into information.

INFORMATION AND FOOD PRODUCTS

Three types of goods have been identified on the basis of the right moment to collect information about them: search goods, experience goods and credence goods. Consumers can learn about the quality and attributes of a *search product* before buying it. For instance, they will perform a typical information search activity before buying a durable good such as a refrigerator. The information about the attributes of an *experience good* is available only after it has been actually used.

Basically, food is an experience good. There is no replacement for tasting them. This factor explains the wide use of free samples in supermarkets, especially those that promote new products.

However, many goods, food included, have characteristics that are associated with all three categories: search, experience and credence. Typically consumers know a lot about a product, even if it is new, before they buy it. They know it exists, they can see it and want to know what it contains before purchasing it. From this point of view, food is a search good.

Further more, food also contains the attributes of a credence good. Even after eating a certain food item the consumers will not know its complete set of characteristics. The consumer depends on experts to evaluate its nutritive effects and health effects. For example, he cannot detect the carcinogens and cannot evaluate their long-term impact. Those who buy organic food have to trust that they buy what is claimed.

Information search and product selection are different for food than they are for most other consumer goods. Since groceries are bought frequently and shoppers buy small, individual articles, grocery shopping conforms to recurrent buying patterns. In addition, food shopping obviously reflects the essential food consumption habits in a household. Such habits do not change very often. For these reasons, most consumers may engage in little information search before buying a product. They will only read its label to find out its ingredients and nutritive contents. But they will rely on "the accumulation of knowledge over time from numberless information sources, including their experience.

Some studies suggest that almost half of supermarket purchases result from impulse decisions, reaching 60% for some categories, such as frozen foods. But these estimates could be exaggerated depending on the

definition of impulse purchasing used. There are four types of impulse decisions: 1) pure impulse, which breaks a normal buying pattern; 2) reminder impulse, in which an in-store stimulus reminds the shopper of a product need; 3) suggestive impulse, when the shopper sees a product for the first time and wants it and 4) planned impulse, when the consumer deliberately makes in-store decisions to take advantage of price discounts, coupons and special offers.

Some shoppers make complete grocery lists. Other make only partial lists for products they buy only rarely, while other do not make any lists at all. But this does not mean that food not on such a list are unplanned, particularly in the sense of impulse purchase categories 1 and 3.

LABELLING

Ingredient and nutrition labelling were controversial topics in the 1970's and they are at issue again. Food industry argues that labelling regulations are too costly, and the consumer considers they are a great advantage in choosing healthy and nutritive food. Typically, consumers use a wide range of information about food and nutrition; to look only at how often they read labels before buying would be a narrow focus. The use of label information may also occur after the purchase. For instance, very few buyers read the labels on the cereal box at breakfast. Such postpurchase information can be important because of its possible effect on future food purchases.

In addition, mandatory ingredient and nutrition labels may generate other benefits. Such labels can encourage the production of more nutritious products, increase consumer confidence in quality of food and in the food industry and satisfy the consumer's desire to know, even if he does not use them directly. These nonuse benefits explain why consumers indicate a strong desire for information when questioned in surveys, even if they do not regularly use the information in making purchases.

PRICE INFORMATION

The value of information is measured directly for product prices. The prices of specific consumer goods vary considerably from store to store, even within small geographic areas. In this case, the return on information

gained by shopping around is the price paid for the product. Advertising not only informs, but also tries to persuade. Some types of advertising have more information, while others have a strong persuasive message. Newspaper and in-store advertising focus on providing information. They tend to concentrate on product specials and price cuts. On the other hand, television advertising of brand-name, manufactured food products has a typical persuasive message. Because of the "experience what is good" nature of food products, the goal of much food advertising is to persuade the consumer to experience (try) the product.

The Americans are exposed to an enormous volume of advertising and the find it easy to become cynical about its lack of informational contents. But even advertisements that are almost totally persuasive in their orientation usually supply some useful information. If nothing else, they identify potential sellers (stores) and product alternatives. The customers find out about a new product from advertisements and this represents a useful functions, given the thousands of new food products introduced annually.

Since television watching is a passive activity, viewers become passive recipients of advertising messages. Television advertisements need to be repeated frequently because of the low viewer involvement. Most television advertisements for food products and other consumer goods have little factual information. They frequently attempt to relate the product to "the fulfilment of basic human needs, such as love, acceptance and happiness". The desired result is to cause a subconscious change in viewers' attitudes that ultimately affects their purchase decisions. The efficiency of food advertising may be overestimated. Most people are quite skeptical of the claims made in food advertisements. Only 16% of the respondents in a survey by Consumer Network, Inc., a research company, said food advertisements were "very honest", but 25% called them "somehow honest" or "dishonest". The most frequent complaints concerned nutritional information that is misleading, claims that exaggerate the good taste and ease of preparation and overuse of words like "new" and "improved". Some people gave as examples advertisements that stress a cereal's high fibre content but do not mention the product's sugar or salt content, or advertisements for cooking oil that focus on the health benefits of reduced cholesterol level but then show a high-fat product like fried chicken. One

consumer said that "food advertisements are sneaky… they words so as not to lie, but to deceive"

Since the enormous proliferation of product alternatives, the greater complexity of many food products and their numberless ingredients and the strong evidence linking diet and health, food information has become even more important to consumers. At the same time, the value of information has increased, the cost associated with the time needed to become well informed has also increased. The private and public benefits from truth in labelling and advertising imply a permanent role for government regulation of information about the attributes of food.

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ASPECTS OF BRAND IMPLICATION IN INFLUENCING CONSUMERS' BEHAVIOUR

ASPECTE ALE IMPLICĂRII BRANDURILOR ÎN INFLUENȚAREA COMPORTAMENTULUI CONSUMATORILOR

GABRIELA POPESCU[*]

A brand is a name, term, sign, term, symbol, or design, or a combination of these that identifies the maker or seller of a product. It is a seller`s promise to deliver consistently a specific set of features, benefits, and services to buyers. Consumers view a brand as an important part of a product, and branding can add value to a product. The value of a brand, based on the extent to which it has high brand loyality, strong brand associations, and other assets such as patents, trademarks, and channel relationships.

***Key words**: brand, consumer, behaviour.*

In a world that is more and more complex and based on automation, with consumers who become more and more demanding and are widely exposed to all kinds of messages, the development of a strong brand represents the final challenge for marketers.

A strong brand makes the product unique and attracts the attention of a large number of consumers. A strong brand sells, and does this repeatedly. Branding has thus become the objective of any marketing specialist.

A great advertising expert said that "The consumer is not a stupid person, it is your wife!" And most people thought he was right. Who is the Romanian consumer and what are his brand preferences?

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The fast access to information of the Romanian consumer has changed him into a cynical and demanding individual who can afford to ignore what does not impress him. He, "the consumer king", believes that he had the right to have everything: quality, low price, the place where he shops and the right to choose, since he has a lot of variants to choose from. And in the future there will be even more possibilities to choose from! Such trends have led to a concern about brand approaching.

The brand is a comfortable hat that helps you sell your products more effectively. The production technology is almost the same everywhere; but the brand has a special recognition that is hard to gain. In addition, it may be the only way to distinguish among competitors.

The value of a brand comes from the fact that it makes you buy a certain product that does not differ from the others. However, you buy it and maybe pay more for it because of the brand attraction.

Following a large number of market surveys, it has been observed that generally, when buying a brand product, the consumers' expectations is correlated not only with the trust in the product quality but also with the identification of the consumer's personality with the image that the bran communicates.

Some of the barriers in the way of imposing an Occidental brand in Eastern Europe are the cultural, psychological and behaviour differences.

The more consumers a brand attracts, the stronger it becomes.

The term "brand" dates from very old times. It comes from the Norwegian word "brandr", that means to burn, and also named cattle marking.

The first brands started to develop at the end of the last century and the beginning of our century. Some if them are well-known even today, such as Levi's, which is over 100 years old, and, of course, Coca-Cola! A simple market survey reveals three basic characteristics of a brand: fame, how inclined consumers are to buy it and the market share. "Fame is only half important, because what matters is the vitality of the brand, how well is it sustained and how present it is in the consumer's mind.

Building a brand implies considering the whole future of the brand: where is it going to exist — on what market, whim does it address, what is the consumers' state of mind when they buy it from that market, what are our future plans for the brand, what do we want it to be — expensive, less

expensive, profitable, dynamic, close to people, technical, new, traditional, etc.

For example, Joe has developed very well because the people who worked for it understood the specific features of the Romanian market. Its success has attracted a famous investor in the field, Nestlé.

European Drinks has also managed to make many brands successful on the market despite the fact that its budget does not exceed the budget that Coca-Cola and Pepsi have.

The first great secret in brand building is to understand what the brand creates.

As a rule, the name makes 80% of the success, since people are exposed to a lot of information. A suggestive name makes a product easy to remember.

Coca-Cola, for example, was named after two of its ingredients: the coca leaves extract and the cola nuts.

I am what I am because I have my own name, I look, speak and dress in a certain way. These are the features of a brand.

Romania is a brand. What does this brand communicate to the consumers? Let us think of them as beer drinkers who go to work, watch TV, read newspapers, go to football matches or watch them on TV, are concerned with food, their children, films — live a normal life. What do they know about Romania? It is a historical, exotic name. The Romanians speak a special language that not many can understand.

Transylvania, a frightful region covered with forests where the Dracula myth was born. Nadia, for some. Hagi , Zamfir for others. This is the brand. This is branding. What is its importance, what makes it sell better? Let's take a look at other brands and we shall understand.

Romania is one of the countries that received with great enthusiasm the international companies on its market after the fall of communism, as in those days "the Romanians had their minds wide open to everything that was new".

The foreign brands were very string on out market.

Coca-Cola, for instance, was very little known before it actually penetrated our domestic market, so the company found it easy to get a large market share, which at a certain moment was estimated at 60-70% in the soft drinks sector.

Coca-Cola spends almost $350 million a year advertising its soft drinks. Coke offers a long list of brands and brand versions: Coke Classic, Coke II, Cherry Coke, Diet Coke, Caffeine-Free Coke, Diet Cherry Coke, Caffeine-Free Diet Coke, Sprite, Tab, Mellow Yellow, Minute Maid Soda, and others.

The international brands have had success on our market also because they had no competitors on the local scale. The lack of a true marketing before 1989 created a gap in the desire to associate the products with a certain image or emotional features.

So it was easy for the foreign companies to come to Romania. At the same time, it can be said that the current brands on our market appeared after 1990, be they international or local.

There was also the case of international companies that once on the Romanian market had to face pseudo-Romanian brands that were well-known among the consumers. They applied the strategy of taking the pseudobrands either to relaunch them or to use their name to promote other brands.

"Dero, for example a «brand» that had become synonymous with the detergent in general. Unilever decided to buy and promote it under this name. Perlan Alb, another brand bought by Procter&Gamble, is another example. The company relaunched the brand first under the name of Perlan, then this changed to Perlan Bonux, then to Bonux Perlan and finally to Bonux.

The first foreign marks that came in Romania opened the way to a variety of other brands of the same category "that walked on an almost well-worn path."

European Drinks penetrated the market at the right time. But it was not the right time for Coca-Cola, too. "Frutti Fresh launched on the market at a price lower than the Coca-Cola price when the soft drink consumption increased, but the Romanians' purchasing power started to decrease". "Given the low purchasing power, Frutti Fresh managed to obtain a large marker share, while Coca-Cola suffered a decrease in percentage".

At present, European Drinks can be considered a successful Romanian brand that competes with international brands. There are other successful Romanian brands like Borsec, a brand that gained fame thanks to the well-known Romanian mineral waters and the Romanians patriotism, or Joe, that developed after some multinational companies established the path. It is one of the few brands that has managed to gain a large market share thanks to quality products and not to advertising.

A relatively new brand on the Romanian market is Rai de Murfatlar (Heavenly Murfatlar). It is the result of the desire to make the Murfatlar brand new and it was launched after a number of ordered market surveys. These surveys proved the need of an alternative to the sweet wines on the market such as Grasa de Cotnari, Tamaioasa Romaneasca or Busuioaca de Bohotin — typically Romanian wines. Rai de Murfatlar is their alternative, much more modern, much younger, created for those who enjoy sweet wine, i. e those with traditional tastes but they want more than what the specific Romanian varieties offer. The brand name is simple, easy to remember and allows personal interpretations: the nicest moment, a memorable moment you want to live again, communicating the wonderful sensation that the Heavenly Murfatlar offers. There are, of course, other examples of successful Romanian brands.

What are the first things you remember when you hear the name of a company? The services it provides or the exceptional products? The low prices?

Whatever the answer, it must be said that all these elements pay a major role in building a BRAND.

The power of a brand lies in its capacity to influence the buying behaviour.

A successful branding programme is based on the concept of singularity which gives the buyer the sensation that no other product on the market is like the one he is ready to. The fundamental marketing idea is how to persuade the buyer to identify himself with the brand. Another essential feature is that inconsistency kills the brand.

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MARKETING COMMUNICATION IN AGROALIMENTARY PRODUCTS: THE ANIMAL SYMBOL

COMUNICAREA PENTRU MARKETINGUL PRODUSELOR AGROALIMENTARE: SIMBOLUL ANIMAL

IASMINA PAUNCHICI*

Agroalimentary advertising uses animal symbols quite frequently. However, their connotations are different from the ones we are familiar with. I will try to present several such connotations and underline their importance and impact upon the consumers.

***Key words**: animal symbol, agroalimentary product, impact*

INTRODUCTION

Symbols are present in each of us, in the way we talk, move or dream during daytime or by night, although we may not be aware of them. They give our desires a material form, generate some of our actions, model our behaviour and are the seeds of our successes or failures.

The birth, evolution and interpretation of symbols concern not only a large number of disciplines, but also the methods applied in sales and promotional operations.

However, when considering the element of quality and quantity, symbols may not always be the best representatives for the advertised agroalimentary products.

MATERIAL AND METHOD

I will deal with several animal symbols used in agroalimentary products and I will define their mythological and religious meanings in

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advertising, as well as their positive and negative symbolism in the religious culture.

My examples are taken from the best known TV guide, "PRO TV Magazin", from which I extracted several agroalimentary advertisements based on certain animal symbols. I have analysed them with the help of the following dictionaries: Ivan Evseev, „Dicționar de simboluri şi arhetipuri culturale" (Dictionary of Symbols and Cultural Archetypes), Jean Chevalier & Alain Gheerbrant, „Dictionnaire des symbols. Mythes, rêves, coutumes, gestes, formes, figures, couleurs, nombres„ and Clare Gibson, „Signs & Symbols. An Illustrated Guide to Their Meaning and Origins".

RESULTS AND DISCUSSIONS

Of the 105 agroalimentary advertisements published in "PRO TV Magazin" in 2003, only 17 contain animal symbols, that means only 16,19% from the total amount. The most common are the dog (PEDIGREE), the cat (WHISKAS), rabbits and hares (HEIDI), and the reindeer (TUBORG CHRISTMAS BREW).

Used quite frequently in agroalimentary advertising, rabbits and hares have a number of features that place them among the most representative symbols in universal symbolism. Within the Romanian cultural area, the rabbit is a solar symbol, as in some legends and mythical texts it draws the solar chariot. Because they are nocturnal, rabbits and hares symbolize the moon and hence death and rebirth. In Christianity, the rabbit's swiftness also led it to symbolize both the passing of life and dilligent service. The rabbit was an emblem of the Chinese emperor and signified longevity through its connection to the moon. The rabbit is the Chinese zodiac sign for the feminine and virtuous. To Buddhists, the hare symbolizes self-sacrifice, because a hare offered itself as food for Buddha and in gratitude he placed it in the moon. Their shy habits have led rabbits to epitomize timidity and sometimes cowardice. Through their procreative powers, both rabbits and hares were regarded as magical in the Middle Ages: carrying a foot was believed to protect against evil and bring good luck, although the hare could also be a witch's familiar.

The dog is another frequent symbol. The symbolism of the dog is truly that of man's best friend, for dogs signify loyalty, vigilance and courage. The Celts believed that dogs had powers of healing. Faithfulness is

probably the dog's prime virtue, and ancient Egyptians and Greeks believed that it followed its master to the afterlife. The dog was sacred to the messenger god, Hermes and Artemis, goddess of the hunt, and was also a companion of Hecate and Orion. In many cultures, it was believed that dogs were mediators with the realm of the dead.. Some African cultures regard the wise dog as the ancestral father of civilization and bringer of fire. In a reversal of its usually positive symbolism, Jews and Moslems consider the dog an unclean beast, a black dog signifying the Devil. Canis Major is the dog star, and the dog is the eleventh sign of the Chinese zodiac, representing idealism. In Chinese tradition, the dog can be both yin, symbolizing catastrophe, meteors and eclipses, and yang, signifying protection.

The cat is another common symbol. The cat has attracted mainly negative symbolism – although in some countries a black cat can be a bringer of good luck. Because of its perceived Satanic association within Western tradition, the cat was regarded a cruel, deceitful, malevolent creature. Female cats were considered promiscuous and epitomized lustful women; their "nine lives" were regarded as suspiciously supernatural. However, other cultures have regarded the cat more charitably: because of its independent nature, in Ancient Rome the cat was an attribute of the goddess of liberty, was sacred to the lunar goddess Diana and was also the guardian of homes, and thus a symbol of domesticity. A cat is revered by Moslems for saving Mohammed from the serpent, and the "M" marking on many cats' foreheads is believed to be the mark of the prophet's fingers.

Another frequent symbol is the reindeer. For the people in the far northern parts of Asia who feed on reindeer and use the animal for traction purposes, the reindeer has become the symbolic equivalent of the horse in other geographic regions. The Norse culture maintains a moon symbolism and the reindeer, like all deer family members, belongs to the general moon symbolism. It plays a funerary, nocturnal and psychopomp role. Wherever it was tamed and used for traction, it accompanied the dead to the afterworld.

CONCLUSIONS

Being poorly represented in advertising agroalimentary products, these symbols are of major importance.

We should revise our consumer behaviour and emphasize more than ever on the necessity of consuming food through advertising agroalimentary

products in every existing media, especially in magazines that we purchase regularly.

Another reason why advertising agroalimentary products should be better represented in our media is, from the point of view of marketing, increasing sale of these products.

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VIOLENCE USED IN ADVERTISING AGROALIMENTARY PRODUCTS

VIOLENȚA UTILIZATĂ ÎN RECLAMELE PENTRU PRODUSE AGROALIMENTARE

IASMINA PAUNCHICI [*]

Mass media has become more and more a locus for violence. One should not ignore the topics specific to mass media especially nowadays when media otherwise considered "peaceful" (such as TV commercials) harbour more and more violence under the appearance of "innocence". It is very important to see how mass media function – we have in mind the way they can be altered by violence. From this perspective knowing the causes of violence in mass media is of major importance: we insist, therefore, on violence in movies, TV and, surprisingly, in advertising (particularly TV commercials) and on the forms of violence, analysing its effects on mass media consumers.

Key words: *violence, advertising, food products, communication*

INTRODUCTION

Why "Violence in food products advertising"? Because the evolution of the contemporary society reveals an alarming aspect that affects all the social and human sectors, namely the unprecedented increase of *criminality in general* and *violent criminality in particular*. The acts performed with the use of force are a social problem whose forms of manifestation and solutions involve both the social control factors and the public opinion.

When we talk about "violence in mass media" we consider for example the informative programmes or advertising broadcast by different television stations. The issue that concerns us is the following: How deep

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are the mass media involved in advertising violence and what effect does this have on the public?

MATERIAL AND METHOD

In defining violence one must not ignore certain historical, cultural and normative criteria that apply in the society at a certain time, without excluding de plano some social or political interests or some subjective or arbitrary contexts that vary from one type of society to another. I will analyse this phenomenon using specialised references and TV commercials.

Television is the one that mostly propagates violence. Experts have established three large categories of "vehicles" for violence – the film, the advertisements and the television. This is the reason for which we shall only deal with these three mass media; television includes the other two at least partially, thanks to the advantages when compared with them.

RESULTS AND DISCUSSIONS

Mass media or **the means of mass communication** are defined as „the whole of the means of mass information (radio, television, press etc.)" (***DEX***, s.v. *mass-media*). **Mass media** are *means of communication and advertising* with a well-defined audience, structure, broadcasting frequency and professional or entertainment theme that can support or not a certain type of communication and/or advertising.

There are three large groups of mass media with a specific role, function and history: *the written press*, *the radio* and *the television* (Albert, 1988).

The advertising spot is considered the most effective type of advertising as it uses a complex of mass media: moving images, text, and sound.

Psychologist Robert Liebert (apud Elias, in Wells, 1979, 234) asserted that "Many of the advertisements for children emphasise physical strength. They show that force can be used to get stronger in many different ways. Research work on entertainment televisions have shown us that the force applied in a funny and acceptable context may lead to a violent behaviour." Liebert gives the example of the TV advertisements for the Hawaiian punch in which a character ask somebody else: "Do you like the

Hawaiian punch?" (*punch* "hit in the face with the fist"; "a drink made of wine or alcohol mixed with water, milk, sugar, lemon spices etc.") and then hits him right in the face. "All this in an amusing context that stimulates people to laugh at the situation", says Liebert.

The problem of the effect, the impact that violence has on the public all over the world is still far from being solved completely. The proof is the public's reaction towards the same violent scenes: some are terrified, others laugh and jump with joy. Another effect is the imitation of the violent scenes in the real world.

Violence in advertising is fairly new in the field. It is generally agreed that the advertisement is meant to promote a new product on the market or to maintain an old one on it. The fact that violence under its most subtle forms, I could say, gains ground in the advertisements that are broadcast by our national TV channels makes me accept the idea that mass media present acts of violence at public's request. How else could we interpret the following advertisements?

At the beginning of 2002, a television advertisement promoted a largely commented soft drink. A young man manages to catch a girl's eye only after he has blocked the rotating door with the bottle stopper. She gets a bump on her head and he offers her a "Frutti Fresh" bottle as a remedy!

By the end of 2002 an advertisement was shown in several variants but the question was the same "What would you do for Star chips?" In one of the variants a young woman punches a young man straight in his nose because he had dared take her chips.

In 2003 another series of violent advertisements for food products appeared. Thus for "Chio Chips" (again!), Leo Bennett Company created two advertisements in which while asking for the tasty chips the happy man who is eating them imagines that a piano or a money safe will fall as a penalty on the head of the one who might dare take his chip bag.

The radio stations broadcast in 2003 an advertising for the same chips (again!) during which a storm of gunfire is heard – maybe the bullets were shot against somebody who dared ask for a chip!

CONCLUSIONS

Undoubtedly, violence remains one of the most serious problems mankind has to cope with at the beginning of the new millennium. Whatever

the acceptation of the term, whatever the perspective from which we analyse it, its forms of manifestation are proliferating and its roots are within us and among us. It is the only way to respect the liberty of the press that does its duty by saying and/or showing the truth and the right of the mass media-connected individual not to suffer violence in his own house.

From this perspective, any type of mass media is a potential violence "carrier", whatever support, journalistic type, location, theme or function it may have. Verbal violence characterises them all, while visual violence refers only to the older (illustrated magazines, films, TV reports) or more recent ones (TV advertisements or even cartoons) – in which the photographic or the moving image is decisive.

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THE PRESENCE OF INFORMATION IN PROGRAMMING THE ACTIVITY AT GROWER FARMS

PREZENȚA INFORMAȚIEI ÎN PROGRAMAREA ACTIVITĂȚII LA FERMELE AGRICOLE

IOANA DELIA MOISESCU*, G.A. FIRU-NEGOESCU*

The article presents the information in programming the activity at grower farms.

Data are numeric representations of a phenomenon, process, activity, or action within or outside the farm. Information is a datum, which was subjected to processing and that brings a surplus of knowledge, by supplying new elements. As a rule, information must be of quality. The quality of information is measured with the help of some specific parameters such as: dynamism (which distinguish the processes of work in their evolution), realism (they refer to the use of information clearly reflecting the situation of the farm and its environment), intricacy (being able to supply as much as possible information), accuracy (information is exact if it reflects the real situation of a phenomenon, thus influencing decision), convenience (it refers to gathering, recording, transmitting and manufacturing the information at a proper time), accessibility (the information can be useful when you need it), safety and accuracy (necessary to eliminate the ambiguities of the message), synthesis and concision (the presentation of information with economy of messages), specification (the adaptation of information to the user's peculiarity, regarding the level of training, degree of information, time available). After presentation, information can be: oral, written and audio-visual; after destination it can be: ascendant, descendent (decisions), or horizontal; after processing degree they can be: primary, intermediate, and final; after the symbols used they can be: alphabetic, numeric and alphanumeric; after the degree of synthesis of content it can be:

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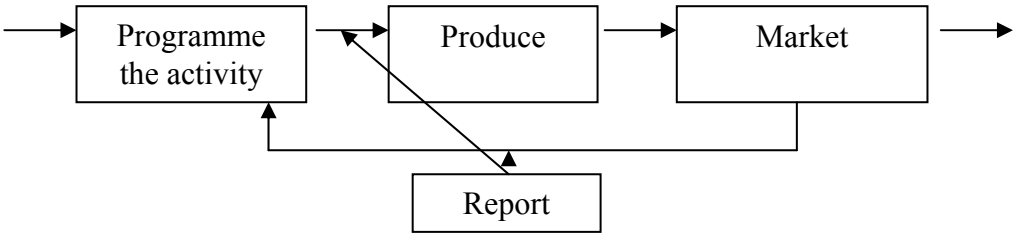
analytic and synthetic; after origin it can be: exogens and endogens; after destination it can be: internal and external; after its usage it can be: of state, of change, of medium; after type of reference it can be: long-time period or short-time period; after connexion it can be: conductor, conducted and reverse connexion; after mode of organization it can be: information which controls the work, book-keeping information, statistics, and foreseeing.

First, we programme the activity, then we produce and, in accordance with how it markets, it plans the next activity, as in the next figure:



So, we can introduce two measures: - first – fidelity rate which represents the report between the number of consumers who buy a certain product "x" from an "f" farm and the number of consumers who bought the "x" product from the "f" farm, as in the formula: $Rfidx, f = \frac{Ncons(t)x, f}{Ncons(t-1)x, f}$, - second – the attraction rate which represents the ratio between the number of consumers who buy "x" product from an "f" farm and the number of consumers who bought "x" product from the "k" farm, as in the formula: $Ratrx, f = \frac{Ncons(t)x, f}{Ncons(t-1)x, k}$.

The elements of an informational system are: - personnel resources – analysts, programmers, system engineers who sell the farmers the necessary soft, - material resources – computers and all the equipments linked to these, - software resources – programmes, systems of administration of data bases, - data bases – which represent a collection of data with description of data and of relations between them.

With a computer's help we can manage crops and make a database with suitable diseases and treatments. We can compute the cost of unit product, the rate of the profit knowing the production, the expenditure and the price. With the help of the Internet we can obtain more data regarding the crops. With the help of the computer we can constitute a data base regarding the animals, for example horses, by introducing their names, breed, father, and mother used in crossbred to obtain good offspring.

The components of an informational system are data, information, informational tides, informational circuits, informational procedures, and means of treatment of information.

An informational system can be seen (Figure 1): at a global strategical level where objectives and means of informational system planning are; at a tactic level where most applications are achieved with the help of a project.

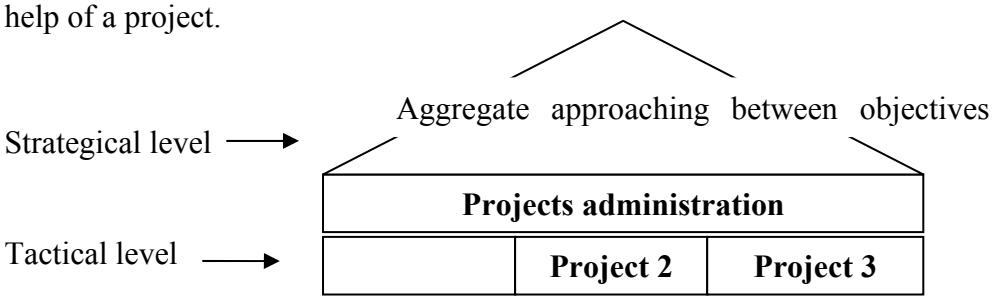


Figure 1 – The 2 levels of management of an informational system

Information, as a rule, must satisfy the demand bound to: age of information – sometimes it is necessary every day; value of information; deepth of information; accuracy of information.

Information flows are the routes from the transmitter to addressee. They are characterized by: content, volume, quality, frequency, direction, form and support.

Informational circuits point out the way of information from generation to archives and destruction.

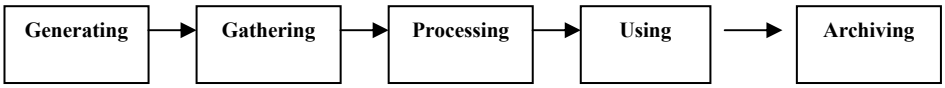


Figure 2 – The circuit of information

Informational flows and circuits are classified: after the direction suppliers – beneficiaries they are: vertical – between compartments and jobs on different hierarchical levels between which there are relations of subordination and which allow transfer of ascendant and descendant information; horizontal – between segments and compartments which are situated on the same hierarchical level; oblique – between compartments and jobs been on different hierarchical levels between which there are relations of subordination, but relations of authority of the decision type; after the frequency of production they are: periodical – which are repeated at certain time intervals; occasional – in accordance with appearance and situation.

At present, farmers know two types of means of treating information: manual – with reduced speed of treatment, low cost and possibility of appearance of many errors; automated – regarding computers, very good manufacture speed, much costs, powerful internal memory, safety of calculations, skilled personnel (programmers, experts, analysts, and operators).

Computers are useful when there is a great volume of data which must processed and checked up; when it is necessary that the data should be stocked and it is necessary to have rapid access at a great volume of data and information, when it is needed to achieve complex manufacture of data and information.

