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C O N T E N T S

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FROM FORMAL TO INFORMAL IN THE VEGETABLE CONTRACTUAL RELATIONSHIP

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Key words : *contractual relationship, vegetable production*

Abstract

The integration into the world trade and particularly along the chain of products with high value added, such as the vegetables chain, is considered as a promoter of growth and poverty alleviation (Aksoy and Beghin, 2005), even though this topic is subject to controversy. Romania's production of vegetables is quite fragmented, mostly coming from the individual household farms (90%) and only 10% from the commercial farms.In this context, the objective of the paper is to reveal the role of contractual relations along the vegetables chain, as the high level of requirements imposed to small producers has been most often seen as a barrier to commercialization. At the same time, the role and contract negotiating power by the individual producers is very low in relation with all the commercial partners in the chain. The paper attempts to make an analysis of the contractual relations along the vegetables chain on the basis of case studies conducted in the vegetables basins from the south-eastern part of Romania. The main conclusions signal out the large number of informal contracts along the chain as well as the high degree of non-respecting the formal contracts.

INTRODUCTION

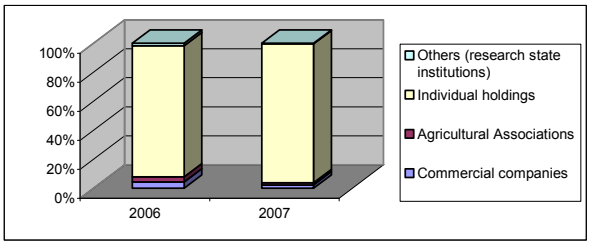
The horticultural products proved that they generate high incomes per hectare and they are known as products that need intensive labour input [1].
Stricter quality requirements imposed by supermarkets are hardly met by small scale farmer but even though when these requirements are met by larger farmers the contractual terms are not respected or even worse the supermarkets avoid concluding the contract.
In contrast to producers in industrialized countries who benefit from appropriate infrastructure, effective institutional systems and agricultural policies that facilitate a widespread adoption of good agricultural practices and environmental standards, producers in developing and emerging economies may encounter severe difficulties in complying to increasing levels of quality standards. These difficulties generally result from idiosyncratic market failures characterizing the vegetable production and the informational, financial and educational constraints of producers in these countries [2]. Some farmers claimed that these constraints could be mitigated through increased vertical integration, including the use of contractual arrangements.

MATERIAL AND METHOD

In valoric terms, in 2007, the production of vegetables accounted for 24% of the total crop production value. Nevertheless, following the EU integration, the vegetable commercialization sector seems the most negatively affected sector, due to the high share of imports and the impossibility or farmers' incapacity to maintain stable contractual relationship within the chain. In addition to that, many of them are not able to enter or form producer groups either because of lack of trust or willingness to cooperate.
At the European Union level, the share of area under vegetables is quite similar; the difference is that currently in Romania the consumption needs are not fully covered by

the current domestic supply. In the year 2007, the main cultivated vegetables were the following: tomatoes 18%, cabbage 17.7%, and dry onion 14%. The individual holdings have the highest share in the cultivated areas in the vegetables sector (over 95%) (Figure 1).

Figure 1: Share of cultivated areas by types of holdings



Source: MAFRD, 2007

The figure depicts the situation at national level; in the region where the analysis was carried out, the vegetable production is also obtained in the individual holdings (more than 96%).

The methodology used is based on statistical analysis of the stakeholders' answers to the questions addressed in a structured questionnaire. The description of the methodology and the data collection methods were structured as a set of criteria and questions that were answered and analysed by employing the structure proposed by Williamson's governance structures [3].

In the last 20 years the fresh and vegetable supply chain in Romania has shown a dramatic evolution following the destroy of the former fruit and vegetable commercialization companies which has lead to fail the year-round domestic vegetable supply and fragmentation of production.

The paper is based on data provided by 30 farmers and 8 processors located in the S-E region of Romania following a survey conducted in this region in 2008. In total, 30 structured questionnaires were applied to farmers and 10 questionnaires to processors. The analysis is mainly a qualitative one and takes into consideration stakeholder answers to the questions regarding the type of existing contractual relationship along with a set of questions regarding their main commercialization channels. An open comment has been also introduced in the questionnaire.

The relationships types as described by Williams are classified into 2 categories, namely formal and non-formal. Respondents were asked to present which type of contractual relationships they use in their business and further, they were asked to choose more than one of the four relationships, i.d. spot market, repeated market transaction, formal-written contracts, and financial participation arrangements.

RESULTS AND DISCUSSIONS

Table 1 reveals the relationship type for the three chain stages. The answers show that the percentage of formal relationship is extremely low both at farmer-wholesaler level and farmer-processor stage. A higher percentage of formal relationship can be noticed in the case of processor-retailer level. The formal relationships include formal written contracts and financial participation arrangements, including prices, qualities, quantities and any other financial support. Retailers tend to choose more formal relationships with processors, in comparison with farmers, showing that downstream businesses are more likely to coordinate and organize their relationships more systematically and in a standardized way. Similar findings are also presented at the European level [4] with the difference that the percentages are much lower in Romania's case, especially at the farmer-buyer and farmer–processor level.

Table 1: Percentage of formal relationship

	Farmer–buyer (wholesaler)	**Farmer-processor**	**Processor-retailer**
Formal relationship %	1/30 3%	2/30 6%	1/8 12.5%

Source: Field survey, 2008

As far as the relationship and contractual aspects are concerned, the respondents were asked to rate on a scale from 1 to 4 (1: extremely poor to 4: very good) their opinions on the

following aspects concerning: the quality of the relationship, trust, contractual terms and the level of enforcement of the contracts.

Table 2 reveals the answers of the interviewed stakeholders.

Table 2. Farmer-buyer relationship and contractual aspects

	Very good	Good	Poor	Extremely poor
The history relationship with the buyer is	7%	13%	33%	50%
The respect of contractual terms is	0%	13%	43%	43%
The trust in our partner is	3%	13%	33%	50%
The enforcement of this contract is	0%	10%	37%	53%

Source: calculations based on the field survey, 2008

The enforcement of the contract is seen as the biggest problem the farmers have to face, 53% of them answering that the enforcement of the contract is extremely poor. The level of trust in partners and the history relationships are seen as poor and extremely poor.

Table 3. Processor-retailer relationship and contractual aspects

	Very good	Good	Poor	Extremely poor
The history relationship with the buyer is	0%	23%	60%	17%
The respect of contractual terms is	0%	23%	57%	20%
The trust in our partner is	0%	20%	60%	20%
The enforcement of this contract is	0%	13%	60%	27%

Source: calculations based on the field survey, 2008

The relationship and contractual aspects at the processor-retailer level were assessed in a better light by the respondents, but still there is a lack of trust and a bad enforcement of contracts among stakeholders.

Farmers were also asked to choose the type of relationship they are involved. 67% of them are involved only in a spot market relationship (sale at the farm gate to different wholesalers) while the rest might choose some other relationships (repeated market transactions, formal contracts, and financial participation). 83% of them are involved in only one type relationship while 17% are involved in more than one relationship type.

Another problem reported by the respondents, is represented by imports, the quality of which is not rigorously checked at present. For many vegetables, production has a seasonal nature, and the products have to be consumed immediately after harvesting. That is why the prices greatly fluctuate throughout the year. In general, immediately after harvesting begins, prices go down fast. For example, the prices of tomatoes, eggplants and peppers may decrease by up to 50% in 2 weeks.

As long as the area under heated glasshouses is low, the producers cannot benefit from the high prices during the winter; in this period of the year, most vegetables come from imports, mainly from Greece, Netherlands and Turkey.

CONCLUSIONS

Effective business relationships can help to reduce environmental uncertainty (e.g., by securing a more stable inflow of orders); contribute to better access to crucial resources (e.g., raw materials, capital, specialised skills); and/or result in higher business productivity (e.g., by enhancing loyalty among suppliers), (Dyer and Singh, 1998).

Nevertheless, the results obtained reveal that in Romania's case there is a high degree of uncertainty among stakeholders both in terms of contractual relationships and contract enforcement. The share of contractual relationship is higher at the processing-retailing level which is in line with the EU findings, but much lower than in the EU both for the farmer-buyer and the processor-retailer level.

This sector lacked a coherent strategy in the period 2000-2007, being characterized by the diminution of the capacity to face the market competition. At the same time, as a result of Romania's joining the EU, its competitors from the EU both in the production and processing sector are testing the Romanian market; in case the Romanian vegetable sector is not able to get reorganized and benefit from the established intervention measures, it will

not be able to face the strong competition coming from the Single Market and not only.

REFERENCES

[1] Weinberge, K., Acedo, A. 2008. *Quantifying postharvest loss in vegetables along the supply chain in Vietnam, Cambodia and Laos,* International Journal of Postharvest Technology and Innovation, v1, nr.3

[2] Swinnen, J., Vercamme, J. and S. Rozelle. 2008. *Standards and Development*. Discussion Paper 199, KU Leuven (LICOS).

[3] Williamson, O E. 1991. *Comparative Economic Organization: The Analysis of Discrete*. Administrative Science Quarterly, 36 (2): 269-296.

[4] Fischer, C, Gonzalez, M, Henchion, M and P Leat. 2007. *Trust and economic relationships in selected European agri-food chains*. Food Economics, 4 (1): 40-49.

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STRATEGIES FOR SUSTAINABLE DEVELOPMENT IN RURAL AREAS – AN INTERDISCIPLINARY APPROACH

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Key words : *strategy, sustainable development, community*

Abstract

This article presents the authors' experience in developing local development strategies of three rural communities in Brasov County. The development premises of this type of documents in Romania (in the context of accessing European funds), the activities undertaken in order to achieve these particular strategies and the common elements of strategic planning concerning these documents are here presented, as well. The interdisciplinary team and some working groups for development, whose contribution was essential in determining the development vision, the objectives and action plans currently pursued, had to make an effort in order to accomplish the aforementioned strategies. The accomplishment of the development strategies at the community level has proved to be an useful step, promoting both the access to grants and the "bottom up" appropriate establishment of a sustainable development coordinates of each community.

INTRODUCTION

The approach for developing sustainable development strategies concerning rural communities of Romania has increased in the recent years, rather due to practical considerations than to reconsidering the role of strategic planning in sustainable development. To obtain EU funds for rural development (through the National Program of Rural Development - NPRD), points are obtained if the applicant proves the correspondence between the proposed project and the development strategy of the town / rural area in question. For example, an applicant under Measure 322 of NPRD can obtain five points if he meets this criterion [1], a fact which cannot be overlooked, given that the projects financed under this component have obtained between 75 and 90 points [2].

MATERIAL AND METHOD

The authors of this article have participated in the achievement of sustainable development strategies for three communities with distinct characteristics of Brasov county: Bran - best known as "homeland" of rural tourism, but also for its important cultural traditions, the enterprising spirit of its people or for the most visited historical monument in Romania, Bran Castle; Prejmer (a community with a long tradition of ethnic coexistence, a city with a site on the world heritage list of UNESCO (the fortified church and the fortress) and which has determined the largest investment in Brasov county, The Industrial Park - Prejmer) and Vama Buzaului (which until the nineteenth century, had represented a frontier point located at the intersection of the roads linking the three Romanian countries, one of the most "green" rural areas of Romania, with a quasi-non-existent pollution and several Nature 2000 sites, situated in the Ciucaş Mountains).

In preparing the development strategies for a period of seven years (the period chosen to ensure the correspondence with the main European funding programs currently operational) a team expert of five consultants - experts has been engaged (a social development specialist, an education science specialist and a human resources specialist - the two authors of the article – specialists in economic development, environmental protection and civil society / European citizenship), a team which has worked closely

with a working group for development, where every person, institution or organization concerned to accomplish the strategy were invited to attend.

To achieve the three strategies of the aforementioned municipalities the following (joint) set of activities was undertaken:

1. The constituting of the Working Group for Development (WGD), composed of representatives of the local public administrative authorities, private companies and members of the civil society. Were invited to attend this group: elected and appointed individuals of the local government, business men, business or professional organizations, private entrepreneurs, personalities from various fields, representatives of the church, NGOs, representatives of the media.

This work was conducted through a public meeting where has been initiated the accomplishement of the strategy, where the objectives and benefits of its achievement and the methodology to be used were also presented.

2. The development context analysis and the drafting of the community profile, including here the analysis of the regional, national and international context (in order to develop an integrated strategy within these contexts of development). The SWOT analysis model has been used as the main tool of analysis and presentation, being supplemented with cost-benefit analysis and opinion surveys (at least five surveys / community, regarding major issues involved in the strategy development).

3.The defining of the vision and strategy goals, which was made with the participation of WGD, in order to obtain a general agreement on some principles, on certain economic interests, concerning environmental protection and an appropriate resource management. The consensual definition of the vision and objectives was made setting out the principle that a certain community with specific goals and objectives offers greater confidence to its members, increasing thus citizen participation and the degree of association according to its own interests, which would be more clear after a joint formulation of strategic objectives.

4.The development of policies and action plans. This work involved a transposition of development objectives in practical actions, included in the measure plans developed for each prior area of development. The projects facilitating the achievement of development goals and the action plans required to implement these particular projects have also been identified.

These plans include the main tasks to be completed, an estimated calendar, responsibilities (of different social actors), funds and the implementation and monitoring mechanism. The priorities set by the WGD were taken into account, and the inclusion of necessary projects was made based upon relevance, feasibility and sustainability. In particular, the projects financed by European funds were considered.

Focus groups were put together in order to accomplish this activity (at least five, for each strategy) and workshop-type small meetings (at least ten).

5. The development of the first version of the strategy involved both the reunion of the previously identified elements within a single material and the description of the methodology of implementation, monitoring and update, in order to be presented to WGD. For each community were taken into account: the investment plans / projects already developed / approved, the general urban plan and development documents prepared at a more general level (at the level of Development Region 7 "Center" of Brasov county and the rural development area under the Leader Axis + Program), marketing and business plans known by the local authorities, accessible funding programs, etc. available. This first version of the strategy was subject to a public debate in a public meeting held in the "open door" system.

6. The completion of SDD, the preparation of the adoption by the City Council and the final report of the consultancy team. After receiving comments from the members of the WGD, from other experts in development and the participants in the public debate, was developed the final form of sustainable development strategy, which has been subject to public debate (as required by the laws in force). The suggestions, recommendations

and amendments made were the basis of the final text, which was adopted by a decision of the Local Council.
Regarding the report of the expert team, it included as a distinct section, the strategy implementation monitoring measures to be undertaken by local authorities. The report also included a particularization of possible sources of funding conerning prior areas of development (from European funds and other funding sources).

RESULTS AND DISCUSSIONS

Thus, three strategies resulted - corresponding to the development priorities of each community, which had for a nucleus two particular elements:
a. The analysis – diagnosis on the current situation, presented as a SWOT analysis, whose content was completed using a series of investigative tools (structured interviews, opinion surveys, cost benefit analysis etc.). Within every content of each development strategies were developed SWOT analysis for each of the areas currently associated with the concept of sustainable development:
I. The economic growth, with an emphasis on improving the business environment and development opportunities in services, industry, agriculture, trade.
II. Providing local public services, focusing on the authorities capacity to fund and provide public service in the following areas: public utilities, education, health, social services.
III. Civil society development, focusing to increase the involvement and participation of citizens regarding decisions.
IV. Qualification and retraining of the workforce, in order to meet new requirements of the European, national and local labor market;
V. Tourism sustainable development along with the protection of natural, cultural and historical resources of the community.
VI. Urban development, with emphasis on promoting urbanism policies and local infrastructure policies set at the local level, within the context of ensuring environmental protection.

b. Elaboration of the development vision, objectives, policies and action plans.
The development vision for each community expresses an ideal target, jointly shared with the planning development that meets the needs and expectations of citizens. After the elaboration of the development vision, the strategy objectives were defined - being identified based on results of consultations within WGD. The objectives were defined and ranked according to the expected time horizon (short, medium and long). Depending on the objectives established, the prior areas of development have been identified (where a special attention was given to areas whose development depends mainly on local resources).
In formulating the prior objectives and areas, the complexity of local factors that may influence sustainable development were taken into account (such as: business environment situation, local economic context and the national one, employment situation, efficiency and equity of public services provided by local authorities; availability of stakeholders to assume roles and responsibilities, expectations and priorities of community members).
Also, in definition the objectives and areas of development were considered the approaches currently associated with sustainable development: environmental protection, proper use and management of resources, sustainable economic development, the need to develop local partnerships etc.
For the implementation of the vision and objectives set by the WGD, proper policies and action plans have been formulated - used in the implementation of the strategy:
- Policies are designed to institutionalize procedures and practices that will lead to the implementation of the strategy's objectives throughout the community. Thus, the effects of the actions and the decisions and behaviours inconsistent with the objectives will be limited. By their very clear structure, the policies will help to keep the strategic vision and the completion of the development objectives;
- the measure plans represent objectifications of policies in each development area, being

defined in terms of concrete actions, directly measurable. These plans are working tools for the persons / organizations involved in implementing the strategy, the true "roadmap" developed for each domain / sub-domain of sustainable development.

CONCLUSIONS

1. The value of a strategy implementation for sustainable development in rural areas consists in institutionalizing the strategic plan. It is essential to create an organizational and financial base to support this particular plan. Strong links with organizations and programs that could harmonize the strategy, must be created. There are required certain techniques for financial planning and project management, without which no strategic development plan could be accomplished.
2. The existence of measure plans developed for each area has proved a useful methodological option concerning the monitoring of strategy implementation. Each measure plan is observed by a group of local experts, aiming: the accomplishment of responsabilities (self) assumed by local actors of development; the development of project financing documentation set, the adequacy of budget planning. These measure plans are regularly reviewed in terms of classifying operational objectives, the first operation required in updating the adopted strategies.
3. The unitary applying of action plans will ensure the success of integrated planning of community development. Integrated planning is a modern solution for the development of initiatives and institutional, administrative and socio-economic actions, which lead to the optimization of resource use, in the purpose of change management and maximizing the positive impact of change, according to the established strategy.
4. Monitoring the development process of the strategy is an essential action for an early detection of its adjustment needs or of the implementation process development. For a successful strategy implementation, all community stakeholders must be involved (depending on their field of competence / expertise) in designing the process of evaluation and in the establishment of indicators for achieving the concerned strategy, according to socio-economic developments at the local, county, regional or national level.