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RESEARCH REGARDING THE ORGANIZATION OF THE ACTIVITY OF PRODUCTION AT THE PRIVATE FAMILY FARMS FROM GLIMBOCA COMMUNE, DISTRICT CARAŞ-SEVERIN, THE ANALYSIS AND THE PLANS FOR THIS LOCALITY

CERCETĂRI PRIVIND ORGANIZAREA DE ACTIVITĂȚI DE PRODUCȚIE LA FERMELE FAMILIALE DIN COMUNA GLIMBOCA, JUDEȚUL CARAŞ-SEVERIN, ANALIZA ŞI PROIECTELE PENTRU ACEASTĂ LOCALITATE

IOANA DELIA MOISESCU*, G. A. FIRU-NEGOESCU*

The article presents the research regarding the organization of the activity of production at the private family farms from Glimboca commune, district Caraş-Severin, the analysis and the plans for this locality.

Glimboca is a village from North-East of Caras-Severin district, traversed of Bistra River, which is nearby on the national road with the town Oțelu Roşu and the Obreja commune. It is in a hill zone at 15 km of Caransebes, with 550 family households who have land in surface of 1550 ha.

The private family farms have the following landed structure: 50% arable, 25% hay fields, 5% vineyards, 5% woods, 5% pasture lands, 5% fruit trees, 5% uncultivated.

The commune owns a surface of 770 ha of arable field from which: 300 ha are cultivated with maize, 300 ha are reserved to beans (which grow up on maize), 200 ha are distributed to potatoes, 100 ha are of pumpkins which constitute the forage and from the seeds is doing the oil, 30 ha are with beets, 30 ha with sun-flowers, 20 ha are cultivated with tomatoes, 20 ha with peppers, 20 ha with carrots and parsley, 20 ha with onions, 10

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hectares with garlic, 10 ha with egg fruits and 10 ha with cabbage. The commune has 77 ha with vineyards, 77 ha with fruit trees (plum trees, apple trees, pear trees, cherry trees, walnut trees). The most hauseholds have almost 1 cow, 2 sheeps, 3 pigs
and 20 fowls. The productions achieved on an average at hectare are: 3.500 kg of maize, 660 kg of beans, 12395 kg of potatoes, 20000 kg of pumpkins, 25000 kg beets, 12088 kg of sun-flowers, 15545 kg of tomatoes, 3000 kg of pepper, 9900 kg of carrots and parsley, 12000 kg of onion, 1200 kg of garlic, 18000 kg of egg fruits, 5000 kg of cabbages, 5000 kg of grapes, 3800 kg of other fruits. The production of pork is of 100 kg of pig in a year, of the milk is of 2951 litres on cow on a year, of the wool is of 2,41 kilograms on a sheep on a year, of the eggs is of 138 pieces on fowl.

The price on kilogram of maize is 7844 lei, beans - 32000, potatos - 10000, pumpkins - 2000, beets - 20000, sun-flowers – 20905, tomatoes - 7000, peppers - 10000, carrots and parsley - 35000, onions - 15000, garlic - 45000, egg fruits - 10000, cabbage – 8000, grapes - 15000, other fruits – 10000, wool – 100000, pork - 80000. A liter milk costs 15000, one egg costs 2500. In this period the currency of the dollar is 33000 lei.

The family private farms from Glimboca commune dispose of resources of production adequate, which exercised in the process of production, with adequate organizations and with aplication of some performance technologys, contribute of development of efficacious activities, has production costs reduced.

In analysed period the family private farms from Glimboca finished the activity with a profit of 25 billion lei.

The analysis of the locality serves of estimate of a situation, as base of starting for elaboration of strategically programmes. In the frame of analysis access itself first the internal specific of macro-region, the strong and weak points. Then analyses itself the exterior influences. The exterior positive effects are considered opportunity, and the exterior negative effects – dangers, threats.

The essence of analysis is that is seeking and is finding grounded answers for appeared problems.

The strong points are: in rural medium is finding important naturale resources: the soil and subsoil wealth, landscapes; we find construction which people improved along of more generations; the durable development tries to transform the relation between village and town in a cooperation; the

spreading of city zones did not affect total the rural specific; though the commune pass the national way and railway; the quality of the land is good, obteining good yields even in dry seasons from the last years; as regards landed fund is majority the private property; drinking water is of superior quality after the closing of Oţelu Roşu factory; many animals especialy fowls, honed cattle and pigs find itself the market in Oţelu Roşu and Caransebeş; the dwellings are with electricity, plumings, gas, telephone sets; the rural landscapes present tourist attraction; The weaknesses are: is finding that some bildings are leaved as consequence of the exodus rural-urban; the sewerage and the warming are inadequate; they are disputed issues on grounds; the factory from Otelu Rosu closed the gates setting free many people, part of them made for jobs abroad; it is not a foodstuff industry processing of local raw material, from the vegetable and animal sector; comeings very low.

The opportunity is that regarding Romania integration, the European Union subsidise some investments in areas of industrialization of milk and meat, of spreading of sewerage systems.

The threats are: disappearance of some craftsmanship; the existence of social tensions as consequence of growth of unemployment rate.

The theme of the first project for Glimboca commune is the setting up of a woodwork factory, the motives are: the existence of a wood in proximity, inflation and optimization of economic activities in small and middle enterprises. The objectives are: the supply of enterprises with production factors and facility of production to turning to good though the finding of markets of sale and negotiation of prices. These objectives could be realised though: organization and legalization of activity, development of functions of supply and sale, forming and development of material base and insurance financial and self finances sources.

The suggested term for setting up the factory is of 2-3 years. The responsibility are of Local Council and of Chamber of Comerce and Industry Reşiţa.

The middle is the funds of association from private investors. The result is the settlement of problems regarding of supply and sale.

The theme of the second project is the organization of a centre of gathering and manufacture of milk and lactate products, the main motives are: many honed cattle in locality and deficiency of a adequate point of gathering and manufacture. The objectives are: setting up of a point of

gathering of milk, organization and arranging of a unit of production of dairy products, development of marketing function for turning to good account of products and diversification of products. These objectives could be realised though: planning and arrangeing of a adequate space for development of activity, endowing the net of gathering of milk, marketing of integral of production though self nets and contracts of sale though various another points. The suggested term for organization is of 2 years. The responsibility are of Local Council for insurance of a headquarters and promotion. The middles are the funds of association from private investors, SAPARD finance, support of partial finance from Local Council. The results are: the solution of the problem of gathering and manufacture of milk and lactate products, the growth of farmer's income and the possibility of turning to good account the production.

The fourth project is the setting up of a bank, the main motives are of satisfaction of need of access to credits and increase of the economies though deposition. The main objective is of spreading of the net of distribution of credits. This could be solved though information of the population and the commune hall regarding the achievement of the objective, projection and execution the work. The suggested term for setting up is of 2 years. The responsibility are of Local Council and National Bank of Romania. The middles are the participation of Local Council for promotion and financial support. The result is the fluency of banking credit.

So, we arrive at the conclusion that locality Glimboca border itself in a zone with conditions of middle development.

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BANAT - ASPECTS OF MODERN HISTORY

ASPECTE DIN ISTORIA MODERNĂ A BANATULUI

M. - R. LUNGU[*]

Banat is a Romanian province that covers an area of 28,562 km$^{2.}$ During the Middle Ages, Banat belonged to Hungary. The Turks lost Banat in 1718 when it became part of the Hapsburg Empire. Following the Paris Peace Treaty, Banat was divided between Romania and Yugoslavia: two thirds of the province were given to Romania and one to Yugoslavia.

Banat is a Romanian province that covers an area of 28,562 km^2 and is bordered by the Carpathians in the east, the Danube in the South, the Tisa in the West and the Mures — an affluent of the Tisa — in the North. The relative historical autonomy of the province came as a consequence of its former statute as a border region with a military role.

During the Middle Ages, Banat belonged to Hungary. The Turks conquered it in the 16th century. In 1596, Sigismund, Prince of Transylvania, surrounded the Fortress of Timisoara in an attempt to free it from the Turkish occupation. Mihai Viteazu, the first ruler of the United Romanian Principalities, took part in this siege with an army of 4,000 soldiers.

The Turks lost Banat in 1718 when it became part of the Hapsburg Empire. In the same year, Count Mercy, an Austrian general born in Lorraine, was appointed Governor of Timisoara. He supported, organised and reconstructed modern Timisoara.

In 1719 the imperial territorial administration and the afferent region of the fortress of Timisoara were constituted and named "Temeswarer Banat", i.e. the Banat of Timisoara.

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Laid waste by wars, the territory was colonised and developed by its new rulers. Starting with 1723, a large number of Germans called Swabians were brought in Banat from the southern and western parts of Germany. The colonisation was a three-stage process:

a. the first stage — 1723-1726 — the first 15,000 colonists settled in the centre and the southern parts of Banat;
b. the second stage — 1763-1766 — 20,000 colonists arrived;
c. the third stage — 1778 — 25,000 colonists arrived.

The settlers were families from Swabia and Rhineland and French families from Lorainne. They founded new villages and extended the existing ones. As early as the 17th century, Serbians from the south of the Danube also moved in Banat. Following the Bulgarian migration, the first Bulgarian communities appeared in Banat in 1738.

Documents attest that in 1774 Banat had 317,000 inhabitants, of which 181,000 Romanians, 78,000 Serbians, 43,000 Germans, 8,000 Bulgarians, 5,000 Gypsies and 300 Jews.

In 1779, Banat went under Hungarian administration. However, in 1781 Timisoara was declared an independent municipality and the Romanian historiography mentioned it as a free royal town. This situation facilitated a better administration of the incomes spent for the modernisation of the Fortress and the neighbouring castles, and cultural, confessional and urban development.

Between 1728 and 1732 hydrotechnical operations took place to adapt the Bega Canal and Timisoara became a port. It was connected to the Central European river system by the Tisa and the Danube.

In 1846 the first railway was built and linked Oravita and Bazias. The 1848 revolutionary events postponed its inauguration until 1856. Railways to Arad and Caransebes were built in 1876.

Timisoara played a major role in the above-mentioned historical periods. During the Napoleonic wars, the imperial Austrian thesaurus was brought here for safety reasons.

During the 1848 revolution, Timisoara underwent very difficult times. Mayor Johann Preyer organised a people's gathering in front of the town hall. The people assured the Emperor in Vienna of their devotion to the royal throne. However, in the following days the people gathered to express their attachment to the Hungarian revolutionary government.

Timisoara's population no longer supported Austria. The revolutionary flame spread all over Banat. The Serbians fought against the Hungarian hussars at Kikinda.

In October 10th 1848, the imperial general Rukavina von Vidovgrad declared state of siege on Timisoara's territory. In the spring of 1849, the Hungarian army led by general Bem moved its battlefield in Banat. The Romanians and the Serbians living in Timisoara joined the Austrians.

The Hungarian revolutionary troops set out towards Timisoara with 6,000 soldiers and 300 cannons. The siege lasted 107 days, during which the revolutionaries occupied Iosefin and Fabric districts.

The Fortress was about to surrender. However, on August 9th 1849 Austria sent more soldiers led by general Haynau. The Hungarian army was defeated at Sânandrei and Banat went under Austrian authority again.

The Governor of the Banat of Timisoara and Serbian Voivodine chose Timisoara as his residence. In 1860, Banat was under Hungarian administration again.

Documents say that in 1910 Banat had 2,161,000 inhabitants, of which 910,000 were Romanians, 510,000 Germans, 313,000 Slavs, 308,000 Hungarians, 30,000 Slovaks, 33,000 Jews and 51,000 other nationalities.

Timisoara, the capital of the province, became a typical Austrian town known as "Little Vienna". The town modernisation was a very fast process.

- 1854 - the first telegraph line in Timisoara
- 1866 the first Ambulance Station based on horse transportation was opened; it was the first institution of this type in Central Europe.
- 1869 - passenger river transport was inaugurated on the Bega Canal; these were the first regular water courses in Romania;
- 1881 - Timisoara had the first telephone network in Romania;
- 1884, November 12th - Timisoara was the first European town with electric street lighting;
- 1897, July 27th - the first electric tram was inaugurated; it was the first in Romania and the ninth in Europe.

In December 1st 1918, Romanians from Banat went to Alba-Iulia to support the union of the entire historical Banat with the Romanian kingdom. Of the coinhabiting nationalities, only the Germans supported the union.

Following the Paris Peace Treaty, Banat was divided between Romania and Yugoslavia: two thirds of the province were given to Romania and one to Yugoslavia.

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FACTS THAT INFLUENTS THE COMPETITIVITY AT COWS FARMS LEVEL

FACTORII CARE INFLUENȚEAZĂ COMPETITIVITATEA LA NIVELUL FERMELOR DE VACI

IULIANA IOANA CREȚ [*]

The facts that influents the competitivity at cow farms level are: the number of milk cows and the medium dimension of effectives, the medium milk production per cow, the prices of milk and the improvement of the milk production at farm level.
The milk cows effective in Romania represents about 8% from the number registered in U.E. The medium milk production in Romania represented in 1999 only 55% from the medium registered U.E.

***Key words**: competitivity, cow farms, milk production, milk market*

INTRODUCTION

In traditional way in Romania, the milk production was concentrated in private sector. In 1989, the state agricultural industrial units were getting 18% from production; the agricultural cooperatives were getting 28%, and family farms 56%. Till 2000, the percent realized by family farms reached to 97%, while the state agricultural industrial units were realizing 2%, and the production agricultural industrial units 1% (4). As a results, the concentrated milk production, in great measure, in family exploitation at low scale. Part of the produced milk is kept in farms, to be used by the family and for animals, and many quantities are sealed directly to consumers, mainly in street market (2,3).

The facts that influents the competitivity at milk cow farms level are: the number of milk cows and the medium dimension of effectives, the medium milk production per cow, the prices of milk and the improvement of the milk production at farm level (1,3).

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RESULTS AND DISCUSSIONS:

In 2001 the cows effective in Romania (1746 thousand) represent about 8% from the number of U.E. (21152 thousand) (4). The milk cow effectives, has known a pendulant evolution in 1999 – 2003 (table 1)

The number of milk cow and the medium dimension of effectives represents one of the factors that influence the competitivity at cow farms level.

Table 1

Milk cows number in Romania (thousand capita)

Specification	1999	2000	2001	2002	2003
Number of milk cow	1769	1736	1746	1759	1800

Source: MAAP

Private sector becomed preponderant, in 2001 had 99% from the cows effective and furnished 98% from milk production being represented especially by small exploitation of family type. In total for country there is 1, 2 millions milk cows exploitations. The medium dimension by exploitations shows a values of 1,4 milk cows, the highest balance (95%) being held by the exploitations with 1 – 2 heads. With this value of medium dimension of effectives Romania has a dimensional structure very different by the one in U.E, where is 24 cows.

The milk medium production on cow in Romania is concentrated in private sector.

In table 2 is presented the situation of cow milk production in Romania in 1999 – 2003

Table 2

Medium cow milk production evolution

Specification	1999	2000	2001	2002	2003
Medium milk production (quart/capita/year)	2990	2867	3014	3230	3260

Source: MAAP

Analyzing this table we can see a tendency of going down of the medium milk production on cow till 2000, after that is noticed the tendency of growing which is maintained in the present.

Still, if is done a comparation with the medium milk production on cow in U.E. (5433 quarts/cow/year, in 1999) the medium production in Romania was just 55% from average registered in U.E.

Small productions on head of the animal in Romania are owned to the low genetic potential of some animals, under best forred levels and to the deficiency in the activity of animals grow.

The under best forred base for cattle effectives could be owned to the changes which took place in communal postures organization, which made, always, on important forred base for the effectives in commune.

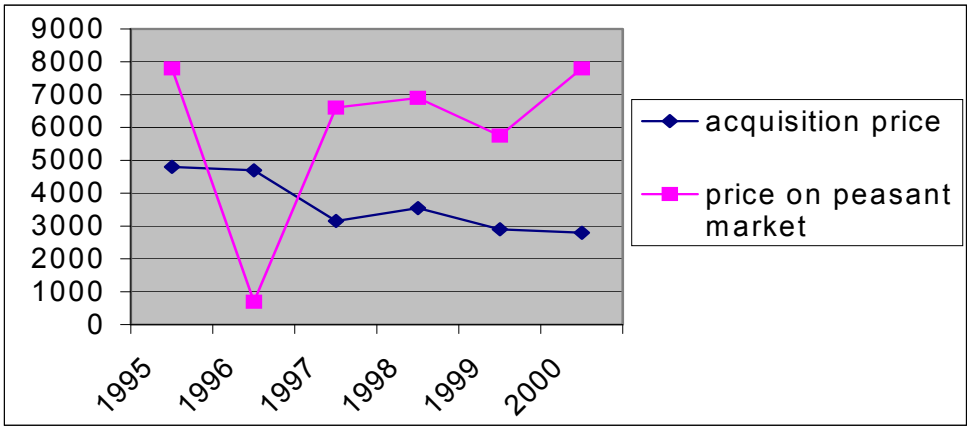
Milk prices at farm levels had an oscillate evolution in analyzed period being noticed the existence of a market of direct sales in Romania, along with sales for the processors.

The price level in 2002, for milk sold to the processor (price and acquisition) was between 4000 lei, and 4300 lei for quart. The prices in the peasant market had considerable grown, and the high level of price and the assurance of payment are two reasons for which the commerce form is so popular for farmers.

The price received by the farmers for processing milk in Romania is lower than half of the U.E. countries (fig. 1).

Figure 1

Prices for milk in Romania (lei per quart)
Source: MAAP



While the milk prices in Romania, expressed in present terms, had dramatically grown in the second half of 1990 decade, the official registered prices, expressed in the prices from 2000, (reevaluated using the Index of Consumers Prices), for the sales for processors registered a continuous fall.

The services of gathering milk and extension for the improvement of milk production at farm level are not deeply developed in Romania, while in U.E. the producers have these services.

The gathering centers of milk are a major demand for the development of a milk sector with competitive efficiency. The investments level for making a gathering center, necessary from each farmer, could be relatively low if an enough number invests and are offered only the adequate facilities.

The investments on small gathering centers could be on good economic opportunity, if is well organized and implemented.

CONCLUSIONS:

1. With a medium dimension of 1,4 cows effectives on exploitation, Romania has a dimensional structure very different from one in U.E. where the average on exploitation is 24 cows.

2. The small productions on the head of an animal in Romania are owned to the low genetic potential of animals, under best levels of forred and to the deficiency in growing animals activity.

3. High level of price and the assurance of payment are two reasons for which the commercializing milk on peasant markets is so popular for farmers.

4. The gathering milk centers are a major demand for the development of milk sector with competitive efficiency.

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CONSIDERATIONS REGARDING THE MILK SECTOR AND MILK PRODUCTS FROM ROMANIA. SWOT ANALYSIS

ASPECTE PRIVIND SECTORUL DE LAPTE ŞI PRODUSE LACTATE ÎN ROMÂNIA. ANALIZA SWOT

IULIANA IOANA CREŢ*, CORNELIA PETROMAN*

The opportunities of the efficiency and quality improvement must be searched, mainly, in some better foddering and hygiene practices. The investments, from own resources, as trough the interloper of financial assistance, in animals, shelters, and the storage, will affect the production and productivity in a positive way. The processor are offered big opportunities if they invest in a gathering system (witch includes the payment for quality) in modern processing technologies.

***Key words**: milk and milk products, competitivity, economical efficiency.*

INTRODUCTION:

Milk sector and milk products competitivity in Romania presents the following disadvantages caused by

- medium productions on the head of small animals, which in many cases, ore situated under the genetic potential of the respective cows, because of the deficiency of foddering and taking care.
- insuitable attention given to the quality oh milk at farms level, in gathering process and the establish of prices, as in the measurements of settles vising the markets from the street.
- a milk gathering system which is very brook up, doesn't have enough installations of colding in many areas and operates with small quantities in many points, in the milk tide frame from the form to the processor.

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In what regards the sector of milk processing, the sector is generally very broak up the state sector is still in the privatization process and some ex state companies are touching good levels of efficiency and development.

In the last years the processors of milk seams to have raise their work productivity and, generally, to have maintain their efficiency levels.

The influence of foreign investments and competition has made a stimulant for the development of products and the raise of milk quality.

RESULTS AND DISCUSSIONS

The major points of milk sector and milk products in Romania are the relatively small prices with work force and – in comparison with U.E.- the relatively small costs of the inputs. The milk is acquisitioned by the processing units at relatively small prices (generally, half of the medium price from U.E.).

At the low quality of milk contributes many aspects, like the quality of fodder and the lock of orientation for quality and hygiene in forms. The quality of milk is, also, negatively affected by the lock of colding installations in forms and in gathering points.

Table 1

Major points and weak points at milk sector

Stage	Major points	Weak points
Market/macro medium	Big market with 22 millions consumers	a) the low level of the consumers incomes, what eds to a reduced buying power of the consumers. b) high rates of inflation and of the interest c) the lock of accessible information regarding the industry structure, the behavior and it's efficiency, necessary for the achievement of a monitorised of the sector well informed and for the agreement of assistance for it's development.

The level of farm	a)Extensive disponibility of force of cheap work. b) Small cost of the inputs (comparative with U.E.)	a) The structure at small scale of milk production. b) Low levels of expertise between the producers, in what regards the grow of animals, and the economical aspects. c) Low quality and limited production of fodder (of winter) d) Inadequate storage for qualitative winter fodder e) Low genetic potential for the milk production of a significant percentage from the effectives total at motional level f) Low milk productions on cow g) Lock of orientation for quality and hygiene (low level of knowledge, lock of cold installations, falsified milk with water by some producers) h) Lock of investments at farm levels high cost of commercial credits.
Process	a) Small costs of work force b) Reduced cost of milk (about half of the costs for quart registered in U.E.)	a) weak supply base for many industrial units b) High cost of milk gathering c) Undeveloped payment system for milk depending on quality in many processors case d) Low level of factory use e) Relatively old technologies f) High costs of distribution for many industrial units g) Lock of preoccupation for quality

		coming from some producers h) Low levels of profit i) Lock of information regarding the situation and evolution of market
Street market	a) Offers insurance of payment for small producers b) Creates a avaible of small prices for some products for consumers with low incomes	a) Low hygienical quality of products, installation and procedures. b) High using of work force (in losts, in which case the cost of opportunity is bigger than zero)
Distribution with wholesale		a) Distribution sector by wholesale is very fragmentated, which leads to higher costs of distribution
Small shops	Offers a large range of available products	a) Limited facilities of maintaining the quality of fresh products b) Is difficult to realize a scale economy
Supermarkets and sale units with important wholesales	a) Good range of products – grows the available of products b) Generally good standards of services c) Higher levels of efficiency than in other distributors, case in what regards the acquisitions of products, sale and other functions d) Grows the available of products for some small shops (where they can be bought in large quantities)	a) Lock of competition b) High prices for a low quality

At farm levels, the opportunities of improvement of the efficiency and quality must be searched, mainly, in some better foddering and hygiene practices. Investments, is own resources, as in financial assistance, in animals, shelters and fodder storage, will affect production and productivity in a positive way.

The processors are offered big opportunities if they invest in a gathering system (which includes payment for quality) in modern technologies of processing. A major risk for the sector is that it doesn't succeed to satisfy the demands and standards quality which are in a continuous grow for the entire chain of milk

Table 2 Opportunities and Risks for milk sector and milk products in Romania

Stage	Opportunities	Risks
At farm level	a) Improvement of milk quality by granting consultancy and training in what regards the conditions and hygienical procedures b) Investments in animals with high genetic potential in shelters and fodder storage they have as a result higher productions and productivities c) Regulate payments creates possibilities for investments from own resources	a) Accepting low quality products (streets markets) may affect the efforts of sector of raising the standards of milk production. b) Failure in satisfying the demands of Acquis (quality, hygiene, etc.)
At processing level	a) raising of quality and quantity of milk delivered in gathering systems, plus the development of payment systems for quality b) The growing of quality and efficiency of the production through investments and modern technologies. c) Development of main products on the base of some better knowledge regarding	a) Sale chains by piece which establish demands of quality and quantity which the local industry can't satisfy and grows the penetration of imports b) Tendency of grow of products use with a low fat contents c) Failure in satisfying the demand as Acquis (quality, hygiene)

	the market and consumers demand d) Improved range and quality of products while the demand is growing in same time with the consumers incomes e) The grow of the sector efficiency by restructurations determined by the market f) Foreign investments allow the insurance with capital, management expertise and production	d) Continues meak of Romanian economy stops the development of a market for milk products e) Risk business fied because the elaboration and inadequate implementation of politics

CONCLUSIONS

Milk sector and milk product has opportunities for improving the competitivity. At farm level the productivity and efficiency could be grown by better foddering and hygiene practices. These measurements would improve the level of milk quality. A major risk is the fact that milk sector and milk products don't satisfy the demands of quality and standards which are higher in the milk and milk product chain.

The milk processing is very fragmentated, the state sector still being in privatization process and some ex state companies are touching good levels of efficiency and development.

The milk processors seems to have grown their work productivity and to have maintain their efficiency levels.

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ESTIMATIONS CONCERNING POULTRY MEAT MARKET IN ROMANIA

APRECIERI PRIVIND PIAŢA CĂRNII DE PASĂRE DIN ROMÂNIA

ANCA BANU[*]

The poultry meat and products obtained are important components in rational nourishment of peoples. In the total production of meat in Romania the poultry meat has 28% and the present 98,6% of the poultry effectives are in the private sector. The main objectives for rehabilitation and redressing for long and medium terms of poultry sector and poultry meat market are: maintain the developing rhythm of the poultry meat sector; ensure the population with the necessary amount of poultry meat to an accessible price and quality; financial sustenance for poultry meat production; the financial sustenance wants to bring the breed poultry sector to the European Union standards.

Key words: *poultry meat market; effectives and production, assortments, poultry meat trade.*

The poultry meat and products obtained are important components in rational nourishment of peoples. Because of the special quality of meat, the poultry meat consumption had been raising year by year, attaining in some countries more than 25kg/capita.

Not only the reduced price and quick adaptability of the producers at the peoples need, is pleading to poultry meat consumption, but also it's diet quality which impose it in West Europe (more and more affected by the nutrition disease) and for the islamic people (where is allowed by the religion).

In the total production of meat in Romania the poultry meat has 28%. Before 1990 in our country there was a very important poultry sector, the poultry's breeding was about 80%, in poultry farms of industrial type, in the state sector and economic associations.

The liquidation of a big number of poultry farms determined the decline of poultry meat production.

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The effectives and poultry meat production are presented in next table (table no. 1).

Table no. 1

Effectives and poultry meat production

Index	2001	2002	2003
Total effectives of poultry's (thou. capita)	71413	77379	80000
Total production of meat (thou. to)	363	431.6	455
Average weight (kg./capita)	1.7	1.8	1.9
Subsidize quantity of poultry meat (thou. to)	-	100	140

Source: M.A.A.P

Analyzing the presented dates we notice that both effectives and production had an ascendancy evolution.

In 2002 poultry effectives developed (reach at 77,379 thousand), fact which determined a production with 19,8 % bigger than the year before.

Development of poultry meat effectives can be explained by the effect of money (bonus) given from the budget for the poultry meat delivered on the market and so in 2003 had obtained 80.516 thousand chicken. In the present 98,6 % of the poultry effectives are in the private sector. The intensive unities for poultry breeding are making almost half of poultry meat production, supplying the internal market centered in the cities, where in the last two years have been a raising demand for refrigerated products.

The main assortments which have supply's o the market are: whole chicken, pulps, chest, internal organs, and less processed products (half-prepared, etc) existing the prospect to develop this sector. The main type of demand products on the market are presented in the table no. 2.

Table no. 2

Types of products demand on market -%-

Assortment	2001	2002
Whole chicken	35	40
Pulps	23	27
Chest	7	10
Parts	5	6
Total	70	83
Other assortments		
Liver	8	4
Prepared	7	3
Other assortments	15	10
Total	30	17

Source: "Land O Lakers" Company and U.C.P.R.

From the presented dates results that the whole chickens are the most requested by the consumers, 35% in 2001 and 40% of total demand in 2001. It follows by preferences the pulps with 23% and then chest with a reduced percent – 10% in 2002.

In this way, comes up the preference of consumers for cheap assortments because of reduced power of buying.

From the whole quantity of poultry meat, 33% represents the familial consumption and 67% goes in the market network. The romanian intern market is dominated by the selling of frozen products and only in the last years began to develop the market of refrigerated products, centered in the important city's, the demand for these products is going to be raising certainly. In table no. 3 are presented the retrial prices in 2002 for frozen and refrigerated products.

Table no. 3

Indicative retail prices (lei/kg)

Assortment	Fresh/refrigerated	Frozen
Whole chicken	70000-79400	59000-78300
Pulps	95700	68390-97600
Wings	-	79000
Chest	140100	129900
Half-prepared	-	150000
Chicken burger	-	60000

Source: U.C.P.R.

In the present there isn't a major advantage of refrigerated products to frozen products, the companies are selling both products at nearly prices, the differences presented in the table representing the main differences between poultry farms.

Beside the romanian people are less fastidious, buying with no attention frozen meat, giving importance to the price more than quality. And so, the romanian market is full of products with reduced quality beside romanian chickens: chicken nourished with combined fodder, rich in ingredients of animal origin, frozen american pulps.

The great integrated producers begin to develop, in present, a large gamut of processing products and to develop this market.

The poultry meat trade isn't restricted. After 1996, in foreign trade, the quantity of exports has a descending course, mean while the imports had

raised, especially after 1999 when customs taxes were reduced to 45% and 28% for CEFTA countries.

The evolution of foreign poultry meat trade is presented in the table no. 4.