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REFERENCES

[1] Agenția de Plăți pentru Dezvoltare Rurală şi Pescuit, Raport de selecție pentru proiectele depuse în cadrul Măsurii 322, http://www.apdrp.ro/content.aspx?item=1826&lang=RO.
[2] x x x – GhidulSolicitantului pentru accesarea Măsurii 322, – „Renovarea, dezvoltarea satelor, îmbunătățirea serviciilor de bază pentru economia şi populația rurală şi punerea în valoare a moştenirii rurale”,versiunea 04 iunie 2009, http://www.madr.ro/pages/dezvoltare_rurala/ghidul-solicitantului-masura322-iunie2009.pdf

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RURAL DEVELOPMENT – THE " BOTTOM UP" APPROACH : LEADER +

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Key words : *strategy, sustainable development, community*

Abstract

This article presents the main issues involved in the implementantion of LEADER+ Program, as part of The National Program of Rural Development (NRPD). Here are presented issues related to the program development and history, its characteristics and advantages and the particularities of its development in Romania, as well. The current development stage of the program, which involves the constitution of Local Action Groups with legal personality and their strategies preparation for the development of rural areas is also exemplified.The importance of LEADER + is given by the fact that it requires a different approach of rural development than other parts of NPRD, the one based upon the operation of some public-private partnerships at the level of certain rural territories with common features. In addition, after accomplishing the accreditation process of the LAG, the direct funding of projects that meet the development strategies, becomes possible.

INTRODUCTION

The changes in the agricultural sector, as a result of the Joint Agricultural Policy reform, the pressures upon the environment, the rapid spread of new technologies, the aging population and rural depopulation are only some of the factors affecting rural areas in European Union (EU). Following these changes, the need to implement a program aimed at developing public-private partnerships and the exploitation of local resources (natural, human and financial) for developing and implementing local development strategies has occurred.
In Romania, the program is called Axis LEADER + - the most decentralized component of the National Program for Rural Development (NPRD) [1].

MATERIAL AND METHOD

The Leader + Program is an approach that offers new opportunities for rural development based on the identification of local needs, on strengthening the development capacity, designing and implementation of local development strategies. Unlike other components of NPRD, Leader + allows local decisions on funding certain projects aimed to preserve the rural and cultural heritage, the development of the economic environment, the training of individuals in the rural area and the improvement of organizational abilities of local communities. Its name reflects its original objective, since this is the acronym in French – "Liaison Entre Actions de Developpment de l'Economie Rural" ("Links between Actions of Rural Economic Development").
The development of the LEADER program in EU began in 1990, as a result of the government programs for rural development in many countries were limited in terms of the objective of the fact that the public programs for rural development were limited in what concerned the goal of their interventions, being managed in a traditional top-down manner (from the central to the local level). Therefore, a program of Community intervention has been developed, based on the work of Local Action Groups (LAG), which represents public-private partnerships formed in associations, consisting of representatives of the public and the private sector, and civil societies in the concerned territory .
At the decisional level, the economic partners and companies representatives must represent over 50% of the local partnership. The LAGs are responsible for developing and

implementing the local development strategy and also for the selection of projects to be financed within the strategies. In the Member States, the LAGs have different legal structures (non-profit associations / foundations, local or regional authorities, companies, cooperatives, etc), they develop an integrated local rural development strategy and they are responsible for its implementation. In the territory where the function, the LAGs chose the projects to be financed within the strategy and may select projects of cooperation with other territories / LAGs.

This decentralized program only aims the rural areas (defined according to the methodology of the Organization for Economic Cooperation and Development (OECD), as the area in which the population density /km2 is less than 150 inhabitants per km2). Each LAG is formed on an territory eligible within the program, which provides several features (the rural feature, consistency, adequate resources, local identity, population between 10,000 and 100,000 inhabitants).

The LEADER program is based on a combination of seven features:

1) territorial approach (the efficient use of local resources within a specific territorial area, the deployment of integrated activities and the development of a shared vision);
2) partnership approach (achieving a public-private partnership interested in the area development, called the Local Action Group);
3) a bottom-up approach (active participation of the local population in planning, decision making and implementation of strategies needed to develop the territory);
4) an integrated and multi - sectorial approach of the strategies (based on the interaction of partners from all sectors of local economy, in order to plan and put together the problems of rural areas);
5) a special emphasis on innovation and experimentation (looking for new responses to the existent problems of rural development);
6) implementing cooperation projects;
7) networking the local partnerships (within LEADER territories).

The main advantages of the program are:
a) forming the local partnership capacity, animation and achievement of the skills to mobilize the local potential;
b) promoting public-private partnerships. Leader will continue to play an important role in encouraging innovative approaches concerning rural development and bringing together on the same stage the private and the public sectors;
c) promoting cooperation and innovation;
d) improving local management. LEADER promotes the development of innovative approaches, ensuring thus the link between agriculture, forestry and local economy and helping therefore to diversify the economic base and to strengthen the socio-economic structure of rural areas.

RESULTS AND DISCUSSIONS

At European level, three distinctive phases of the program development can be defined:
a) The initiation phase: at Community level, between 1991-1994 was conducted Leader I, in which there had been formed 217 Local Action Groups (LAG), selected at European level;
b) The generalization phase: through LEADER II (1994-1999) had been formed 1000LAGs, selected at national level;
c) The consolidation phase, corresponding to LEADER + Program (2000-2006), where 896 LAGs had been selected in the rural areas within all Member States (based on a selection procedure carried out at the EU Member States) level.

In Romania, the implementation of the program was initiated in 2006, along with the establishment of the LEADER Service and the Rural Development Network [3] within the General Directorate for Rural Development – the Management Authority for NPRD. In May 2006, was initiated a competition at the national level for the selection of potential animators of the territories, where were received 156 applications, of which 121 were selected. Subsequently were organized two training sessions (in July and November 2006) and a national network of potential LEADER territories was also accomplished. In September 2009 was published the ad

regarding the competition of projects for Measure 431 within NPRD, the Sub-measure 431.1, Phase 3 - Financial support for the preparation of files for LAG selection . Following this ad, 111 projects have been selected, valued at 4,827,533.49 EUR [1].

By observing the report of the selection process for these projects we can see that:

a) a single project which had been submitted for funding was rejected (which contrasts the evaluation results of the projects submitted in other components of NPRD, such as eg. 322 or 313);

b) the total amount financed is only 49.24% of the total amount allocated for the session for submission of projects (9,803,744 euros).

In other words, despite the fact that the Leader was promoted even since 2006 through informing measures throughout the country and through a national network of animators, not yet has been achieved its full development, which can be explained by evoking several factors (low associativity, lack of confidence in the success of public-private partnerships, lack of specialized staff in rural development at the administrative-territorial units level etc.).

To exemplify how territories were delineated within the selected projects, we chose from Brasov county (with a total of five projects funded), the two LAG including also several cities near the capital of the county:

a. The LAG "Ţinutul Bârsei" (with a territory that includes the following municipalities: Bod, Crizbav, Dumbrăviţa, Feldioara, Hălchiu and Sâmpetru of Braşov county).

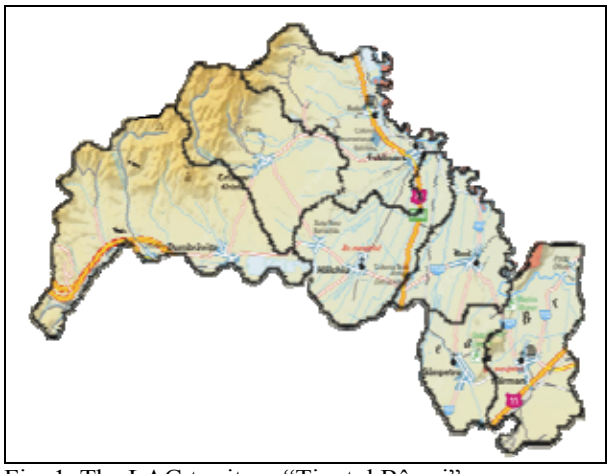

Fig. 1. The LAG territory "Ţinutul Bârsei"

b. The LAG "Curbura Carpaţilor" (whose territory is composed of the following municipalities - Budila, Prejmer, Tărlungeni, Teliu and Vama Buzăului of Braşov county, Dobârlău village and Întorsura Buzăului of Covasna county):

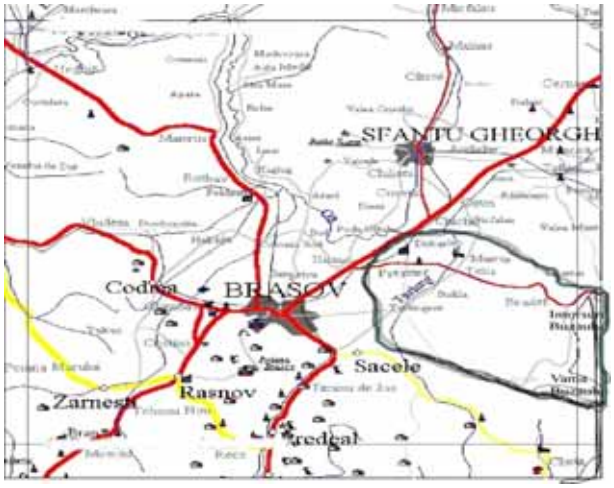

Fig. 2. The LAG territory „Curbura Carpaţilor" (the defined area on the right side of the image).

The two territories have the following main features, presented in a comparative manner concerning the area, the number of inhabitants, population density and traditional occupations primarily practiced in the two areas:

Table 1. Characteristics of The LAG territories "Tinutul Barsei" and " Curbura Carpaţilor".

Territory:	The LAG "Ţinutul Bârsei"	The LAG "Curbura Carpaţilor"
Surface (km2)	403,8	571,5
Population (No. of inhabitants)	32.172	37.760
Population density (nr. inhabitants / km2)	79,67	66,07
Traditional occupations:	Agriculture and livestock, food industry	Livestock, wood exploiting and processing

Regarding the action plans in the period when the two projects had been funded (January ÷

April 2010), they are adapted to the specificities of the two territories and include:
a) The LAG "Ținutul Bârsei":
1. Information, communication and promotion;
2. Obtaining legal personality for the LAG;
3. Elaborating the Local Development Plan;
4. Project management;
5. Ensuring project visibility.
b) The LAG "Curbura Carpaților"
1. Project Management;
2. Conducting acquisitions;
3. Elaborating the Local Development Plan;
4. Transferring the European LEADER expertise;
5. Information and promotion;
6. Audit.

CONCLUSIONS

The application of Axis Leader + in Romania has a number of peculiarities:
1. Unlike previous approaches of this program in the other EU countries, the program has an integrated functioning within the NPRD and it is not funded separately, by structural funds;
2. The institutions and agencies to be involved in managing and implementing the LEADER approach have limited experience at present;
3. There is a low awareness of local communities about the potential of LEADER approach;
4. It is based on involving more types of partners (private and social) found in the composition of the LAG and who will benefit from the implementation of the concerned project;
5. It has a certain degree of difficulty (particularly for animators and municipalities), due to the fact that they are obliged to dispense individual work (at the community level);
6. it involves taking into one's own hands the control of rural development, hence the need to change the current mentality (to await decisions from the central level) with that of making local decisions.

ACKNOWLEDGEMENTS

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REFERENCES

[1] Agenția de Plăți pentru Dezvoltare Rurală şi Pescuit, Raport de selecție rectificat, Masura 431, Sub-masura 431.1, Faza 3-Sprijin financiar pentru pregatirea dosarelor pentru selectia GAL,http://www.apdrp.ro/uploads/Docu%20FEADR/M_431.1/Sumbasura_431.1Selectate_RECTIFICAT.pdf
[2] Ministerul Agriculturii şi Dezvoltării Rurale, De ce Leader?, http://www.madr.ro/pages/dezvoltare_rurala/analiza15.pdf
[3] Ministerul Agriculturii şi Dezvoltării Rurale, Autoritate de management pentru PNDR LEADER şi Rețeaua de Dezvoltare Rurală, http://www.madr.ro/apel.php?id=2

THE WINE MARKET IN ROMANIA AND AT INTERNATIONAL LEVEL

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Key words: *wine, demands, supply, international trade, evolution, Romania*

Abstract

The research has sought to determine the Romanian viticulture position relative to the viticulture at an international level. Thus, it was done to determine the volume and evolution of the demand and offer of wine and, also, of the international wine trade. In the 2000 – 2007 period, the wine demand was of 4785, 4 thousands hl, the offer of 5251, 2 thousands hl. The imports had a volume of 150, 0 thousands hl and the exports 325, 4 thousands hl.

INTRODUCTION

The market analysis represents the starting point, respectively the basis for future decisions. This supposes consumption analysis, offer analysis, prices analysis, competition analysis, the analysis of tendencies and changes in the macromedium and micromedium of the company [2].
The wine production is an important area of activity for the Romanian economy due to its food, industrial, agro technical, ambiental importance, for export and as a profit source [1].

MATERIAL AND METHOD

The quantification of the level of development of viticulture has been realized using statistical interpretation procedures utilizing statistical information available in the FAOSTAT database [3].
The statistical interpretation and the economic-mathematical models represent the essential particularity in aproaching the specific problems of agricultural exploitations management.
The statistical indicators utilized were: wine demand, individual wine consumption, wine offer, the volume of wine import, the volume of wine export, the value of wine import, the value of wine export, the price of wine.

RESULTS AND DISCUSSIONS

The analysis of the data presented in Tab.1 indicates a demand worldwide of 229570 thousands hl of wine over a serie of six years – the last years for which information are available in the researched database.
On the european continent, the wine demand was of 155140 thousands hl and in the European Union it was of 126285 thousands hl.
In Romania, the wine demand is of 4785 thousands hl, representing 3.8% of the European Union demand, 3.1% of the demand at continental level and 2.1% of the global demand.

Table 1 The wine demand in the 2000-2005 period (thousands hl)

Area		Worldwide	Europa	UE	Romania
Year	2000	220075	148513	122778	5104
	2001	223098	152328	125015	4965
	2002	223904	151480	122778	4845
	2003	234566	158599	128704	4939
	2004	236807	158640	128007	4572
	2005	238969	161282	130430	4287
Average 2000-2005		229570	155140	126285	4785

SOURCE: FAOSTAT - 2010

The evolution of wine demand is expressed through an annual increase at global level of 1.4%, a reduction with 1.4% at european level, with 1.0% in the European Union and a reduction of 2.8% in Romania.
To know the level and evolution of the wine demand depending on the evolution of the population is necessary to determine the level of the individual level of consumption presented in Tab.2. Worldwide, the individual average consumption in the analysed period was of 3,7 l/pers/year with a variability of 3.5% and on the continent this has a value of 21,3 l/pers/year with variations of 7.9%.

Table 2 The individual wine consumption in the 2000-2005 period (l/pers/year)

Area		Worldwide	Europa	UE	Romania
Year	2000	3,6	20,4	32,5	23,1
	2001	3,6	20,9	33	22,5
	2002	3,6	20,8	32,2	22,1
	2003	3,7	21,7	33,6	22,6
	2004	3,7	21,7	33,2	21,1
	2005	3,7	22,1	33,7	19,8
Average 2000-2005		3,7	21,3	33	21,9

SOURCE: FAOSTAT - 2010

In the European Union, the individual wine consumption was of 33.0l/pers/year and in Romania of 21.9 /l/pers/year with variations of 4.5%, respectively, 14.8%.

This indicator registered a significant reduction in the analysed period, especially in Romania, where a reduction in consumption of 2.4% in the analysed period was produced.

But in the European Union and on the continent, there has been recorded an increase of the individual consumption with 0.6%, respectively 1.3% and worldwide this increased with 0.4%.

Table 3 The wine offer in the 2000-2007 period (thousands hl)

Area	Worldwide	Europa	UE	Romania
2000	283949	202520	191297	5453
2001	270063	185484	173176	5463
2002	262031	179451	166758	5461
2003	268877	182176	168739	5457
2004	307910	211105	195880	7071
2005	281455	181463	168349	2602
2006	279047	190367	177366	5251
2007	283949	202520	191297	5453

SOURCE: FAOSTAT - 2010

The wine offer at global level presented in Tab.3 indicates a multiannual average of 283949 thousands hl and at european level of 202520 thousands hl with multiannual variations of 16.4%, respectively 16.6%. In the European Union an annual offer of 191297 thousands hl has been recorded with a multiannual variation of 16.4%. Romania realized anual 3.0% of this reaching an annual average level of 5453 thousands hl. Reported to the global and european offer, the Romanian wine offer represented 1.9%, respectively 2.8%. The variability of the Romanian total offer was of 85.1% due to the high variation of surfaces and average production as to the reorganization processes of the grapes processing units.

Table 4 Importul de vin în perioada 2000-2007 (mii hl)

Arealul		Mondial	Europa	UE	România
Anul	2000	54800	41742	37378	13
	2001	60316	46659	40941	7
	2002	62977	48296	42025	7
	2003	68406	52448	44917	7
	2004	73509	56887	48232	12
	2005	77258	59156	49076	42
	2006	78084	57316	49464	732
	2007	83425	59320	51271	380
Media 2000-2007		69847	52728	45413	150

SOURCE: FAOSTAT - 2010

The wine import in the 2000-2007 period was, according to the data in Tab.4,at global level of 69847 thousands hl wine; on the continent, this registered an average of 52728 thousands hl and in the European Union of 45413 thousands hl with variations of 41.0%, 33.3%, respectively 30.6%. In Romania the average quantity of wine imported was of 150 thousands hl with a variation of 483.6%.

This indicator registered an annual increase at global level of 5.4%, in Europe of 4.6%, in the European Union of 4.1% and in Romania of 233.5%.

The wine import had, at global level, at average value of 18515 mil $, on the continent 11709 mil$, in the European Union of 10298 mil $ and in Romania of aprox. 12 mil.$ with variations of 78.5%, 74.5%, 73.1%, respectively 310.5%. The value of the grapes imported by Romania represents aprox. 0.1% from the value of european imports and aprox. 0.06% from the value of imports at global level.