Table no. 4

The evolution of foreign trade of poultry meat

Specification	1996	1997	1998	1999	2000	2001	2002
Export (tones)	967	942	1325	1137	825	803	1251
Import (tones)	24541	3167	14419	45117	25755	66900	78526

Source: Foreign trade rapport 12/2002

In 2002 the import of poultry meat was 78,5 thousand tones represented 3,6 kg/head in the medium consumption of population.

The export in 2002 raised comparative with the last years and was oriented to the countries from E.U with a percent of 84%. In the first term of 2003, the imports were 40 thousand tones of poultry meat from which 49% represent the poultry meat from SUA, 26% from Brazil and 13% from UE. This fact explains falling of the dollar towards euro, raising the number of imports made in US dollar.

The main objectives for rehabilitation and redressing for long and medium terms of poultry sector and poultry meat market are:

- maintain the developing rhythm of the poultry meat sector;
- ensure the population with the necessary amount of poultry meat to an accessible price and quality;
- financial sustenance of poultry meat production in conditions of economic efficiency;
- the financial sustenance has in view to bring the breed poultry sector to the European Union standards.

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THE COMPETITIVITY IN THE POULTRY MEAT SECTOR. THE SWOT ANALYZE

COMPETITIVITATEA ÎN SECTORUL CARNE DE PASĂRE. ANALIZA SWOT

ANCA BANU[*], C. CRISTA*

There are about 3.3 millions of zoo technical exploitations, of which 81.2% have about 28 poultry's. The number of poultry's breaded in the household system is 76% and in industrial system is 24%. The most important weak point of poultry meat sector is the proportion in which the activity in small scale of breeding the chicken in the fragmented households, ensures a production meaningful enough, being a resource for the insurance of consumption necessary poultry meat in our country. A strong point of this sector is the integration grade and size of societies which supplies the organized market.

***Key words**: poultry meat sector; competitivity, economic and technical performance, efficiency.*

The breed poultry sector of in Romania is characterized by existence of two systems of breeding:

- the extensive or household system
- the intensive or industrial system

There are about 3.3 millions of zoo technical exploitations, of which 81.2% have about 28 poultry's. The number of poultry's breaded in the household system is 76% and in industrial system is 24%, respectively poultry's associations in the Breeder's Union of Romania.

The intensive units for the poultry's breeding are integrated complexes, which have reproduction units, combined fodder production, breeding and exploiting of chickens, slaughter/houses, processing units and shops own for marketing.

These units are making about 40% of poultry meat production, the biggest producers being: Avicola International Baciu (20%), TEC Group

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(9%), Avicola Calarasi (6%), Avicola Buzau, Transavia Alba lulia, etc, where is accomplishing technical performances comparable to those obtaining in the countries members of E.U (specific consuming average of 1.9/2.1 kg, weight at slaughter, 1.8/2.0 kg and age of sacrification 40-42 days).

For distinguish some aspects of technical and economic competitivity in the poultry's sector, we had compared some technical index realized in Great Britain to those realized in our country at the broiler production in 2002. The dates are presented in the table number 1.

Table no.1

Technical and economical performance of the broiler production

The index	Romania	Great Britain
Age of sacrification (days)	35-42	45
Density of keeping (poultry/square meter)	16	18
Weight of sacrification	1.8	2.5
Conversion rate of the fodder	2,1	1.9
Mortality (%)	7.6	6
Efficiency of daily weight (gr)	38.5	53.9
Price of chicken (lei/chicken)	10000	10350
Price of fodder (lei/chicken)	37000	30000
Price of kg in the chicken farm (lei/kg)	35000	21600
Price of chicken in the chicken farm (lei/chicken)	63000	54000
The cost of fodder of chicken (lei/chicken)	28000	32400
Price for whole frozen chicken (lei/kg)	85000	80000

Source: U.C.P.R.

Analyzing the dates presented, we can underline the following conclusions regarding at the indexes realized in our country:

- the weight of sacrificing is low;
- the spores in daily weight are reduced;
- conversion rate of the fodder is reduced.

With all these it follows to realize a large scale of technical performances and the best producers should realize standards of technical performances equivalent with the europeans producers.

The reduced levels of technical efficiency are reflected in the main economic index, the approximate fodder's, roumanian production is situated

under usually average inregistrated in Great Britain, in spite of the bigger sell price for broilers.

Technical efficiency is influenced also by genetic capacity of effectives owned by the producers, many of them importing genetic material from Hungary.

Analyzing the market competitivity and the international trade, studying the dates regarding production, import, export and poultry meat consumption, we have ascertain the following:

- the poultry production reduced begin with 1990, it had a small rise in 1993 and beginning with 1996 it reduced constantly, being in 2003 at 455 thousand tones;
- in spite of the production oscillations, the consumption maintained around of 13 kg/capita the diminution of production had impact on the consumption but the imports contribute at it's redress;
- is estimate that in present, the imports had almost tripled, reaching a level witch represent almost 80% of industrial production.

In 2002, the great poultry meat purveyors for Romania were Holland (33% from imports), U.S.A (17%) and Belgium (14%). Other countries who supplied more than 5% of imports were France, Hungary and Brazil. The exports are minimal because a few slaughter houses had done obtaining a statute approved by E.U.

The production sector in households do not sell important quantity of poultry meat in organized market which is about exclusively supplied by industrial integrated producers and from imports. Integrated producers have their own networks of sacrification and delivery and supplies directly a large level of piece by piece sellers.

Other aspects about the competitivity and developing of the poultry meat sector refer at bio-security which is a very important element to maintaining a high level of health. There is a clear prove of old bio-security measures used in the present and industrial producers admit this fact. It is trying to adopt the slaughter-houses to the european standards, for developing the systems to match IS09002 standards, for implementation of HACCP programs.

About the small producers can't take an extended control, reason to maintain significantly the risk of animal health problems and in the same time the people's health is in danger because the precarious quality of meat which reach at the consumers.

The SWOT analyze

Stage	Strong points	Weak points
Producers	- large intern market; - large scale integrated producers; - the quality of genetic material which is available for the large scale producers outside of Romania.	- low technical efficiency especially in the use of fodder; - reduced quality of fodder components and diets recipe; - low quality of genetic material made in Romania; - lack of capital for investments in the production; - low standard in training the workers.
Processing	- integrated with large scale producers;	- lack of market for semi-prepared products; - lack of investments in maintaining and modernizing of infrastructure.
Supermarkets Metro, Carrefour	- retail trade it's grow in a high hygienic medium; - market sector raising.	- the terms and conditions required are very difficult.
The street market	- ensure an immediately and safely payment.	- the quantity of products from the unsettled households; - low safety standards in distribution and selling.
Retail market's	- big network of small shops which ensure a good access to the consumers.	- low level of market selling plus distributions costs.

Opportunities and risks

The poultry meat sector	Opportunities	Risks
	- development of cash and carry markets extends the market sector and develop the market; - development of market for the frozen and semi-prepared products; - improvement of durability by improvement of genetic existent material; - improvement of technical performances by training	- development of retail trade, cash and carry, reduced the prices; - introducing the E.U. standards which need big investments; - bio-security compromised in the households effectives is threatening total effectives; - high level of imports at low prices threaten the durability of integrated producers.

The most important weak point of poultry meat sector is the proportion in which the activity in small scale of breeding the chicken in the fragmented households, ensures a production meaningful enough, being a resource for the insurance of consumption necessary poultry meat in our country. This supply non-organized with eggs and poultry meat which is delivered on the market open the risk to appear an epidemics because of the bio-security which is precarious and put in danger the people's health, because of low storing and hygienic standards during the distribution.

With all these, a strong point of this sector is the integration grade and size of societies which supplies the organized market. This permit a high grade of control on the quality and hygienic standards of the products. The size and scale of society ensures the opportunity of making a very efficient sector.

All these success are casted by:

- the high level of debts which makes difficulties in obtaining the capital for investments;

- the reduced levels of profitability make the payment of debts very difficult;

-the low standards of genetic material in Romania;
- lack of training in using technology;
- low levels of technical performances.

In the program elaborated for sustaining poultry meat market, the most important objectives are:

- improve the poultry effectives for the improvement of meat quality;
- stimulate the organized exploitations for efficiency and competition;
- increase the farmer's incomes that are implicated in poultry breed;
- increasing the average weight for sacrification.

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CONSIDERATIONS REGARDING ASSETS AND LIABILITIES STRUCTURE RATES IN AGRICULTURAL TRADING COMPANIES FROM TIMIS COUNTY

APRECIERI PRIVIND RATELE DE STRUCTURĂ ALE ACTIVULUI ŞI PASIVULUI ÎN SOCIETĂŢILE COMERCIALE AGRICOLE DIN JUDEŢUL TIMIŞ

C. CRISTA [*]

In this paper work are analysed, on a sample of 27 agricultural trading companies (16 stock companies and 11 companies with limited liabilities), the balance sheet structure rates. The aim of this paper work is to offer some information regarding: capital economic destinations, capital liquidity degree, capacity of companies to modify assets structure as a result of conjuncture changes, financial autonomy and stability as well as obligation degree.

***Key words**: analysis, assets, liabilities, structure rates*

1. INTRODUCTION

Analysis of patrimonial elements structure follows assessment and evaluation rapports between different patrimonial elements, appreciation of patrimonial and financial status as well as underling financial policy and strategy. This analysis can be realised with the help of the balance sheet structure rates.

2. WORK METHOD

Asset structure rates

a) Immobilised assets rate

$$r_{AI} = \frac{\text{Immobilised assets (AI)}}{\text{Assets (A)}} \times 100$$

This rate represents the share of patrimonial elements, which are permanent utilised in total patrimony, and measures the investment share of capital in company. It is preferable to obtain values at a level over 60%.

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b) Floating assets rate

$$r_{AC} = \frac{\text{Floating assets (AC)}}{\text{Total assets (A)}} \times 100$$

Passive structure rates allow appreciation of financial policy of the company, by underling some aspects regarding the financial stability and autonomy, as well as indebted degree.

1. Global financial autonomy rate

$$r_{afg} = \frac{\text{Own capital}}{\text{Total liabilities}} \times 100$$

The share of proper capital, respectively obligations in total liabilities are different from company to company according to financial policy. A level of 1/3 it is satisfactory for financial equilibrium.

2. Global indebting rate

$$r_{ig} = \frac{\text{Total debts}}{\text{Total liabilities}} \times 100$$

The value of this rate must be under 2/3, backing away from 1 representing a reducing, respectively a rising of company indebting.

3. RATES ANALYSIS

Immobilised assets rate

From data analysis, results that 37% of agricultural companies recorded a rising, in 2002 toward 2000, and 63% recorded a decreasing of immobilised assets rate. This means that, for the majority of agricultural trading companies, the share of immobilised assets decreased in total asset because the total asset value changes in a share elder than fixed immobilisation value.

In 2002 only for 22% from agricultural trading companies the immobilised assets rate was greater than 60%, which means that for the rest of 78% from agricultural trading companies the investiture rate of capital it is reduced.

Floating assets rate

As regards to the floating assets rate, in 2002 toward 2000, 63% from agricultural trading companies recorded a rising of floating assets share in total assets and the rest of 37% have recorded a decreasing of floating assets share in total assets.

The average level of share, which the stocks detain in total floating assets, it is: for 2000 = 71%, for 2001 = 61% and for 2002 = 27%

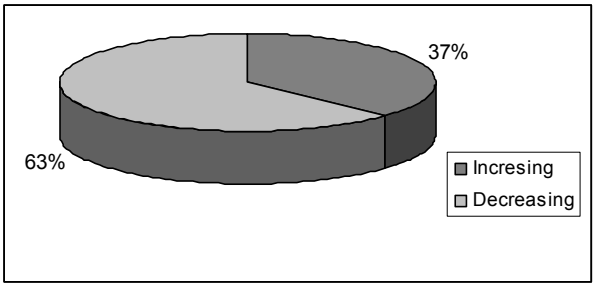

Figure 1. Farms situation regarding the immobilised structure rates

Global financial autonomy rate

From the three years analysis it can be notice that only 7.5% from agricultural trading companies can derive advantage from new credits in conditions of surely guaranties, the level of the rate being nearly 2/3.

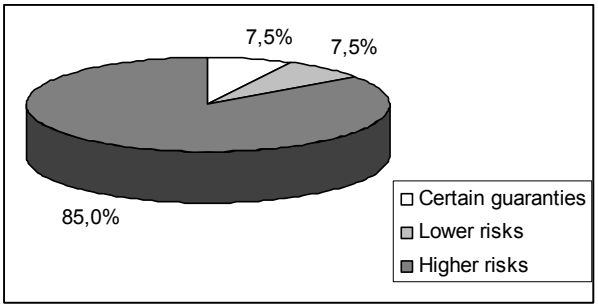

Figure 2. Risk condition regarding credit deriving

A share of 7.5% from agricultural trading companies has a rate between 30% and 50% and can obtain new credits but increases their risk.

The rest of 85% from agricultural trading companies have recorded a decreasing of financial autonomy because of changing the proper capital in a rhythm much lower than total liabilities.

Global indebting rate

In 2001 toward 2000, 77.8% from agricultural trading companies recorded an increasing and 22.2% a decreasing of global indebting rate. In

2002 toward 2001, 56.25 from agricultural trading companies recorded an increasing and 34.8% a decreasing of global indebting rate.

Table 1.

The average level of global indebting rate between 2000-2002

	2000	2001	2002
The average level of global indebting rate	0.93	1.31	1.42
Agricultural trading companies with a rate of 2/3 or lower	25.9%	14.8%	17.4%
Agricultural trading companies with a rate greater than 2/3	74.1%	85.2%	82.6%

Only a percentage between 14.8% and 25.9% from agricultural trading companies, which have been analysed, had a lower level of debts. For a level of the rate greater than 2/3, in 2000-2002 period, can be observed that a percentage between 74.1% and 85.2% from enterprises have a level of debts which in the case of new credit can generate major risks in the future.

4. CONCLUSIONS

The share of immobilised assets lowered in total asset for 63% of enterprises which means that the asset value is changing in a share greater than fixed immobilisation value.

The existence of large stocks can be determined whether the nature of agricultural activity or some situation of conjuncture.

Only a percentage of 7.5% from enterprises can derive new credits with certain guaranties from them.

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RESEARCHES REGARDING RATE OF PROFIT AND TURNOVER SITUATION IN AGRICULTURAL TRADING COMPANIES FROM TIMIS COUNTY

CERCETĂRI CU PRIVIRE LA SITUAŢIA CIFREI DE AFACERI ŞI A RATEI PROFITULUI ÎN SOCIETĂŢILE COMERCIALE AGRICOLE DIN JUDEŢUL TIMIŞ

C. CRISTA[*], ANCA BANU*

The paper work contains some appreciations regarding rate of profit and turnover evolution in agricultural trading companies from Timis County. The research has been made on a sample of 27 agricultural trading companies (company with limited liabilities and stock companies), which have as main activity, according to CAEN code, crop growing.

***Key words**: economic and financial analysis, turnover, rate of profit*

1. INTRODUCTION

In the case of agricultural stock companies, companies with limited liabilities and, even, agricultural companies, of which accounting is organized after current law, on the strength of existing information are determined the output elements: income, turnover, added value, raw and net profit and so on. With the help of them and other elements, in particular, on the input it can be determined numerous indicators, which relieve economic and financial situation in the activity of every company.

2. WORK METHOD

Among this indicators, in this paper work, are analysed two of them:

a) Turnover (CA)

In the case of turnover analysis, it can be fallow relative and absolute deviation. The relative one may be accomplish in either fixed basis or chain basis.

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b) Rate of profit (Rp)

$$Rp = \frac{\text{Raw profit}}{\text{Total expenses}} \times 100$$

The economic situation of agricultural trading companies was made on a sample of 27 companies (16 stock companies and 11 companies with limited liabilities), between the years 2000 and 2002. The main activity of these companies is plants growing.

3. TURNOVER AND RATE OF PROFIT ANALYSIS

According to general agricultural census from 2002, Timis it is one of the first counties having in view the number of companies with juridical personality.

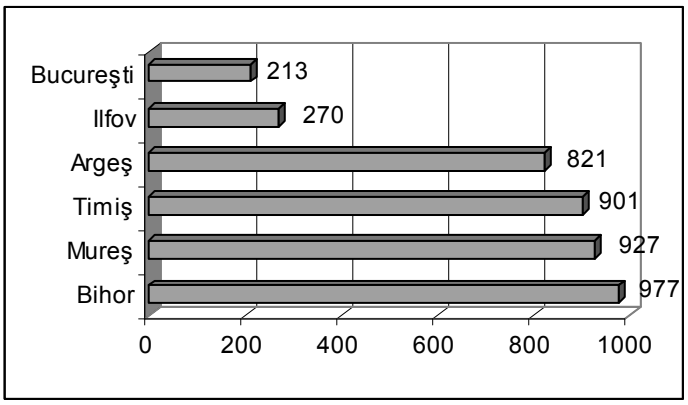

Figure 1. The number of companies with juridical personality in Romania in agricultural year 2001-2002

On the fist place is Bihor with 977 agricultural companies and on the last place is Bucuresti with 213 agricultural companies. Timis, at the level of Romania, is on the third place with an amount of 901 companies.

In 2002 toward 2000, 53.8% from agricultural trading companies recorded an increasing of turnover and 46.2% a decreasing of turnover. In

2002 toward 2001, only 40% of agricultural trading companies recorded an increasing of turnover and 60% a decreasing of turnover. Graphically the situation looks like this.

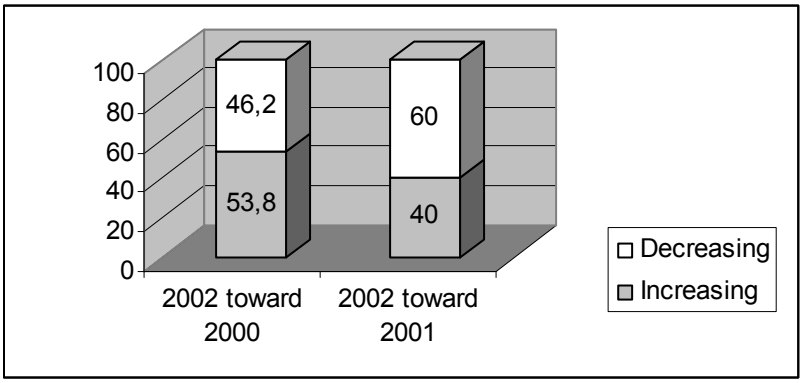

Figure 2. Turnover evolution in the year 2002 towards 2001 and 2000

In relative measures, the average level of turnover from 2002 representing 98% from 2000 level and 104% from 2001 level, which means that turnover, decreased in 2002 toward 2000 with 2% and increased with 4% toward 2001.In 2002 toward 2000, the turnover decreased in an average rhythm of 2%.

The situation of economic results, on the three years analysed, regarding agricultural trading companies it was following:

Table 1.

Farms weight, which obtained profit or loss between 2000-2003

	2000	**2001**	**2002**
Profit	33.3%	33.3%	40.7%
Losses	66.7%	66.7%	59.3%

It can be see that, at the level of all three years, nearly 60% of agricultural trading companies have recorded losses.

The average level of the rate of profit, between 2000 and 2003, was following:

Table 2.

Average level of the rate of profit

	2000	2001	2002
Rate of profit	3.3%	2.8%	14.7%

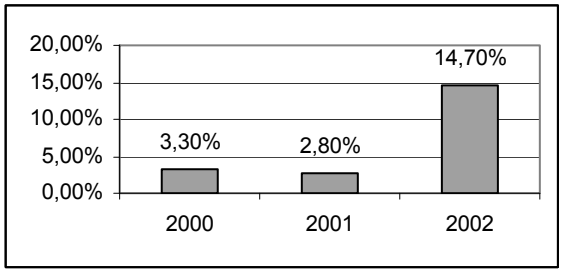

Figure 3. Average level of rate of profit

In 2002, the average level of rate of profit was the greatest from the analysed period, about 15%.

4. CONCLUSIONS

The level of turnover decreased in 2002 toward 2000 in an average rate of 2%.

In 2000 and 2001, the average level of rate of profit has not exceeded the level of 3.3%. Only in 2002, the average level was 14.7%.

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THE LEASING MARKET EVOLUTION IN ROMANIA

EVOLUȚIA PIEȚEI LEASINGULUI ÎN ROMÂNIA

ANDREA NAGY *

This work refers to the leasing market evolution in Romania. The activity leasing in the forms known worldwide was possible in our country after 1989 and it was imposed by the users. The evolution in the last few years has shown an increasing success of business in the field of leasing regarding both the value of the contracts and the number of the concluded contracts.

***Key words**: market, leasing, evolution*

One of the ways to get and use assets is to buy them but an alternative is to rent them, especially when their value is important.

Leasing appearance was favored, in a decisive mode, by the fact that not only goods property but also the use of them can assure income and production necessary for enterprise development.

Leasing market was possible in Romania only after 1989 but only in 1996 there appeared the first specialized leasing companies. Therefore we can notice that the Romanian market is in an incipient stage which can be explained by the fact that out of the multitude of leasing types used worldwide in Romania we can find for now only financial and operational leasing.

Leasing market in Romania is represented by several thousands of economical agents who fulfil the two conditions imposed by the law to operate in this domain: to include "leasing activity" as an activity object and a social capital of 500 million lei. From 4000 registered companies having leasing as an activity object approximately 100 companies are active and 35 of them are members of the Leasing companies association in Romania (ASLR) having over 60% market quotation.

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The structure of leasing market include:

- leasing companies affiliated to some banks, in percentage of 20%;
- leasing companies affiliated to some producers or suppliers, 15% of market;
- independent leasing companies, which seize 65% of market.

The most important clients of leasing companies are juridical persons, the value of the goods bought by these through the leasing system being of 75.6% of the total of the market, the rest of 24.4% being represented by physical persons. Concerning juridical persons most of the contracts are concluded with private companies, the percent of state companies in the total of contracts signed in 2003 being below 1%.

Rising continuously in the last years, the evolution of Romanian leasing market is being presented in table 1.

Dynamics of the leasing market evolution (mil. euro)

Table 1

Year	1998	1999	2000	2001	2002	2003
Companies members of ASLR	128.5	202.9	340.0	587.6	624.1	674.9
Companies not members of ASLR	-	-	82.2	374.4	275.7	449.1
TOTAL	128.5	202.9	422.2	962.0	899.8	1124.0

Source: Capital nr. 46/2003
ASLR

The evolution of the last years shows a growing success in leasing business. If in 1998 the total value of leasing contracts signed in Romania were of 128.5 million euro, in 1999 their value raised to 202.9 mil.euros and in 2000 to 422.2 million euro. In 2001, the value of leasing market doubled compared to the precedent year, reaching to 962 million euro. In spite of a slightly lowering registered by this market in 2002 to 899.8 million euros, in 2003 it reached the value of 1124 million euro. This evolution can be easily noticed in figure 1.

The companies members of ASLR cover a segment of 60% out of the total market. The evolution of leasing market at ASLR level is presented in table 2.

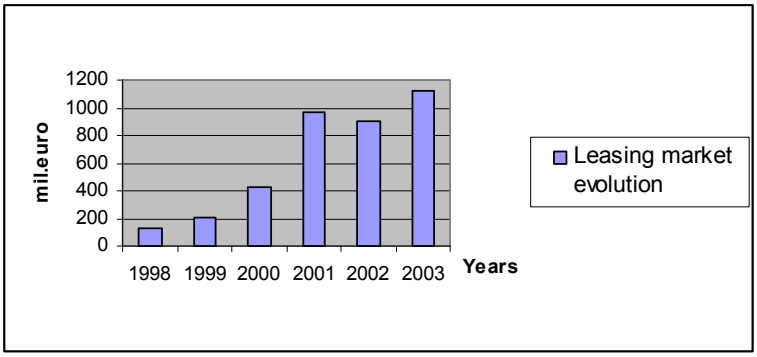

Figure 1. **Leasing market evolution**

Evolution of the leasing market at ASLR level

Table 2

Year	1998	1999	2000	2001	2002	2003
Nr.of contracts	6160	8746	854	14991	36093	30131*
Variație (%)	-	41.9	-10.2	90.8	140.7	-
Value of contracts (mil. euro)	128.5	202.9	340.0	587.6	624.1	674.9
Variație (%)	-	57.9	67.5	72.8	6.2	8.1

* Note: the value represent the number of contracts at the end of the third trim., 2003

Source: ASLR

As we can notice, beginning with 1998 the transactions volume within ASLR members has continuously raised so at the end of 2003 there was registered a value of 674.9 million euro.

Also the number of contracts situated on an ascendant way from 6.160 in 1998 to 36.093 in 2002 (485.9%) and 30.131 in 2003 (the third trimester). This evolution can be explained through the prism of several factors:

- rising of the ASLR members from one year to another (from 17 in 2000 to 35 in 2003);
- market development;
- awareness among clients concerning the importance of leasing transactions.

The general tendency established in the last years of practicing mainly financial leasing to the detriment of the operational one continued in

2003 too. So the number of financial leasing contracts represents 92.6% and from the point of view regarding their value the quantum represented 90.9% of the market.

Financing through the leasing system for various goods and even for buildings has begun to develop stronger and stronger in Romania but the success was and still is assured 80% by auto leasing.

The structure of leasing contracts signed at ASLR level in 2001 and 2003 is presented in table 3.

The structure of leasing contracts at ASLR level (%)

Table 3

Year	Motor vehicle	Industrial equipments	Agricultural utilities	Office equipment	Others
2001	86.9	7.0	2.4	1.7	2.0
2003	87.8	5.9	2.4	2.2	1.7

Source: ASLR
Capital, nr.9/2004

We can notice that the engine of leasing market rising is represented by auto leasing. This represented in 2003, 87.8%from the total leasing contracts. The cars had 56.2% and the auto utilities, the commercial vehicles and the buses 31.6% of the total.

Although the cars have more than a half on the native leasing market, the European average is also raised getting to 45%.

On the second position there are the industrial equipments with a quotation of 7% in 2001 and 5.9% in 2003. It is followed by agricultural utilities with an almost constant evolution, representing 2.4% of the total leasing contracts.

According with the information provided by the ASLR, Afin Romania leasing company will axe in 2004 on leasing with agricultural equipments and will try to develop operational leasing.

The chart of leasing contracts structure for 2003 at ASLR level is presented in the following figure:

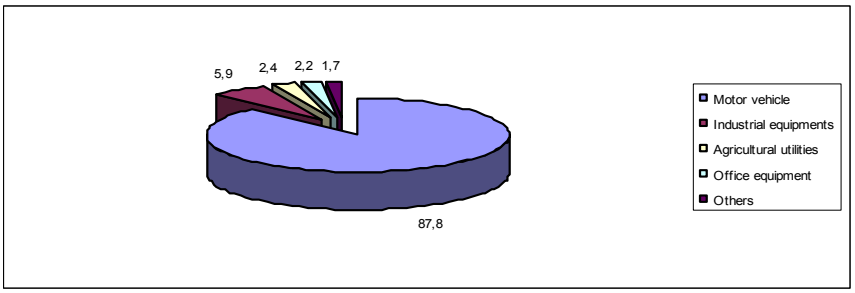

Figure 2. **Leasing contracts structure for 2003**

Also the analyses of leasing market in 2003 shows that leasing activity on real estate segment (office-residential) increased from 0.84% in 2002 to 1.70% of total contracts in 2003.

Another feature of leasing market in the previous year is the fact that most of the leasing contracts were contracts with external suppliers (62.37% from the value of the contracts).

The general tendency instituted in the last few years by practicing prevalently financial leasing in the detriment of the operational one has continued in 2003, too. Therefore the number of financial leasing contracts represented 92.6% from the total contracts concluded by the leasing companies in the previous year and from the point of view regarding the value of the contracts for goods purchased through financial leasing their quantum represented 90.9% of the market.

The overwhelming weight of financial leasing in 2003 can be established by analyzing the data in table 4.

Financial and operational leasing weight from total market

Table 4

	Financial leasing	Operational leasing
Nr. of contracts	92.6%	7.4%
Value of contracts	90.9%	9.1%

Source: ASLR

CONCLUSIONS

Leasing market was possible in Romania only after 1989 but only in 1996 there appeared the first specialized leasing companies.

In the last few years there has been noticed a special dynamics of the leasing market, the value of the contracts reaching to 1124 million euro in 2003 which represents a growth of 166.2% compared to the value registered in 2000.

This continuous development due to the rise of financial requests but also to the evolution of the activity of leasing companies.

Presently in Romania leasing is being assimilated mainly with car sales but leasing operations are much more diverse as it is proved by the developed leasing markets to which the Romanian market is tending.

The segment of leasing with agricultural equipments represents only 2.4% from the total but this financing modality is of major importance for the economy of the Romanian agricultural exploitations in purchasing performing equipments necessary to an efficient activity especially because the financial possibilities are limitative.

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LEASING IMPLICATIONS ON THE COMPANY`S FINANCIAL SITUATION

IMPLICAȚIILE LEASINGULUI ASUPRA SITUAȚIEI FINANCIARE A ÎNTREPRINDERII

ANDREA NAGY *

Leasing is an adjustment of the market to the limited capacity to finance investments. Leasing has become necessary because of the alert rhythm of competition, of demand and supply, of the technical progress, which imply immediate decisions and interventions that sometimes are overwhelming for the enterprisers' possibilities to auto finance, as well as for the credit capacities they have.

***Key words**: leasing, fiscal implication, advantages, limits*

Leasing can be defined as a form of trade and finance through location (rent) practiced by financial companies specialized in such operations, by financial institutions or directly by the producers of different fix assets (cars, equipment, means of transport, buildings, land, etc.).

The companies are interested in this kind of technique for trade and finance because of the specific of the operation accomplished with these means or because obligated by the fact that they don't have enough own or borrowed funds to buy them.