Table 5 The value of wine import in the 2000-2007 period (mil $)

Area		Worldwide	Europa	UE	Romania
Year	2000	12772	8136	7206	1
	2001	13097	8500	7470	1
	2002	14290	9266	8194	2
	2003	17507	11204	9859	2
	2004	19943	12904	11414	4
	2005	20681	13111	11479	9
	2006	22519	13686	12029	38
	2007	27314	16863	14736	39
Average 2000-2007		18515	11709	10298	12

SOURCE: FAOSTAT - 2010

The evolution of the value of the wine import is given by an annual increase at global level of 10.2%, 9.8% at european level, 9.7% in the European Union and 73.3% in Romania.

The analysis of the data presented in Tab.6 indicates an exported quantity, at global level, of 74976 thousands hl. On the european continent, the wine export was of 54536 thousands hl and in the European Union of 51798 thousands hl

Table 6 The wine export in the 2000-2007 period(thousands hl)

Area		Worldwide	Europa	UE	Romania
Year	2000	61008	47230	45226	254
	2001	65755	50582	48089	394
	2002	66550	51129	48523	503
	2003	71114	52929	49983	410
	2004	76680	55668	52411	370
	2005	79186	56807	53147	269
	2006	83564	60242	57314	254
	2007	95953	61701	59693	148
Average 2000-2007		74976	54536	51798	325

SOURCE: FAOSTAT - 2010

The value of wine exports in the 2000-2007m period was, according to the data in Tab.7, at global level, of 18518 mil.$; on the continent, this recorded an average of 13986 mil.$ and in the European Union of 13676 mil.$ with variations of 85.0%, 74.7%, respectively 75.1%.

In Romania, the wine export is of approx. 325 thousands hl, representing 0.63% of the European Union export.

This indicator registered an annual increase, at global level, of 5.9%, in Europe of 3.4%, a reduction of 3.6% in the European Union and also a reduction of 2.4% in Romania because of the high variations registered from one year to the other.

In Romania, the average quantity of wine exported was of 23 mil.$ with a variation of 57.5%.

Table 7 The value of wine export in the 2000-2007 period (mil $)

Area		Worldwide	Europa	UE	Romania
Year	2000	12705	10020	9845	18
	2001	12671	9861	9641	20
	2002	14206	11066	10828	23
	2003	17318	13509	13198	25
	2004	19765	14855	14506	26
	2005	20655	15410	15011	22
	2006	22424	16861	16493	31
	2007	28402	20302	19908	22
Average 2000-2007		18518	13986	13679	23

SOURCE: FAOSTAT - 2010

The evolution of the value of wine export is expressed through an annual increase at global level of 11.0%, 9.5% at european level and in the European Union and of 4.5% in Romania.

CONCLUSIONS

1. At global level, the average wine demand was of 229570 thousands hl, the wine offer of 279047 thousands hl, the average value of imports was of 18515 mil. $ and that of exports of 18518 mil.$
2. In Europe, the average wine demand was of 155149 thousands hl, the wine offer of 190367 thousands hl, the average value of imports was of 11709 mil.$ and that of exports of 13986 mil.$.
3. In the European Union, the average wine demand was of 1262859 thousands hl, the wine offer of 177366 thousands hl, the average value of imports was of 10298 mil.$ and that of exports of 13679 mil.$.
4. In Romania, the average wine demand was of 4785 thousands hl, the wine offer of 5251 thousands hl, the average value of imports was of 12.0 mil.$ and that of exports of 23.3 mil.$.

REFERENCES

[1] Pânzaru R. L. şi colab., 2009, Economia producţiei vegetale, Editura Universitaria, Craiova, Capitolul 3, p. 57-58.;
[2] Ştefan G. şi colab., 2007, Economia şi filiera produselor agroalimentare, Editura „ALFA”, Iaşi, Capitolul 5, p. 137-138;
[3] www.faostat.fao.org.

THE TECHNICAL-ECONOMIC ANALYSIS IN VITICULTURE

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Key words: *viticulture, economic diagnosis*

Abstract

The diagnostic analysis realized in this paper has as a purpose the establishment of informational benchmarks regarding the internal and external situation in which the economic actors from the viticulture domain evolve. The way through which this purpose can be reached are based on the establishment of the economic environment conditions and the primary data obtained by the company. So, it has been proved that the analyzed company has a great economic potential, but reduced flexibility and is subjected to economic risks.

INTRODUCTION

The way through which this purpose can be reached are based on the establishment of the economic environment conditions and the primary data obtained by the company. So, it has been proved that the analyzed company has a great economic potential, but reduced flexibility and is subjected to economic risks.

MATERIAL AND METHOD

Knowing the firms` dimensions, the turnover and the efficiency of resources usage allows to form a general image about the object of the evaluation and permits to select the methods and techniques adequate for diagnosis. [1] For the appreciation of the general economic state of the firm the following criteria have been used:

- Situational analysis
- The turnover
- The diversification of production
- The share of the exported quantity out of the total volume of sales
- The share of viticulture in the volume of receipts
- The dynamic of work productivity

RESULTS AND DISCUSSIONS

Following the realized situation analysis it has reached the conclusion that SC Agroindustriala Bucium SA has a greater dimension that other enterprises with similar activities in the Moldova region. Given the superior processing capacity of the grape quantity produced by the firm, the company can be considered over dimensioned for its profile, but the promoted development policy regarding the conservation of the supplementary capacity has been correct taking into account the natural growth of the enterprise.

Likewise, it has been observed that once with the change of the structure of the shareholders and the managerial team the firms` policy has changed. The current debt have been paid to benefit of the provisions of Law 254/2002 (which provider for cancellation of outstanding debts and increases in penalties) and the contracting of bank loans to support the activity in the period between the delivery of products and the collection of their value.

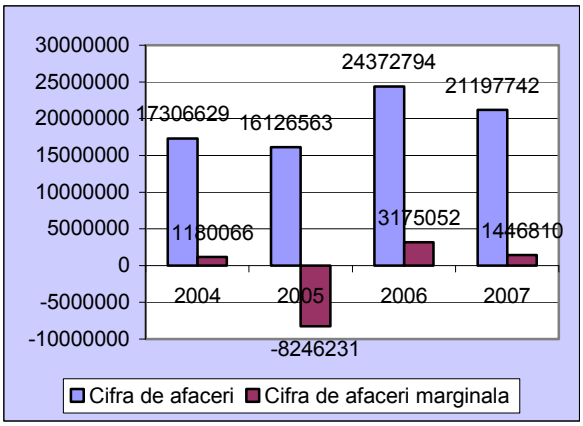

Figure 1. The evolution of the turnover (lei)

The analysis of the raw volume of activity reveals that although in the analyzed period the turnover shows a significant growth, the marginal turnover registered a critical value in 2005.(fig. 1).

The GINI-STRUCK concentration coefficient registers an increase from 0,72 in 2004 to 0,84 in 2007 and the Herfindhal index increases from 0,21 in 2004 to 0,38 in 2007 (fig. 2).

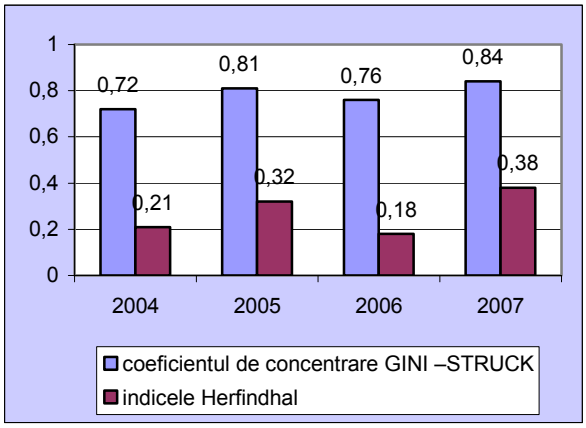

Figure 2. The level of diversification of the business

The highlighted results in the diagram indicate a reduced level of production diversification, the company pursuing specialization on certain assortments recognized nationally and internationally and, also, an important concentration given by the high share of some products in the volume of sales.

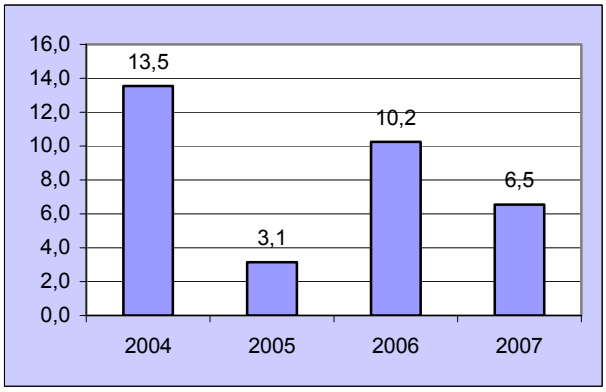

Figure 3. The share of exports in the total volume of sales(%)

The share of the exported quantity in the total volume of sales (fig. 3) indicates an appreciable decrease but this fact is due to the decrease of the volume of productions due to the reduction of surfaces and unfavorable climatic factors. Through the correlation of the evolution of production with the share of exported products quantity, it has been determined a more accentuated decrease than the one highlighted in the graphic representation namely from 13,5% in 2004 to 5,2% in 2007.

The share of the branch production in the Gross Domestic Product (PIB) permits the appreciation of the place and role of the branch in the national economy, given the size of this share. The branches which hold a great share in the PIB theoretically create favorable assumptions for the future development of companies in them. [2]

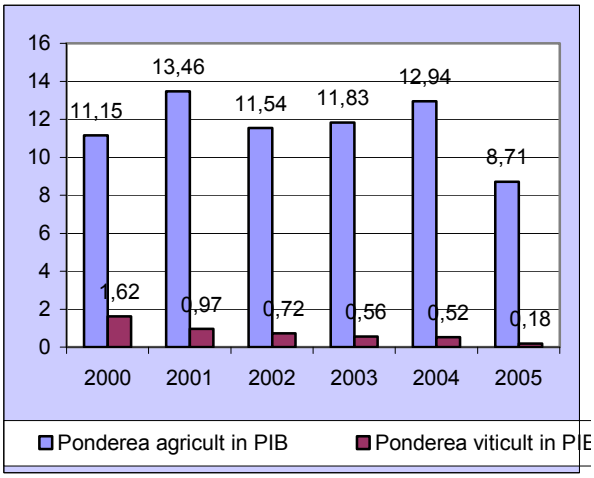

Figure 4. The share of the branch and sub-branch in the PIB (%)

The share of the agriculture and viticulture in the volume of PIB (fig.4) shows a significant decrease but this must be appreciated accordingly to the annual growth of this indicator. In these conditions, it can be concluded that the activity domain is important for the national economy and has real chance of development.

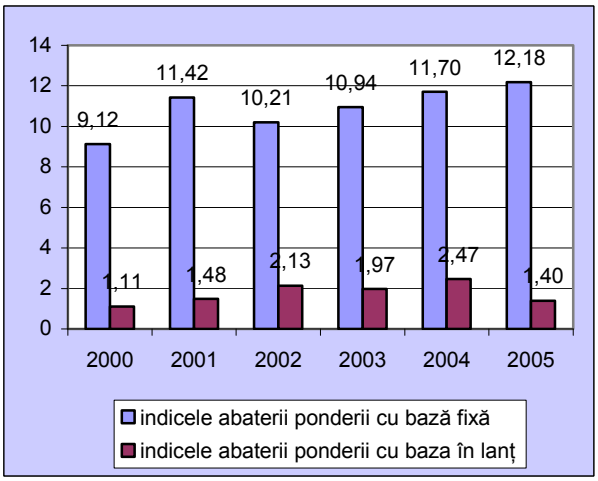

Figure 5. The deviation of the share of the branch and sub-branch from the PIB

The deviation of the share of the branch against the deviation of the volume of PIB (fig.5) indicates a growth of the importance of agriculture and viticulture for the national economy in conditions in which these branches of activity are in the process of capitalization, retechnologization and consolidation on the European market.

The dynamic of work productivity (fig.6) reveals a significant annual growth but the variations of their level indicates a high unfavorable instability both for the performances of economic units and for the personnel hired in this domain of activity.

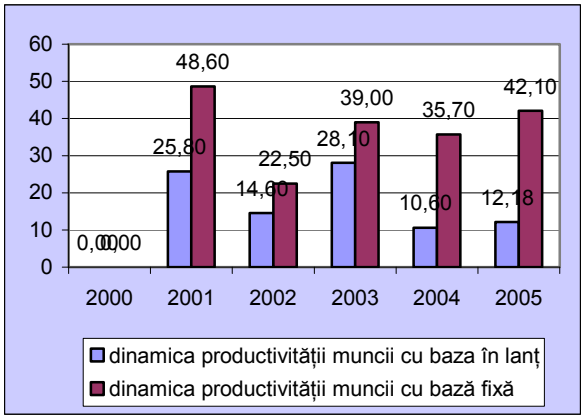

Figure 6. The dynamic of the branch productivity

Through the correlation of the analyzed indicators it can be appreciated that the economic unit has good capacity and perspectives. The firm operates in an important economic domain, warranty for its future development.

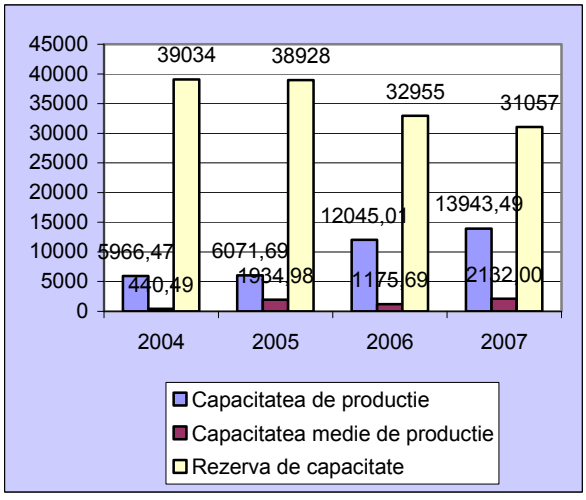

Figure 7. The situation of the production capacity

The correlation of indicators regarding the situation of production capacity indicates the fact that there is a high availability of production capacity. Because of this situation, the management of the unit intends to grow the surface of plantations and, in the same time, to purchase raw material.

The last years have been characterized by a reorganization policy of the personnel, reason for which it decreased both the average age and the average experience registered in the firm. A measure with important impact on these indicators consisted in the development of the sales teams in which have been promoted young and dynamic persons to consolidate this sector.

If the work productivity expressed in natural units registered important variations in the researched period, the productivity in value units (fig.8) indicates much smaller variations of 26196,6 lei/person and an increase of it in the last two years.

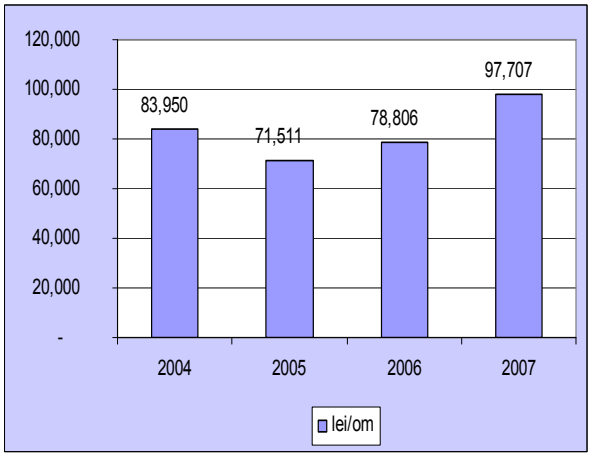

Figure nr. 8. The work productivity

Sure that this increase can be put on the evolution of prices and of the rate of inflation but thus two phenomenon's have been registered in the first two years also. In this case, it may be said that significant efforts have been made at management level to control these results even in the precarious environment conditions internally and externally.

Hence, it results that the human potential of the company is good, from this perspective no restrictions for future developments existing.

CONCLUSIONS

1. The situational analysis highlights a superior dimension of the processing capacity of the wine production capacity but if offers conditions for further development.
2. The evolution of the turnover indicates an economic growth doubled by a development of the managerial performances.
3. The diversification of production is unfavorable because is subjected to situational risk.
4. The share of incomes from exports is decreasing, reason for which is imposed the growth of promotional efforts of own products on new markets and the consolidation of the market quota on the traditional markets.
5. The fructification degree of human resources is increasing. This phenomenon represents a warranty factor for the increase of the firms` performances.

REFERENCES

[1] ROUX P., 1986, Economie agricole, Ed. Technique et Documentation, Lavoisier, Cap. 1, p. 11-12.;
[2] Ştefan G. şi colab., 2007, Economia şi filiera produselor agroalimentare, Editura „ALFA", Iaşi, Capitolul 5, p. 137-138;

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THE DIVERSIFICATION OF THE NON-AGRICULTURAL ACTIVITIES IN HOUSEHOLD FAMILY IN RURAL AREAS

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Key words*: non-agricultural activities, rural areas, family farms, distribution, promotion*

Abstract

In addition to agriculture, which is the main economic activity, in rural areas we find a number of non-agricultural activities. They are held in a few small and medium enterprises.
Despite the increasing trend of private entrepreneurs in rural areas, the number of non-agricultural activities is still low. The extension of the SMEs activities meets a number of obstacles related to: the supply of resources, the work itself, problems faced by entrepreneurs.
The analysis of non-agricultural activities on the rural markets from the study made it possible to identify a typology of their three areas of relief. This type of analysis allowed the four components of marketing mix's, namely: non-agricultural product, price, distribution, promotion.

INTRODUCTION

The purpose of the analysis was the identification of opportunities for economic diversification in the rural households, problems and opportunities of the sales market of the agricultural and non agricultural products, public perception of the degree of economic development of communes, failures in marketing products. The vast majority of the non-agricultural activities is closely correlated with the degree of agricultural development as a secondary activity of the rural population remains subsistence farming. It is a vicious circuit between the two sectors as agricultural activities themselves are not very efficient due to the lack of suppliers of goods and services needed to ensure performance (mechanization services, repairs, loans).

MATERIAL AND METHOD

The research was conducted in mountain, hill and plain and watched finding different specificities of rural markets in the communities examined.Using questionnaires to study participants were interviewed with questions on non-agricultural activities in rural areas. Most participants interviewed felt that occupational diversification can be achieved in order to reduce excessive dependence on agriculture communities. Their views have been realized on a scale of favorability and restrictions.

RESULTS AND DISCUSSIONS

Restrictions identified in the focus groups reveal a number of specific features in the communities investigated, which, regardless of location, gives an overview not only of the Romanian rural society but also the conditions in which market relations is evident. Rural markets in Romania are affected directly or indirectly by the above problems, they putting his mark on the degree of development of rural economy, especially as regards agricultural products/non-agricultural, pricing, distribution and promotion.On the other hand it gives us a vision of the functionality of these markets and allowed highlighting the following aspects of rural community: there is a small number of retail outlets, income rural households are directly affected by the results of farming, consumption is affected by income and small economies, education level, etc.. and there is a slow adaptation to change and modernity of producers and consumers

due to age and level of education, there are a large number of intermediaries that directly affect prices and the organization, infrastructure is inadequate in most cases [1]. Analysis of non-agricultural activities on rural markets in the study made it possible to identify a typology of their three areas of relief, as follows:

Table 1 Analysis of non-agricultural activities in hill and mountain plains

	Plains	Hill	Mountain
Food industry	Products of animal origin (slaughterhouses, milk and dairy products, canned fish) Food plant (bakery, Canned vegetables)	Food Animals (Apiculture, slaughterhouses, milk and milk products) Food plant (herbs) Alcoholic beverages (bottling)	Food animals (meat processing, Slaughterh ouse)
Textile Industry	Workshop tailoring		Garment factory Textile factory
Wood Industry	Carpentry workshop Factory floor	Workshop primary wood processing (sawmill) Furniture Factory	Sawdust briquette factory Workshop primary wood processing (sawmill)
Construc tion	Building materials	Workshop processing marble, concrete	
Services	Joint store	Joint Store Bank Branches	Joint Store
Catering		Restaurant	
Tourism	Pensions (relaxation, fishing, business)	Pensions (organic, relax, agritourism, pedestrian, fishing, business)	Tourism (cultural, ecumenical)
Manufac turing		Weaving twigs	Wood sculpture, Cooperage Folk artists

Source: own interpretations

Analyzing the four components of marketing mix's in the three areas we have seen that in terms of *non-agricultural product* in the hilly area are local brands in beekeeping, drinks, *price* is on application and production costs are of seasonal / permanently in all areas, *distribution* is achieved through direct sales to food sales is the butcher's shops, processing plants etc. and *promotion* depends on the product, for example in hilly area for the wood industry is in fairs and exhibitions, tourism is promoted through advertising.

CONCLUSIONS

1.On rural market, in addition to agricultural products, are marketed a number of non-agricultural products, but both their share and revenue are scaled [2].

2.Non-agricultural activities are carried out in a few small and medium enterprises.

3.Obstacles encountered in the establishment of such non-agricultural establishments are: poor infrastructure, lack of monetary resources, outdated mentality, poor access to credit, lack of skilled labor, lack of knowledge of management and marketing, unstable or insufficient demand, limited opportunities for advertising, legislation unclear and unstable, etc.

4. Also, there is a loss of traditional crafts due to aging and lack of interest among young people.

5. Furthermore, access to European funds is hampered by high bureaucracy, corruption, lack of specialized consultants.

6. Non-agricultural activities, the vast majority, is closely correlated with the degree of agricultural development as a secondary activity of the rural population remains subsistence farming.

Diversification into non-agricultural activities of family households depend on these five main factors: the general level of education, educated agricultural advisory and non-agricultural incomes and local transport. Furthermore, diversification is affected mainly by four factors: lack of capital, inadequate knowledge, high cost of inputs and consumer access and lack of instruments to implement rural development policies.

REFERENCES

[1].P.S.611:Socio-economic development and sustainable rural communities and strengthening family farms in agriculture and multi activity

[2]. Maria Vincze, Regional and rural development ideas and practices, University Ed.Presa Clujeană 2000, p.93

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MEASURES FOR IMPROVING THE MARKETING OF THE NON-AGRICULTURAL PRODUCTS IN RURAL AREAS

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Key words*: non-agricultural products, marketing, non-agricultural activities, rural households, the market*

Abstract

Marketing failures on the market access of many participants in rural areas highlight the importance of diversification of the activities in Romanian households. The development of non-agricultural activities and hence of services to rural areas is closely connected to the activity of family households practicing agriculture and rural development of small and medium enterprises. Thus, householders carry several types of activities in addition to those identified in the territory. To implement these different types of non-agricultural activities, in the rural households should be adopted a series of measures and developed solutions for the entire rural economy.

INTRODUCTION

Non-agricultural activities and products offered by rural households are dependent on the activity engaged in agriculture heritage and development of small and medium-sized marketing rurale. Marketing failures identified highlight the importance of diversification activities in the romanian rural households.

MATERIAL AND METHOD

I used to base research data from the questionnaires made after identifying the problems of rural areas in macroeconomic identified. Measures taken macroeconomical (political, legal) and micro (the family household), must take account of the foundation elements of marketing strategies.

RESULTS AND DISCUSSIONS

In rural communities meet two types of non-agricultural activities:
- *household survey carried out* - processing of agricultural products and foodstuffs, construction materials processing, etc.
- *conducted in the community or locality in proximity*- construction, industrial processing,transportation,services.Believe that the private can carry several types of activities than those identified in the territory [2].
Identified categories of non-agricultural activities can be structured as: processing of agricultural products (plant products, meat, milk, vegetables and fruit, etc.), primary and secondary industry, commerce, catering, craft products, etc.
When non-agricultural activities come to fill farming carried out in a household, in order to make additional income, economic diversification opportunities may include:establishment in the household of: workshops, warehouses, garages, offices and consulting services, food processing units, retail store; promoting rural tourism, camping site, holiday boxes (while setting up centers with specific local artisanal products); establishment of processing units of biomass energy and creating unconventional (waste, wind);promotion of leisure (without accommodation) as well as fishing, observing wildlife and flora, extreme sports (paintball, ATV, hunting, etc..); setting up of riding (riding trails, stables, riding classes, races);
To implement these different types of non-agricultural activities in rural household should be adopted and a series of measures designed solutions for the entire rural economy.
1. Macroeconomic measures:

Developing the agricultural sector to ensure its competitiveness by supporting economic growth and stability of family farms, developing legal and institutional instruments necessary to diversify the rural economy, creation of viable and functional links between agriculture, industry, tourism and environment, developing a marketing system, facilities development of small and medium agro.

2. Microeconomic measures:

At the microeconomic level, diversification of agricultural activities in core non-farm income generating activities should take into account the following elements in the foundation of marketing strategies (range of practical activities, planned and organized on price, promotion and distribution of products and services).

Marketing mix for products manufactured and marketed in rural markets have to take into account a number of general features:

Table 1 Features on the marketing mix

1	**RURAL PRODUCTS**	**RURAL**
	AWARENESS LEVEL	Low
	CONCEPT	Poor knowledge
	POSITIONING ON THE MARKET	Difficult
	MARKET RESEARCH	Difficult, poor knowledge
	QUALITY	Low
2	**PRICE**	
	SENSITIVITY	High
	LEVEL	Low, medium
3	**DISTRIBUTION**	
	DISTRIBUTION CHANNELS	Local Markets
	TRANSPORT	Limited
	VIABILITY	Limited
4	**PROMOTION**	
	ADVERTISING	TV, radio
	SALES	Ocazional
	PROMOTION	Brochures
	ADVERTISING	Poor

Source: own interpretations

CONCLUSIONS

Given the current situation which shows business growth in rural areas, community support is needed to promote sustained national and non-agricultural activities, leading to:

1. rising incomes of the rural population,
2. creating jobs,
3. reduce discrepancies between rural and urban.It is necessary to promote diversification of activities by assimilating new entrepreneurial skills, acquire new skills and providing new services to rural population.

REFERENCES

[1]. http://centres.exeter.ac.uk/crpr/
[2].www.regional-studies-assoc.ac.uk//feher.pdf
[3]. Sector Project 611:Socio-economic development and sustainable rural communities and strengthening family farm

ANALYSIS OF THE SUBVENTION SYSTEM IN THE AGRICULTURE FIELD OF THE REPUBLIC OF MOLDOVA

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Key words: *Land, land market, perspectives, peasant farms*

Abstract

One of public policy to promote of agriculture it's represent through subvention system. In dependence of politic factors and macroeconomics results the size of subventions depends from one period to other. More of them the subvention mechanism in agriculture is enough diversify in different periods and in methodological aspects, which often create for producers a illusion than a reward. The foal of this study is to analyze the importance of subventions for agriculture producers, to research the function of methodology and to identify the proposals and recommendations from the researches.

INTRODUCTION

Developing scenarios of the agricultural branch, in dependence on the country, are varied and depend in a large measure on budget financial possibilities of the government, degree of investments attracting, applied agricultural policies, existence of some clear strategies of development in this sense. Also, the accomplishment of these strategies and activities in the agricultural field in a great part depends on the degree of distribution of public expenses. During the last years the evolution of public expenses for agriculture is very varied, that demonstrates also, in fact, the development, in whole, of the national economics.

MATERIAL AND METHODS

There were the publications used of the National Bureau of Statistics of the Republic of Moldova for the analysis of the subventions system in agriculture, the concept of the subvention system of agricultural producers for the years 2008-2015[1] of the Ministry of Agriculture and Food Industry.

In order to make some comparisons there were used the reports of the Organization of Cooperation and Economic Development (OECD) and of the Institute for Development and Social Initiatives (IDIS) «Viitorul», Republic of Moldova.

RESULTS AND DISCUSSIONS

During the period 2003-2009 the totality of subventions for the agricultural sector has increased approximately tenfold. If in 2003 this figure was of 300 mln. MDL[2] lei, so in 2010 the figure is of 300 mln. MDL lei. Basing on their destination – agricultural sector, the subventions are not managed only by the resort ministry. At present, the management of subventions for the agricultural sector is spread on some public institutions, namely: Ministry of Agriculture and Food Industry, Ministry of Finances, "Molresure", Apele Moldovei Agency.

According to the conception of the subvention system of agricultural producers for 2008-2015 years there is the subvention of the following directions offered: *Modernization of the agricultural sector,* that provides investment activities related to the initiation of activities of food production processing, the renewal of agricultural equipment and of processing lines, the formation of network purchase and collection of agricultural production, the founding of perennial plantations, the initiation

[1] Government decision No. 1305 of 28.11.2007 regarding the approval of the conception of the subvention system of agricultural producers for 2008-2015 years. Official monitor No. 188-191/1356 of 07.12.2007

[2] MDL- Moldavian leu, national currency of the Republic of Moldova

of product enterprises of planting and reproductive seed material, the initiation of services provision in agriculture; *Agricultural performed activities in the vegetal and animal sector,* that has the goal to increase the competitiveness of agricultural products, the insurance of food security and of equitable incomes for farmers, market stabilization (Table 1).

Table 1 Distribution of Fund assets for the subvention of agricultural products in 2003-2010 years, millions lei

	2003	2004	2005	2006	2007	2008	2009	2010
Total for the years	30	45,3	180	220	465,3	270	313,5	300,0
Crediting financing in agriculture	30	21,2	29,0	-	-	-	-	100,0
Creation stimulation of machine stations		9,0	18,0	20,0	43,0	20,0	23,5	
Financing of the works related to the autumn plowing execution		15,3	-	-	-	-	-	
Support of the fruit sector		-	10,0	15,0	17,0	25,0	52,9	
Endowment of stock-raising and veterinary offices		-	2,0	-	-			
Financing of sugar beet growers		-	-	20,0	8,8			
Financing of photo sanitarian products and fertilizers		-	-	50,0	130,0	50,0	50,0	
Keeping of the stock-raising sector		-	-	15,0	15,0	23,0	12,5	15,0
Repayment of VAT share at the agricultural production delivery by proper fabrication		-	-	100,0	140,0	50,0	50,0	
For financing of agricultural works		-	121,0	-	99,0			
Financing of tobacco cultivators				5,0	2,5	8,0		
For encouraging nut culture development					3,0	5,0	8,0	
For supporting the promotion of ecological agriculture development					2,0	4,0		7,0
Reimbursement of the VAT sum by acquisition of techniques and agricultural equipment					5,0	-	-	
For insurance risks financing in agriculture						18,0	24,1	15,0
Investments stimulation in the vegetable production on the closed ground area in acquisition of techniques and irrigation equipment						20,0	12,5	18,0
Investments stimulation in acquisition of equipment and outfit for small and middle enterprises of processing, drying of fruits and vegetables, placed in rural localities and for package houses and refrigerators						20	-	30,0
Investments stimulation in creating of perennial plantations								60,0
Investments stimulation in technique acquisition and agricultural equipment, irrigation equipment						20,0	-	40,0
Stimulation of acquisition of pedigree cattle and of maintenance of their genetic fund								15,0
For coverage of expenses for water pumping						7,0	10,0	

Source: Institute for Development and Social Initiatives (IDIS) «Viitorul»
Government Decision of the R. of Moldova regarding the using method of Fund assets for financing the agricultural producers for the year 2010

Along with the mechanism evolution of subventions there were funding directions of agriculture activities expanded, so there are 9 financing directions provided for the year 2010 financed at the expense of the financing fund assets of agricultural producers in the amount of 300 mln. MDL lei, namely:

1. **Crediting stimulation of agricultural producers by the commercial banks**. This measure comes to stimulate the crediting system in the agricultural sector, in the conditions of economic crisis and high value of financial resources available in the market of Moldova. The maximal value of rendered assistance to a beneficiary will not exceed 85 mln. MDL lei;

2. **Mechanism stimulation of risks insurance in agriculture**. This measure supposes development advancement of the risks insurance system in agriculture. The financial assets provided in this section will be used in conformity with the Law No. 243-XV of July 8, 2004 regarding subsidized insurance of production risks in agriculture and on the basis of the List of risks and objectives subjected to subsidized insurance in agriculture in the year 2010, confirmed by the Government decision: *a)excessive drought (that has provoked harvest lowering of more than 30%), hail, b)lowered temperatures under the biological limit of plants resistance, c)storms, d)floods, e)animals and birds death because of illness, storm, hail, flood, excessive cooling, traumas, f)sacrifice of necessity of animals, according to the indications of the Sanitary-Veterinary Agency and for Products Security of Animal Origins.*

3. **Investments financing in creation of longstanding plantations**. The value of the rendered help is calculated under the form of dimensions expressed as set amounts to the area unit:

i. for seedy species:

- 15 thousand MDL lei at one hectare of super intensive garden with planting density of 1800 trees at one hectare, but will not exceed the total amount of 150 thousand MDL lei for every beneficiary;
- 10 thousand MDL lei at one hectare of intensive or classical garden, will not exceed the total amount of 100 thousand MDL lei for every beneficiary;

ii. for drupaceous species, including almond-tree and nut-tree: 7.5 thousand MDL lei at one hectare, but will not exceed the total amount of 150 thousand MDL lei for every beneficiary;

iii. for bacciform crops: 20 thousand MDL lei at one hectare, but will not exceed the total amount of 200 thousand MDL lei for every beneficiary;

iv. for nuciferous (grafted) crops: 10 thousand MDL lei at one hectare, but will not exceed the total amount of q00 thousand MDL lei for every beneficiary;

v. for grapes plantations with mass species: 30 20 thousand MDL lei at one hectare, but will not exceed the total amount of 200 thousand MDL lei for every beneficiary.

4. **Investments financing in vegetables production on the closed ground** (winter hothouses and solaria). The value of the rendered help is calculated under the form of compensation in percentage rates in the proportion of 30% from the cost of the hothouse modules, of the acquired equipment and outfit, necessary for vegetables production on the closed ground. The maximal value of help for every beneficiary – 100 thousand MDL lei.

5. **Investments stimulation in acquisition of techniques and agricultural equipment**, **of irrigation equipment**. The value of the rendered help is set under the form of compensation in percentage rates in the proportion of 30% from the cost of techniques and irrigation equipment, but will not exceed the total amount of 150 thousand MDL lei for every beneficiary.

6. **Sustaining of ecological agriculture advancement and development** – pursues the object of efficient using of natural resources and environment protection by developing the ecological agricultural sector. The value of the rendered help is calculated under the form of dimensions expressed as set amounts to the measure unit and constitutes: a) 700 lei for one hectare of the

ground area subjected to the conversion process in the first year (up to 100 ha) and de 400 lei in the second year (up to 100 ha), and b) 20% at the price of ecological agricultural and food products commercialized on the republic territory. The maximum value of the rendered support for a beneficiary is 100 thousand MDL lei.

7.**Investments stimulation in technological using and renovation of cattle-breeding farms**. The value of the rendered help is set under the form of compensation in the amount of 30% from the cost of technological equipment destined for debts and modernization of cattle-breeding mini-farms situated outside. The maximum value of the rendered help is 200 thousand MDL lei.

8.**Stimulation of pedigree cattle acquisition and maintenance of their genetic fund.** The value of the rendered help is calculated under the form of dimensions expressed as set amounts to the weight unit:

i. cows-donors of embryos with productivity at least 9000 kg of milk on lactation - 65 lei/kg;

ii. cows who give birth for the first time, heifers of at least 12 months old - 30 lei/kg;

iii. boars of at least 6–8 months old - 25 lei/kg;

iv. non-conceived young pigs of 6–8 months old (pure breed) - 20 lei/kg;

v.non-conceived young pigs of 6–8 months old (biracial) - 10 lei/kg;

vi. rams and goats of 6–20 months old - 25 lei/kg;

vii. yearling lambs and she-goats of 6–20 months old - 15 lei/kg;

viii. bees queen of at least 3 months old - 50 lei/unit.

The maximum value of the support for one beneficiary is 150 000 Lei.