The selection of the finance sources for investments is complex because in addition to the main criteria regarding the cost for purchasing capital there act a number of restrictions concerning the access on capital market, the difficult legislation, the decision of the proper institutions to approve the use of these financial sources and an important aspect is connected to the leasing implications over the financial situation of the company.

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ADVANTAGES AND LIMITS OF LEASING OPERATION

For a more complete appreciation of what leasing operations contain we have to take into account both the advantages and its limits for the partners of this kind of transaction (supplier, leasing company and client).

Leasing advantages for the supplier /locator are:

- the locator's position (supplier's) is better than the one of another creditor because in the situation when the locater has financial difficulties and he can not pay for the leasing contract obligations, the locator has a stronger legal right to get back the fix asset because he (the locator) is still the owner of that fix asset. The risk of not paying of the locater's obligations are smaller than in other credit conditions, therefore many times when the company that solicitudes finance is riskier the supplier asks for a leasing transaction and not a loan;
- leasing is the method that effectively contributes to promoting and increasing sales, provides new partners, gets into new markets, keeps permanent the commercial relationships through long retail of some products;
- the locator can achieve additional income by reselling or re-renting the fix actives that were returned to him after the basic rent period expired.

Leasing advantages for the client (locater, tenant) are multiple which makes this way of financing to be more and more desired and accepted and they are:

- the locations paid by the locater are emphasized as expense for exploitation in the profit and lose account being fiscally educible which makes for the company to obtain savings with the profit taxes. In the case of financial leasing the user deduces the amortization of the assets and the interest, and in the case of operational leasing of the rent.

The main difference noticed between the payment for locations (rent) in the case of leasing contracts and the installments for buying a fix asset is given by the deductible character for fiscal purposes of the locations and the non educible character for fiscal purposes of the installments in payment of installments sales. In case of loans for payment of some bought assets only the interest for these loans is deductible in fiscal purposes.

For the locater these aspects have a special importance substantially influencing the choice decision of the financial variants for investment

projects especially because according to the leasing contracts the locater can make his choice for buying the fix assets at the end of the location period.

- through the leasing system the user ensures the acquisition of a world technique level asset even if initially he doesn't have own funds and he also doesn't have the possibility to borrow.

Under these circumstances leasing represents a remedy for the lack of funds that strikes the recently created companies or in fast expansion.

- the rent periodically paid according to the leasing contract can be covered by the cash fluxes generated by using the rent active itself;

- the user enjoys the possibility to negotiate with the supplier the buying terms;

- another argument on accountant plan pleading for leasing as an advantageous operation is the fact that leasing doesn't affect the balance of the client company (locater).

Unrecording in balance sheet asset the value of fixed mean and in balance sheet liabilities the payment obligation makes that leasing to be called balance sheet besides financing.

Not contributing to the increase of external sources leasing makes possible contracting new bank credits or the emission of new bonds.

But in the variant of buying the asset and also in overtaking it into location the company assumes the same restrictive obligations because not paying the debts or the locations would have the same effect and that is bankruptcy of the company. Because of this the legislation in most of the countries obliges to reconsideration of the balance through inclusion in the active of the balance of the value of the asset taken in location, based on a financial leasing and registration in the passive the current value of the future payments of the location as a debt.

Leasing limits are:

- leasing operation is more costly than buying on credit and therefore is necessary for an active taken in leasing to generate a higher profitability than in the case of other projects of investments financed with own or borrowed sources;

- the active that makes the object of the leasing contract has to be exploited at its full capacity during the rent period;

- for the supplier there appears the risk of deterioration for the rented active because of certain causes which sometimes are difficult to establish.

More, after the first rent it is possible for that active not to find other users or to be sold.

CONCLUSIONS

The financial environment in Romania is characterized by a monetary market not enough developed with liquidity in reduced economy which determines a much diminished financing capacity of the company. The conditions of the financial environment in which the agricultural exploitations perform their activity are more limitative.

Under these circumstances knowing the various financing modalities and their implications on the financial situation of the company is of major importance and leasing development is more than an opportunity and it wasn't imposed by chance by the users who understood that not only owning capital goods but also using them can provide the production and the income necessary for their development.

Leasing implications on the financial situation of the company and their fiscal effect is one of the aspects that have to be well analyzed when there appears the problem of choosing variants for financing and can be concluded by analyzing the main advantages and disadvantages of leasing operation.

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ASPECTS CONCERNING MILK AND DAIRY PRODUCTS PRODUCTION AND CONSUMPTION

ASPECTE PRIVIND PRODUCŢIA ŞI CONSUMUL DE LAPTE ŞI PRODUSE LACTATE

TABITA CORNELIA ADAMOV*

The paper hereby presents some of the aspects referring to the way of using milk production as well as to the milk and diary products consumption situation after December 1989. I have presented three main destinations for milk production and the causes for this non uniform repartition. Regarding the consumption it refers to the most important aspects that determine the small quantity of milk and diary products consumed nationally as well as to the preferences for consumption of the Romanians.

Key-words: production, auto consume, market, consumption.

1. MILK PRODUCTION DESTINATIONS

MAPDR indicates that milk production obtained in 2002 in Romania was distributed as follows:

- 41% family consume* (auto consume);
-12% technological consumption;
-26% direct sales on the market;
-21% sales to specialized processing units.

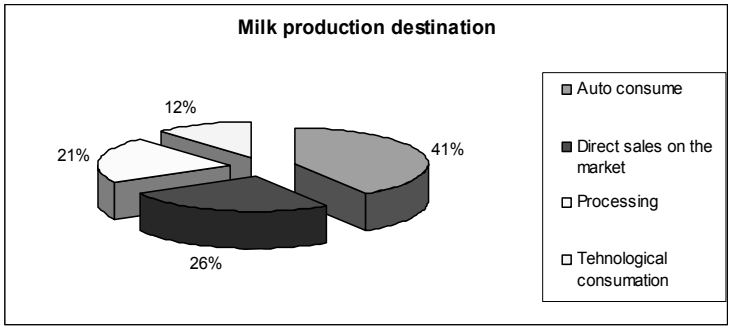

Figure 1

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The important ponder held by family consume (41%) from the total of the milk supply proves the fact that a major part of the milk cow exploitations produce for auto consumption and this is because:

1) The effectives are diminished and bred in a disorganized system;

2) The price offered by the processor doesn't compensate the effort made for realizing the production;

3) The producer doesn't have access to credits with subsidized interest in order to increase the animal effectives and implicitly to increase production;

4) The producers don't have the necessary hygienic-sanitary conditions for stocking milk until processing;

5) The weak supply of the distribution channels from producer to consumer.

Direct sales on the peasant market hold 26% from the total milk production keeping the second position in the total of the milk supply. This situation is because of the following:

1) the destruction of the milk processing network;

2) the average price for capitalizing the milk on the peasant market is higher than the one offered by the processors and more, the payment is made in cash while most of the processing companies don't pay when processing but after a certain period of time, even with frequent delays especially during the rush season;

3) The milk offer is dispersed in small quantities on producer which makes difficult its processing especially because the producer doesn't have conditions to stock the milk until processing.

On the third position there are the deliveries to the specialized milk processing units with a 21% ponder. Although is on the third position in the total milk production they are in a continuous increase mainly determined by:

1) the need for capital of the agricultural producers;

2) the entrance on the market of some big companies, strongly capitalized which in order to create and to ensure the position on the market offer better processing prices as well as other help like: concentrates, medicines, technical and veterinary assistance.

During 1990-2003 the quantity of milk destined for industrialization decreased continuously. If in 1990 there were being processed 52.220 hl milk in 2003 the quantity of milk sent for processing situated around the

value of 11.000 hl representing only 21% of the total production. This fact can be easily noticed in the chart from figure 2.

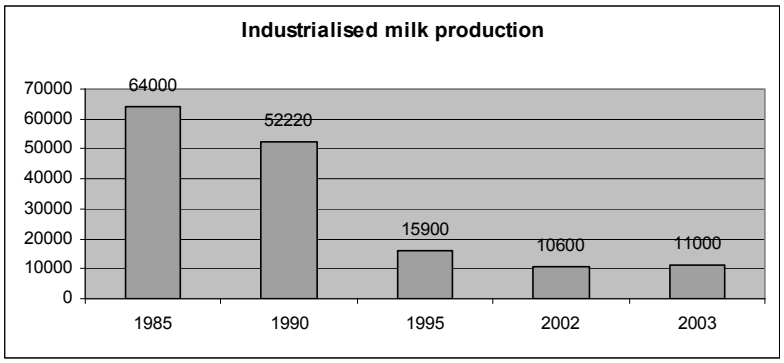

Figure 2

At present private milk producers have the following options:

-to deliver the production on the peasant market;

-to deliver to the processing units;

-to process the milk in their own farm and to sell the processed products in order to obtain higher income this way.

2. MILK AND DIARY PRODUCTS CONSUMPTION

Milk is a product for daily consumption. Milk and diary products consumption is directly influenced by the available alimentary resources and especially by the purchasing power.

Milk and dairy products consumption (equivalent in milk) 1995-2000

Tabel 1

Milk and dairy products l/loc/an	1995	1996	1997	1998	1999	2000
	188.6	192.7	192.4	194.4	194.0	193.0

Source: Anuarul Statistic al României, 2001

As it can also be noticed in table 1, milk and dairy products consumption in our country during 1995-2000 fluctuated from one year to another.

Milk production and consumption in our country are tightly connected. The causes for the decrease of milk consumption doesn't resume only to the decrease of cow effectives, the increase of the prices for diary products and the decrease of the purchasing power but also to the low interest for the bringing back to normal of the milk industry because of:

1) the lack of subventions for the horned cattle breeders;

2) the small acquisition price of the milk offered to the producers and the delay of the deduction;

3) the lack of material incentive of the producer in obtaining a quality product; to get over this impasse it is imposed the material incentive of all those who participate in obtaining and processing the milk having as a final effect the increase of milk and diary milk products.

The association of the Romanian Patronage in milk industry (APRIL) is estimating for 2007 an average annual milk and dairy products consumption of 220 l, a level comparable to the consumption in the western-European countries.

The alliance for milk educational promotion (APEL) initiated in 2000 a permanent programme for research on the diary market in Romania according to which there were emphasized year by year the tendencies of the milk consumption of the population on national scale and the situation of processing milk industry. The results of the research realized by APEL in collaboration with Gallup Romania regarding the preferences for consumption/ buying dairy products in the urban environment in April 2002 indicated the following:

CONSUME- PREFERENCES

84% of the respondents consume milk at least once a week. The average consumption frequency among them is of 3.8 times a week. The pasteurized milk is consumed by 54% of the respondents and 46% consume milk from the peasants.

Yoghurt (including butter milk, sana and kefir) is consumed by 76% of the respondents with an average frequency of the consume of 2.9 times a week. Yoghurt is consumed by 62% of the respondents, fruit yoghurt by 29% while 39% consume butter milk/ sana, kefir at least once a week.

77% consume cow cheese at least once a week. The frequency of the consumption among them is of 3.7 times a week; 57% of the respondents buy cow cheese from the commercial network (stores) and 37% from the peasants. The cow cheese consumption is significantly higher in Bucharest and Muntenia , about 90% and lower in Moldova, 70% and Transylvania, 60%, higher among the persons with higher income and with average and superior education.

Process cheese and cream cheese are consumed by the respondents in a proportion of 48%, respectively 53% of the respondents, approximately with the same average frequency of at least 2.3-2.4 times a week.

The main reason why milk is bought is because of the calcium, minerals, proteins and vitamins content, reason mentioned by half of the respondents while 32% mentioned that they simply liked it.

Regarding the habits of milk consumption, 8 persons out of ten mentioned that they simply drink it warm, 50% consume it as an ingredient in the kitchen, 33% consume it simply, cold and a quarter in addition to tea or coffee.

BUYING-PREFERENCES

More than half of the respondents (52%) buy milk at least once a month and among them the average buying frequency is of 7.5 times a month. A high rate for the buying frequency has the fruit yoghurt which is bought only by 29% of the subjects. The products bought by most of the respondents are margarine (70%) and cream (57%). But these two products have lower buying frequencies among those who purchase them.

The places where dairy products are bought are well emphasized and they are: alimentary stores with a department for diary products –over 70% for products like pasteurized milk, simple yoghurt, butter milk, butter, process cheese, margarine and cream cheese or about 50% for the other products. There could be a few exceptions: cow cheese which is bought in a rather high proportion from the market, from the peasants, 54%. 28% of the buyers of this product can choose for purchasing from the peasants cream, too.

51% from the milk buyers often buy milk packed in plastic bags. They sustain that they prefer this packing because is cheaper and because it is sold this way or they do not find it packed other way.

When they buy dairy products the most important buying criteria for the interviewed subjects are mainly the quality-an average of 9.7 on a scale from 1=”not important at all” to 10=”very important” and the price with an average of 9 on the same scale.

CONCLUSION

In 2002 the auto consumption represented 41% of the total milk production situating on the first position regarding the distributing way of this. This actually indicates that most of the milk cow exploitations produce for family consumption and certifies the prevalent existence of exploitations with 1-2 heads. Therefore it becomes necessary the development of exploitations with over 100 heads.

Milk and dairy products consumption is relatively reduced in our country. It is directly influenced by the available alimentary resources and especially by the purchasing power. Statistics indicate that from the point of view of the milk quantity consumed, the Romanians are below the half of the level in the states of EU with only 3.7 l/month compared to 8 L/month.

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MILK MARKET IN ROMANIA BETWEEN 1989-2004

PIAŢA LAPTELUI ÎN ROMÂNIA ÎN PERIOADA 1989-2004

TABITA CORNELIA ADAMOV *

National market of milk and dairy products must cope with strong competition that has come from abroad. Milk has become a national problem because of the difficult in which the breeding cow sector and also all the zootechnical sectors an found.

***Key words*:** market, milk, production, consumption, price

1. THE SITUATION OF THE BULL EFFECTIVE

Along with the change of property form and with its movement towards private property, with the abolishment of the state farms, there were eliminated and sacrificed a large number of animals which led to the accentuated decrease of effectives.

Horned cattle effectives evolution during 1990-2004 (thousands heads)

Table 1

Specification	1990	1996	1997	1998	1999	2000	2001*	2002*	2003*	2004*
Cattle of which	6291	3496	3435	3235	3143	3051	2800	2879	3000	3150
Cows	2638	1983	1939	1844	1794	1769	1746	1759	1800	1850

Source: Anuarul Statistic al României, 2001

Note: * MAPDR

After 1990 bull effectives decreased continuously until 2002, the amplitude of this decrease being higher during 1990-1996, a period in which there was a reduction of 2856 thousands heads meaning 46%. During 1997-2002 bulls registered a slight diminishing effective with approximately 8%. This diminishing can be explained due to the accentuated decrease of state segment weight and to the increase of the private segment weight. After 2002 the bull effective's situation presents an increasing tendency.

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95% of the total exploitations in Romania have less than 5 cows/exploitation, the average being of 1,44 compared to the average of 17,5heads/expl. in the European Union. In opposition to the situation in 1990 today raising milk cows is done especially in farming system, dominant being exploitations of 1-2 heads/exploitation.

2. MILK PRODUCTION

Milk is the only agro alimentary product for which the internal product has rised after 1990 although the effectives decreased, increase determined by the enrichment with 60% of average production.

The evolution of total production of cow and buffalo milk (mil hl)

Table 2

	1989	1996	1997	1998	1999	2000	2001*	2002*	2003*	2004*
Total	45532	53477	52581	50902	49429	48513	51000	52761	54800	56000
State sector	34584	3266	2644	2216	1648	1071	-	-	-	-
Private sector	7948	50211	49937	48686	47781	47441	-	-	-	-

Source: Anuarul Statistic al României, 2001

Note: * MAPDR

After 1989 total milk production has followed an ascendant dynamics reaching in 1996 a value of 53477 thousand hl. This difference of 7945 thousand hl represents a growth with approximately 23% and it can be explained by the improvement exploitation conditions provided by the private farmers. During 1997-2000 the total milk production registered a decrease following a descendent curve of animal effectives.

After this date the production started to rise continuously. So at the end of February 2004 in a research realised by MADPR resulted that there was a plus of 264,9 thousands hl meaning 4% compared to the same period of 2003. This increase is mainly due to the average production foddered cow which is higher with 19 l.

Although the bull effectives decreased the average milk production realised by the animals remained in exploitation increased, the amplitude of this increase being different from one year to another and from one property sector to another.

Compared to 1989 the average production registered an increase of 1.322 l/head which represents an increase of 4%. This fact can be easily noticed in figure 1.

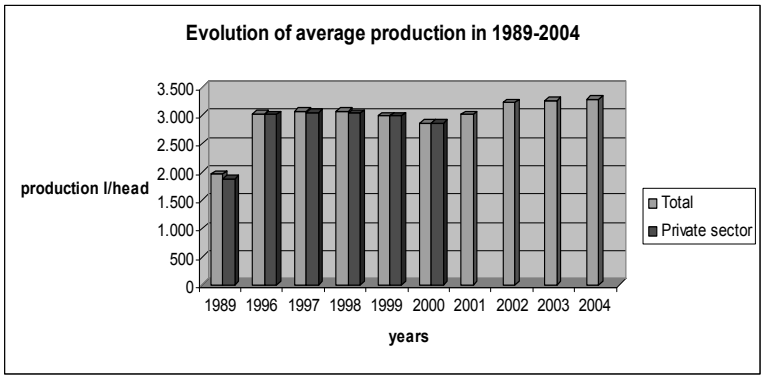

Figure 1

The obtained increase of milk represents an answer to the change regarding the way of feeding as well as an improvement of the structure of animal effectives by eliminating the lee productive ones.

Concerning the repartition of total milk production on property sectors we can say that the private sector has become the main supplier. The production obtained in this sector had an ascendant stage reaching today to 95% of the total production compared to 60% before 1989. The quantity of milk offered by the state sector diminished continuously reaching today to 10% of the total milk production, a diminishing mainly due to accentuated reduction of animal effectives in this sector.

3. MILK PRICE

Because of the big discrepancy of the production between the summer period (may-October) and winter period (November-April) there were established two levels for the acquisition price. All processing companies offer better prices to the producers during wintertime.

Milk price varies a lot mainly according to the negotiation power of the producers. The farms with high milk production can receive up to 8.000-10.000 lei /l from the processors. Smaller farms with 1-2 heads receive lower prices, even 5.000 lei/l. the average price varies around 7.500 lei/l

The average prices for milk in April 2003- April 2004 are according to the graphic in figure 2.

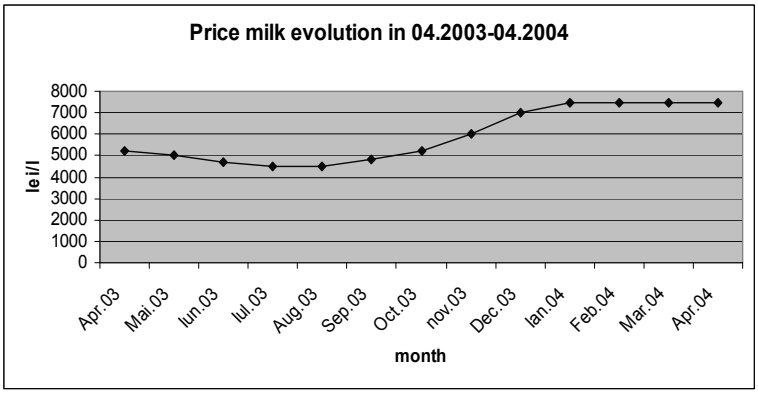

Figure 2

4. PRODUCTION COST

Milk production cost is high today. It can decrease by: increase of average milk production per fodder cow, decrease of production expenses for fodder, a better production organisation, development of the network for sanitary-veterinary assistance development of services offered to the animal breeders.

Today it can not be done a real analysis to the milk cost because most of the milk production is obtained in individual farms. This is made difficult by the fact that the fodder are provided mainly from the own production without knowing exactly their price and cost and the labour is represented mainly by the members of the families, cost of labour being not very well praised.

For a production of approximately 3500 l/cow/year fodder represents 50% of the unitary milk cost and the expenses for labour approximately 20%.

5. MILK AND DIARY PRODUCTS CONSUMPTION

Milk and diary products consume is directly influenced by the available alimentary resources and especially by the purchasing power. The average milk and dairy products consumption haw reached 193 l/ inhabitant in Romania in 2000.

6. MILK PRODUCTION CAPITALIZATION

MAPDR indicates that milk production obtained in 2003 in Romania was distributed as follows:

-53% milk quantity not commercialized (41% auto consume, 12% technological consumption);

-26% direct sales on the market;

-21% sales to the specialized processing units.

The financial resources of small producers are extremely limitated and this situation represents a major impediment for the development of an efficient commercializing system because the lack of capital for investments refers especially to the facilities of the collecting system which for now is realized with difficulty regarding the quality standards.

7. COMMERCE WITH DIARZY- MILK PRODUCTS

Within the difficult period of transition to the market economy, the reorganization and the profitability of the private sector, the low internal production insufficient to cover the necessary for consumption of the population, Romania has become in the last few years an important diary products importer.

The deficit of the commercial balance with milk and diary products increased in the first semester of 2001 with 859.6 thousands $ compared to the same period of the previous year, reaching to the level of 10155.9 thousands $.

The import with diary products in the first half of 2001 increased in value with 339.3 thousands $ and decreased in quantity with 651.1 t. the main cause of the decrease was the increase of the average value for the imports from 1028.8 $/t as it was at the middle of 2000, to 1188.8 $/t in 2001.

The export with diary products registered a decrease in quantity and in value. The exports decreased in quantity with 297.1 t to only 1018.3 t exported in 2001 and in value the decrease was from 469.3 thousands $ to 2125.1 thousands $. In spite of all these the average value of the diary products exported increased with 114.6 $/t to 2086.9 $/t.

Romania's commerce with dairy products in the first semester of 2001

Table 3

Specification	Imports		Exports	
	Tone	mii $	Tone	Mii $
Unconcentrated milk and cream, without sugar addition	1761.1	767.7	20.1	26.2
Concentrated milk and cream, granulated powder	2701.7	5202.9	303.3	377.6
Buttermilk, yogurt, kefir, other dairy products	3693.7	2831.9	2.1	2.5
Whey even concentrated or with sugar addition	934.1	508.3	0.0	0.0
Butter and other fat by-products from milk, dairy paste for tarts	634.9	1024.4	1.5	1.4
Cheese	604.7	1945.9	691.3	1717.4
TOTAL	10330.7	12281.0	1081.3	2125.1

Source: Direcția generală a Vămilor

For the analysed period the cow bulls effectives belonging to state sector decreased continuously and increased those belonging to the private sector. Total milk production increased constantly, despite the permanent reduction of milk cow effectives.

Within the difficult transition period to the market economy, the reorganization of the private sector, a decreased internal production, insufficient to cover the necessary consume for the population, Romania was until 1989 an important net importer of diary products.

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EVALUATION REGARDING THE ROMANIAN AGRO-ALIMENTARY CONSUMPTION

APRECIERI PRIVIND CONSUMUL AGROALIMENTAR ÎN ROMÂNIA

L. SÂMBOTIN[*], ANDREEA-MIHAELA ZOMBORI[*], COSMINA-SIMONA TOADER[*]

Generally the human consumption is a social one, both because it responds to some social functions (beside the strictly physiological consumption) and it takes place between the human groups and communities, where the most important is the family.
The consumption in its whole complexity represents a mirror of the society's physiognomy, where the social stratification and differentiation, the contradictions, the place and role of the socio-proffesional categories and groups from the society are reflected. The consumer and its behavior reveals it's educational, cultural and civilization level, but also the social life quality level.
From the consumption point of view there are undeveloped countries, in development process and developed countries.

***Key words**: consumer, consumption, consumption evolution, annually consumption average and consumption evolution perspectives*.

INTRODUCTION TO CONSUMPTION AND CONSUMER

The consumer is the physical person who buys, gets, uses or consumes products or services, beside its professional activity (government decree no. 21/1992 – art. 2).

It must be mentioned that a natural person can not be excluded from the quality of consumer as long as a product or a service has been used during a professional activity.

The consumption can be defined shortly as being the process of using products or services, or largely as the objective process where, based

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on the obtained economical results, the society in its whole or, the economical societies, the institutions, social organizations and each individual satisfies its own needs.

GOODS CONSUMPTION EVOLUTION AFTER 1990

To distinguish this evolution look at the table 1 where the expenses structure for different family groups like employees, peasants, and pensioners can be found. The followings can be considered:

- In the cas of expenses for alimentary products: an increase of the expenses at the employees of 3.8% and a decrease of these expenses at the peasants and the pensioners of 6.3% and 4.9%.
- In the case of expenses for non alimentary products: a decrease of 11.4% at the employees and for the peasants and pensioners a decrease of 6.5% and 6.4%
- In the case of expenses for services payment: for the employees these expenses are increasing with 7.6%, while for the peasants and the pensioners these expenses are decreasing with 0.2% and 1.5%.

Table 1

The expenses structure for different family groups in 1990 and 2000

	Expenses for alimentary products		Expenses for non alimentary products		Expenses for services payment	
	1990	2000	1990	2000	1990	2000
Employees	46.8%	50.6%	39.2%	27.8%	14.0%	21.6%
Peasants	63.7%	57.4%	28.3%	34.8%	8.0%	7.8%
Pensioners	59.2%	54.3%	22.7%	29.1%	18.1%	16.6%

Source: Romanian Statistic directory 2001

In table no.2 can be distinguished the evolution of daily average alimentary consumption for each inhabitant, expressed in calories and nutritional values. Such as:

- A decrease of calories consumption with 47 units for the year 2000 versus 1999
- This decrease is maintained with 13 units in the case of calories of animal origin, for the proteins a decrease of 2.5 grammes, proteines of

animal origin 0.3 grammes, fats 7.8 grammes and for the fats of animal origin 4.9 grammes

- An increase of consumption can be obrseved for the sugars of 8.8 grammes

Table no. 2

The evolution of daily average alimentary consumption for each inhabitant in Romania (1990 and 2000)

	UM	1990	2000
Vegetal products	kg		
Cereals and cereal products	kg		
- grain equivalent	kg	213.6	219.7
- fauna equivalent	kg	158.5	165.8
Potatoes	kg	59.4	86.5
Vegetables and vegetal\ble products (vegetable equivalent), grain vegetable and melons	kg	127.0	134.3
Fruits and fruit products (fruit equivalent)	kg	59.5	44.5
Sugar and sugar products (sugar equivalent)	kg	27.3	23.0
Vegetable fats (gross weight)	kg	13.1	13.1
Animal origin products	kg		
Milk and milk products (milk equivalent) exclusivly butter	l	140.1	193.0
Eggs	pieces	246	208
Fish and fish products	kg	5.1	2.6
Meat, meat products and edible organs (fresh meat equivalent)	kg	61.0	46.3
Animal fats	kg	5.1	3.4
Beverages			
Non alcoholic beverages	l	18.9	51.3
Beer	l	43.5	55.0
Wine and wine products	l	18.5	23.2
Distilled alcoholic beverages (100% alcohol equivalent)	l	3.2	1.8

Source: Romanian Statistic directory 2001

Very important decreases for the annually consumption average are registered for:

- fish and fish products: 2.5 kg (49%)
- distilled alcoholic beverages : 1.41l/inhabitant (43.75%)
- animal fats: 1.7 kg/inhabitant (33.3%)

- fruits and fruit products: 15 kg/inhabitant (25.21%)
- meat and meat products: 14.7 kg/inhabitant (14.7%)
- sugar and sugar products: 4.3 kg/inhabitant (15.75%)
- eggs: 38 pieces (15.76%)

Verry important increases are registered for:

- refreshment beverages: 32.4 l/inhabitant (171%)
- potatoes: 27.1 kg/inhabitant (45.62%)
- milk: 53 l/inhabitant (37.7%)
- beer, wine, fresh vegetables, etc.

ROMANIAN ALIMENTARY CONSUMPTION EVOLUTION PERSPECTIVES

The anticipations for the evolution of the Romanian internal market, the consumption, including the internal commerce sells, were done taking into consideration the fundemental elements included in the Political Declaration on the Strategy for Integration in Europeean Union, by creating a functional market economy, compatible with the principles, rules, mechanismes, insitutions and policies of the Europeean Union. This will permit the increase of the population incomes and the progress in the poverty control, conditioned by the decrease of unemployment average from 13% in 2000 to 8% and the gross internal product per inhabitant, evaluated in terms of purchasing capacity, will reach, in 2005, 8400Euro.

In perspective the development and reorganization of the alimentary products consumption in our country is based on some conditions taking into account the demands and exegences mentioned in the World Alimentary Programme (WAP) launched by the specialized international organisations (OMS, FAO, PNUD) concerning the population's alimantation, nutrition level and population prosperity, consumer's protection elements so as the alimentary products described in the market offer should assure soma rational balance.

Table no.3

Alimentary products and beverage consumtion prognosis, expressed in thousands of tones, for the years 2004 and 2008 in comparison with 1998

	Thousands of tones			Dinamics %			
				Increase values %		Annual increase average rates %	
	1998	2004	2008	2004/ 2008	2004/ 2008	2004/ 2008	2004/ 2008
a) In quantity							
General Total:	20608	24545.5	26418.5	119.1	107.7	3	1.8
A) alimentary products	17986	21109	22674	117.3	108.2	2.7	1.9
a)Vegetable origin	11958	13149.5	13827	110	105.2	1.6	1.2
b)Animal origin	6028	7969.5	8847	132	111.2	4.7	2.7
B) alcoholic beverages	1927	2499.5	2688.5	129.7	108	4.4	1.8
C) refreshment beverages	695	933	1056	134.2	113.1	5	3.1
b) Structure %							
General total	100.0	100.0	100.0				
A) alimentary products	87.3	86	85.4				
a) vegetable origin	58.0	53.6	52.3				
b) animal origin	29.3	32.4	33.4				
B) alcoholic beverages	9.4	10.2	10.2				
C) refreshment beverages	3.3	3.8	4.0				

Source: FOA, Statistical Databasses Online

To acomplish these anticipations there are requested adequate policies and mechanismes to finish the land reform, a stroger support of this reform from the government.