9.**Investments stimulation in development of post-cropping and processing infrastructure**. The value of the rendered help is calculated under the form of compensation in percentage rates, in the proportion of 20% from the cost of the acquired equipment and outfit. The maximum value of the support for one beneficiary does not exceed the amount of 150 thousand MDL lei for every participant associated at the presented project.

CONCLUSIONS

Weighty points

1.Funds concentration from agriculture for financing into a single and managed one by a separate institution – Ministry of Agriculture and Food Industry, that will rise efficiency of their managing;

2.Creation of the Subventions Agency within the Ministry of Agriculture and Food Industry that will monitor using of the Fund for agricultural products financing;

Insignificant points

3.Debts growth by paying subventions;

4.Existence of disproportions in subventions distribution in proportion to organizational - juridical forms;

5.Absence of the lists of the subventions beneficiaries for the precedent years.

REFERENCES

1. Chivriga Viorel, 2009, Reformarea sistemului de subvenționare în agricultură: rezultate concrete şi eşecuri, Policy Brief, IDIS „Viitorul”, Chişinău.
2. Hotărârea Guvernului nr. 1305 din 28.11.2007 cu privire la aprobarea Concepției sistemului de subvenționare a producătorilor agricoli pentru anii 2008-2015. Monitorul Oficial nr. 188-191/1356 din 07.12.2007.
3. Hotărârea Parlamentului nr. 137 - XIII din 29.12.2009 privind aprobarea modului de utilizare a mijloacelor fondului de subvenționare a producătorilor agricoli.
4. Hotărârea Parlamentului nr. 312 - XIII din 25.12.2008 privind aprobarea modului de utilizare a mijloacelor fondului de subvenționare a producătorilor agricoli

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STRATEGIES AND REGIONAL DEVELOPMENT OF BORDER TOURISM SATU MARE COUNTY

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Key words*: strategy, cross-border tourism, regional tourism, rural tourism*

Summary

Sustainable rural development processes in the Satu Mare, are positive conditioned recovery efficiency potential tourism area which during the 2007-2013 strategic planning must ensure its efficient and sustainable building structural component that ensures the foundation of infrastructure and management necessary to achieve medium and long term objectives. Beyond the parameters of absorption of the European Community structural funds, is determined areas in the regional integration ensuring dynamic cooperative relations, and in view of achieving performance criteria and competitiveness of Europe, is shaping concern for adopting joint efforts to promote and representation .According to the laws based development initiatives and promote vertical, they will have the foundation elements of strategy projects and local, zonal and Euro-regional.

INTRODUCTION

Diagnostic analysis carried out in the Satu Mare County, Suitability and revealed the high potential of development through tourism, due favorability relief, landscape, the geo-thermal mineral water.

To these are added human elements represented by the structure of multi-ethnic and cultural population, whose historical development has created diversity and specificity values of historic heritage, cultural and spiritual.

Enhancement of the potential of these resources falls under the opportunities for accessing structural funds conferred by political and economic system of European Community, to which Romania joined in 2007, the new philosophy of sustainable development and the compatibility of economic, social and environmental European Community.

Against this background, the planning phase 2007-2013, despite these opportunities, there was the threat of global financial and economic crisis - the limiting factor for achieving the objectives outlined in the programs of national and territorial development, by reducing the capacity of local financing.

MATERIAL AND METHOD

The study was conducted by analyzing a database of papers represented documentary strategic planning, concept of business forums: Romanian, Hungarian and Ukrainian, drawn from business forums and NGOs. When they joined a number of common elements of strategy: local, zonal and micro, summarized in a consistent vision and strategy elements benchmarks Satu Mare.

RESULTS AND DISCUSSIONS

In the present context, development processes must be adapted to the new austerity, to avoid syncope, ensuring continuity and maximum potential of attracting European Community financial means, to achieve a synergy effect of the resources involved in achieving the strategic targets proposed. With the district administrative authorities and the resort decentralized Satu Mare county have developed an Integrated Development Strategy County, Chamber of Commerce, Industry and Agriculture Satu Mare, in the bipartite and euro-regional international agreements, has made this task strategic cooperation with foreign partners, by devising plans cross-border cooperation with Hungary and Ukraine, whose development punctual, created the national strategic planning in

tourism in the Satu Mare County for 2007-2013 programming phase and the possibility determining medium and long term projections.

Strategic vision for development and the Satu Mare County border, is becoming a tourist destination with quality travel services based on the promotion of local tourism resources and values.

This mission is the creation of diversified service packages specific to the region attractive local and foreign tourists at levels low cost, making it one of the main pillars of economic and social development of the area, focused on leisure and entertainment.

Target groups are:

- foreign tourists from Germany, Italy, Poland, Slovakia, Netherlands, France, Hungary, Szabolcs-Szatamar-Bereg county and neighbors in the border area of Ukraine (Transcarpathia region): Lvov, Kiev, Chernivtsi, Ivano -Frankivska. These are added and other groups represented by business for business travelers, students sport and recreational tourism, tourism proponents of ecumenical and diverse cultural events occasioned by the traditional calendar.

- Tourists native of components counties Region 6 North-West Development and neighbors: Satu Mare, Bihor, Salaj, Maramures and Cluj.

Strategic Objectives:

1. Tourism development in the border area,
2. Conservation of natural heritage, history and culture of the border area with tourism potential and rehabilitation
3. Modernization and dezvoltrarea areas with tourism potential,
4. Business support by improving tourism services;
5. Developing brands border area of interest.

Priorities:

1. - Restoration of cultural heritage, historical, religious and identity preservation,
2. - Recovery of natural resources in the context of sustainable development;
3. - Rehabilitation of areas of interest,
4. - Business development through regional tourism;
5. - Service quality in tourism and creating new products;
6. - Promoting tourism on the border area.

The plan of actions and measures designed the way it plans to integrate cross-border cooperation with partner countries Hungary and Ukraine.

Plan Priorities

Priority 1. Tourism

Measure 1.1. Modernization and development of thermal and mineral water resort, covering: the modernization and infrastructure development Establishment, development of the accommodation, creating new diversified offer of leisure activities, promotion of interest in the premises: Tăşnad, ACIS, Bixad, Beltiug, Negre Oas, Customs, Mary Valley.

Measure 1.2 Development of SPA and wellness tourism centers, creating infrastructure for such activities and specialized services through upgraded accommodation, gyms and fitness facilities, cafeterias and promote wellness and SPA centers in locations: Tăşnad, Satu Mare ACIS, Bixad, Beltiug, Negre Oas, Customs (Puturoasa baths), Mary Valley.

Measure 1.3 Development of treatment and balneotherapy, the retention of-age tourists III, chemical analysis of water curative setting, creating medical infrastructure, services and therapeutic procedures in: Tăşnad, Satu Mare, ACIS, Bixad, Beltiug , Negre Oas, Customs (Puturoasa baths), Mary Valley.

Priority 2. Business Tourism

Measure 2.1 - Business tourism, targeting: modernization and development of meeting spaces, increasing the number of units 3 and 4 stars, diversifying services: sauna, swimming pool, casino, entertainment programs of the region.

Measure 2.2 - tourism events aimed at: developing management organization for fairs and exhibitions, involving companies, professional associations in congresses, exhibitions and fairs.

Measure 2.3 - tourism conference, aimed at: modernization and development of specific

areas and leisure spaces in restaurants, billiard halls, and bowling.

Measure 2.4 - Tourism related collective activities of employees of companies (teambuilding, training and seminars) with the aim: to complete these activities with attractive tour packages on various points of interest or tourist routes (land and gyms, swimming pools, bowling halls, restaurants, discos, water sports facilities, canoeing, river rifting and hiking).

Priority 3. Tourism Transit

Measure 3.1 - Tourism transit routes for domestic tourists Romania-Ukraine and also the purpose of the longer and stay in view of the stage stops. These activities require the development of future channels of communication routes: routes of links, ring roads, transport connections to European culuoarul IX. rifting and hiking).

Priority 4. Ecotourism is currently in the Satu Mare County this form of tourism ese sufficiently recovered, she was reduced to visit potential areas: Natural Reserve Tour, forests Noroieni, Mujdeni Mountains Oas County, without offering specific services of this type.

Measure 4.1 - Hiking aimed at the creation of tourist information points, mobile signal, guides, mountain rescue services.

Measure 4.2 - Sports in nature, which: attract foreign tourists and social activities, land-water courses, horse riding, equestrian trails, cycling.

Priority 5. Cultural tourism and ecumenical

Measure 5.1 - Cultural tourism, targeting: visits to archeological sites, castles, manors, memorial houses, palaces, churches, art museums, historical and ethnographic.

Measure 5.2 - Tourism History for: greater choice of recreational activities by: tournaments, plays medieval weapons demonstrations and historic ceremonies and stays emotionally charged ..

Measure 5.3 - ecumenical tourism, by providing accommodation close to and during religious objectives of traditional events and pilgrimages.

Priority 6. Agro-tourism has a potentially major development in the traditional character of life, the existence of well-preserved areas of ethno-folk, with diverse ethnic cookery. Oas and foreign areas as the price of the priorities of development.

Measure 6.1 - To encourage their investment and local entrepreneurship in rural tourism: the conduct of information campaigns on the practice field and the economic and social benefits, assistance in attracting funding from European Community funds.

Measure 6.2 - Development of rural tourism is to: favorability particular areas of the country's ethno-folk Forests and Oas County, through development assistance and offers tourist services, integrated network and service diversification complementary thematic routes, turning the natural and traditional culture, art technical and popular.

Priority 7. Tourism-specific ethnic nationalities.

Measure 7.1 - German tourism for German citizens who have relatives and friends in villages in the county Svăbeşti: Petreşti, Foieni, Căpleni, Bogdand and others. - Hungarian tourism in county towns that have ethnic majority or a significant proportion of ethnic Hungarians and the nature of family ties or friendship and cooperation can support the local forms of tourist activity. - Tourism Mosaic: for Jewish pilgrimage to synagogues and cemeteries or other places with religious and secular vocation of the presence of this ethnic group within the county. All this requires upgrading the tourist infrastructure, the supply of services and programs of interest, thematic tours, accommodation, organizing programs and events for ethnic and inter-ethnic (festivals, debates, festivals, celebrations).

Priority 8. Related areas

Measure 8.1 - Encourage European development financed projects: the development of tourism management, and efficient instrument in the field consulting, information campaigns.

Measure 8.2 - Development of transport infrastructure: road by fast roads linking the different areas and with pan-European Corridor IX, the electrification of rail lines

and creating room with high speed, air through the modernization and development of airport capacity Satu Mare, customs by modernizing and resizing the border crossing points.

Measure 8.3 - Software qualification / training and to stop migration of human resources in tourism: the improvement of service managers and staff to raise standards of service, the creation of local organizations to organize courses, preparation of development plans in the field, motivating students and young and offer seasonal jobs.

Measure 8.4 - Development cooperation in tourism: the creation of forms of association at the local government and tourism operators, agents, collaboration and inter-system efficiency, collaboration and public-private cooperation, exchanges and transfers of experience.

Measure 8.5 - Promoting tourism in Satu Mare, setting directions for promotion and target groups represented by the various links existing in other areas: financial, economic, ethnic, coreligionist, NGOs with specific community areas from Germany, Austria, Holland, France , Italy, Hungary and Ukraine by: tourist guides, brochures, tourist signs, additional road signs, TV and radio spots, billboards, Internet virtual environments.

Strategy Satu Mare county is part of two collaborative projects in tourism border with Hungary and Ukraine, evidenced by projects financed by the European Community funds.

The project "Tourism without Borders" - joint tourism development strategy Satu Mare and Szabolcs-Szatmár-Bereg developed in 2007 between the Chamber of Commerce, Industry and Agriculture Satu Mare and the Chamber of Commerce and Industry of Szabolcs-Szatmár-Bereg county through the project PHARE CBC Romanian-Hungarian border was likely to complete objectives in order to harmonize the aspirations of common development in the medium and long Concorsi material resources available.

Comparative analysis of the situation of the two counties partner project revealed a number of constraints and opportunity elements of both parties :

- both counties have a peripheral layout;
- limited access to financial resources for development ;
- tend to underestimate their own resources and development opportunities in relation to external (cosmopolitan trend);
- lack of knowledge, strategic vision, entrepreneurship, initiative, voluntary association and availability.

Romania-Hungary common elements :

- organizational structure with small rural towns and high fragmentation in particular in the area proximal border ;
- features demographic trend of decreasing similarity, aging and migration trends in rural areas;
- Poor road infrastructure Satu Mare can take advantage of connecting the M3 motorway that runs through Hungary Szabolc-Szatamar-Bereg county and thus eliminate a major limiting factor for development and access pan-European;
- the state of the lower sphere of activities represented by services ;
- low penetration of information services ;
- communication informatics - unilateral exploitation feature exclusive tourism and travel by transit ;
- low polarization products, services and attractions;
- the relative underdevelopment of rural tourism and ecotourism through insufficient promotion and professional assistance in their development processes ;
- lack of integrated tourism activities with other economic and social fields, providing a framework articulated synchronous development and sustainability additional collateral;
- weaknesses on the effectiveness and impact of actions to promote specific values valences support tourism development ;
- the most significant objectives of tourist interest and economic efficiency in both cases are outside the urban centers of vocation development, maintaining the characteristics

of difficult access and their isolation by infrastructure poor transport;
- the practice of forms of tourism point of collapse and geographic area of attention and interest of the public service potential consumer interest ;
- reduced ability to practice permanent tourism and eliminate seasonal tourism;
- the space point dissipated (isolated) of various travel deals designed to bring economic and social development process, without a single character given by "thematic routes" ;
- the low degree of specialization in tourism services through school activities, retraining and continuing training in the field.

Elements of differentiation Romania-Hungary

- in Satu Mare County there is an institutional system travel in county government. This resulted in the absence of specific strategic planning documents, which experienced the uncoordinated development of this area economically. - In Szabolc-Szatamar-Bereg County is a network of local tourism associations affiliated to a district system, in turn integrated regional system. - Playing the role of initiator and supporter of the Hungarian party in relation to the Satu Mare County, on contacting representatives of business enterprises, institutions interested in tourism and non-governmental organizations that can support the tourism development process to integrate by ensuring the transfer of experience in management and marketing of tourism products, the best experience, promotion and advisory conclusions. The strategic planning process of cross-border tourism, the programs had to harmonize the system of targets and strategies to the programming documents in force at European, national and regional levels, in conditions in which Romania since 10.01.2007, has become with Hungary, a full member of the European Union, such integrated planning period 2007-2013.

These documents were adapted in all sections: international: Program Hungary-Romania European Territorial Cooperation 2007-2013, the national level: Romania: National Development Plan 2007-2013, National Rural Development Plan 2007 - 2013, National Tourism Development Master Plan 2007 - 2013; Hungary: Hungarian National Development Plan Nine 2007-2013, National Tourism Development Strategy 2007 - 2013; at regional levels: Romania: Regional Development Strategy for North-Western Regional Sectoral Paper Programming for the North West Tourism Development 2007 - 2013; Hungary: The 2007-2013 Strategic Eszak-Alfold, Alfold Eszak-Operational Program 2007-2013, the region's tourism development strategy Eszak-Alfold 2007 - 2013; the county level: Romania : County or Large lacks development strategy planning period 2007-2013, Hungary: The Concept of Tourism Development and Strategic Program of Szabolcs-Szatmár-Bereg county, the Operational Program Guide Szabolcs-Szatmár-Bereg County, Strategic Development Concept and operational programs of Szabolcs-Szatmár-Bereg county.

The result of these steps was an increase in the number of tourists in rural locations to locations for rural tourism accommodation capacity having higher: Tăşnad, Cert, Mary Valley, Călineşti Oas, part due to price levels as a convenient services more satisfactory, indicating a growing part of the price / quality service. It is worth mentioning that about 63% of tourists registered in the Satu Mare County from neighboring counties (within a radius of up to 150 km), mostly having preference as tourism and treatment, the difference is represented the majority of cross-border transit tourism.

CONCLUSIONS

Evolution of tourism development in the Satu Mare County, shows steady trend of positive development, the priority of rural tourism, which is due to infrastructure development in the area by the European Community Structural Funds in the field, and the effect of local development strategies and area, the materialize of external cross-border cooperation by setting specific institutional

framework and experience in the sphere of partnership with NGOs. Develop a strategy to develop tourism in the Satu Mare County, creating the programmatic orientation of regional and local initiatives in the field and to stimulate initiatives in the institutional environment, the formulation of strategies in other areas so as soon as possible to be the integrated sustainable development of Satu Mare County for the programming period 2007-2013 with projections in the medium and long term. This will be placed on the one hand to put in the confluence and synergy of efforts and constructive approaches to development, orientation and entrepreneurial initiatives to harmonize with the principles of sustainability and conservation of natural factors.

REFERENCES

1. The project "Tourism without Borders" conducted by the Chamber of Commerce, Industry and Agriculture Satu Mare with financial support from the European Union Program of CBC Romania-Hungary in 2004, PHARE CBC 2004/016-940.01.01.01.14.
2. Border tourism development strategy Satu Mare - Transcarpathia - Chamber of Commerce, Industry and Agriculture Satu Mare,
3. Tourism without frontiers in Satu Mare and Transcarpathia "funded through the Neighborhood Romania-Ukraine, PHARE CBC 2004 EN 2004/016-942.01.01.01.
4. Border Tourism Development Strategy booklet Satu Mare - Transcarpathia, publication, edited in the project "Tourism without frontiers in Satu Mare and Carpathia" funded by the Romania-Ukraine Neighborhood Program, Phare 2004, EN 2004 / 016-942. 01.01.01. Edit Commerce of Commerce, Industry and Agriculture Satu Mare.
5. http://www.satumare. Insse.ro / main. Php? = 405.html; 6. http://www.satu-mare. uk / mayor / news / intercomunit.html.

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SPECIFIC PROCESS OF STRATEGIC PLANNING AND RURAL DEVELOPMENT IN THE COUNTY SATU MARE

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Keywords: *sustainable rural development, local strategies, micro-regional strategies, regional strategy, cross-border strategies*

Summary

Sustainable rural development process involves a series of strategic planning processes within some areas or territorial area of implementation, adapting elements whose viability of political advertising at point of specific characteristics. With the object-subject rural tourism of Satu-Mare in terms of rural development, these processes have provided specific element in the evolution of matching the objectives of ONG s type telecentre , of their assistance in Hungary and in the current strategic planning phase in the cross-border regional plans and programs of international bilateral. In nature absence of institutional strategies at the local programmatic elements of these NGOs were able to substitute strategic development needs.