Also, it is necessary that the Food industry sectors for processing snd production of the products shoud be reorganized and actualized technically too, so that the finished products line up to the international quality and cost levels, assuring the revaluation of the finished products with a high value. We appreciate that the condiionsof the recent strategy for the integration in the Europeean Union would offer generous means for the agricultural activity and for the food industry, considering the efforts which should be made to assure a better position for our country in the Europeean Union.

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PRODUCTION SERVICES AT FEMADAR LTD. - GIROC, TIMIŞ

PREZENTAREA SERVICIILOR PENTRU PRODUCŢIE LA S.C. „FEMADAR" – S.R.L. – GIROC, TIMIŞ

DANIELA LAZĂR[*], C. CSÖSZ[*]

Dealing with services as an economic category implies only those activities that indicate certain production social relations. Economic evolution proves the existence of a close connection between the level of production development and the services dynamics, as well as connections between the total and per capita GNP and an increased demand of material goods and services.

***Key words**: economic evolution, services, production services, meat preparations.*

Dealing with services as an economic category implies only those activities that indicate certain production social relations.

Economic evolution proves the existence of a close connection between the level of production development and the services dynamics, as well as connections between the total and per capita GNP and an increased demand of material goods and services.

The concept of services can be used in four different ways:

- industrial services - with reference to an enterprise with intangible or unstoppable activities;
- productive services - the result obtained from services industry and other economic sectors as well;
- service occupation - refers to the tasks of the service field workers;
- service function - activities involved within the primary or secondary sector.

In spite of the good technical progress made in recent years, international meat production and trade is highly unstable.

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Generally speaking, there are many factors that influence agroalimentary trade, such as the demographic increase that determines an increase in food product demand, the improvement in storing, transportation and preservation means that affect market prices and international trade.

The problems of meat trade is becoming more and more complex as it is governed by a large number of international agreements and regulations such as the Uruguay Round, the General Agreement on Tariffs and Trade, the Protectionist Policy of European Union Countries etc.

The international pork trade of our country has decreased substantially in the past years and lost many international markets. The creation of the single market for EEC for pork requires a unique programme of changes at the exterior borders. A regime of changes accompanied by an intervention system and including an import customs duty and export returns system that according to community doctrine can lead to price stabilisation avoiding the influence of international market price fluctuations upon the prices charged within the Community.

According to EEC commitments within G.A.T.T., preliminary consultations have taken place between EEC Commission and the representatives of the countries interested in exporting the new product on the Common Market, Poland, Hungary, Yugoslavia and Romania.

Romania offers soil, climate, technical and organisational conditions for of pig breeding development. In Romania, swine are bred in every region, but there are several counties with special pork production (Arad, Timis, Bihor, Calarasi, Dolj, Ialomita, Braila) that provide basic fodder for swine breeding.

FEMADAR Ltd. Giroc

FEMADAR Ltd. Giroc, Timis County was founded in 1995 and actives in the field of meat and meat product preparation and trade.

The production space is divided in five sectors: animal slaughtering, meat cutting, product preparation, refrigerating, freezing and smoking, and the packaging, marking and portioning.

The company can produce its own services, i.e. it can internalise the services activity. The services take place in special departments: research-development, marketing, supply and sales, human resources, technical, administrative, accounting etc. The company can also produce its own services but as an autonomous or associated entity. It can also use exterior services performed by specialised legal or natural persons who provide

services for a large number of economic agents with similar activities or field. Such is the case of transport, telecommunications, the banking-financial system, scientific research etc. The company can use both the internal and the external solutions at the same time, depending on a series of factors and concrete conditions. It is the case of computer services when the company must develop similar activities and competencies in order to benefit from the exterior services it uses. It must develop basic competencies that will allow a more accurate perception of its situation and necessities, a precise evaluation of the service provider and the correct use of the product and the information it contains. This mixed solution is used very frequently in European Community countries.

It must be said that some service categories such as trade, transport, post and telecommunications etc. not only serve production purposes but also answer people's needs and can be classified both as services for companies and for population, as they are presented separately in statistical classifications.

Sanitary veterinary control as a service is performed on live animals in order to identify and eliminate sick animals and those that do not meet the slaughtering conditions. The control is performed on carcasses and internal organs after slaughtering for the identification of infectious and parasitic diseases. Several meat categories result after the sanitary veterinary control; these are stamped according to their own biological value.

Meat preparations are packed in bars or sliced. They are wrapped in contractible thermoresistent vacuum foils with MULTIVAC-type equipment. Small-sized preparations like weenies are packed in bags, contractible foil or casseroles. An acetylated monoglyceride membrane known as MYVCET, TEGOMOLUS etc. is delivered.

Within the national economy, the food industry branch has the task to capitalise at a superior level resources of agricultural, vegetal and animal raw materials and to keep developing food production in order to satisfy the population's rational consumption necessity.

The meat preparations that are called "fresh" are high quality and high nutritious products that ensure a physiological and nutritive balance among the main food components - proteins, fats, carbon hydrates and vitamins - that must satisfy the requirements of scientific, rational, balanced and complete diet, depending on the work the consumers perform and their age.

In the context of a policy that promotes quality and supports consumers' request for healthy products, one should not omit the efforts of producing "biological" meat with high nutritive value, without additional chemical fodder or toxic or irradiated substances.

A close examination of consumers' exigencies towards meat quality and the importance of the psycho-social criteria have required an increased efforts on the part of the producers for quantity improvement and a better differentiation on quality classes.

At the international scale, the supply is differentiated on several quality levels:

- standard quality, according to the present norms and regulations and providing the required level of nutritive value and hygiene; such products are bought by most consumers for whom price is an important element in their buying decision;

- selected quality, for consumers who are very interested in quality, for high income consumer groups, high class restaurants where meat quality is selected and controlled;

- specific quality, resulted from a strategy of integrated production by using genetic amelioration technologies of animal breeding and feeding an animal slaughtering and meat cutting. Control is provided by vertical agreements. This production and trade strategy refers only to certain consumer groups with special quality requirements.

The study of the production services performed at Femadar Company has revealed that all norms and conditions imposed by the Romanian and the community legislation are met. The services are present both qualitatively and quantitatively in the company's production process and are optimised for the market requirements and the company's production possibilities.

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COMMUNITY INTERNET ACCESS IN RURAL AREAS

ACCESUL INTERNET ÎN ZONELE RURALE

A. MUNTEANU[*]

Telecommunications companies, entrepreneurs, and policymakers have regarded rural and poor markets with some combination of too-complex-to-serve and not-interestingenough (politically or economically) to be worthy of sustained attention. But times - and technologies - have changed, leaving what have been perceived as backwaters poised to become significant growth areas in the next decades.

***Key words**: information communication technologies, rural area .*

Stakeholders are beginning to recognize the political and economic significance of the more than half of the world's population that lives in largely untapped rural markets. Governments and nongovernmental organizations are increasingly concerned with addressing economic development goals and stability, stubborn deficits in rural health and learning, urban migration, environmental degradation, and other related trends. The private sector craves new consumers, producers, ideas, and synergies in our rapidly globalizing environment. What most have yet to understand, however, are the tremendous opportunities to address these challenges through new information and information communication technologies (ICTs). Increasingly powerful, flexible, and economical, ICTs present staggering new opportunities for social and economic integration. Achieving the promise of ICTs does not require sacrifice on the part of business, government, or civil society, but it does demand their vision, cooperation, and action to create the environment and mechanisms necessary for ICTs to flourish in the rural areas of the developing world.

One force necessary - albeit insufficient - for the establishment of pervasive and sustainable readiness for the Networked World, especially in developing and rural areas, is the *market*. It is commonly assumed that

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effective rural ICT access requires economic subsidy and financial loss; however, ICTs should be economically viable if they are to gain wide, robust, and longlived usage. While the path to realizing such economics will vary across countries, settings, cultures, and technologies, we consider one critical issue: Internet for rural regions of developing nations.

In researching and studying the economic self-sustainability of the Internet in rural areas, we have identified some criteria for success - something of a laundry list. This list suggests that there are at least six broad categories that must be considered for economic self-sustainability: costs, revenue, networks, business models, policy, and capacity. The groupings are imperfect due to the interrelationship and interdependence among categories, which make consideration of any one category ineffective. A more accurate way to think of the categories might be to imagine them as a balloon, which when pushed in one area, bulges in others. For instance, policy will affect cost, which in turn influences business models and therefore revenue and on down the line; this leads us to the not-soprofound conclusion that everything affects everything else.

In Table 1 we have artificially isolated the relationships between some of the diverse factors affecting economic sustainability for rural Internet, but it should be noted only when the system is taken as a whole can we describe it accurately. We are only beginning to understand the complex nature of these relationships, but have attempted to suggest the level of interaction and provide an indication of the type of effects we might expect to see.

In our estimation, at least 50 percent (and possibly much more in the early stages of connectivity) of revenue from user fees for rural Internet services will arise from the provision of core communication services. These services will enable people to better address their basic needs to communicate with family, with remote trading partners, with their government or others. E-commerce, e-government, entertainment, education, and health show promise for additional specific applications and services that reach beyond basic communication. We will now discuss these areas only to evaluate how they might provide additional services based on user fees.

E-commerce for rural developing areas has often been seen as a problem of porting the existing e-commerce models of the OECD, framed by concepts such as “B2B,” electronic payment systems, and so on.

Recognized the opportunity to allow consumers without credit cards to order online and pay upon delivery, we argue that e-commerce needs to be newly conceptualized for this new context.

Table 1

Nature and Level of Interactivity Between Factors Affecting Rural Internet Sustainability

	Costs	**Revenue**	**Networks**	**Business Models**	**Policy**
Capacity	LOW: Unless access to Computer maintenance is limited	HIGH: Business, IT and outreach skills key for new industry	MEDIUM: More users ease awareness raising and training	MED/HI: Capacity suggests limits of model	MED/HI: Education, training opportunities
Policy	HIGH: Competition, taxes and tariffs, requirements for entry, spectrum, interconnection	HIGH: VoIP alone issignificant	MEDIUM: Policy broadly affects Readiness, users become political constituency	HIGH: Decides potential for RSP and franchisees, public sector asnetwork client	
Business Models	MEDIUM: Appropriate models reduce costs	LOW: Location guides clientele and applications	LOW: Little direct connection		
Networks	HIGH: Metcalfe Effect costly to leverage (or else it would be done), scale economies grow with network size	HIGH: Size and scope drive content, utility of medium			
Revenue	LOW: Except specialized services requiring extra investment (copier, camera), assuming always on connection				

E-commerce environments must offer different services and employ alternative delivery and exchange mechanisms**,** and they must provide relevant and worthwhile support to the agricultural, informal, and micro- and small business sectors. Private sector groups are also interested in other potential commercial applications including insurance sales, remittance transmission, and other financial services. These groups pursue their goals in the face of subsistence economies, little access to capital, no credit cards, and the absence of effective tools for consumer protection and dispute resolution.

The case of agribusiness and agricultural management support systems has been given considerable attention in the ICT and development community. And indeed, there appears to be scope for agricultural services based on user-fees. However, although market price information for the agricultural sector is often touted as a substantial value addition of rural Internet services, the promise and economic self-sustainability of such a service has recently been called into question. Market prices can be valuable, but their importance will depend on other community characteristics including availability of transport, credit, and alternative markets.

With more than half the world's population living in rural areas, rural communities promise essential new markets, new producers, and new ideas. Helping them to help themselves develop also offers security for urban areas and the developed world by contributing to the grander goals of social and economic stability (and prosperity) through increased economic opportunity, new channels for learning, better communication with government, and improvements in health and wellness.

Economic self-sustainability for the Internet in rural areas is key if we want to avoid common development failures associated with donor initiatives, empower local communities, use the market to vet demand and interest, and ultimately link to real and legitimate development objectives. Business, government, and nonprofit institutions have different roles and capabilities in pushing these drivers, and while they may have occasionally competing interests, they have an overriding and common goal in economically sustainable access to ICT in rural areas.

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WAYS OF INCREASING ECONOMIC EFFICIENCY INDICES IN WHEAT PROCESSING

POSIBILITĂȚI DE CREŞTERE A INDICATORILOR DE EFICIENȚĂ ECONOMICĂ ÎN PROCESAREA GRÂULUI

SIMONA CRISTINA CONSTANTINESCU[*], I. CSÖSZ[*]

A managerial process should always achieve, among production factors used in increasing production levels, a certain functional relation that tends to optimal relation. Calculus of analytic indices of agro-alimentary production is based mainly on following production-targeted expenses. Miller's trade industry plays an important role in food industry, as flour is raw material in bread making. We have noticed an increase in profit following introduction of ameliorators in wheat flour.

***Key words**: agro-alimentary production, flour, ameliorator, expenses, and income.*

Reaching agro-alimentary production and its steady increase reduce expenses per produce unit and increase profit, which can only be achieved by managing production.

A manager that deals with organising agro-alimentary production has to face a lot of problems, created by the fact that economy is developing under natural conditions, upon biological material and production means (capital), through which man acts to reach a higher production.

Miller's trade, bread making, and floury produce industry plays an important role in consumption goods, first of all due to the fact that bread is a daily basic food. Bread making produce, together with other food produce, supply the human body with a considerable amount of the substances necessary to an active life, to maintaining health, and to preserve labour

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capacity. Due to its nutritious features, bread making and floury produce are useful forms of valorising flour as wheat processing derivative.

Nutritious value of bread making and floury produce, particularly of bread, is an important element in daily food ratio and is subject to wide debate in the field of rational feeding. This value comes not only from the energetic supply (calories), based on increase content in sugars and lipids (fats), but also on the supply of any other ingredients representing forms easily to assimilate by the human body.

Flour is the basic raw material participating with the greatest share in bread making and floury produce. Broadening the range of assortments together with technological processes in manufacturing varied produce asks for the use of different flours with different physical and chemical and technological features. Flour quality thus becomes one of the fundamental problems in bread making and in floury produce industry, because advanced mechanisation and, particularly, automation of technological processes do not allow random change in working parameters. Thus, in order to get good quality produce and in superior economic conditions, flour must have as constant and as proper features as possible to answer manufacturing requirements for each assortment or group of produce.

Flour is a complex of chemical components that provide it its technological features, each component having a well-determined role in manufacturing processes, with defining influences on produce quality.

This study concerning the economic efficiency in wheat flour processing is based on two different methods of obtaining finite produce, i.e.: flour and ameliorator flour meant to improve technological features and bread making quality.

Analytical and synthetic indices of economic efficiency have been analysed and compared. Data interpretation is presented below, with the mention that in both cases we started from the same amount of wheat (3000 t/year).

The ameliorator used is a bread making ameliorator destined to improve bread quality from low-enzyme activity flour, i.e. high fall index flour (over 300). Chemical composition of ameliorator is as follows: ascorbic acid, emulgator E 472, vital gluten, and sprung wheat flour. It looks like a white powder with a specific tart smell. Its physical and chemical features are as follows: moisture – maximum 8%, lipids – maximum 20%, ascorbic acid – minimum 7%, proteins – minimum 20%,

and sugars – minimum 45%. The recommended dose is 0.3-0.6% of the whole flour amount.

Flour

Table 1.

Nr.	Item	Value (ROL/year)	%	Value (ROL/kg)
1.1.	Raw material expenses	18.000.000.000	68,4	
1.2.	Additional material expenses	281.500.000	1,07	
1.3.	Building liquidation	118.080.000	0,45	
1.4.	Equipment liquidation	129.428.400	0,49	
1.5.	Energy consumption	283.820.689	1,08	
1.6.	Labour expenses	564.400.000	2,43	
1.7.	Indirect labour expenses	124.168.000	0,47	
1.8.	Interest	4.782.240.000	18,23	
1.9.	Other expenses	1.937.722.908,9	7,38	
1.10.	Total expenses	26.221.359.997,9	100	
2.	Total incomes	33.600.000.000		
3.1.	Price	7.378.640.002,1		
3.3.	Profit			16.000
3.3.	Profit rate		28,13	
3.4.	Labour productivity	3.733.333.333,3 ROL/person		
3.5.	Profit/1000 ROL invested		281,3	
3.6.	Profit/number of employees	819.848.889,1 ROL/employee		
3.7.	Cost of production – flour			12.486,36
3.8.	Profit/U.M.			3.513,64

Source: Economic balance of mill Voiteni, Timişoara, 2002

We can see that:

- raw material expenses (68,4%), together with additional material (1,07%) do not represent too much, so they can be ranged within normal consumption limits;
- building and equipment liquidation are only 1% (0.45%) of the total expenses, being low;
- expenses with interest on money lent from the bank to resume production cycle is 18,23%;
- energy consumption expenses are low because of new equipment with production capacity adjusted to the processing of big amounts of wheat;
- income has a profit rate of 28,13%.

Flour with ameliorators

Table 2.

Nr.	Item	Value (ROL/year)	%	Value (ROL/kg)
1.1.	Raw material expenses	18.000.000.000	67	
1.2.	Additional material expenses	701.500.000	2,61	
1.3.	Building liquidation	118.080.000	0,43	
1.4.	Equipment liquidation	129.428.400	0,48	
1.5.	Energy consumption	283.820.689	1,05	
1.6.	Labour expenses	612.400.000	2,27	
1.7.	Indirect labour expenses	134.728.000	0,5	
1.8.	Interest	4.899.430.172,25	18,28	
1.9.	Other expenses	1.984.522.908,9	7,38	
1.10.	Total expenses	26.863.910.170,15	100	
2.	Total incomes	34.650.000.000		
3.1.	Price	7.786.089.829,85		
3.2.	Profit			16.500
3.3.	Profit rate		28,98	
3.4.	Labour productivity	3.465.000.000 ROL/person		
3.5.	Profit/1000 ROL invested		289,8	
3.6.	Profit/number of employees	778.608,982,98 ROL/employee		
3.7.	Cost of production – flour			12.741,37
3.8.	Profit/U.M.			3.758,63

Source: Economic balance of mill Voiteni, Timişoara, 2002

We can see that:

- raw material expenses (67%) and additional material expenses (2,61%) do not exceed a high percentage;
- liquidity expenses, energy consumption, and labour expenses are unchanged;
- total income increases together with profit and profit rate due to the increase in price of valorising flour;
- profit per produce unit increases with 244,99 ROL/kg due to the increase in price with 500 ROL/kg of produce.

This study shows that profit is higher when using flour with ameliorators than when using no ameliorator flour, and costs, except for additional material ones, are unchanged.

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POSTAL SERVICES IN THE RURAL ENVIRONMENT OF THE TIMISOARA POSTAL REGION

SERVICIILE POSTALE IN MEDIUL RURAL DIN REGIUNEA POSTALA TIMISOARA

C. LAZARESCU[*]

The analysis of postal services in the rural area based on the example of the Timisoara Postal Region.

Key words: *services, post, rural environment*

The importance of postal services for the society is preserved in the same place it has earned and kept for centuries. About the postal services in general and especially in the villages one cannot speak in a simple manner, this meaning the possibility of delivering a letter, a sum of money or a parcel. Their approach can be made only in the context of the postal services market, made possible through the analysis of their evolution, necessity and utility.

During their evolution, the postal services only met the need for communication. At a further time they ensured the continuity of information and the extension on larger and larger areas, so that each locality on the state territory would benefit from these services. To ensure the delivery of an universal service (F.S.U.) was, is, and will be a major problem for providers because in the rural environment it implies very high costs. The cause for this is the fact that the villages occupy the larger and more varied territory so its crossing is more expensive and the revenues form traditional postal services are limited due to the low population density.

Ensuring an universal service, developing and modernizing the means of communication, discovering new ways of communication give new utilities to postal services, increasing their demand. On the other hand, new providers of postal services appear beside the old ones. So the offer of postal services increased creating a true postal market. The universal service was and is not uniformly ensured due to the discrepancy between the rural and urban environment, an issue that permanently attracted the attention of both providers and governments together with international bodies : The

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Universal Postal Union (U.P.U) and the European Union (E.U.). The importance of the post is underlined by the universal service which was recognized and accepted worldwide. Its maintenance must be followed by the quality increase in services, which can be achieved only through a postal reform, necessary at a world level because not all states ensure the same universal service. On the postal market FSU permanently searches for solutions to improve the quality of traditional postal services, achieved through electronic stamps and self- peeling stamps, and to implement new products and services especially of the "new economy" type achieved through the Internet. On the other hand new postal programs and objectives which have in view the main priorities as : restructuring for improving efficiency, improving the relationship with the clients and increasing quality of service, creating revenues and diversification of activities together with developing new markets, were elaborated. Also development strategies oriented towards efficiency improving programs and globalization of postal entities through the integration of achieved enterprises at a national and international level and through programs of modifying the postal network were established. On the governments work agenda the village issue is more and more up- to- date. It distinctively includes rural postal services that were included in the GATS agreement (General Agreement on Tariffs in Services) which decided at the ministry reunion in Doha in the year 2001 to start negotiations for the liberalization of all services that make the object of international commerce and therefore of postal services. An important part in this direction will be played by the rural postal network. "(6) The rural postal network, especially in the mountain and island areas, play an essential part in what the integration of enterprises in the national and international economy is concerned and also in maintaining social cohesion and employment in mountain and island areas. In addition, rural postal offices in mountain and island areas may provide an infrastructure network mainly for the universal access to new technologies in the communication sector "(Foreword to the Directive no. 2002739/ CE , 10 June 2002). Historically in our country there were concerns regarding rural postal services, but they were abandoned.

THE RURAL POST IN ROMANIA

The existence of rural post is attested in the Romanian Country during the reign of Barbu Stirbei, who was concerned with the extension of

the postal service allowing the transport of correspondence between county and region capitals through the " Royal Office no. 102 from the 19th of January 1851, issued by the monarch for the interior department " published in the Official Monitor no. 7/1851. An organization of the rural post in the united kingdoms was realized by the Director General Librecht who persistently asked the monarch Al. I. Cuza to introduce a rural postal service. The monarch signed the decree no. 357 on the 26th of February 1865 comprising 12 articles laying the foundations of the rural post, both for official and private correspondence and established the organization of the rural postal service. In the same year, for the functioning of this service, he elaborated the index of posts and drew the Instructions for rural postal services, elaborated the alphabetic index of rural localities specifying the county for each locality, and also the rural expedition office to which each site belonged and the exchange office assigned. The Decree no. 357/ 1865 comprises 32 counties out of 33, 153 regional capitals out 164 and supplied 3020 communes. The motto of Director Librecht was " A dweller will not need to leave his home, but will be able from his commune to send and receive an answer from one end of the country to the other. " The abdication of ruler Al. I. Cuza had negative influences on the rural postal services so that in 1870 they were practically non- existent. The non- existence of a rural postal service was of concern for the authorities of the age so measures were taken for a new law of postal services in the village. Therefore the Director General Zisu was very concerned and prepared a project for a new law that was passed in the Chamber on the 2nd of July 1871 and the Senate on the 9th of October 1871. The law was issued during the mandate of Director Lahovari, by the decree no. 734/ 1871 and applied beginning with the 1st of May 1872. This law was published in the Official Monitor no. 252/ 1871. In this period the rural postal services were greatly developed and the revenues obtained were published in the report of the year 1874/ 75, pg. 22 .

The great expenses for maintaining this service at a country level- being 208,299 lei at that time-, determined the Post Management to reorganize rural postal services. Beginning with the 1st of January 1876 a new regulation was introduced leading to the decrease of expenses with 49,799 lei, to the value of 158,500 lei. Not only rural postal services were developed but also telegraph services by the extension of telegraph lines and offices, the regulation for " establishing lines and opening telegraph offices by county and commune authorities" being issued. In order to obtain great

achievements in the village area and especially for meeting new demands a more complex approach of the post from an economical and social point of view is necessary. The approach from a postal point of view must consider the new post policies, which to eliminate the difference between rural and urban and to ensure the necessary conditions for the unraveling of postal service activity. From an economical point of view postal services must be made efficient by finding new rentability possibilities. If postal services met just one need in an area of decreased population, by the aid of the new utilities that postal services can offer they must meet more needs. From a psychological and social point of view the approach for the village must be made through a systemic approach of the state. The state must be considered a system composed of more sub- systems : spatial (where it belongs), social (demographic, social relations), cultural, economic, infrastructure, etc. If postal and communication services are part of the infrastructure and are poorly developed they will negatively influence the system. At the level of Romanian Post and implicitly at the level of D.R.P. Timisoara no direct approaches for the village have been made for almost a century. Post activity implies to ensure presentation conditions, transport or delivery and distribution. Up to now measures for the reorganization of the postal network and for improving the distribution of postal messages were taken. Centralized Distribution Postal Offices (OPDC) were created in the urban area, while in the villages the Mechanized Rural Postal Offices (OPRM) were established. In this sense in 1998 many postal offices at the level of Timisoara district were dismantled : 48,7% in the Timis county, 47,3 % in the Arad county, 23.8 % in the Hunedoara county and 56.3% in the Caras Severin county , most of them in the rural area. Instead postal agencies and windows were organized. Most postal windows had a 6 hour working schedule per day, while the post agencies were organized for distribution, presentation and commerce. The postal windows organized instead of the dismantled offices are poorly equipped, but the personnel is composed of the former postal managers well trained in the domain of postal instructions. The creation of OPRMs was realized by organizing external sites : windows, agencies and rural postmen supplying the belonging localities. The postal agencies which dominate the rural network are organized full-time- 8 hours -for distribution and presentation, as well as a commercial activity.The presentation activity is very limited because the agencies function at the postman’s home and have no equipment. The possible

presentations are only minimal and only for traditional postal services. The commercial activity is also limited because the merchandise is sold both at the agency site and ambulatory. The postal presentation distribution activity is ensured by the daily home delivery for the recipients or for the companies. The effect of this organizational type was the increase of expenses over the revenues per employee and the respective increase of average expenses over the average revenues for each external site. For these indicators the following values were registered:

- in the Timis county: revenue per employee 4.9%, expenses 7%;
- in the Arad county: revenue per employee 5 %, expenses 7.4 %;
- in the Hunedoara county: revenue per employee 3.1 %, expenses 6.9 %;
- in the Caras Severin county: revenue per employee 4 %, expenses 7.2 %;
- in the postal district: revenue per employee 4.3 %, expenses 7.2 %.

On the exterior sites the recorded figures are as follows:

- the Timis county: average revenue 8.1%, expenses 11.4%;
- in the Arad county average revenue 9.6%, expenses 11.4%;
- in the Hunedoara county average revenue 4.7%, expenses 14.2%;
- in the Caras Severin county average revenue 6.5%, expenses 12.4%;
- in the postal district: average revenue 7.2%, average expenses 12%.

The revenues and expenses for one work phase are not real because the postal taxes perceived for one service do not include: presentation expenses, transport or delivery, distribution and profit. The figures presented above refer to the distribution activity and respectively to the employees engaged in this type of activity .The balancing between the presentation and distribution, the elimination of gaps between cities and villages may offer great opportunities for the central and remote rural areas. If in the city outskirts area the rural population has possibilities and an easier access to the urban environment for problem solving, for the population in central and especially in remote areas the possibility to get into town is more limited and achieved with great consumption of time and money. A better organization which to allow for a better and sure promotion of postal services in the rural area would create great opportunities both for postal services suppliers and for consumers. The service suppliers may create a sure market. For the service consumers: on the one hand the population would be informed through the public post service about the variety of produce offered by the great producers and about obtaining these by home delivery. On the other hand the great produce suppliers have the

opportunity of making themselves known by extension in untouched areas. The development of commerce by post has the attention of post suppliers and also international bodies and organizations. In the Timisoara post district, the population density and the accessible relief on a great surface of the rural environment together with the high cultural level confirm the existing conditions for a potential postal market. The modernization of traditional services, the implementation of new services and especially computerized ones is necessary both socially (it ensures very fast communication) and economically, having in view that the agricultural produce (especially food) are perishable. Their selling can be made only by ensuring rapid circulation of information. For obtaining food agricultural produce (animal and plant alike) of good quality , correspondence counseling may be ensured, both for access to new species of plants and animal breeds and for sanitary and veterinary counseling together with plant growing counseling. A policy headed towards the presentation activity would be more beneficial than the policy headed towards distribution. The presentation of postal delivery at the level of present requirements, by computer equipment implicitly ensures the arrival of post deliveries (correspondence, money) with the same technique. The presentation expenses are lower than the distribution ones. The postal services consumers come to the postal office while distribution is made by going to the recipient's home. Once presentation is well organized through a flexible program that would be concurrent with the consumer demands a substantial distribution may be realized. The mobile telephone communication market confirmed that a great number of communication services consumers are no longer willing to wait at home or near a telephone apparatus. This is another reason for creating post offices with a prolonged and flexible program that would offer recipients the possibility of getting their post from the post office in their available time, without having to wait at home.

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DIVERSITY OF WEEDS IN CEREALS AND MAIZE IN EASTERN HUNGARY

DIVERSITATEA BURUIENILOR ÎN CULTURILE DE CEREALE PĂIOASE ŞI PORUMB DIN ESTUL UNGARIEI

I. MOLNÁR*

On the regularly cultivated fields two types of weed vegetations develop yearly, the so-called cereals and root crop weeds. It is well known that the cereals weed vegetation is richest in wheat, while root crops weed vegetation is richest in maize.

When the weeds of cultivated field crops are merged we obtain the total alternation of the three weed associations for the given field.

In the past fifteen years phytosociology examinations have been carried out in winter weed and maize fields. During the phytosociological comparisons of the two field crops, the similarities and diversities were used. The similarities were calculated using Czekanowski method, while diversities were estimated with the Shannon formula.

Our analysis showed that the changes in the similarities and diversities of the weed communities of wheat crops were very different in small and large-scale farms. It appears that several similarities and diversities may exist simultaneously in wheat and maize fields. Also, we have found out that different agrotechniques may have different effects on the structural attributes (similarities and diversities) of weed communities.

Key words: *alternation of weed associations, Sørensen-index, importance values, dominance-diversity, rank-correlation coefficients, Kendall coefficient*

INTRODUCTION

On the regularly cultivated fields two types of weed vegetation develop yearly, the so-called cereals and root crop weeds. It is well known that the cereals weed vegetation is richest in wheat, while root crops weed vegetation in maize.

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In the case when the weeds of cultivated field crops are merged we obtain the total alternation of the three weed associations for the given field.

The composition of species of weed associations goes through significant changes with the application of different technologies in cultivated field crops. These changes can be examined using a variety of phytosociology research methods: similarities, diversities and preferences.

In the past fifteen years phytosociology examinations have been carried out in winter weed and maize fields. During the phytosociological comparisons of the two field crops in the present work, the similarities and diversities were used. The similarities were calculated using Czekanowski method (COUSTON 1983), while diversities were estimated with the Shannon formula.

The cultivating methods of different farms continuously change. In the past 40 years this has been especially true for cultivating methods in maize fields. This is the reason why my research and examinations focus on the phytosociological changes of weed communities in maize fields.

After 1990 the percentage of small farms has grown significantly. The growing technology of these small-scale farms is substantially different from the one that has been used on large-scale farms. This has been studied by making a comparative phytosociological survey of maize fields on small farms (1-5 ha) and on large ones (above 10 ha).

MATERIALS AND METHODS

I. Weed vegetation of winter wheat

During the first stage of my research I studied the phytosociological diversities of weed vegetations in winter wheat on different soils. Afterwards, I made a comparison of weed vegetations in winter wheat with the help of the Sørensen-index (SØRENSEN T. 1948) on two different soils (chernosemic soil and clay soil), where I analyzed the change of weed vegetations in plots treated with herbicide and in untreated plots.

I made a comparison of covers and species of the given plots using the H' index (PIELOU 1975, PEET 1974).

II. Weed communities in maize fields

In the second part of my research I have performed a comparative phytosociological survey of weed communities in small maize fields (1-5 ha) and in large ones (above 10 ha).

The surveys were made on clay soil in Bihar County using 10 plots on each field type, with 10 surveys on each plot, which means that for each type field we performed 100 weed community evaluations.

During the cover analysis the Spearman rank correlation coefficients (SVÁB 1967) and the Kendall concordance coefficient (ZAR 1984) were used.

RESULTS AND DISCUSSION

I. Weed vegetation of winter wheat

I have measured the percentage alternation of weed vegetations in winter wheat on chernosemic and clay soil under a four-year period (Fig. 1.).

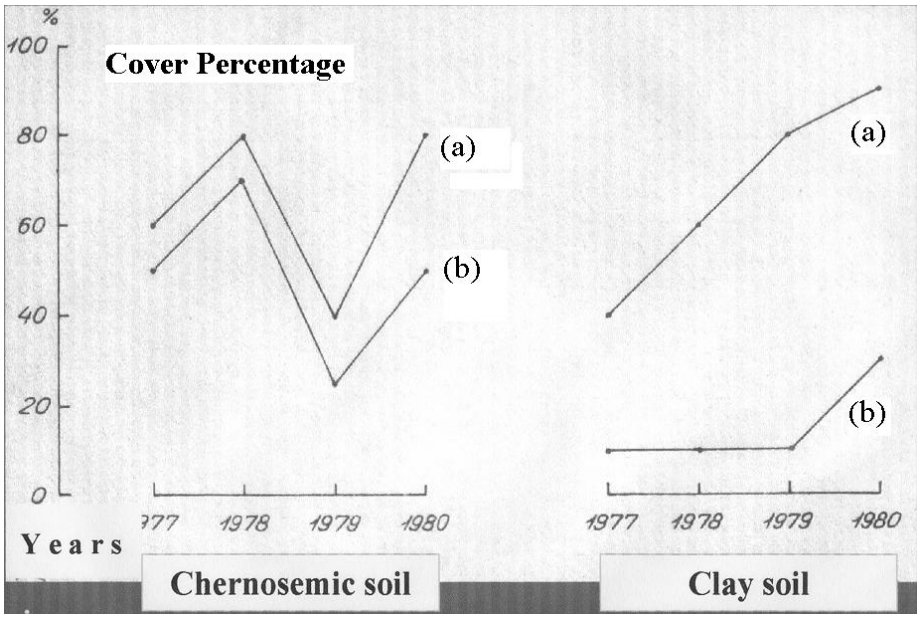

Fig 1: Greatest and smallest percentages of dominant species from importance values: (a) all species, (b) dominant species

In chernosemic soil the *Stellaria media* and *Stachys annua* became dominant based on their importance value (the importance value is the cover percentage multiplied by the frequency percentage of the species).

On chernosemic soil the cover percentage distribution for both the dominant and other species showed a similar pattern, with high importance values between 40-80%. However, the distribution of the importance values significantly varied from one year to the other.

In winter wheat on the clay soil the *Gallium aparine* outweighed the other weeds. In this case the overall cover percentage distribution for all the species gradually increased over the investigated period, but for the dominant species we observed a sudden increase in the importance value (from 10 to 30%) during the last year of the investigated period.

The comparison of covers and species of the given plots using the H' index (PIELOU 1975, PEET 1974) gave the following results:

On chernosemic soil: H' = 1.4263 – 1.9948

On clay soil: H' = 1.0285 – 2.787

On chernosemic soil, the H' index value indicates that there are a few dominant species, the importance values of other species are close to each other.

On clay soil, the H' index value indicates that besides the dominant species, other species with similar high importance values are observed.

The above assumptions on dominant species for chernosemic and clay soil were verified using the Whittaker (WHITTAKER 1975) dominance-diversity graphs (Fig. 2).

On the upper parts of (a) and (b) graphs various species with high importance values can be found, especially on clay soil. In the case of (c) and (d) graphs one type of species with very high values is found in each case (*Gallium aparine* and *Stellaria media* respectively). The sharp slow down of the graphs shows that the ecological conditions are not favorable for the weeds.

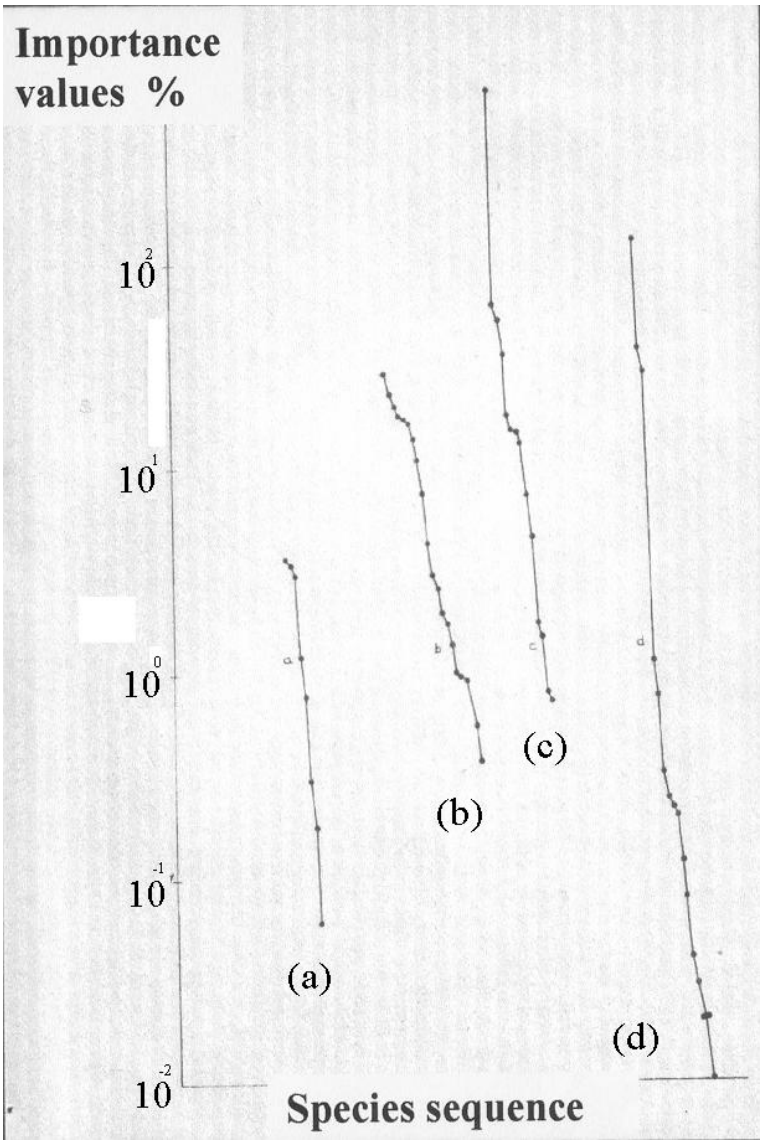

Fig. 2: Whittaker dominance-diversity graphs: (a) Chernosemic soil, first sampling; (b) Clay soil, first sampling; (c) Clay soil, second sampling; (d) Chernosemic soil, second sampling

II. Weed communities in maize fields

The results of the surveys of weed communities in maize fields of small and large-scale farms are shown in Fig. 3. The obtained values were grouped on the basis of cover percentage and number of species.

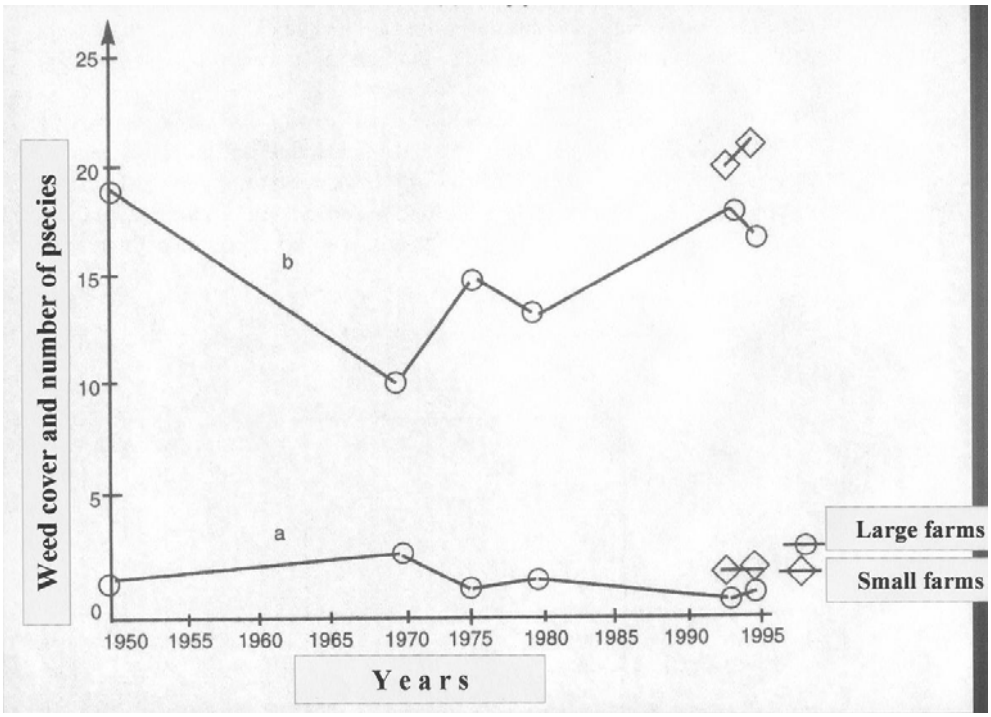

Fig. 3: Changes in (a) average weed cover and (b) number of species

Furthermore, those weed species that appeared in the analyzed fields were ranked on the basis of their average cover percentage; the results are presented in Tab. 1.

Tab. 1: Rank of weed species by their average cover percentage

Species	Years							
	1950	1970	1976	1980	1994	1995	1994	1995
					Large farms		Small farms	
Convolvulus arvensis	1	4	3	4	3	4.5	4	3
Cirsium arvense	2	7	7	5	9	11	1	6
Chenopodium album	3	8	4	7	7	4	6	7
Setaria glauca	4	5.5	5	2	7	4.5	6	9
Rubus caesius	5	10	9	8	11	9	11	7
Echinochloa crus-galli	6	1	2	1	2	2	2	2
Polygonum amphibium	7	2	6	9	5	3	8	5
Hibiscus trionum	9	5.5	8	6	6	8	9	10
Amaranthus retroflexus	8	3	1	3	1	1	3	1
Xanthium italicum	10.5	10	10.5	10.5	10	7	15	4
Phragmites communis	10.5	10	10.5	10.5	8	10	10	8

The average percentage cover changed in a big interval (0.61% – 3.11%). The dominant species were *Convolvulus arvensis* in 1950, and *Echinochloa crus-galli* between 1970 and 1980. During the examined period those species with a cover percentage over 1% were chosen out for our analysis. Altogether 11 such species could be found and were ranked according to their average cover percentage (Tab. 1.).

In 1994-1995 the Spearman rank coefficient (rank-correlation) was higher on large farms (r_s=0.8113) than on small ones (r_s=0.6273). This shows that the rank of species in 1994 and 1995 was very similar on large farms, while on small farms bigger changes occurred the rank of species. A major change was observed particularly in the case of *Cirsium arvense*, but also significant changes occurred in other two species, namely *Xanthium italicum* and *Rubus caesius*.

The calculated value of the Kendall concordance coefficient was high and significant as follows:

W = 0.5783

χ^2 = 46.26

df = 10

The above means that there is a correlation between the rank of the species and the years, the species follow each other in nearly the same sequence in the different years. On both small and large farms *Convolvulus arvensis, Echinochloa crus-galli* and *Amaranthus retroflexus* stand on the first three places. These species represent the main danger.

Xanthium italicum, Phragmites communis and Datura stramonium are significant especially under the cultivating methods of small farms.

In spite of the aforementioned three species Abutilon theophrasti and Ambrosia elatior appeared and the species cover percentage grew significantly, thus the damaging influence of these species has to be taken into account.

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THE STUDY OF ZUCCHINI YELLOW MOSAIC VIRUS OF SOME PLANTS FROM THE CUCURBITACEAE FAMILY

STUDIU PRIVIND VIRUSUL MOZAICULUI GALBEN LA UNELE PLANTE DIN FAMILIA CUCURBITACEAE

RENATA CSORBA[*], EDIT F. KISS[**]

Zucchini yellow mosaic virus (ZYMV) is a widespread serious pathogen of cucurbitaceous plants. The virus has many hosts, which - particularly perennial ones – may play important role as virus reservoirs and infection sources in virus epidemiology. Our research was carried out on a total of 15 wild species from 8 genera (Cucumis, Cucurbita, Cyclanthera, Ecballium, Momordica, Lagenaria, Zehneria, Bryonia). Test plants were mechanically inoculated with ZYMV. Local and systemic symptoms were determined and 5 weeks after inoculation DAS-ELISA tests were also carried out. Symptomeless plants were reinoculated to Cucumis sativus cv. Accordia test plants. On the basis of the results we determined the percentages of infections and so we classified the test-plants into sensitive and resistance categories.

Key words: *Zucchini yellow mosaic virus (ZYMV), local and systemic virus susceptibility, wild cucurbitaceous hosts, host - virus relationships;*

INTRODUCTION

A large number of viruses - nearly forty - have been reported to infect plants of the family *Cucurbitaceae* has recently become more frequent. From which until now three aphid transmitted viruses [C*ucumber mosaic virus* (CMV), *Zucchini yellow mosaic virus* (ZYMV) and W*atermelon mosaic-2 virus* (WMV-2)] are known to have economic importance in Hungary (TÓBIÁS et al. 1996, KISS et al. 2002). Zucchini

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yellow mosaic has come to have great economic importance since it was recognised in 1981 (LISA et al. 1981, ZITTER et al. 1996). In Hungary ZYMV was isolated by TÓBIÁS et al. (1996) at first time, and became one of the most serious viruses of cucumber (KISS et al. 2002).

From the point of virus epidemiology it is very important to find primary infection sources and virus reservoirs from cucumber ecosystem, with special regard to perennial plants (KISS et al. 2002). Wild species belonging to the family *Cucurbitaceae* as alternative hosts may play important role in the development of the chain infection. Inspite these few information is about host - ZYMV relations. The aim of our study was to examine unknown host-virus relations in order to get more information about virus susceptibility or resistance of wild cucurbitaceous species.

MATERIALS AND METHODS

15 species of 8 cucurbitaceous genus (*Bryonia, Cucumis, Cucurbita, Cyclanthera, Ecballium, Momordica, Lagenaria* and *Zehneria*) were mechanically inoculated with *ZYMV–10* strain (TÓBIÁS et al. 1998) at cotyledons fenological stage using carborundum-spatula technique (Table 1). Nine plants per virus were inoculated and the virus-containing tissue sap was diluted with phosphat buffer at a ratio of 1:1. The susceptibility and resistance (immunity) of the species were determined symptomatologically and serologically by DAS-ELISA method (CLARK and ADAMS 1977) and by back evaluation to *Cucumis sativus* species, as test plant.

In case of visual assessment an evaluation formula was applied (Figure 1), according to the severity of symptoms (KEGLER and KLEINHEMPEL 1987).

$$RL = \frac{\sum n\,(b-1)\times 100}{N\,(B-1)}$$

RL= resistance level (%)
n = frequency belonging to the scale value
b = scale value equivalent to the severity of virus symptoms, 1-4
(1 = severe, 2 = moderate, 3 = weak symptoms, 4 = symptomless)
N = total number of examined plants
B = the maximum scale value

Figure 1: Resistance level (%) equation

Table 1: Test plants used in the experiments

Name of test plants		Origin of test plants	Sortiments
1.	*Cucumis zeyheri* Sond	Institut für Pflanzengenetik und Kulturpflanzenforschung Gatersleben	(CUC 54/1991.)
2.	**Cucurbita argyrosperma *Huber***		(MIX 1/1972.)
3.	*Cucurbita argyrosperma* Huber		(MIX 1/1990.)
4.	*Cucumis figarei* Delile		(CUC 44/1989.)
5.	*Cucumis metuliferus* E. Mey ex. Schrad		(CUC 3/1981.)
6.	*Lagenaria siceraria* (Mol.) Standl. ssp. Siceraria		(LAG 37/1984.)
7.	*Momordica rostrata* A. Zim Bally	Hortus botanicus Hauniensis, Botanicus Garden of the University of Copenhagen	(S1981-0670)
8.	*Zehneria scabra* (L.fil.) Sonder		(S1967-0201)
9.	*Zehneria indica* (L.) Keraudren		(S1953-1997)
10.	*Ecballium elaterium* (L.) A. Rich.		(224/5132 1)
11.	*Bryonia alba* L.		(224/5130 1)
12.	*Cucurbita ficifolia* Bouché	Institute of Ecology and Botany of the Hungarian Academy of Sciences, Vácrátót	(873/1003)
13.	*Bryonia dioica* Jacq.		(873/992)
14.	*Momordica balsamina* L.		(873/1009)
15.	*Cyclanthera pedata* (L.) Schrad		

RESULTS

The results of experiments are summed up in (Table 2-3). We observed strong local lesions, often followed by cotyledon necrosis. Beside the general symptoms of the mosaic spots and leaf deformation on the infected plants we can highlight the dark green blistering on the leaves strongly divided and the narrowing of the young leaves (Table 2). *Cucurbita ficifolia* showed interesting fern leaves and total chlorosis. On the older leaves the symptoms appeared in another way, in the form of highlighted vein banding. Similar were our experiences in the *Lagenaria siceraria* plants as well, besides enatio manifested along the vein as interesting, unusual symptom of ZYMV. There were severe malformation and blistering on the stunted fruits often.

The infection measured by DAS-ELISA test was the highest in the *Cucurbita* genus, which harmonized with the RF figures (Table 2).

On the basis of the RF data (according to the visually evaluation) can be enlarged the total lack of symptoms of the *Momordica balsamina,*

Ecballium elaterium, Bryonia alba and *Zehneria indica* plants and the weak or hardly recognizable symptoms of the *Cucumis zeyheri* species. The individual differences in *Cyclanthera pedata* plants are particularly remarkable, as certain plants were totally resistant to the virus, while others reacted with conspicuous stunting.

During visually examination we observed none of the symptoms at the *Bryonia alba, Ecballium elaterium, Momordica balsamina,* and *Zehneria indica* plants while DAS-ELISA test proved it was only the *Bryonia alba* and the *Zehneria indica* species clear of viruses.

DISCUSSION

Owing to the inoculation with the zucchini yellow mosaic virus extremely varied and severe symptoms manifested on the test plants, especially on the *Cucurbita* genus similar to the findings of ZITTER et al. (1996)**.** The enatio along the vein of the young leaves of the *Lagenaria siceraria* plants is a new symptom in the case of this virus. After estimating visually we can sum up that the ZYMV causes extremely severe deformation in the leaves and fruits, which results in economic damage and unmarketable products because it causes remarkable loss in the quantity and quality of the fruits of our cultivated cucurbitaceous species.

The virus susceptible wild species are dangerous weed and virus reservoires, they play an important role in the spread and survive of the viruses, so it is extremely important to control them. It is essential to enlarge our knowledge on the susceptibility of weeds not examined so far (particular perennials), because this information is also necessary to prevent and control the spread of the viruses. Inspite these according to present knowledge data on the hosts range of the ZYMV are not sufficient. BRUNT (1996) listed five natural hosts: zucchini, melon, watermelon and cucumber from the cultivated plants of the *Cucurbitaceae* family and the *Melothria pendula* wild species. Apart from these he mentioned 17 artificial host species, from among virus susceptibility of the wild *Cucumis metuliferus*

species was justified by our experiments as well (Table 2). HORVÁTH (1985a, 1985d, 1993, 1995) described 14 hosts of ZYMV species from the *Cucurbitaceae* family, from which the susceptibility of *Cucumis zeyheri* and *Cucumis metuliferus* was confirmed by our own experiments. Similarly to the data of TÓBIÁS et al. (1998), who examined 21 species from

various plant families, and 14 of which proved to be virus hosts – we also found the *Cucurbita ficifolia* as ZYMV susceptible host plant.

Table 2: Symptoms and susceptibility of cucurbitaceous species to Zucchini Yellow Mosaic Virus (ZYMV) (Hódmezővásárhely, 2002)

Test plants		**Symptoms** local / systemic	**Resistance level (%)**	**Highest extinction values of DAS-ELISA test**
1.	*Bryonia alba* L.	- / -	100,0	0,158
2.	*Bryonia dioica* Jacq.	- / Ch, Ldef, D, E	22,22	0,556
3.	*Cucumis figarei* Delile	Nl / Mo, Bli	75,57	1,120
4.	*Cucumis metuliferus* E. Mey ex. Schrad	Nl / Ldef, Bli	37,03	1,425
5.	*Cucumis zeyheri Sond*	Nl / Bli	93,33	0,852
6.	*Cucurbita argyrosperma* Mix 1/1972	Nl / Mo, Ch	50,00	1,052
7.	*Cucurbita argyrosperma* Mix 1/1990	Nl / Mo, Ch	41,66	1,525
8.	*Cucurbita ficifolia Bouché*	Ll / Mo, Bli, Nl, Ldef, Fle	33,33	1,854
9.	*Cyclanthera pedata*	Nl / Bli, Gr,	77,78	0,971
10.	*Ecballium elaterium* (L.) A. Rich	- / -	*100,0*	*0,472*
11.	*Lagenaria siceraria* (Mol.) Standl. ssp. Siceraria	Ll / Bli, Ldef, Vc, E	38,10	1,963
12	*Momordica balsamina* L.	*Ll / -*	*100,0*	*0,772*
13	*Momordica rostrata* A. Zim Bally	Nl / Mo, Bli	70,83	1,113
14	*Zehneria indica* (L.) Keraudren	- / -	100,0	0,244
15.	*Zehneria scabra* (L.fil.) Sonder	- / Mo, Vb, Bli	73,33	0,656

Legend to table 2:

Symptoms: - = no symptoms, Ll =local lesion, Nl = necrotic lesion, M = mosaic, Ch = chlorosis, Bli = blistering, Fle= fern leaf, Gr = growth reduction, Vb = vein banding, Vc = vein clearing, Cd = crop deformation, E = enatio, D = plant death, Ldef = leaf deformation

Note: negative control value of DAS-ELISA test: 0,190
positive control value of DAS-ELISA test: 1,805
Infection limit: twice as much as the negative control

According to our experiments the new ZYMV hosts are the following: Bryonia dioica, Cyclanthera pedata, Ecballium elaterium, Momordica balsamina, Momordica rostrata, and Zehneria scabra species. We found no symptoms at all in Ecballium elaterium and Momordica balsamina species, at the same time low virus concentration was revealed referred to latency of these plants (Table 2). These plants can play a major role in the differentiation of viruses in the future. We wish to highlight that the Ecballium elaterium and the Bryonia dioica, as perennials from 4 tolerant wild species are native weeds in Hungary, can be virus reservoires and infectious agents near our cultivated Cucurbit cultures. In spite of the fact that we have no knowledge about perennial virus hosts in Hungary, except these two, and firstly the role of the seed transmission (TÓBIÁS and KOVÁCS 2001) and the vector transmission (ZITTER et al. 1996) is proved, the epidemics years by years make it necessary to continue the search for perennial host plants. Considering the weak weed-repressing ability of the cucumber species at the beginning of their development, it would be wise to avoid the harmful neighbouring plants and regular virus vector aphid control is also necessary.

Bryonia alba and Zehneria indica are especially remarkable, because they proved resistant to ZYMV on the basis of symptomatology and serology. The *Bryonia alba* – which can be considered as virophobe according to HORVÁTH (1973) – did not react to the ZYMV infection either with local or systemic symptoms. The DAS-ELISA test also backed up the virus resistance of this species. The *Bryonia alba* and the *Zehneria indica* plants proved to be virusless both visually and serologically (Table 3), which is a valuable result for virus differentiation research and can be the base of further examinations.

Table 3: Virus susceptibility of wild cucurbitaceous species inoculated by *Zucchini Yellow Mosaic Virus* on the basis of DAS-ELISA test

Testplants		Susceptibility to ZYMV	
		Susceptible	**Resistance**
1.	*Bryonia alba* L.		+
2.	*Bryonia dioica* Jacq.	+	
3.	*Cucumis figarei* Delile	+	
4.	*Cucumis metuliferus* E. Mey ex. Schrad	+	
5.	*Cucumis zeyheri Sond*	+	
6.	*Cucurbita argyrosperma* Huber Mix 1/1972	+	
7.	*Cucurbita argyrosperma* Huber Mix 1/1990	+	
8.	*Cucurbita ficifolia Bouché*	+	
9.	*Cyclanthera pedata* Schrad.	+	
10.	Ecballium elaterium *(L.) A. Rich*.	+	
11.	Lagenaria siceraria *(Mol.) Standl.ssp*. siceraria	+	
12.	*Momordica balsamina* L.	+	
13.	*Momordica rostrata* A. Zim Bally	+	
14.	*Zehneria indica* (L.) Keraudren		+
15.	*Zehneria scabra* (L.fil.) Sonder	+	

Legend: extinction value of DAS-ELISA test: Resistance plant: 0.38 >
Susceptible plant: 0.38 ≤

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INSURANCE MARKET IN AGRICULTURAL PRODUCTION FROM ROMANIA. EUROPEAN DIRECTIVES REGARDING INSURANCE

PIAȚA ASIGURĂRILOR ÎN PRODUCȚIA AGRICOLĂ DIN ROMÂNIA. DIRECTIVE EUROPENE ÎN MATERIE DE ASIGURĂRI

T. MATEOC*

Insurance is seen, nowadays, as a complex industry, a regular network providing the community with a great variety of products. It appeared from man's need for protection against dangers, and for finding proper solutions of preventing and erasing them.
Insurance market development was caused by the fact that both demand – resulted from the complexity and number of risks – and offer, including the different possibilities of covering risks, have known an unprecedented increase.

***Key words**: insurance, re-insurance, risk, crops, livestock, legislation, Directives, State, intervention, insured, insurer, damage, compensation*

Insurance is seen, nowadays, as a complex industry, a regular network providing the community with a great variety of products. It appeared from man's need for protection against dangers, and for finding proper solutions of preventing and erasing them.

Despite all measures taken for their own security and for the protection of their fortune, people, as any other economic or social entity, have always been under the incidence of dangers.

Natural calamities are among the most serious dangers that can

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affect humans' lives and the activity of any entrepreneur, resulting in great material losses, in suffering, and in human life loss. Nature's forces can cause unsuspected destructive effects, among which: drought, frost, flood rainfalls, hurricanes, floods, earth quakes, lightning, fire, land collapses and glides, snow avalanches, etc.

Most times man can cause serious losses by his improper way of accomplishing his duties in economy or in society. Technical catastrophes result in damages that are closely linked to man's activity, including: fires and explosions, aviation crashes, sea accidents, root accidents, railway accidents, building clashes, etc.

In these conditions, modern societies have developed financial mechanisms capable of diminishing or even annul economic or financial effects of these events – an activity known as **insurance**.

Insurance does not eliminate risk – it only distributes damages within a risk community. Most specialists in the field embrace the idea according to which insurance is a means of distributing the damage of a smaller number of people, caused by a phenomenon or by a complex of phenomena, over a great number of persons (risk community).

At a national level, insurance is an economic tool of greatest importance. Within a national economy, insurances have two main roles: protecting national wealth and acting as a savings tool.

As a risk transfer method, insurance has the following advantages: the insured can transfer the risk – in exchange for an insurance premium – to an insurer; the insured can replace an unknown and variable cost with a known cost equalling the insurance premium; during a year, insurance premiums represent only a part of the loss risk value; the insured benefits from supplementary facilities offered by the insurer.