INTRODUCTION

In Satu Mare County are developed strategic development programming documents as an integrated strategy for sustainable development by institutions of county government and the devolved institutions spring. This may be due to anticipatory initiatives in this area of concern coming from the type telecentre NGOs that since 1999, have expressed such concerns, initially through the local development process management projects.
Yet the onset they were originally cross-border collaboration with parent organizations in Hungary Telehaz, anticipating and pre-accession structural national programs available after Romania, opportunities offered by the Hungarian part of the PHARE program, the support of the Hungarian communities in the border area of our country.

MATERIAL AND METHOD

The study was conducted by analyzing the strategic planning documents available, drawn from business and NGOs forums Romanian, Hungarian and Ukrainian, harmonized euro-regional policy documents and integrated cross-border international programs ended bilateral levels. In this context, were considered targets pathways and measures, identifying specific elements of nature and micro-regional area specific Satu Mare.

RESULTS AND DISCUSSIONS

The first nuclei of type telecentre in Satu Mare (and also in our country except Miecurea Ciuc and Odorheiul Secuiesc), occurred in localities: Tăşnad, Cehal, Petreşti and Căpleni, the short period being coordinated by the Center Resource Carpathian Euro Region - CREST Satu Mare. Through his instrumentality were ensured unity of action, coordination, advice and assistance to implement the transfer and exchange of experience with structures similar NGOs in Hungary, the management of projects, preparation of development plans and micro-regional strategies in different areas. The next step, in 2000, was the first occurrence of associative structures with micro-regional character of the area that micro region "Fagu" that would meet 4 Telecentres: Cehăluş, common Cehal, Satu Mare, Camara and Carastelec of Salaj and Balchik, the county Bihar.
Micro would prefigure future community development associations of local programs and continue them through the process of

territorial cohesion and cross-regional programs. The development programs of the territory of Satu Mare County experienced a qualitative stage of development at local micro-regional and cross-border levels. In this stage was the transition from software development point of local character, to those of larger territorial area, factor in the shaping of local development plans and strategies on planning period determined by the context European Community policies, specifically 2000-2006 and structural stages of pre-2007 to 2013.

In this period, the funding source with the largest share of suffering a translation of the extension of a neighboring state PHARE program, for 6 Regional Development Agency North West added that a number of other programs: ISPA.; RSDF and others with higher specific context in which NGOs type telecentre gained not only experience in the field but started a whole process of transfer of experience and advice to industry and public through various partnerships that have facilitated access to new economic and social programs.

All this led to a growing degree of trust among the communities which these organizations operate aces, so they created a climate of confidence in the masses of people and especially the youth segment through which not only created availability for volunteering, from the leisure and recreational but also for dissemination among the wider community objectives, ability and actual effectiveness of these organizations among host communities on enhancing economic, social and cultural welfare. Against this background the county government remained in the position of outsider the conceptualization and strategic planning processes, they really come from the territory, however the most often without even being aware and understanding of these phenomena.

In this respect, Satu Mare County Council holds general information on the structural funds allocated to Romania in 2007-2013, not related to projects under way or proposed for funding. Of decisions of the Satu Mare County Council follows the existence of a number of projects have to fund PHARE CBS. Source: Romanian Association for Transparency Monitoring Report management of structural funds in Romania - Phare / 2005/017-553.01.02.-33., Developed under the pilot program "to create a national network of NGOs to monitor the integrity of the use of funds structures in Romania in January 2007 - August 2008 "Development Region 6, page 26.

Exception made some county-level institutions of education, administration and trade that have designed and developed strategic planning documents through multi-annual plans. The strongest development strategies have met in tourism and environmental protection, which originally had steps of NGOs, whose strategic documents have been incorporated for harmonization of regional strategies and later with the border. All have been harmonized with the national programming documents of each party (bi-or tri-lateral) that: Romania, Hungary and Ukraine as well as district plans, county, regional and local parties.

In fact, especially after 2007, 6 Regional Development Agency North West has been increasingly involved in the act of assistance and coordination, given the scale of project financing and increasing their own expertise. In the context of strategic planning processes and sustainable development, especially in rural areas Satu Mare was privilege and merit local initiatives, ensuring public authorities when circumstances have required financial resources for financing or co-financing required. In most cases, these local planning documents were based on public-private partnership by providing data and material resources by administrative institutions and involvement in the act of conception of the type telecentre governmental or general civic participatory through activities voluntary, the success of their entrepreneurial nature providing impetus by examples of good practice and practice for other communities who subsequently developed similar projects. The success of the regional areas to create the proper association is removed to change the inertia and conservatism, and fear of failure, motivation is access to large projects with opportunities to accelerate the process of

economic and social development and access to community welfare.

It was time of formation of forms of association and formation of LAG -, like financing structures compatible with structural pre-accession programs and local. Type border collaborations have been integrated pathways to regional and national agreements and ministers with partner countries. All these programs have Euro Carpathian border and the origins, early forms of type twinning of communities fellow countrymen or co-religionists, who subsequently experienced an institutional development progress and material and financial support programs. From these local twinning and cooperation between parties, they started to develop collaboration between local government, the institutional construction of micro-regional association forms of the Romanian side, a phenomenon necessary partners to ensure collaboration and action. In fact a major component of cross-border collaboration targeting the transfer and exchange of experience will be the Hungarian party in the future determination, empowerment and encouragement of such approaches at different levels: local, area (micro-regional), county or regional level, aimed to ensure effective collaboration and strengthen the common European representation.

They will be made by Hungarian-Romanian partnership associations at the county level: Association for Eszak-Alfold Region Tourism Organization County Agritourism and Rural Tourism Association of Szabolcs-Szatmár-Bereg county, Hungary Organization County Tourist Association (Mature), Tourist Commission and Monuments Assembly Szabolcs-Szatmár-Bereg county, **local organizations**: Organization of the National League Regional Cooking Nyregyhaza region, the Commission of Culture and Tourism of the city Nyregyhaza, Bathing Sóstó and within organizations: Bureau of Rural Services and Tourist Information - Tiszalok, Center for Tourism and Recreation - Kisvarda, Association of Rural Tourism Szatmár-Bereg-Tivadar, Association Plum Road "-Vasarosnomeny and Vasarosnomeny Tourist Association and its region. All have had and will have a more important consideration in the future in the areas of institutional building, training of human resource and strategic planning processes for sustainable rural development, assessment and survey in all areas of social and economic development process integrated rural development, and extensive collaboration with other organizations.

The Local Development Agencies are organized in two specific forms of data on the nature of local interests and zonal development objectives, namely: **Micro forms** for NGOs telecentre and that type of **intercommunity development associations** to local government institutions. To achieve these common objectives, but cooperate as public-private partnerships, forms that have ensured the exchange and transfer of experience, support and cultivate mutual trust permanently. The widest form of association is the **Association for Services Intercommunity Development in water** and wastewater sector in Satu Mare County, which brings together 30 municipalities. Along with this note: micro region for development of the area Commons Satmar, which includes the municipalities: Botiz, Dorolţ, Lazuri, Small, Odoreu, Păuleşti, Satu Mare and Vetiş Viile Association and the Rural plain Careiului Ér founded in 2005, comprising 16 councils local municipalities: Petreşti, Pişcolt, Urziceni, Foieni, Berveni, Căpleni, Andrid, Pir, CAUAS, Ciumesti, Student, Cehal, Tiream, Santos, Sanislău and Săuca, and Association for Cooperation and Development established in 2005 microregion Tăşnad including 7 Local Councils in the region southeast of Satu Mare County: Tăşnad, Andrid, Cehal, Pir, Santos, Săcăşeni and Săuca and Civil Association for Community Development Tăşnad, thus eight founding members, the Association containing the micro region of Oas County towns : Negre-Oas, Cert, Bixad, Târşolţ, Cămârzana, Calinesti-Oas, expeller, Batarci, Gherţa Small and Customs, and ProSomeş Codru micro region, aimed at rural development, attracting investors pews,

addressing infrastructure and rural tourism development, consisting in rural communities: Ardud, Beltiug, Bogdand, ACIS, HomoroadeSupur, Socond, Terebesti and Viile Satu Mare and **Rural Development Association pro-MAJA**, the sole member Bogdand common.

To these are added up in the micro-regional structures for specific purposes**: Association of Micro-natural ecosystems** - are outside the criteria of specific territorial and socio-economic development of communities under the protection of natural values, as members of communities: Halmeu, Lazuri, Micula Porunbeşti, Turulung, Gherța mica, Calinesti-Oas, Agris, Livada and Dorolț.

Their objectives are:

1. revitalization of rural areas;
2. rural economic recovery and development potential
3. improve the quality of education and social services in rural areas
4. improve the quality of government services in rural areas;
5. Support for protection and preservation of natural environment;
6. preservation and promotion of cultural traditions and local
7. promote community development activities in rural tourism;
8. organizing courses for qualification and retraining;
9. organizing seminars, conferences, symposia, festivals, contests, opinion polls, publications, setting up clubs for leisure activities, libraries, study centers and documentaries, workshops, distribution of material promoting tourism;
10. creation of adequate and qualified human resources to provide IT and communications facilities for strategic planning activities.

Specific activities:

1. initiation and development programs, projects and documentation for the economic, social and cultural
2. small infrastructure projects to improve accessibility to the area and providing necessary public facilities;
3. projects for development and enhancement of the area as tourism potential,
4. projects for income generating activities and employment;
5. projects for agricultural development;
6. implementation of a program unit area for the value of traditions, habits, and recovery products and crafts and craft
7. development of a system for fundraising;
8. the conditions necessary and organizing training courses,
9. information and documentation to identify and develop projects financed by the European Union,
10. encouragement, guidance, help organize community members of civil associations in order to facilitate resolution of issues of common interest, including by making partnerships with other NGOs in the country and abroad;
11. achieve a framework and community development activities by identifying the possibilities and local 12. stressing the new possibilities of cooperation between business enterprises, civil society and public sector in the development zone
13. creation, development centers Micro "," Information Centers "and" Citizen consultancies, which provide the framework for achieving human resources, qualified staff, volunteers and contributors

To identify to achieve efficient completion of its local initiatives and equipped with IT equipment and communication facilities. Vision for the future of their business is designed to: - acquiring recreational consultancy and training under the Leader axis of PNDR 2007-2013 to develop local strategies for rural development and of the area (micro-regional) - development and strengthening collaboration in partnership public-private-profit - providing the function of real partnership working, by opinion polls and interviews, - create conditions for cooperation with The Leader in territorial cooperation projects with other micro-regions in Hungary, Ukraine, Slovenia and Poland - making partnerships as effective on a district , project, community or area spatial dimensions: area, regional and international levels; - Formation and training of counselors in micro generation, development and management of cross-border development

projects, thereby building cross-border trade and economy, and facilitating information exchange and cooperation between the target micro. In this respect, most of them will enjoy the support and support know-how through a program "group mentoring" in Hungary.

CONCLUSIONS

Positioning proximal border of Satu Mare County was likely to create some disadvantages attached peripheral position in relation to domestic development centers share a number of other benefits conferred by the structure of many ethnic and multicultural communities Components. They were likely to secure governmental structures through support element transfer and exchange of experience, and sometimes lead structures for implementation of European Community visions of community through support fellow countrymen (Hungarian and German) or co-religionists (Catholic and Reformed). Through these local non-governmental organizations supported by charitable aid or technical assistance and material conditions of release were established in rural Spot concepts of management by projects, such as to advance their practice not only our country but also correct perception of administrative levels on their implementation (years 1998-1999). Promoted and implemented the elements of strategic planning and sustainable integrated rural development strategy, strategic analysis and have shown the importance of human resource development and volunteer activities. That these issues should be considered in rural areas were noticeable shifts since rural show in general the largest opposition to elements of nature and most innovative trends inertia to change, or just in these environments were created conditions not only of aquesare these new principles, but even the general public and youth involvement in voluntary activities and association. Category represented the youth population is the most important accomplishment and gain the projections of future strategic nature and success of sustainable rural development, is perhaps the most important resource, which will require training if not the largest financial effort, very likely the biggest investment of commitment and time. One can appreciate that in the Satu Mare County there is a real win given the existence of these forms of assistance and advice to nonprofit institutions, with a commensurate contribution currently difficult but not only were the precursors factors act consultancy strategic planning, but covered a period of development of process specific pre-accession rural development and structural components of which was precisely the deficit and critical competence in this field.

REFERENCES

1. Romanian Association for Transparency Monitoring Report management of structural funds in Romania - Phare / 2005/017-553.01.02.-33., Developed under the pilot program "to create a national network of NGOs to monitor the integrity of the use of structural funds in Romania in January 2007 - August 2008 "Development Region 6, page 26. 2. The project "Tourism without Borders" developed by the Chamber of Commerce, Industry and Agriculture Satu Mare, the program CBC Romania-Hungary in 2004, PHARE CBC 2004 EN 2004/016-940.01.01.01.14 3. Border Tourism Development Strategy Satu Mare-Transcarpathia, publication published under the "Tourism without frontiers in Satu Mare and Transcarpathia" funded by the Romania-Ukraine Neighborhood Program, PHARE CBC 2004 EN 2004/016.-942.01.01.01
4 . Stage Training Network LEADER and Rural Development - LEADER Service and Rural Development Network, Wah 7-10 November 2006
5. http://www.satumare. Insse.ro / main. Php? = 405.html
6. http://www.satu-mare. uk / mayor / news / intercomunit.html 7. http://www.samexpo-sm.ro/climatul-afaceri-si-investitii/satu-mare.html
8. http://www.cjsm.ro/microreg-satumare-J-cuprins-02.html.

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CONCEPTUAL MODEL OF INTEGRATED APIARIAN CONSULTANCY

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Key words: *integrated apiarian consultancy, conceptual model*

Abstract

The socio-economic field researches have indicated the necessity of realizing an integrated consultancy service for beekeepers that will supply technical-economic solutions with a practical character for ensuring the lucrative ness and viability of the apiaries. Consequently, an integrated apiarian consultancy model has been built holding the following features: it realizes the diagnosis of the meliferous resources and supplies solutions for its optimal administration; it realizes the technical-economic of the apiarian exploitation adapted according to its objectives and identifies its optimal administration measures; it manages the local pollination services market; it realizes viable investment projects and ensures the management of their implementation; it elaborates aggregated indicators as efficient instruments of analysis and utilizes and informatics application of apiarian management used for realizing the specific objectives of the apiaries; it integrates the technical, economic and juridical consultancy service.

INTRODUCTION

The purpose for elaborating this concept consists in realizing a package of complete and integrated services, adapted to apiarian exploitations. These characteristics also represent the elements of innovation of the model.
The integrated consultancy model in apiculture assumes assuring information, counseling and representing beekeepers after their main preoccupations: the administration of the meliferous resource, apiarian technology, pollination services, the commercialization of apiarian products, legislation, design, apiarian management, and the improvement of the level of the economic results.
This integrates the modular consultancy services to assure an efficient consultancy services package through the utilization as resources of the information resulted from each type of service that comprises the package.
The model proposes adapting consultancy services on various types of beekeepers by their objectives as: beekeepers-owners, beepers-entrepreneurs, beepers-investors and viable beekeepers.

MATERIAL AND METHOD

The utilized research method in the present paper is represented by the socio-economic interview technique on the sample basis.
The first phase of this was the areolar type sampling that consists in dividing the concerned space in sectors differentiated by a certain characteristic. The Romanian territory was divided in six specific areas from apiarian point of view names bio-apiarian zones bounded by the volume of the meliferous resource [2]. These are differentiated by the type of terrain, altitude and longitude – determinant elements for the volume and distribution of the meliferous resource. By the share of the volume of the meliferous resource at national level it has been determinated the number of counties that have been part of the sample in the group. Thus, 21 representative counties have been identified.
In each county, the sampling of apiaries by size groups of bee families effectives were necessary as following: 0-50 families; 50-100 families; over 100 bee families.

This sampling was realizing according to the quota procedure that involves two stages, the first consisting in building a reduced model of the population concerned in the research and the second consisting in establishing of subjects quotas for each operator [3]. The model is defined by the size of the apiaries and their share in each group resulting a dimension of the sample of 126 apiarian exploitations.

The second phase consisted in realizing the investigation plan that comprised the interviewing technique, the type of interview, moment, interview guide and the means through which these are realized.

The interview guide was previously verified in a pre-inquiry realized on a reduced number of subjects aimed at discovering any discrepancies, completing and adapting the questions in relation to the way in which this was received by the interviewed population and the measure in which it offered the expected results.

The moment of realization of the investigation was in spring because in this season the final results are known both regarding the final production and sold the previous year and the hives losses accured over the winter. At the same time, it has been necessary avoiding the period in which the beekeepers are out in pastoral, that is why the month of April has been considered as being the optimal period of realizing the interview.

The utilized materials have been those specific to socio-economic field researches: interview sheets, tables with the studied population, maps etc.

RESULTS AND DISCUSSIONS

The objectives of the integrated consultancy service in apiculture are:

- Increasing the level of fructification of meliferous resources available to the apiarian exploitation;
- Increasing the level of efficiency in the supply with inputs;
- Elaborating adapted and efficient technological models;
- Developing the bee pollination services market as a vector for the increase of beekeepers welfare;
- Insuring the informational and consultative support in a legal aspect;
- Improving apiarian exploitations marketing;
- Insuring the technical-economic design and the implementation management for investment project;
- Developing an efficient management at the level of apiarian exploitations;
- Insuring financial and accounting assistance;
- Providing the technical-economic instruments for improving the economic efficiency of apiarian exploitations.

The integrated consultancy service in apiculture has a modular form interconnected an interactive PIVOT database, connected to the databases specific to each module.