Insurance has also some disadvantages: not all risks are insurable; insurance rarely provides an integral compensation for the losses; not all insurance premiums have a certain distribution in time and as size.

In Romania, agriculture is an important economic branch due to its financial resources (62.2% of the total area being represented by agricultural land), ranking second after Poland within the group of Central and Eastern European nations. Among European nations, Romania is considered a high production potential agricultural country.

We should take into account the fact that there is no really effective and certain agriculture without insurances. It is true that much too little

agriculturists can benefit from insurances. Only agricultural firms and some agricultural producers having large areas of land and considerable productions can afford insurances. Agricultural producers and agricultural firms usually appeal to insurances because of bank loans as the latter implies crop and liabilities' insurance.

Insurance market development was caused by the fact that both demand – resulted from the complexity and number of risks – and offer, including the different possibilities of covering risks, have known an unprecedented increase.

The factor insurance demand influences the size of insurance markets only by confronting offer. This factor is, from the point of view of its covering by the society members, in correlation with each country's or area economic development, with access to income, the interest in this type of service being enhanced by ownership relationships and by the level of culture and education.

The other factor contouring insurance markets – offer – is characterised by the presence, depending on the conditions of each country or geographical area, of insurance companies, of mutual organisations, and of insurance companies.

This specific type of services, characterised by the **lack of homogeneity of the products they provide**, results in special conditions of manifestation of competition. There is, on these markets, a perfect competition only if the different insurers offer the same types of products.

In other words, competition only appears among similar companies, providing the same type of product, i.e. insuring against the same type of risk. Thus, any insurance market is composed of a number of component parts equal to the number of insurance types. Competition is manifest within these sub-branches by providing different insurance terms, which results in individual products competitive with other offers.

As for **transparency** on such markets, we should take into account the difficulties potential beneficiaries are confronted with in knowing the differences between the competitors' offers, as it is very difficult for them to understand the exact effect if the insurance, the ratio between the value of the liabilities insured, the risks covered, and insurance premium.

Insurance and re-insurance markets are also characterised by their degree of atomisation, i.e. by the number of providers and solicitors on the market, which influences or not a company's activity. The degree of

atomisation on some insurance markets in countries that range at the top of insurance worldwide, given by the number of insurance organisations, is quite different.

An important element contributing to the manifestation of competition on insurance markets is **freedom of movement** (ins and outs) of economic agents on these markets; this element, specific to market economies, influences free manifestation of market laws by its opening to the economical and social environment.

A particularly interesting and relevant index in developing the sector is **insurance density**, i.e. the annual amount of insurance premiums per capita. Analysing this index shows disparities worldwide.

Within the Domestic Market, there are three generations of European Directives concerning insurances and re-insurances.

First, they have developed two important Directives linked to the stipulations of the Treaty of Rome on free movement of the capital, on the freedom of constitution, and on the freedom of practicing services.

The first generation contains directives specific to general insurances (non-life) and life insurances.

The Directives of the second generation represented the passage to the freedom of providing insurance services, 9 years after the development of the Directive for life insurance and of the first Directive concerning the freedom of supplying insurance services. Building up Europe and, as a consequence, a unique European market in the field of insurance was suspended. The Recommendations of the White Paper in 1985 and their inclusion in the Unique Act in 1986 promoted the new boom in the field of insurance.

The principles of the 3rd generation point out the clear intention of developing a European level market economy on the background of a detachment from public authority intervention, in order to get competitive products and prices, as an outmost guaranty for consumers' protection. Surely, this could only be done by harmonising insurance legislation and by adopting prudent standards for all companies.

Licensing insurance companies is based on the acceptance, by the surveillance authority of the country, which should assess: the business plan, the components of the minimal fund guaranteed, the quality of the shareholders, the reputation and professional expertise of the managers.

Financial surveillance is also an attribute of the surveillance authority in the country licensing the insurance company. It is done by annual inspections of financial-accounting balances, of solvency, of portfolio transfers, and of acquisitions.

Price control is based only on the checking up of the calculus engendering them.

Only the authority in the country of origin shall do technical reserve control; their investment can be done in any of the member nations.

Solvency and guarantee fund reflect the financial health of the insurance company. Calculating solvency shall be done on the ground of specific rules for life and non-life insurances, and guarantee fund shall be calculated on its ground.

As for Romania's insurance market, the sector of insurance has increasingly developed since 2002, with a quite significant increase, which is a happy exception in the present Romanian economical landscape.

On December 21, 2003, a number of 46 insurance companies were registered by the Insurance Surveillance Commission, with 44 licenses and 2 establishing licenses.

On the ground of the stipulations in article 16 paragraph 3) of the Law no. 32/2000 with modifications and completions, they issued the Order of the President of the C.S.A. no. 6/2002 concerning the application of the Norms concerning the minimal limit of the social capital deposited, i.e. of the free reserve fund deposited by the insurers.

Through these norms, which had their effect on May 15, 2003, the minimal limits of the capital stipulated by the Law no. 32/2000, depending on the type of insurance practiced, were updated. Thus, starting from May 15, 2003, the minimal social capital deposited asked for is 15 billion ROL (the equivalent of 364,813 €) only for general insurances, while it should reach 51 billion ROL (the equivalent of 1,240,363 €) for general and life insurances, including compulsory ones.

At the level of each state, the state department for insurance regulates insurance and re-insurance activities. In Romania, there is, within the Ministry for Finances, a Insurance Surveillance Commission, which acts in the following domains: surveying insurers and re-insurers acting nationwide and surveying insurance and re-insurance intermediaries.

According to engagements undertaken by our country through position documents (Free movement of services) and to recommendations in

the financial assessment report in the field of insurances, the Insurance Surveillance Commission developed a strategy whose main objectives are:

1. Harmonising our national legislation and E.C. acquis;
2. Strengthening institutional capacity of prudential and controlling surveillance;
3. Permanent, correct, and efficient surveillance of insurance companies and brokers;
4. Consumers' protection and increasing insurance market transparency.

By adopting and gradually applying they have in mind to fulfil all engagements to the E.U. as domestic market increases its capacity of absorbing in good conditions all legislative changes.

The objectives established in order to reach this goal are:

- adopting Directive stipulations concerning access and exercise conditions in general insurance, access and exercise life insurance, and insurance intermediaries – short term (within the 2nd step in changing and completing the Law no. 32/2000);
- reaching the Directive concerning supplementary surveillance of insurers' groups – short term (by changing and completing Law no. 32/2000 and by norms);
- integral reaching of the Directives concerning the re-organising and bankruptcy of insurance companies – short term;
- totally reaching Community stipulations concerning the quotas corresponding to liabilities representing technical reserves to general insurances and the guarantee fund of the companies practicing credit insurance, quotas corresponding to technical reserves to life insurances – short term;
- totally reaching Community stipulations concerning the calculus methodology of the solvency limits both in general and in life insurances – short term;
- adopting Directive stipulations concerning annual accounts and accounts consolidated in order to facilitate the transition to I.F.R.S. – short term;
- adopting the stipulations of the international accounting standard I.F.R.S. 4 – insurance contracts – medium term;
- in the field of personal liability of self-propelled vehicles –

developing and implementing (medium term) regulations guaranteeing:

- Insurer's responsibility, on the ground of a unique premium paid for the compulsory insurance of personal liability for vehicles to third parties that have suffered prejudices both on domestic ground and abroad, following route events caused by using vehicles registered in Romania;
- Protection for any victim of accidents resulted from using vehicles;
- Suitability of national regulations with special recommendations stipulated by European Directives, reaching the goal of E.U. legislation of establishing a unified Europe in the field of personal liability for vehicles;
- Interdependence of indices specific to insurance market with other economic indices;
- Eliminating deficiencies of interpretation of existing stipulations;
- Preventing situations that can prejudice Romania's relationships with international insurance markets or that can hinder insurance market development;
- Establishing basic elements in insurer's activity in order to maintain a healthy financial position (risk prevention, monitoring, and administering strategies in personal liability for vehicles);

- issuing and implementing norms concerning the prevention and elimination of money laundering in the field of insurance – short term;

- modifying and completing the Norms no. 2/2001 concerning the information and papers asked for in licensing insurance and criteria for approving significant shareholders and insurers' significant persons in order to include new stipulations concerning the last link of shareholding, as well as completions concerning feasibility study and tourist insurance class – short term.

We should point out that, in the first half of the year 2004, the Insurance Surveillance Commission developed a law project concerning the modification and completion of the Law no. 32/2000, a project that was introduced into the legislative circuit in order to be adopted. They have also developed projects of norms concerning the application of the future stipulations of the Law no. 32/2004 modified, as well as the law project

concerning the re-organising and the bankruptcy of insurance companies, that are to be debated by the public.

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MARKETING RESEARCHES ON AGRO-ALIMENTARY PRODUCTS EXAMPLE

CERCETĂRI DE MARKETING PE EXEMPLU DE PRODUSE AGROALIMENTARE

ANDREEA-MIHAELA ZOMBORI[*]

In business, but also in life the success can not be known without knowing the environment, the market and the customers. To know all this, marketing researches has to be made. The market, the customers, the users, the consumers have to known, evaluations and anticipations on the combination of circumstances have to be made.
The key for an efficient marketing research is nor the technique neither the amount of data, but the immediate control of information because the preferences of the customers change continuously, there for the new changes have to be known. If too much time is taken to acquire and to process the information the research might be less appropriate, due to the information in a continuos change.

Key words: *marketing research, market study, methods and instruments of research, conclusions on the marketing researches.*

The marketing research is a way more or less methodic of searching information based on analyses and anticipations referring to the possible market and its evolution, to the characteristics of the existing market and of the selling mechanism, etc., where different statistic methods and procedures are used. The market study shows what the people really want to buy, to consume, to use, meaning something different from what somebody wants to produce and to sell.

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Any procedure of documentation, investigation, expression, testing and simulation assuring the informational background necessary to establish a marketing decision can be called marketing research or market study.

The objective of the market study is to find solutions from the data analysis collected from the field, drawing out the objectives specifies the information necessary to establish the decisional alternatives adequate to each dimension of the investigated problem. Each objective must be revealed for the research purpose, often beside the main objective there are minor objectives.

The stages of a typical marketing research are, mainly, the followings:

1. the definition of the problem
2. transposition of the problem into a research objective
3. evaluation of the existing information
4. choice of type of study and of the working methods
5. determination of the plan and budget for collecting the supplementary information
6. creation of the instruments to collect and process the data
7. sizing and formation of research sample
8. collecting, processing and interpretation of information
9. editing and presentating the final report:

- establishing the decisions
- pursuit and control of the results (the audit)

The two final stages are specific parts of the research process.

THE PURPOSE OF THE MARKET STUDY

Its purpose is to find answers to one or more of the seven essential questions to understand a situation of marketing:

1. Who and what buy?
2. What is sold?
3. Who, how and where sells?
4. Who stops the selling?
5. Which is the selling price?
6. How can the selling be stimulated?

7. Which are the market circumstances?

THE METHODS USED FOR THE MARKET RESEARCH

The investigating research includes documentary study, case study, quantitative research methods (group interview, profoundness interview, projective techniques) and observation method.

The descriptive research includes investigation questionnaires (detecting the reality at a specific moment) and longitudinal panel type studies (continuous recording of the studied problem observing its evolution).

The causal research is based on experiment.

Table no.1

Research methods and instruments

Research methods	**Sampling methods**	**Research instruments**
Observation	Sample definition	Questionnaire
Investigation	Sample dimension	Mechanic devices
Experiment	Sampling procedures	Pretext

Source: Constantin Sasu, Marketing, "Al. I. Cuza" University publishing house, Iasi, 1995, page 61

Establishing the dimensions of the sample. The determination of the sample dimension depends on the requested information and on the sample planning method. The main problem is to obtain a great amount of information with a high precision level on a relatively small sample. Sure, a smaller sample is insignificant and a greater one is too expensive.

The questionnaire represents one of the most important elements on which the success of the selective research depends.

The analysis supposes the classification of information in different categories and the study of the relationship between these categories. It means the use of a great number of quantitative and qualitative methods to verify the initial theories.

Both the researcher and other managers and specialist should realize the interpretation of the information. Many times the researches are interpreted

in different ways and than the researchers and the managers discussing choose the best interpretation.

Conclusions regarding the market research, in the case of some agro – alimetary products.

Generally a market research implies to edit and to present two documents: the preliminary report and the final report. The first report marks the beginning and the other mark the end of the research. The approximate content of the preliminary report should include the following elements:

- provisional title of the research/study
- the concise definition of the problem to be solved
- general and specific objectives, necessary conditions and their limits
- the initial plan of the project
- models and instruments of research
- estimations on terms and personnel
- cost estimation/ necessary budget

The final report of the research constitutes an assembly of written and drawn pieces, graphics, photographs, samples, filled questionnaires, tapes and recorded CD's etc., which express the results of the research. It has to be complete, concise, valid, clear and as objective as possible.

As the market studies show the Romanian refreshment beverages market in the last 11 years has known a continuous development, expressed mainly by the increase of 6 times of the average consumption per inhabitant.

The refreshment products market, for Eastern and Central Europe, is in continuous development, extensive and intensive. For the following years, for these markets less saturated, including Romania, a consumption increase of approximative 20-30% per year is anticipated.

According to the GfK Romania reports, in 2002 the purchases in the population administrations for the refreshment beverages based on fruits increased with 12% compared to the previous year, and in the case of "cola" category with 44.3%.

The majority of the refreshment beverages sold in Romania are packed more with 6-10% in non returnable PET bottles than in classic bottles, and the volumes most frequently bought are 0.5 and 2 littres.

From the total amount of refreshment beverages cosumed about 30-35% are "cola" type, the rest are almost exclusivly represented by fruit

refreshment beverages, in a proportion of 62-67% (the proportion of non-fruit beverages beeing under 2-3% of market).

As the following market information confirm it, the European Drinks group covered the majority of the markets.

Table.2

Market quotation of the most important refreshment beverages producers

Period Producer	Apr – May '01 (%)	June – July '01 (%)	Dec '01-Jan '02 (%)	June– July '02 (%)
European Drinks	47.2	49.4	48.4	50.8
Coca Cola	40.8	37.9	38.5	39.3
Pepsi Cola	5.5	5.5	7.8	4.6
Other producers	6.5	7.3	5.3	5.3

Source: GfK Romania

From this table can be noticed that these refreshment beverages from European Drinks, became the favorit ones for the Romanian consumers, being no. 1 with over 47% of the market quotation and it is incresing. So, every second bottle of refreshment beverage consumed by a Romanian is from European Drinks, and this fact is due to the various range of bottles, volums and flavours.

From brands point of view, the refreshmennt drinks marked European Drinks are leading in the classification of preferences for the most sold and appreciated on the market, as follows:

Table.3

Market quotation of the most important refreshment beverages brands

Brand Period	European Drinks			Coca Cola Brands			Pepsi Cola Brands	
	Frutti Fresh	American Cola	Other	Coca Cola	Fanta	Other	Pepsi	Mirinda
April – May '01	39.10%	7.70%	0.40%	18%	17.70%	5.10%	4.40%	0.60%
June – July '01	42%	7.10%	0.30%	16.10%	16.50%	5.30%	4.60%	0.40%
Dec '01 – Jan '02	40.60%	7.50%	0.30%	17.20%	16.30%	5%	7.30%	0.30%
June – July '02	41.60%	8.80%	0.40%	20.60%	13.70%	5%	4%	0.30%

Source: GfK Romania

According to the aforesaid, the Frutti fresh range is the brand the most sold in Romania with a triple quotation confronted with the main direct rival Fanta and double confronted to Coca cola brand with an increasing quotation, continuously outdistancing the traditional brand Pepsi cola.

The consumers preferences for European Drinks refreshments can be explained by the costs policy practiced by this group. It can be noticed a restreint of the population in buying the product, even the sells have an ascending dynamic, when the prices are increased.

The bottled mineral water market in Romania Knows also a dynamic evolution, only in 2001 increasing with 42.2% confronted with the previous year (according to GfK Romania reports).

Table no. 4

The market quotation of the most important mineral water producers and brands

Producer	**Brand**	**Dec '00 – Jan '01**	**Dec '01 – Jan '02**	**June – July '02**
European Drinks	Izvorul minunilor	27.90%	42.20%	51.90%
Regina apelor minerale	Borsec	17.30%	16.50%	17.40%
The Coca cola company	Bonaqua	14.30%	6.30%	4.40%
Apele minerale Dorna	Dorna	11.80%	6.50%	4.40%
Vitarom Romania	Perla	7.40%	10.90%	3.80%
Other producers		21.30%	17.60%	16.70%

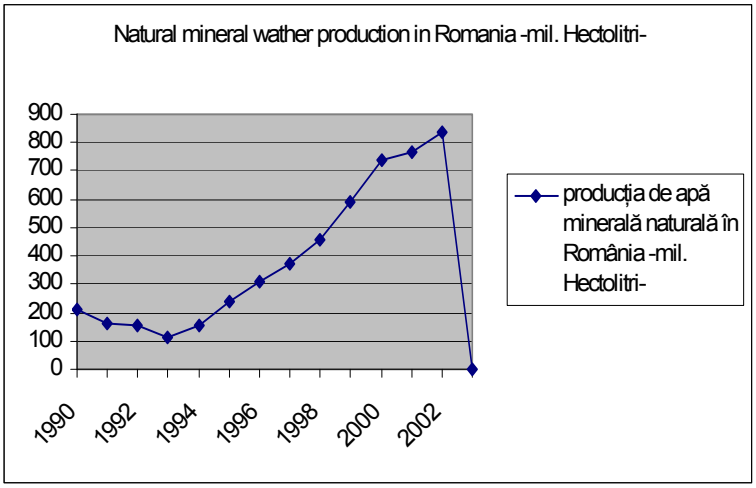
Source: GfK Romania

In conclusion, the Izvorul Minunilor mineral water almost doublrd its quotation in the last two years from 27.9% to 51.9% on continuously increasing market and in the conditions where the most important rivals have known a stagnation or even a decrease of market quotation.

In the present time, the mineral water production in Romania, at the begining of 2003, has slowered its increase. If the increasing rate was 20 – 25% per year, two years ago, in our days this rate has decreased under 10%. The explanation might be the fact that the buying capacity of the Romanian

people has reached the maximum level. The actual consumption is about 40 littres per inhabitant (confronted with the 300 littres – the western Europe average consumption).

Natural mineral water production evolution in Romania during 1990 – 2003 1st trimestre



Source: Adevarul economic, no.22, 2003

From the market reports of GfK Romania, European Drinks group is uncontested leader on the refreshments market . How did they succed? First, having a verry good field organization and with gained experience during the past years in selling moment products. This can be translated in elaborate marketing and distribution strategies, sufficiently expensive, consisting in developing the concepts of amplacement of the stands and optimizing the selling centers. In the hole country there are almost 100000 selling centers, permanetly controled by over 500 own employees from the selling area, merchandising and promotion centers.

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ON ANNULMENT OF SOME COMMERCIAL OPERATIONS CONCLUDED BY THE DEBTOR WITH "INSIDERS" THE YEAR PREVIOUS INITIATING JUDICIAL REORGANISATION AND BANKRUPTCY

ANULAREA UNOR OPERAŢIUNI COMERCIALE ÎNCHEIATE DE CĂTRE DEBITOR CU PERSOANE "AFILIATE" ÎN ANUL ANTERIOR DESCHIDERII PROCEDURII REORGANIZĂRII JUDICIARE ŞI A FALIMENTULUI

SIMONA VARVARA CHIOREANU[*]

This deed aims at identifying the object of stipulations in the art. 45, § 2 of the Law nr. 64/1995 and the conditions in which they can be applied. This approach is necessary because of the abstracted feature of the legal text, which allows the judge to annul certain acts signed by the debtor in judicial reorganisation and bankruptcy.

Key words: *commercial operations, annulment,insiders, bankruptcy*

We have in mind here "the commercial operations concluded the year previous initiating judicial reorganisation and bankruptcy", and signed together with "insiders", i.e. persons detaining a position conferring them the right to take knowledge of the economic and financial state of the debtor and the power to make the debtor conclude certain documents with these persons. Are considered "insiders" the following:

- The associate, active partner, or shareholder (depending on the case) owning at least 20% of the capital (shares) of the debtor;
- The managers, directors, or members of monitoring institutions;
- Any physical or legal person detaining a dominant position over the debtor or its activity. Though the law does not explain the phrase "dominant position", we can appeal to the Competition Law nr. 21/1996, which deals with the protection of the weaker side and shows that "a dominant position is the general trend of control of economic balance".

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To understand this phrase in the context of Law nr. 64/1995 it is necessary to see if the person thought to have at the time of document conclusion the actual power of making the debtor into doing it, e.g. the husband of the person who is a significant shareholder, etc.

Reading § 2 of art. 45 we can see the following:

- only commercial operations are taken into account, and not just any kind of documents (as in art. 44, for example);
- annullable deeds must have been concluded ”to the detriment of the debtor’s interests”, which is apparently equal to the phrase used in art 44 “to the tort of the creditors’ rights”; the following explanations are useful here:

- the use of “interests” instead of “rights” shows a low judicial force, the lower protection degree conferred by the law to the creditors’ interests protected by art 45 § 2 compared to the degree of protection conferred to the creditors’ rights protected by par 44.This is why in our classical literature and in contemporary doctrine they make the distinction between annulments “in full right” that protect creditors’ rights and “facultative” annulments that protect creditors’ simple interests;
- the legislator refers to creditors’ interests as there is no right to action without an interest.

The distinction between rights and interests was constantly underlined in literature. Thus, Turcu comments on art. 45 § 2 as follows: “operations damaging the creditors’ interests were possible because of abuse by interested person, who took advantage of both the position held in society and the information to which he had access concerning the possible initiation of the procedure to get an unlawful profit to the prejudice of the creditors”. By “right” we understand the possibility legally acknowledged by a person of having a certain conduct, of enjoying certain privileges, while “interest” is the concern of being successful, of getting an advantage, the eagerness if satisfying certain needs. Interest is the concern of creditors in satisfying their own interests.

Law nr. 64/1995 in its form before the appearance of the G.O. nr 38/2002 regulates the regime of deeds concluded before initiating the “suspect period” procedure by the following stipulations:

Art. 44, referring to “fraudulent actions concluded by the debtor to the damage of creditors’ rights during the 3 years previous the initiation of the procedure”.

In clarifying stipulations quoted in literature they showed that "fraudulent actions are actions that were done nula fide in order to affect another person's interests".

The same author shows that deeds stipulated by Art 44 are actions done nula fide and with a double purpose:

a) to affect creditors' rights or to elude law;

b) to get a profit for the debtor or for another person.

As the law does not make the distinction between the two, we consider that these stipulations are applicable to any deeds concluded by the debtor, even with insiders (shareholders, associates, directors, managers, etc.) provided the deed is not a fraud, in which case the task of proving the fraudulent character of the deed is assumed by the administrator or the judicial trustee, depending on the case.

It is also clear that the fraud must have had as effects the generation of damages on the creditors' rights, as they could not have damaged only simple interests.

To note that the law does not mention whether the deed should have damaged only the rights of some creditors or the rights of all creditors.

Taking into account the fraudulent character of deeds we think that it is not necessary to show that the deeds damage all creditors, as it is enough that only some creditors be damaged: for example, a deed that damages only chirographic creditors, guaranteed ones being not damaged by fraudulent alienation of a possession in case their guarantees are sufficient to satisfy their debts. We can also see that, unlike Art. 45 § 2, Art 44 refers to deeds and not to commercial operations, which leads to the conclusion that it also includes civil deeds done by the merchant as well as any other negotium largo sensu.

Art 45 par 1 refers to the two types of suspect periods, the 3-year one and the 120-day one, as follows:

A. A suspect period of 3 years previous the initiation of the procedure supposes:

a) transfer deeds as a grant, except for humanitarian sponsoring;

b) commercial operations in which the debtor's action overrates the received one – the co-called "inequitable commutative deeds".

We note that, in these cases, there is no subjective condition (fraudulent character, intent, nula fide, etc.): it is enough for the deed to be

integrally or partially granted, i.e. the third person's action should be inferior to the debtor's in value.

The text also says that these deeds are annullable no matter the capacity of the third person; consequently, its stipulations are applicable also to deeds concluded with third persons mentioned by Art. 45, § 2, i.e. "insiders".

c) deeds concluded with the intent of all parties involved to purloin goods from suing by creditors or to damage their rights in any other way.

As shown in literature, unlike actions under the incidence of Art. 44, in this case "all the parties involved, both the debtor and his partners, were animated by the intent of damaging creditors by purloining goods from those pursued on the ground of the general securities of creditors". As a consequence the administrator or the judicial trustee must prove a "fraudulent agreement". In the light of these procedures we can ask ourselves if these stipulations are also applicable to the situation in which the third person is one of the creditors that are also "insiders"?

We consider that, as the law does not make the distinction, stipulations in Art 45 § 1 let. c are applicable also to the case in which the third person is also a creditor, or an insider.

If we exclude creditors that are insiders they can practically become immune for their fraudulent deeds, concluded during the 2nd and 3rd year before initiation of procedure. Accepting this solution leads also to accepting the notion of creditors that concern only part of them; it is enough for the deeds to have damaged the other creditors' rights, except for the creditor that is also an insider.

A. The suspect period of time of 120 days before initiating the procedure refers to:

-ownership transfer deeds to a creditor to extinguish a previous debt or in his interest, if the amount the creditor could get in case of debtor' bankruptcy is lower than the transfer value (let. d);

-constitution orcompletion of a real guaranty for a chirographic credit(let.e);

-after the issue of the G.O. nr. 38/2002 they have also introduced (let f) after the American model, the case in which the debtor proceeded to the anticipate payment of debts whose fiscal payment date outdates the initiation of the procedure.

In all these cases, "the reason for this action is in getting close to the date of ceasing payments, which presumes even stronger intent from the debtor to diminish his patrimony to the damage of the creditor".

In these three cases (Art. 45, § 1. let. d-f) we can talk about the correlation with the stipulations of Art. 45, § 2.At first sight, it seems that our law does not make any connection with these stipulations and those in Art. 45, § 2; the consequence of this situation can lead us to say that Art 45, § 2 does not refer to operations closed with insiders that are NOT also creditors.

Nevertheless, taking into account the sources of Law 64/1995 that are analysed below, we consider there is a certain link between the two categories of legal stipulations in the sense that, as a principle, they aim at the same type of deeds, but the suspect period is expanded to 1 year due to the debtor's possibilities of accessing relevant information on the economic state which are not available for an insider.

Legal literature and laws used as a source by the Romanian legislator contain certain details and application conditions valid in both cases (the 120-day period and the 1-year period).This resemblance in principles does not exclude certain specific differences between these categories of regulations; consequently, we will also use other sources to show that deeds mentioned in Art. 45, § 1. let. d-f can be included in the category of deeds incriminated by the stipulations of Art. 45, § 2.

Art. 47 stipulates that "by exception from the stipulations of Art. 45 one cannot ask for the annulment of a patrimony transfer made by the debtor during his normal activity."As far as Art. 47 is concerned, to explain the notion of "transfer" we will appeal to the regulation evolution, i.e. the initial form of this article numbered 42. This article, in its form in the Law 64/1995, not modified in 1997, stipulated that "by exception from the stipulations of the Art. 40 (the new Art. 45) the judge, the creditors' committee, or the administrator cannot ask the annulment of a patrimony transfer made by the debtor during his normal activity, or if it was part of an exchange that, following the transfer, resulted in a not guaranteed credit to the debtor", a credit that had not been refunded by the debtor to the date the procedure was initiated.

The stipulations in this text are also applicable *a fortiori* to the case in which through the transfer a not guaranteed previous credit to the debtor by a third person was ended.We have also shown that in their favour acts the

assumption that "the transfer is a normal one, equitable and reasonable, though not damaging to the creditor".

Analysing the text we can see that under the incidence of this assumption also fall payments (reimbursements) made to those creditors that also were insiders, as it was normal for a credit – particularly for a not guaranteed one – to be reimbursed without making a distinction concerning his capacity: shareholder/associate or third person.

The fact that Art. 42 was changed by the Law 99/1999 and now is numbered 47, no longer stipulates all the deeds presumed normal does not necessarily mean that the legislator wanted to put them out of the legal protection but he noticed a repetition, the present formula "covering" all the situations stipulated by the ex-Art. 42, as they all referred to natural acts achieved during the debtor's activity.

In the present form, the text allows the judge higher power, as it does not forbid *a priori* the search of certain deeds of the debtor concluded during the suspected period; they thus ensure correlation between the texts in Art. 47 and Art. 45, § 2, that coexisted both in present and previous forms of the law and which, but for the change in 1999, would have led to an excessive protection of the debtor, to a pulling out from the judge's assessment power of certain operations and, practically, to a contradiction between the text in Art. 45, § 2 "they can also annul" and the text in Art. 47 (old) "they cannot ask the annulment".

It is obvious that assessing a certain deed as being or not part of a normal debtor's activity will be the result of circumstance analysis, real circumstances in which the deed was concluded and among them the possibility that someone could have anticipated, at the time the deed was concluded, the future insolvency of the debtor, particularly when the transaction was concluded with a creditor that could have known the company's condition.

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COMPARATIVE LAWS OF BANKRUPTCY

LEGISLAȚIE COMPARATĂ ÎN MATERIA FALIMENTULUI

SIMONA VARVARA CHIOREANU[*]

A decisive factor in the fate of the concluded deed is the economic condition on the whole, the active-passive balance, the financial balance, and all other deeds that can show the debtor had hopes for recovery at the time or, on the contrary, that economic situation was definitely compromised.

Key words: *commercial laws, bankruptcy*

OLD ROMANIAN LAW

At the time of its issue, our Trade code contained no mention concerning transactions concluded by the debtor during the suspect period with close persons.

Nevertheless, with the reform in 1902 (started in 1899 and known as the Stoicescu reform), they introduced a new text, that of Art. 724, last paragraph, stipulating the righteous nullity of all alienation, of any title (i.e. with certain obligations) made by the bankrupt during the 6 months before cessation of payments to close relatives (husband, wife, etc. up to 4th degree relatives).

We also note that in the Trade code the time of payment cessation was settled by declarative sentence, as a rule long before the time of procedure initiation.

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In the justification of this article it was shown that "in this system the only good alienations were *alienations with certain obligations* and every day practice proved that in many bankruptcies there were legal contests difficult to solve concerning sales made by bankrupts to close relatives, sometimes even to wife, for fictitious prices, if for merchandise, and with proper sale deeds, if for real estate. We hope that such a stipulation will eradicate the so-called alienations through which bankrupts purloined part of the active that was common security for the creditors.

Righteous annulability of these deeds without taking into account the third person nula fide was characterised by the same author as a monstrosity both from a legal and moral point of view, identifying a single similar stipulation in the German law, that had a relative, and not an absolute fraud assumption.

With a broader application area, valid also in our case, are considerations made by an author on suspect period; all arguments based on worldwide legislation concerning bankruptcy converge to the following conclusions:

- the suspect period is based on the identification of the bankrupt debtor with a "proscimus decoctioni" (i.e. the merchant ready to fall"), i.e. the person capable of foreseeing the imminence of insolvency;
- there is, in the French, and Italian and Romanian bankruptcy law both righteous annullable deeds and "optionally annullable" deeds whose not opposability to the credit mass depends on circumstance analysis in which they occurred and for which "there is necessity of recording secondary circumstances without which there is no countermanding".

As for legal instance power of assessment, the same author shows that "it is acknowledged that currently jurisdiction instances enjoy a not censurable power of assessment in deciding whether the deed that seems gratuitous is an equitable payment for services provided", quoting authors and reference cases of the time (Thaller Percerou, Lyon-Caën-Renault, etc.).

From the comment above on suspect period belonging to the author and particularly to gratuitous title deeds, it is clear that in all cases the incriminated deed must be thoroughly analysed to see its true character, even in cases in which it is apparently a gratuitous title deed, making its maintenance possible.

Even in cases in which there is a legal assumption of fraud (relative assumption), "the third person interested can reject legal assumption limits

by showing that the operation, given the circumstances, is immune from fraud and thus rejectable",

FRENCH LAW

As it is known, on present French law time of payment cessation is settled by the Court as a rule previous to time of procedure initiation sentenced by the Court.

While analysing the debtor's past condition, time of payment cessation can be changed and moved towards the past, but it cannot be longer than 18 months before initiation of procedure.

Due to this mechanism, annullable deeds concluded during the suspect period are concluded 18 months before time of initiation of procedure, but obviously after the time fixed by the Court as time of payment cessation.

In this context, Art. 18 of the French Law nr. 85-89 says that "are annullable payments for debts payable and deeds with titles with certain obligations concluded after payment cessation", with no other mentions. Due to the general character of terms used, the text allows dispute of all payments the debtor made during the suspect period". Jurisprudence supplied examples of annulment such as: "cunning" price sales or for prices immediately paid to a creditor to cease individual pursuit, debtor prejudicing rental deeds, guarantee constitution, partings, etc.

The conditions to ask annulment of a deed during the suspect period stipulated by French legislation are:

- the deed must have been concluded during the suspect period and not after closure of procedure;
- the third person that dealt with the debtor must have known that there was a payment cessation.

When these conditions are met, nullity is optional for the Court that takes into consideration the third person's conduct in particular.[16]

The explanation for the possibility of pleading nullity consists in protection for creditors and company, "The third persons will avoid dealing with a debtor whose financial situation is compromised from fear that further on a bankruptcy declarative sentence will not settle the date for payment cessation for a date previous to that of the act."

French jurisprudence imposed, similarly to our law, the necessity for the creditors of the company to have been prejudiced for the action to be admissible.

As these deeds are concluded after payment cessation, it is imperative that the third co-contractor to have known about it, the proof (that can be made no matter how) needing to be supplied by the judicial administrator/trustee.

As for Court's power of assessment, it is sovereign, even above Cassation Court: "the Court shall not sentence annulment automatically and based only on knowledge by third persons of the state of payment cessation by the debtor.

As a conclusion, French Law allows annulment of deeds with a title with certain obligations concluded with third persons unless they were concluded after the date of payment cessation, i.e. at a moment in which the economic and financial condition of the company was already compromised and payment means were absolutely absent.

AMERICAN LAW

Insolvency regulations in act in the U.S.A. stipulates, in Chapter 7 (liquidation) of cases in which the trustee (trustee) can proceed to transfer annulment.

Thus, in § 547 are stipulated two suspect periods that concern preferential transfers: a 90-say one, for transfer deeds concluded with third persons, and a 1-year one for the same type of operations concluded with "insiders" (defined in § 101).

These deeds are annullable if the following four conditions are cumulatively met:

- the deed should be concluded with a creditor;
- the deed should have been concluded for a debtor's obligation existing at the time of transfer (pre-existing it);
- the debtor should be "insolvent" at the time of transfer;
- the transfer should allow the creditor to get more than he could get from a bankruptcy if there had been no transfer.

Băcanu shows that "the procedure of re-organising and judicial liquidation is like an iceberg that has a visible part – payment cessation – set

on a first layer, below the visible layer, insolvency, under which there is a second layer – the patrimony condition of the debtor."

In a bankruptcy the only things of interest are the visible part and the first layer, i.e. payment cessation and insolvency, but in the new procedure debtor's solvency and insolvability are of great interest.

If the passive overrates the active available of the company, it means that it is insolvent, a term met in the Law nr. 64/1995, while the term "insolvency" does not appear.

The American model does not make a distinction between insolvency and insolvability, the term "insolvency" including both of them, while insolvability means the ratio between the amount of debts and the whole active.

Besides, American Law makes stipulates in § 548 annulment of fraudulent transfers which, as a rule, is made in favour of family members or of friends, compared to preferential transfers that are made, as a rule, in favour of creditors.

Stipulations in § 548 creditors are applicable for the duration of a year before initiation of procedure if there is any intent of fraud, whether the debtor is solvent or insolvent, and if the debtor has received in exchange "less than a reasonable equivalent value".

Corroborating the two distinct stipulations, that have obviously been the source for the Romanian legislator, it is obvious that in the case of deeds concluded with creditors, the debtor should have already been insolvent at the time the deed was concluded, unlike fraudulent situations in which economic and financial condition of the debtor is not relevant.

Consequently, in order to be able to ask the annulment of deeds concluded during the year previous to procedure initiation with an insider one must prove that at the time the deeds were concluded the debtor should have practically been in payment cessation.

To note that from this point of view both French and American legislation are the source of Romanian legislation concerning insolvency, stipulating the same conditions: the time of concluding annullable deed, the debtor must be insolvent.

The debates on trade insolvency law project they show that "in this case, trade insolvency means more: payment incapacity, impossibility for traders to meet obligations because of lack of liquidities".

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SAINTPAULIA IONANTHA WENDL. GENOTYPES EVALUATION FOR SOME AESTETIC AND ECONOMIC TEAITS

EVALUAREA ESTETICĂ ŞI ECONOMICĂ A GENOTIPURILOR DE *SAINTPAULIA IONANTHA* WENDL

I. SĂRAC[*], GALLIA BUTNARU[*]

Saintpaulia ionantha Wendl. is one of the most know ornamental species with a long tradition in decorating the insides and being the most popular species all over the world.

This is mainly because of two very important characteristics (proprieties) produces p almost continuously and com be vegelatively reproduced bust also by sexual hybridization. This advantages makes Sp.I. W. an exceptional biological material for genetic studies (Butnaru et al 1996).

In Timisoara, at the Department of plant Genetics exixt, since 1960, maintained by vegetative reproduction, in vitro multiplication and intensively used for breeding programs (1965). Periodically the genotypes are evaluated from the aesthetical point of view.

The Heterozis effect in the obtained hybrids was different in the way that not all of them showed improved phenotypes comparing to the parental forms; The heterozis effect was more visible concerning the vegetative part (no of leafs and size) and the generative (nr of flowing branches, color and size of flowers).

Key words: *genotypes, aestetic*

Materials and Methods

10 genotypes were used in experiments and classified in different groups:

-flowers with light colors;

-flowers with white colors;

-pink flowers and curly leafs (Pink Racket tipe)

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-flowers with intense colors blue

-hybrids with puple glabre pubscub (Butnaru, 2001)

The biological and ornamental evaluation was made o the basis of a previons conventional score for 10 ornamental important baits (Table 1).

Table 1

	Specificație	**Punctaj**		
		Minimum	medium	maximum
1	time of leafs explants rooting in no. of days	>38 – 43 - 1	32 – 37 –2 26 – 31 - 3	>38 – 43 – 1
2	formation of rosette	<65 - 1	61 – 65 – 2 56 – 60 - 3	56 – 60 – 3
3	No. of leafs/plant	< 17 – 1	18 – 23 – 2 24 – 29 – 3	30 – 35 – 4 >36 – 43 - 5
4	Leafs surface (cm²)	<800 – 1	800 – 1000 – 3	>1000 - 5
5	Plant viability (%)	35 – 1	36 - 50 – 2 51 - 66 – 3	67 - 82 – 4 82 - 100 - 5
6	Flowering	260 - 1	256 – 260 – 2 246 – 255 – 3	236 – 245 - 4 <235 - 5
7	No. of (flowering branches) talks/plant	2,2 – 1	2,5 – 2	>4 - 5
8	No. flowers/plant	7 – 1	8 – 2 9 – 3	10 - 4 >10 - 5
9	Flower architecture	Sample – 1	½ Double – 2 Double – 3	Double Double - 4 Indented – 5
10	Petals colour	mauve – 1	White – 2 Pink – 3	Blue – 4 White with mauve-5

Results and Discussions.

According Fig. data the genotypes used for the evaluation are placed in a large variation area, between 2,1, established for genotype 511 (control-wilde type) and 4,0, the maximum level corresponding to the 621 genotype.

The medium score, for the genotypes classified according to white and pink colors of flowers, is identical with the average estabislud for the whole colletis. A slightly sensitive decreasing to 2,8 is the score of the genotypes with purple flowers.

With high deviation in the negative area of minus variants we can find the control genotype 511, genotype 421 with blue flower and for away from the average, in the plus variants is located H-621.

The score used differentiation bused on general characteristics (traits) range between 1 (the smallest value) and 5 (bigest value).

The Fig. 2 presents the data of the scores given to every genotype individually and according to the flower color, regarding 4 traits which were fur there selected due to their importance: variability, abundance of flowing, architecture and color of flowers.

Among 621 genotypes due to decorative and practical value of the plants the higest score was awarded.

Among the genotypes with white flowers the average value is suported by the 131 genotype with a nicely combined colors on the petals.

In the groups of 211, 221 and 231 genotypes with curly petals. Genotype 421 takes a higher score for the flowers and the lowest malks for the other traits.

With a high score for variability and lower for other characteristics, the genotype 521 it's the only on from the whole collection who docs not exceed the control (511) y a clearly distinct score.

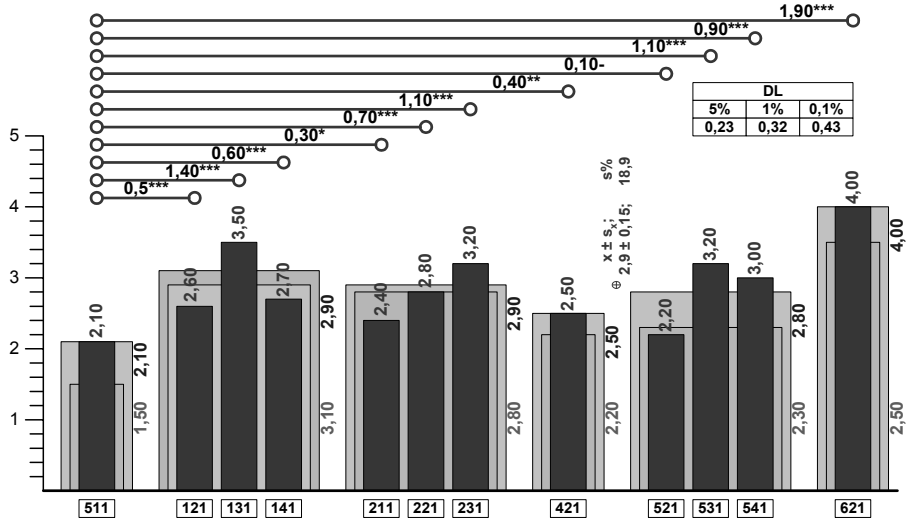

Fig. 1 The differentiation of the genotype from the collection by the scores given according to general aspect of the plants and for some special and important characteristics like: variability, flowering abundance, architecture and flower colors in case of progenies abstained by classic cloning.

According to the data the genotype 621, who participated in the breeding program exceeds the second parental from with 66,6% for the general aspect of the plant and with 7,6 for the special and important traits.

The medium average score of the hybrids is with 24,0% higher in the case of 141 parental form for the general aspects and with 30,7% in case of important traits.

A lowest score is give to the hybrids for the general aspects whiten comparing to the 621 parental form, but regarding the special traits the hybrids are superior.

For the 621 genotype the score raised up to 95,6% increase in case of free publication for the important traits. The autoincopability playes a major role in this genotype.

In Fig. 4 is presented the score of the semnal hybrids (F1 generation) comparing with direct and reverse with parents.

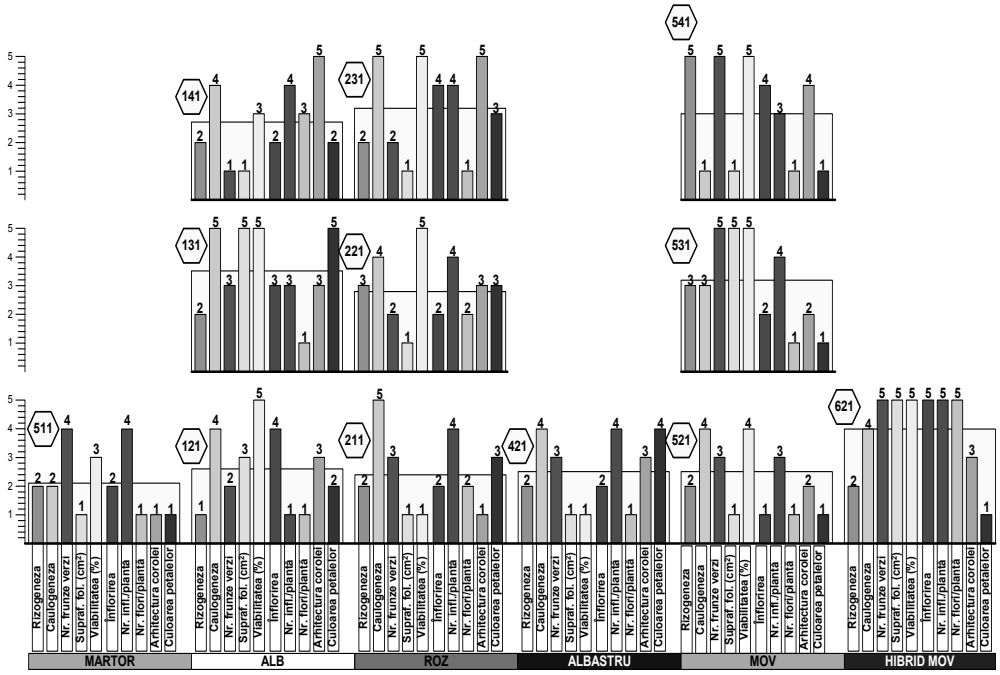

Fig. 2 The variability of the Analyzed traits in the genotypes classified according to flower colors in order to evaluate the biological and aesthetical value.

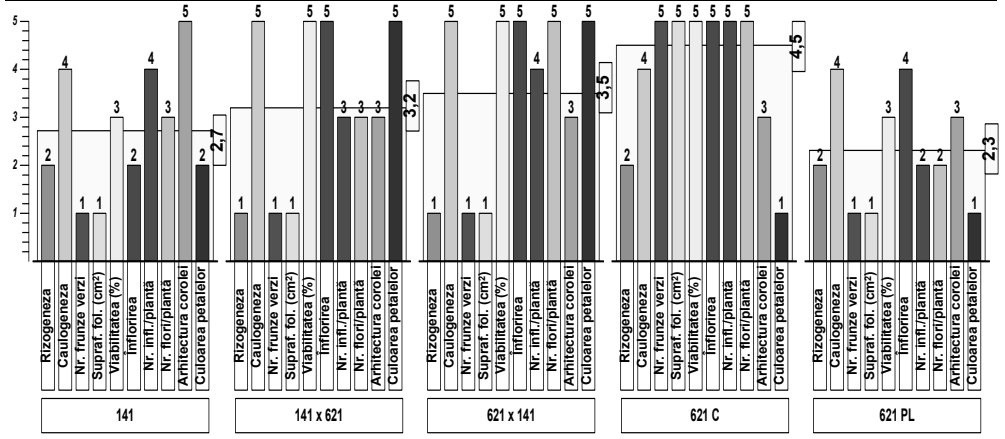

Fig. 3 The general marks given to the progeny obtained by leafs cuttings from the parents, heterozygous formes (hybrids) and homozygous forms (C and BP).

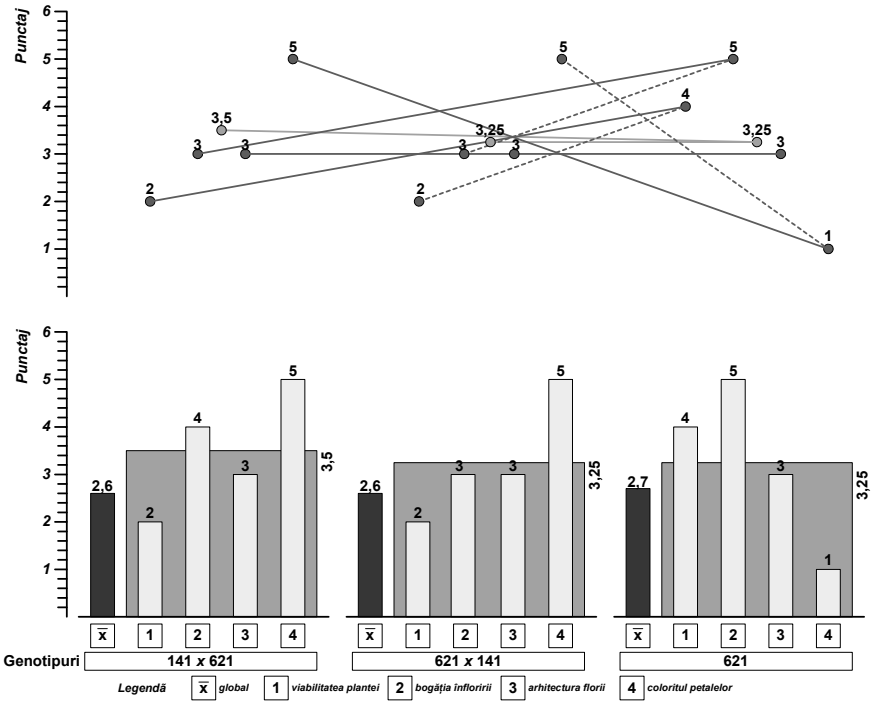

Fig. 4 The phenotype evaluative of sexual hibryds (F1) comparing with parents values (x = averge of 10 traits in case of 1,2,3,4 plants; 4 spacial selected traits).

Conclusions:

My bonitare the obstained cultivars, through leaf auttinys propagation, me could establish he aesthetical value and the first place was given to H 621 witen 3,55 score folloved closely by 141 genotype with 3,27 score and 421 with 3 points. Even if genotype 231 had a lower score (2,61) it ghas his owen avantage given by a nice pink and curly flowers.

H 621 was very suitable for leafs cuttings, propagations method with a 100% viability heenig so far the best genotype from selection

The most valuable results of over work is "Valeria" variety which alredy passed the first round of omologation procedures

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THE CONSERVATION OF SILVAN GENETIC

CONSERVAREA RESURSELOR GENETICE FORESTIERE

I. SĂRAC[*]

The conservation of genetic resources means maintaining three elements which bring value to genetic diversity:
- the genetic integrity of the taxons and populations;
- environment conditions and ecosystems which support the genetic diversity;
- the relations between the genetic resources and the environment conditions.
The conservation "in situ" maintains genetic diversity, but also allows the permanent adaptation on temporal variation of the environment.
The conservation "ex situ" demands the movement of germoplasmic resources from their original habitat or from natural environment causes.

Key words: *genetic resources, conservation, "in situ", "ex situ".*

IN SITU CONSERVATION

Represents the conservation method which will applicate the most difficult, demanding a large cooperation between many national organisations, including the local population. Otherwise, presents the great advantage of making possible the ecosystems conservation or parts from ecosystems.

The first method evaluates the number of population on the ability of rejecting the loss of genetic variability through inbreeding because of the short size of the population.

The second method of evaluation is about approximing the populational number on the smallest number necessary for maintainging the evolutional capacity of the population.

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The third method is based on the calculation of the number of population which will minimize the loss of sampleing (testing, tryout, trialing) of the genes which occurs in case of low frequencies.

EX SITU CONSERVATION

Represents the modality which is put in application the most difficult and unaffordable, demanding the cooperation of a large number of abilitated cooperations. The ex situ conservation incorporates the artificial conservation modalities within the artificial areal of the species or outside it, but also within the controlable environment conditions and repeated on a long term.

In modern conception, an arboretum must be created taking into account the following principles (Bauvarel, 1970):

- every single specie will be represented at least through two provencies of known origin, with the intact genetic structure, or the least possible modificated;
- in every unitar lot is planted at least ten subjects, with repeating, if it is possible, so at the end, at least ten adult trees are on;
- in every major ecological region must be installed an arboretum, in order to be able to estimate the performances of the species pertained to the environmental conditions; it is better if there is a network of small arboretums rather than a few big arboretums.

There are a lot of changes to conserve (rescue) genes with low frequencies if the group of subjects made in subpopulation is made in the adaptability boundaries, because one gene can have an unique frequency on a specie took briefly, but more frequent in some of the subpopulation.

Now there are included in tests almost 500 proveniences or endangered species, more or less, with the disparition, all of them with usage potential. There are endangered species threatened with total disparition or only in a significant part of their areal. (chart1).

Species or proveniences pertained by the specific literature as indagered species, total or in a significant part of their areal (selectively chosen by Board on Agriculture National Research Council, 1991)

Genre / Specie	The status of proveniences or species	Source
Abies		
A. concolor	E	SARH-INIF, 1979
A. mebrodensis	E	FAO, 1986
A. minidica	V	FAO, 1986
Alnus		
A. acuminata	V	FAO, 1986
Betula		
B. uber	E*	IUCN, 1978
B. utilis	T*	FAO, 1981
Carpinus		
C. caroliniana	R/E*	FAO, 1981
Cedrus		
C. libani	V	FAO, 1986
Celtis		
C. aetnensis	T*	FAO, 1981
Cercis		
C. canadensis	R/E*	FAO, 1981
Cladrastis		
C. lutea	V*	IUCN, 1978
Cupressus		
C. atlantica	E	FAO, 1986
C. manocarpa	E*	IUCN, 1978
C. semperorins	T*	FAO, 1981
Dispspyros		
D. hemiteles	E	FAO, 1986
Eucalyptus		
E. deglupata	V	FAO, 1986
E. froggattii	E*	FAO, 1981

Fagus *F. mexicana*	R/E*	FAO, 1981
Libocedrus *L. decurens*	R/E	FAO, 1981
Liquidambar *L. styraciflua*	V	FAO, 1986
Picea *P. chihuahuana*	E	FAO, 1987, 1981
Pinus *P. attenuata* *P. contorta var. latifolia* *P. halepensis* *P. jeffreyi* *P. radiata* *P. strobus var. chiapensis*	 R/E R/E T R/E E E	 FAO, 1955 FAO, 1981 FAO, 1988 FAO, 1981 FAO, 1986 FAO, 1987
Peatnus *P. orientalis*	V	FAO, 1986
Pseudotsuga *P. menziesii*	T	FAO, 1981
Quercus *Q. copeyensys*	T*	FAO, 1981
Salix *S. silicicola*	R*	IUCN, 1978
Sophora *S. masafuerana*	E*	IUCN 1978
Taxus *T. glabosa*	R/E*	FAO, 1981
Tilia *T. mexicana*	R/E*	FAO, 1981
Ulmus *U. wallichiana*		

Their categories and total number (from the appendix of the quoted work, from which is given a few species) are the next:

E* (disappeared): it has not been found after repeated search, 6 species;

E (indagered): indagered with disappearing and with probable survival if the factors which caused it continue opperating, 147 species;

V (vulnerable): will pass, in a close tuture, to indagered, if the factors which caused it will still opperate, 156 species;

R (rare): small populations which are not yet indagered or vulnerable, but which could be, 42 species;

T (threatened or undeterminated): proveniences or indagered species, about whom there are insufficient informations in order to catalogue them into one of the categories above; this includes the taxons with indagered proveniences, 173 species.

With (*) have been marked the species that are not known as species included in a conservation programme; species or proveniences; in original list there are 209 species.

About informational sources, besides FAO and IUCN (quoted on bibliography), SARH-INIF is Secretaria de Agricultura y Recursos Hidraulicos – Instituto National de Investigation Forestal.

Another 400 species are included in at least one ameliorating programme or are the subject of testing.

CONCLUSIONS

Choosing the species for conservation and the method which will be used depends especially on their value for the economy or silvan of the country or region. In the same way are treated the ecosystems.

In general, it is estimated that the conservation in situ and ex situ of management and using the genetic resources of trees of the forest must be enlarged signifiantly through a multiplication of ten times on all interesting species for present and future.

With a certain particularisation, the priority of conservation of the genetic resources is, most of all, dependent on the economical importance of the species, and, in general, on the biological material and urgence of conservation.

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THE PROTECTION AND ECONOMICAL VALUES OF LANDSCAPE AND SILVICAL ECOSYSTEMS

PROTECŢIA ŞI VALORILE ECONOMICE ALE ECOSISTEMELOR SILVICE ŞI ALE PEISAJULUI

I. SĂRAC*

The biological diversity is vast to all the levels of organizing the living world - genotypic, populational, genomical, biocenotical, ecosystemical, forests and landscaping. The majority of the biodiversties taxons are placed on the extremities of their natural areals, which increases their vulnerability against antropic factors.
In the forest frame backgrounds of Romania, for the last two centuries haved interfered some substantial changes. Main problems, which is confronted this sector are the following:
- The insufficient degree of afforestation;
- Reduce continuously forest diversity;
- The potential bioproductivity and ecoprotectivity diminished of forests.
The rising for the past 4-5 decades of the number of the forests in the forest funds, challenged the decrease of the genofund on the indigene species from the frame of the forest formations. Likewise, by the time of the degradation of the forests, the diminution of the quality static potential is intensified. The diminution of the stational conditions leads inevitable to the simplification on the structure and composition of the forest communities and the prepotency of monodominant arborets.

Key words: *Biodiversity, ecosystems, landscape, forest*

The ecosystems from Romania are grouped in three main forest types: naturales (forest, of steppe, of river meadow, petrofited, aquatic), semiantropizated (botanical gardens and zoological gardens) and antropizated (agrarian - cereals -, orchards, winegrowing etc.; urban (urban, rural and industrial localities).

Forest ecosystem is represented of broad-leaved tree of the Central-Europe type. They are an important source of biologic product and carries

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out the protection of the aquatic resources and soils, recreation, hygiene and aesthetical.

The interest for the natural resources has been a major concernment for a series of ecological and economical writeings from the XVIII-XIX century until nowadays especially today, when the accent is put on the landscape designing.

A major interest of the classical economy was the question which determined the standards of living and economical growth. The natural resources were saw as an important determinant of the growing and national health. Especially the landscape improvement through his esthetical way, atracted turists from all over the world and contribute pregnantly to the incomes and the advancement of the economy in that particulary country.

The enviroment is seen, in the economical politics, as a mixt capital which deliver a diversity of jobs. It is a very special capital because it delivers the maintaining life systems, which keeps us alive. As if for another capitals it desires the prevention of the excesively depreciation of the capital value, so that it continues the delivery of esthetical servicies and maintaining life.

The evolution of society took place faster, the human being and his activity was determined through the great number of biological laws, and knew a great progresive acceleration of the advancement rhythm, an experience and a profound interest on ecology (landscape and economical)

In the actual context of Romania, in which the acomplishments in the nature conservation and protected areas, become timeless, both from legislative point of wiev (the absence of the law of Protected Areas) and from administrative point (Delta Dunarii Natural Reservation remains the only protected area with management and administrating structure) it is imperative that efficient form of expression and focusing of the ideeas exists on thepreotected areas which has to assure the information and comunication of the interested factors (decision factors, ONG's, public interest).

The protected areas are percepted for a large number of men and women in the "conservationist" sense, beeing considered fountains of the wild nature in a desert of economical advancement, which must be protected only for the conservation of the species whom they populate.

The conservation of the Natural Capital assumes, mostly, maintaining a aceptably rapport between the natural ecosystems,

seminatural and antropic ones, with maintaining the heterogenity within each ecosystem and insurance the conectivity between those ecosystems.

For maintaining the ecological structure on the macroregional complex scale, it is necessary to identify the oportune configuration of a mosaic of natural and seminatural ecosystems which has to include all the ecosystem types.

The protected areas are zonesin which the cognition grows in order to assure the tranzition to a durabile advancement model.

The National Park represinte the most complex form of nature harbour. In this teritories, actions for eliminating human exploitation are taken in order to make the ecological, esthetical,geomorfological entities honorable and to justify their creation.

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