The modules that are part of this package respond punctually to each specific objective of the package:

- Consultancy in the administration of meliferous resources;
- Consultancy in supply;
- Technical consultancy;
- Brokerage and counseling of bee pollination services;
- Legal counseling;
- Marketing consultancy;
- Technical-economic design;
- Consultancy in apiarian management;
- Financial-accounting consultancy;
- Technical-economic consultancy;

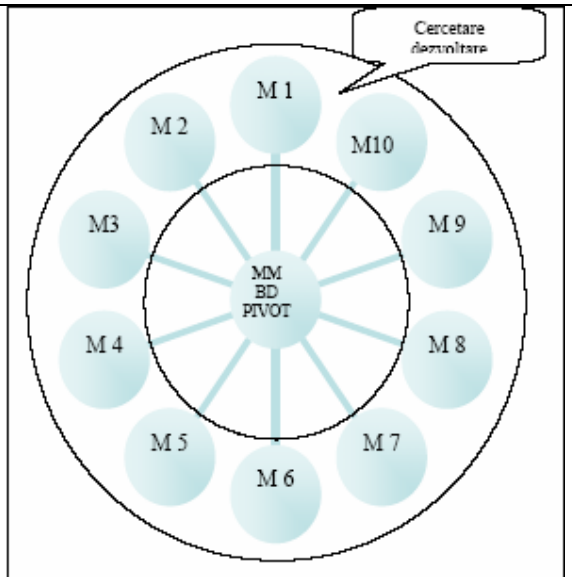

Fig. 1 The integrated and modular structure of the conceptual integrated consultancy model in apiculture

Each module requires the existence of a consultant in the specific module area, a procedural protocol and a specific instrumentation.

The expert consultant must hold specialty knowledge's tested by recognized publications and relevant experience. This can be an employee of the company supplying integrated consultancy services or an external consultant.

The procedural protocol requires the delimitation of each work stage, internal regulations, work methodology and the set of result indicators.

The module specific instrumentation comprises: pilot apiaries, analysis instruments (if any), vehicles, computer hardware and common and specific software elaborated by the company board.

The beneficiaries of consultancy services

The economic consultancy in apiculture addresses all beekeepers, but especially the representatives of apiarian exploitations with a commercial purpose.

Module 1 Consultancy in the administration of meliferous resources has the following attributions:

1. The quantification of the meliferous potential available to apiarian exploitations by volume, evolution, variability aspect for which a set of indicators, maps of meliferous resources and meliferous resources evolution scenarios are realized. The utilized methodology comprises field determining techniques, GPS and ImageSAT functions, as laboratory analysis.
2. The identification of the means of increasing the economic efficiency in utilizing the meliferous resource for which adapted models of efficiency of the fructification of meliferous resource is realized.
3. The elaboration and administration of specific interactive databases which hold information regarding the size of the meliferous resource on micro-zones.
4. The administration of the section of the website for public use with general information about the structure of this module.

Module 2 Consultancy in supply has the following activities:

1. The identification of inputs suppliers: apiarian inventory, supplies, transportation services etc.
2. The elaboration and administration of the specific interactive database that hold information regarding suppliers;
3. The conclusion of collaboration conventions with agreed suppliers;

Module 3 Technological consultancy has the following activities:

1. Providing maintenance models of bee families on various technological variants;
2. Adapting the technological models for each beneficiary depending on the internal environment and internal situation of its exploitation;
3. The elaboration and administration of the specific

interactive database regarding the utilized method and their results;
4. Verifying the reference technological solutions in the pilot exploitations;
5. Elaborating and updating the breviary with adapted technological solutions.

Module 4 The brokerage and counseling of bee pollination services holds:
1. The promotion of bee pollination services;
2. The identification of potential beneficiaries;
3. The conclusion of collaboration protocols;
4. The administration of the database with potential beneficiaries of bee pollination services;
5. The elaboration of optimal pollination routes..

Module 5 Legal counseling holds:
1. Providing updated legal information;
2. Legal assistance.

Module 6 Marketing consultancy has the following activities:
1. Identifying the distribution channels for apiarian products;
2. Identifying potential buyers for apiarian products;
3. The administration of the database with potential buyers of apiarian products;
4. Providing information regarding the market situation.

Module 7 Technical-economic design consists of:
1. Realizing initial or modernization investment projects from own resources or financing funds;
2. Insuring the project management;
3. Insuring the counseling after the finalization of the investment project;
4. The elaboration and administration of the specific database with investment project models.

Module 8 Consultancy in apiarian management holds:
1. The elaboration of the diagnosis of the apiarian exploitation management;
2. Providing the instruments for improving the managerial performance;
3. The elaboration and administration of the specific and interactive database that holds information about the management of apiarian exploitations and instruments for improving its efficiency.

Module 9 Financial and accounting consultancy assumes:
1. Insuring the bookkeeping;
2. Realizing the documentation for obtaining credits.

Module 10 Technical-economic consultancy.
1. Elaborating the technical-economic diagnosis application;
2. Elaborating the technical-economic solutions breviary;
3. Elaborating the informatics applications for simulating the implementation of technical-economic solutions;
4. Verifying the reference technical-economic solutions in apiarian exploitations;
5. The elaboration and administration of specific database that holds information regarding the economic performances of apiarian exploitations and the adopted technical-economic solutions.

The information management and the interactive „PIVOT" database represents the integrating component of the system holding as a purpose the administration of information from the specific modules [1]. This allows accessing of all information in an efficient manor and updating them in real time. Thus, at any time, information about a beneficiary, a beneficiaries group or all

beneficiaries can be accessed. Also, the information in the specific databases of each module will be easily updated.
The transfer of information from PIVOT to the module is controlled by the database manager depending on the necessity and the particularities of each module.
This flow of information will be used also for the transfer of obtained results from the research and development activity, common or realized by each module. These results must hold a practical character and must be verified in the pilot exploitations so they can be utilized effectively in the modules activity.

CONCLUSIONS

1. The integrated apiarian consultancy model is a complete consultancy services package, integrated and adapted to apiarian exploitations.
2. The integrated apiarian consultancy model elaborated has the following characteristics: realizes the diagnosis of meliferous resources and provides solutions for its optimal administration; realizes the technical-economic diagnosis of the apiarian exploitation depending on its objectives and identifies its optimal administration means; manages the local pollination services market; realizes viable investment projects and insures their implementation management; elaborates aggregated indicators as efficient instruments of analysis and utilizes a software application of apiarian management useful for realizing the specific objectives of apiarian exploitations; integrates the technical, economical and legal consultancy services.

REFERENCES

[1] Ciurea Ioan Valeriu, 1999, Management în exploatațiile agricole, Editura „Ion Ionescu de la Brad", Iași, Capitolul 3, p. 135;
[2] Malaiu Aaurel, Bucată P., 2001, Condiții necesare pentru organizarea fermelor apicole, România apicolă nr.8/2001, Ed. Apimondia, Bucureşti, p.6.
[3] Mărghitaş L. Alexandru, 2002, Albinele şi produsele lor, Editura Ceres, Bucureşti, Capitolul 2, p. 65-66;

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THE OUTSOURCING OR INTERNALISATION OF ACTIVITIES IN APIARIES IN ROMANIA

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Key words: *internalization, outsourcing, beekeeping*

Abstract

The research presented has been the result of the necessity of the growing performances of apiaries in Romania on the basis of increasing the level of fructification of the used resources. The most important activities that may be subject to the outsourcing process are: honey extraction, transport, the primary processing of apiarian products, packaging, bottling and labeling, marketing of bee products, financial-accounting records, the analysis the technical-economic projection, juridical assistance, promotion of apiarian products and services. The fructification of the mobility of certain activities in apiaries can be achieved by the following steps: the quantification of the level of usage of the available resources in the exploitation, the identification of alternatives to their own activities and the comparison of costs of alternatives with those of their own activities.

INTRODUCTION

In the activity of apiarian exploitations, in the same apiarian year or from one year to another, beekeepers are faced with a dilemma regarding to the volume and structure of works needed to be realized. A part of these activities that must be realized for obtaining the apiarian production or for its commercialization can be transferred to other economic units (third parties) as: the transport of bee families in pastoral, apiaries security, the honey extraction, product commercialization, bottling, packaging, labeling technical-economic design etc.
The beekeepers must decide what are the activities that will be realized through their own efforts and that will be transferred to other units. [3]

MATERIAL AND METHOD

The research method utilized was the case study realized at an apiarian exploitation in the Iasi County with a 60 bee families effective, a mixt maintenance system (stationary and pastoral on small distances) whose main production is honey and secondary – wax.
The utilized information is specific to 2009 and the external factors values are established as county averages.

RESULTS AND DISCUSSIONS

The outsourcing consists in the decision to transfer, per charge, some own activities of the apiarian exploitation in favor of a third person. Par example: beekeepers that maintain bee families in the pastoral system have the possibility to transport the bee families with their own transport vehicles. Many times, these own small sized vehicles and must make many trips to move the entire apiary. In these cases, outsourcing the transport activity consist in utilizing specialized transport services.
The internalization of activities in apiarian exploitation consists in realizing through own efforts of some activities that, until that time, have been realized by third parties. Par example: some beekeepers transport hives in pastoral until a certain time soliciting specialized transport services. In some situations in which the distance to the pastoral

hearth is small, they decide to transport the bee families with their own vehicles although they have to do more trips. In this situation, they have internalized the bee families transport activity.

The objectives of the internalization or outsourcing decision of the transport activities:

- Improving the level of usage of own resources;
- Improving the economic efficiency of the apiarian exploitation;
- Insuring some technological demands;

The improvement of the level of usage of owns resources require the realization of a technological flow adapted to the specific resources of the apiarian exploitation such as work force, capital, and meliferous potential.

According to this principle, beekeepers must organize the activities in their exploitation thus that the work force should be occupied the entire year and every day of work, the production means to be utilized in a greater measure and the meliferous potential to be completely fructified. Thus, beekeepers must determine the level of usage of available resources and identify the activities that can lead to its increase.

For the example of the transport in pastoral, beekeepers that own vehicles that are indispensable for the apiarian exploitation will realize the trips with the own vehicles to utilize this means as much as possible.

In the apiarian exploitation at which the case study has been conducted, the following calculation can be realized:

If the own vehicle is used:

- Apiary size = 60 hives;
- Transport distance (round-trip) = 100 km;
- Fuel consumption = 7,5 l/100 km;
- Salary costs = 90 lei/day;
- Work consumption = 4 hours/transport or 0,5 days/transport;
- The vehicle has the capacity of 20 hives;

Than the costs will be:

- Fuel costs = 3 transports x 7,5 l fuel x 3,5 lei/l fuel = 78,5 lei;
- Salary costs = 3 transports x 0,5 days x 90 lei/day = 135,0 lei;
- Total transport costs with own vehicle = **213, 5 lei.**

If transport services are utilized:

- Same distance = 100 km
- Fare = 2,5 lei/km
- Total costs with transport services = **250, 0 lei.**

This simple calculation shows that the transport services is more expensive than the transport costs with the own vehicle. In this case, the beekeeper will utilize its own vehicle and its degree of usage will increase.

We mention that, for the given situation, we won`t take into consideration the own fix costs because the vehicle is necessary to the apiarian exploitation and the beekeeper cannot dispense of it.

Still, if the sum of fuel and work force costs will be higher than the fare of the transport services the following principle must be pursued.

The improvement of the apiarian exploitation lucrativeness is the criterion that imposes the substantiation of the technological flow structure on economic efficiency principles. The beekeepers will outsource the activities that require superior expenses with external services and will internalize the activities that determine smaller costs to the costs with acquisitioning these services.

There can be cases in which the sum of all fixed and variable costs determined through the utilization of the own vehicle to transport the apiary in pastoral in the entire apiarian season is superior to the expenses with the acquisition of transport services for the similar period. Than the outsourcing of the transport in pastoral will be necessary and the use of the vehicle in other purposes. If this is used for other activities also in the exploitation, the realization of an economic analysis is imposed in which the expenses and incomes specific to these activities must be included.

A calculus model has the following form:
If the own vehicle is used for transporting the hives in pastoral and for the beekeepers transport to realize work in the apiary:

- Apiary size = 60 hives;
- Transport distance (round-trip) = 300 km – distance from the hearth of wintering at two picks with a distance of 100 km each and the trip back to the hearth of wintering;
- Number of trips of the beekeeper to work in the apiary = 12;
- Fuel consumption = 7,5 l/100 km;
- Workforce costs = 90 lei/day;
- Work consumption = 4 hours/transport or 0,5 days/transport;
- The vehicle has the capacity of 20 hives;

Than the costs will be:

- Fuel costs at hives transport = 9 transports x 100 km x 7,5 l/100km fuel x 3,5 lei/l fuel = 235,5 lei;
- Fuel consumption at beekeeper transport = 12 transports x 100 km x 7,5 l/100km fuel x 3,5 lei/l fuel = 314,0 lei;
- Salary costs = 9 transports x 0,5 days x 90 lei/day = 405,0 lei;
- Other fixed costs (insurance, road tax, repairs, maintenance amortization) = 1430 lei/year;
- Total transport costs with own vehicle = **2384, 5 lei/year.**

If differentiated transport serviced – hives -> beekeeper are utilized:

- Same distance for the hives transport = 300 km;
- Fare hives transport = 2,5 lei/km;
- Distance for beekeeper transport = 12 x 100 km;
- Fare beekeeper transport = 1,0 lei/km;

Than the expenses with the acquisition of transport services will be:

- Costs with hives transport = 300 km x 2,5 lei/km = 750,0 lei;
- Costs with beekeeper transport = 12 x100 km x 1,0 lei/km = 1200,0 lei
- Total costs with transport services = **1950, 0 lei/year.**

Consequently, the beekeeper that is in this hypothetical situation will spend more with 434,5 lei/year if he will realize its transport and of the hives with its own vehicle. In this situation, it is indicated the outsourcing of the transport service.
This analysis is necessary also in the case in which for keeping the own vehicle for transport there are other motivations such as those of technological or personal nature to know the cost of compliance with these considerations.
In some situations, some alternatives can determine to obtain supplementary incomes. In this case, the previous analysis will be completed with the determination of the supplementary benefit determined by choosing this alternative. These are determined with the following relation:
$Bs = Vs – Ch_s$ where:
Bs – supplementary benefic determined by choosing the analyzed alternative
Vs – supplementary income determined by choosing the analyzed alternative
Ch_s – supplementary costs determined by choosing the analyzed alternative
In the following example, we present the alternative of replacing bee swarming queens from the own apiary in comparison purchasing selected queens.
We assume that utilizing queens from the own apiary require work force costs, establishing fecundation swarms, their stimulation and supervision at a cost of 12 lei/bee family.
On the other hand, utilizing selected queens require purchasing expenses at which we add eventual losses. We estimate these costs at 38 lei/bee family.
Instead, these could determine an increase of the honey production with 5% that would reflect in the increase of income with 28 lei/bee family in the two year of utilization.
The determined benefit of the two variants will be:

Variant 1: 0 lei/fam. – 12 lei/fam. = -12 lei/fam.
Variant 2: 28 lei/fam. – 38 lei/fam. = -10 lei/fam.

Consequently, if the beekeeper uses queens forom its own apiary will lose 12 lei/bee family and if he uses selected queens will lose with 2 lei/bee family less.

So, starting from the previous assumptions, is recommendable the utilization of selected queens. If the supplementary income determined by using these queens would be of 20 lei/bee family, their usage could not be justified because the loss would have been of 18 lei/bee family. As well, the increase of production may be of 10% and than a supplementary income of 56 lei/bee family will be obtained resulting a benefit of 18 lei/bee family.

Although these calculations are based on some estimations is more than obvious the most opportune variant.

The insurance of some technological demands requires the correlation of the outsourcing or internalization decision of the apiarian exploitation activities with the necessities of the bee family or the particularities of apiarian products. [1]

Par example, is recommended the outsourcing of bottling and labeling the honey for lots of big sizes. The fare for this activity is smaller than the production cost if the bottling and labeling is done by the beekeepers own means. In this case, an impediment intervenes regarding the properties of the honey: this might crystallize till commercialization. In this case, the beekeepers must appreciate what is the quantity of honey that can be commercialized in a given period of time, smaller than the one till crystallization. So, the beekeepers that hold great quantities of honey and a good sales flow will outsource this activity and the others will realize this activity through their own means (if these exist) or will sell the honey bulk.

Another relevant example is outsourcing the honey extraction. It is well known the fact that for an own extraction chamber, properly equipped and authorized by resort organisms requires high fixed costs and a small level of usage. Many times this chamber is used for extraction effectively 3-4days/year resulting a degree of usage of aprox.1%. This activity can be realized per charge in the big apiarian exploitations that hold this type of extraction chambers. The advantage of this decision is mutual: for the beekeeper because he doesn`t need to make investments and then to increase the volume of expense with this and for the owner of the extraction chamber in the sense that it will grow the degree of usage of this fixed mean.

Appear instead at least two issues of technological nature: the extraction of honey is done in the same period and the extraction chamber might not be available and the bee families cannot be left for a long period without the frames because the risk of swarming appears. [2] The first problem might be solved by devising a programming of the period in which the extraction of honey will be done in the own exploitation and of the period in which the chamber can be rented. The second problem can be resolved by using reserve frames and hives bodies.

The solutions to the problems that appear have a particular character and must be identified at each exploitation level but the possibility of outsourcing or internalization of apiarian activities represents a lever that can determine the increase of the level of results in apiarian exploitations and, finally, of the welfare of beekeepers.

Regarding the time and their succession, in any economic unit, promptly, in the technological processes, some activities are outsourced and some are internalized depending on the internal and external situation of the unit. If at any given time the price of sherbet will be smaller than its production cost in the exploitation, this will be purchased as is, and then if its price will rise it will be necessary it`s realization in the exploitation. At the same time, if the beekeeper wishes to realize a financing project and holds the time, knowledge and logistics necessary he will elaborate the documentation for this on its own. On the other hand, if he doesn`t hold these resources, it will be more convenient to use consultancy services than to acquire the necessary logistics

and to consume from the time allocated to the apiarian activities in which he is specialized.
Instead, not all activities can be outsourced or internalized without the loss of the integrity of the main activity of the apiarian exploitation. The technological activities cannot suffer this mobility because they are organically tied to the production process and their outsourcing would implicate in fact changing the economic units` activity domain.
The activities that can be internalized or outsourced at the level of apiarian exploitations are: honey extraction, transport, the growing of queens for own needs, some activities in the repair and maintenance on apiarian inventory, primary processing of apiarian products, packaging, bottling and labeling, the commercialization of apiarian products, apiary security, meliferous potential research etc.
Of course that at the level of each apiarian exploitation a part of these activities can be mobilized and in the case of others new activities can be identified. The decision is held by the exploitation manager.

CONCLUSIONS

1. The improvement of results in apiarian exploitation is possible also through the fructification of the mobility of some of its activities.
2. The fructification of the mobility of some activities in apiarian exploitations can be realized by the following stages: the quantification of the level of usage of available resources in the exploitation, the identification of alternatives of own activities and comparing the costs of alternatives with those of own activities.

REFERENCES

[1] Lazăr Ştefan , 2002, Bioecologie şi tehnologie apicolă, Editura Alfa, Iaşi, Capitolul 5, p. 123;
[2] Mărghitaş L. Alexandru, 2002, Albinele şi produsele lor, Editura Ceres, Bucureşti, Capitolul 1, p. 16-19;
[3] Neagu Vasile, 1993-Un pastoral raţional = rentabilitate = profit, România apicolă nr.4/1993, Ed. Apimondia, Bucureşti, p.9.

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THE IMPORTANCE OF RURAL ENVIROMENT AND AGRICULTURE IN THE ECONOMICAL-SOCIAL CONTEXT OF ROMANIA

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Abstract

The importance of the rural environment in Romania and the economic difficulties that the country is facing, is required the development of a competitive agriculture and integrated in its natural, economical and social environment, taking into account that last year the agricultural sector was the one that raise GDP by 1% in the third quarter, in the context of actual crisis, in which the rest of the sectors have decreased, the only sector which grew by 2,5 percentage compared to 2008 was the agriculture. The research follows the highlighting the importance of the rural environment and of the agriculture, and their funding opportunities in the economic-social context, through the program APIA based on the Directorate State AID and Subsidies, through Structural Funds and European Funds as PNDR..As method we used the result and the questionnaires used in previous years on the agricultural side and rural environment from the programs and structural funds used for rural environment development as well as and of the competitiveness and the development of the agricultural sector. The results want to highlight the importance of rural development and agricultural sector in the current economic context through the funds offered by Europe and Romania.

INTRODUCTION

We consider that, the development of the agriculture sector would lead to the simplification of the problems brought by the global financial crisis and through an agricultural policy and of rural quality development, not only in Romania, but all the affected countries would succeed to overrun the financial crisis. The importance of the rural environment in Romania and the economic difficulties with which the country is facing require competitive agricultural development and integrated to its natural economic and social environment, taking into account that last year the agricultural sector was the one that raised by 1% percentage the GDP in the third quarter, in the context of the current crisis, in which the rest of the sectors have fallen, the only sector which grew by 2.4 percentages compared to 2008 was the agriculture[8]. In this paper is followed also the funding opportunities through the APIA program based on the Directorate of State Aid and Subsidies, by structural funds and through European Funds like PNDR. For 2010 the PNDR program has an amount of 1.359.770/651 euro allocated, and the APIA program 279.8 million euro for the unique area payment which is about 81 euros/hectare [4]. The financial resource is very important and to it its tied primarily carrying out the rural development, but it mustn't lose sight of any resources other than the pecuniary nature, like the maximum exploitation of the lands or stimulating the youth to return to villages, which require large sums of money, an awareness of the population beside the global financial situation in which we are[5].

MATERIAL AND METHOD

With over 56 % of the population in the 27 Member States of the European Union (EU) living in rural areas, which cover 91 % of the territory, rural development is a vitally important policy area. Farming and forestry remain crucial for land use and the management of natural resources in the EU's

rural areas, and as a platform for economic diversification in rural communities. The strengthening of EU rural development policy is, therefore, an overall EU priority.

AS research methods are used the questionnaires by the funding programs to observe how much from the offered funds by EU and Romania war effectively used, and of the authorized statistic institutions to present the share of agricultural surface of Romania and of figures afferent to agriculture from the previous years.

RESULTS AND DISCUSSIONS

The importance of agriculture and rural development in Romania

The 2007, the date of Romania's accession to the European Union, marks a new era in the agricultural economy and rural development of our country. In this context, Romania, has to quickly adapt its agricultural economy and rural development for the possibility of integration in the internal market of EU and fully adopted the Commune Agricultural Policy (PAC).

The accession to EU,, is probably the most powerful pressure factor for the rapid reform of the agriculture and rural Romanian economy, given the necessity for successful integration in the European rural economy.

The European model of agriculture is based on a competitive sector, oriented towards market, satisfying however, and other public functions, such as environmental protection, providing of some residential settlements more convenient for the population from the rural space, as well as and integrating the agriculture with the environment and forestry. The Commune Agricultural Policy it moves its accent from the direct subsidies granted to agriculture (Pillar I of the PAC) towards integrated development of the rural economy and to environmental protection (Pillar II of PAC).The Romanian rural economy, dominated by agriculture in large part, is still poorly integrated in the market economy. In the actual context of market economy, by the way of understanding and applying the marketing techniques depends the welfare of citizens from the rural and urban area, as well ass and the welfare of the agricultural producers.

The Romanian producer must act in line with the existing economic reality on global and national plan, to apply technical and economical methods to provide stability and secure economic efficiency. The producer is forced to produce what is required under the domestic and international market, to respond promptly to the consumer needs. The favorable geographic conditions, relief, climate, fertile soils, to which are added the qualified labor, the population attachment from the rural environment for land and animals, a adequate institutional administrative system, can make the Romania's agriculture an attractive and profitable domain of activity. Nationally, the agriculture is one of the most important branches of the Romanian economy.

Romania has an important potential of development, but unused. Romania, with a territory of 238.391 km², almost equal to that of Great Britain (244.820 km²), occupies the ninth place among the 27 member states of the European Union, after France, Spain, Sweden, Germany, Finland, Poland, Italy and Great Britain. It represents 6% from the total surface of EU and 4% of its population. The investments and competitiveness from Romania are still elements that must be improved, to make it an acceleration of the economical growth and ensuring a convergence of the incomes with the ones from EU. The report between the arable land of the country to the number of inhabitants shows that to every habitant are coming about 0,42 ha arable terrain, superior value of many European countries and almost twice compared to the European average which is only of 0,235 ha/habitant.

Throughout the transition period, the agriculture played an important social role, acting as an occupational "buffer" against the socio-economical effects of the transitions, absorbing a large share of labor dismissed by the urban industries. A third of the country's employed population works in agriculture, which places Romania more than the average of 5.9% of the EU 27 countries. All this

reasons places Romania among the countries with a high agricultural potential.

Even if we stay very well at the chapter "arable land", compared to other EU countries, not the same thing we can say when it comes to its use. According to a report made by BCR, the labor productivity in agriculture in real terms has not improved over the past five years, but the harvested area has decrease by about 10% during 2003-2008.

There were also case in which the foreign investors came to Romania just to buy arable land at a price between 3 an 7 times lower than in the West and then to resell at higher prices. Restructuring the agriculture and revitalizing the rural economy can be important levers of development. At present, there is a significant difference between the performances of Romanian agriculture and those of the EU, the profitability of Romanian agriculture being inferior to that of the EU. The process of increasing the natural potential of agriculture depends upon the combined efforts of all the decision factors involved.

Romania's territory represents approximately 6% (5.51%) of the total 4,325,787 km² which represents the UE-27. From the 23,8 million hectares that summarize the Romania territory, its agricultural surface is of 14,7 mil ha (71,7%), of which 9,4 mil. ha is arable land. Romania is located on the 7th place in Europe as agricultural area (after France, Spain, Germany, Poland, Britain and Italy) and o the 5th place as arable surface (after France, Spain, Germany and Poland). In what concerns the gross domestic product (GDP), we mention that the share of the agricultural sector within Romania's GDP has decreased significantly in the last 4 years, from 12.6% in 2004, it dropped to 6,5% in 2008. Compared with the same period in 2008, the Romanian economy fell by 6,6 percentage, and, on the whole year 2009m the GDP was with 7,2 percentage under the level of the previous year.

The contribution of agriculture to GDP has always been high. The share of agriculture to GDP it was in 2002 of 11.4%, in 2003 of 11,6%, in 2004 12.6%, in 2005 8.4%, in 2006 of 7.8%, in 2007 of 6.15 %, in 2008 of 6,5% and in 2009 the agriculture reduced its contribution to 3.8%.

The distribution of the land after the way of using shows that the arable terrain occupies about 64% of the agricultural area, and one third from the surface, 4,8 mil. Ha, is occupied by pastures, meadows, and vineyards and orchards is about 3%.

Table 1. Land fund, after manner of use

Specification	2007 Thousands ha	2008 Thousands ha	2009 Thousands ha
Agricultural are, from which:	14709,3	14712,4	14705,3
Arable	9423,3	9387,2	9384,4
Pastures	3330,3	3384,3	3380,7
Meadows	1531,4	1525,3	1526,7
Vineyards and vine nurseries	218,0	216,0	214,4
Orchard and fruit nurseries	206,6	199,6	199,1

Causes of non-performing agriculture in Romania

The performance in agriculture was low and became increasingly unstable. This is the result of a dual structure and "old" of the agricultural exploitations, lack of markets which to support the restructuring and modernization of the agricultural sector and of food industry that hasn't yet completed the process of restructuring and modernization.

The share of agriculture in gross added value is significant in Romania (7.5%) compared to EU-27 average of 1.9%, a similar situation being meet in Bulgaria, Lithuania and Poland. Apart from the European funds, the local opportunities may arise in applying a regulatory framework more stable and predictable as a result of implementation of PAC, with positive effects in terms of price stabilization. The full capitalization of the advantages of integrating Romania in EU could open new opportunities for the Romanian farmers that will have the possibility to supply the market with a population exceeding 80 million inhabitants.

In theory, Romania can become the third European agricultural power after France and Germany in terms of better absorption of EU funds until 2013, of some significant direct foreign investment and a certain government support. Despite the fact that Romania holds an agricultural potential, according to the

specialists it could feed 80-100 million people. Few stop but on the real causes, that makes our country that barely manages to provide agricultural product for the quarter of the population.

Well, with certainty, one of the main sectors of agricultural underproduction is the lack of an adequate system of irrigation. This factor is even more important today, in the context of climatic changes, occurred in the recent years.

If before 1989, about 25-30 % of the agricultural area of Romania has benefited from irrigation, after the revolution things have evolved dramatically. Although since 2005 the irrigated areas had a slightly upward trend, which promised, has followed a rebound in 2008. And today, as can be seen from the tale below, the situation is quite, we can say "painful".

The dynamics of irrigated areas is presented in the following table, developed by the Autonomous National Administration of Land Improvement (ADIF).

Table 2. Dynamics of irrigated surfaces during 2005-2009

Year	Area suited to be irrigated	Contracted surface	Irrigated surface (Wettingl)	Percentage from the suitable area to be irrigated on which were applied wetting	Percentage of the contracted surface on which were applied wetting
	(ha)	(ha)	(ha)	%	%
2005	1.500.000	352890	45719	3.05	12.96
2006	1.500.000	198036	96224	6.41	48.59
2007	1.500.000	433747	301450	20.10	69.50
2008	1.500.000	507863	208218	13.88	41.00
2009	1.500.000	562952	294318	19.61	52.25

Because after entering the Romania in EU, the Romanian farmers are forced to compete with their European counterparts, we thought to see the status of irrigated agricultural areas in the countries of Europe Central and East. The comparative situation of the parameters of irrigation activity in the countries of Central and East Europe is presented in the following table, developed by ANIF.

Table 3. Situatia suprafetelor agricole irigate la nivelul tarilor din Europa Centrala si de Est.

Country	Total arable surface	Irrigated surface in 1990	Suitable surface to be irrigated	Observations
	ha	ha	ha	
Bulgaria	4.805.000	1.884.400	30.000 – 40.000	Accession at EU in 2007
Germany (de Est)	17.185.000	1.440.000	650.000	EU member from 1990
Hungary	4.600.000	300.000	100.000	EU member from 2004
Macedonia	612.000	127.800	27.400	Cooperation Agreement with EU
Poland	14.050.000	301.500	83.300	EU member from 2004
Russia	120.000.000	4.737.000	3.506.100	Commune Economic zone
Romania	9.416.300	3.205.200	500.000 – 850.000	Accession at EU in 2007
Slovenia	746.000	15.000	5.000	EU member from 2004
Ukraine	33.615.000	2.624.000	700.000 – 1.000.000	Cooperation Agreement with EU

After watching the above table we can clarify why Romania, having a very high potential, doesn't fully capitalize it. In addition the exploitations of subsistence diminish the performance of the agricultural sector in general. Both the terrains and the labor are used under their economic potential. To subsistence exploitations have lack of capital and a proper professional training of the farmers, aspect which has as result very low incomes from the deposited activity. Consequently, the farmers from the subsistence farms have practically, neither the motivation, either the capacity to respect the European standards including those relating to the environment quality, animal welfare and food safety.

Funding opportunities for agriculture

The financing for agriculture can be done by PNDR (National Rural Development Program). The allocation of funds for 2010 is 1.359.770.651 euros, through which for the moment Axis 1 with Measure 125 " Improving and developing infrastructures related to the development and adoption of

agriculture and forestry: is available for submission of proposal during March 15 to April 15, 2010.

History of PNDR

Measure 121 "Modernization of agricultural exploitations" launched in 2008. So far APDRP has received 4529 applications for funding, from which there were contracted 1.258 projects in public value 361.34 million euros. However, there were made total payments in public value of 115,65 million euros.

Measure 123 " Increase of the adding value of agricultural and forestry products", this measure also launched in march 2008, was accessed by 606 beneficiaries, being signed until now 306 contracts of financing in public value of 277,85 million euros.

Measure 332 "Renovation and development of villages" after submission of over 3.039 of application for funding, the amount allocated by PNDR to these measure, until 2013, respective 1, 54 billion euros, was exceeded by seven times. So far, for this measure, there aren't available funds

There were contracted so far 291 projects with a public value of 797,89 million euros, the evaluation stages and of contracting being still ongoing.

Measure 312 "Support for the creation and development of micro-enterprises" For this measure, launched in September 2008, until now, were submitted 2198 funding requests, being contracted 110 projects, with value of 16,36 million euros, the process of evaluation and contracting being underway.

Measure 141 "Supporting the agricultural farms of semi-subsistence" So far, for this measure were contracted 6.148 projects with a public value of 47.11 million euros, being made payments in public value of 9.19 million euro.

Measure 112 "Setting up of young farmers" This measure has enjoyed from its launching, since December 2008, by a great interest. Thus so far were submitted 3.363 funding requests from which were contracted 507 projects with a public value of 10.189 million euros.

By 24 December 2009, Payment Agency for Rural Development and Fisheries has made payments for the investment measure in value of 182 million euro, and fort the support measures on surface implemented by the Agency for Payments and Intervention for Agriculture, approximatey 543 million euros.

CONCLUSIONS

1. The financial resource is very important and to it its tied primarily carrying out the rural development, but it mustn't lose sight of any resources other than the pecuniary nature.
2. Romania has an important potential of development, but unused.
3. The agriculture is underperforming right now mainly because of non-developing the irrigation systems for an important contribution at the agricultural production and in the same time an enlargement of the share in GDP.
4. The only solution of agricultural development and of rural environment is the structural funds and subsidies. In this moment it is obvious that the performance of agriculture will not improve significantly in coming years without the support of foreign investments.
5. The investments and competitiveness from Romania are still elements that must be improved, to make it an acceleration of the economical growth and ensuring a convergence of the incomes with the ones from EU.

Romania, with a territory of 238.391 km², almost equal to that of Great Britain (244.820 km²), occupies the ninth place among the 27 member states of the European Union, after France, Spain, Sweden, Germany, Finland, Poland, Italy and Great Britain. It represents 6% from the total surface of EU and 4% of its population. From the 23,8 million hectares that summarize the Romania territory, its agricultural surface is of 14,7 mil ha (71,7%), of which 9,4 mil. ha is arable land. Romania is located on the 7th place in Europe as agricultural area (after France, Spain, Germany, Poland, Britain and Italy) and o the 5th place as arable surface (after France, Spain, Germany and Poland).

The only way of financing in present is through PNDR and APIA which are having

each allocated 1.359.770.651 euros, respectively 729.8 million euros.

The agriculture can support the economic growth only if it can fully cover the domestic consumption, while the prices evolution would benefit of a higher degree of predictability. In conditions of recession, the consumption is orienting towards the alimentary products, especially the basic ones. In conditions in which the unemployment is increasing, with a peak that could be achieved in 2010, and the revenues are falling, the further deterioration of retail sales, including the sales of food should not be excluded. At the same time a possible depreciation of the exchange rate in some periods may create additional pressure on prices and default sale volume. A total number of 15.010 projects have been tabled in the National Program of Rural Development with a total value of 9 billion euros according to the data submitted by the Ministry of Agriculture. Only 3.000 of these were however actually incurred their value amounting to 1.3 billion euros, while the difference is in the process of analysis. Over 8 billion have been allocated to Romania for the period 2007 to 2013 for rural development through European Agricultural Funds for Rural Development (FEADR), another 2 billion euros following to be offered in domestic budgetary resources. So far, almost 70 million euros were actually used in the period 2007 June – 2009, which corresponds to an absorption rate of only 2,2%. Usually existing a gab of 3 year until the absorption of EU funds becomes more visible. Romania is a massive importer of potatoes, and the local manufactures accuses the aggressive strategies of those abroad that are supported by their governments through subsidies, by submitting bids at very competitive prices. The reality is a bit more complex because if indeed the foreign producers are much better supported by the governments of countries of origin, it is no less true, that, internally, there are major deficiencies in terms of organization and technical endowment, a planting material of low quality and limited financial resources compared to the necessary to invest, all this leading to a low efficiency compared to that of the neighboring countries of the euro area. The further delay of the restructuring process of agriculture will have undesirable effects on the Romanian economy, including the pressures on the inflation rate. The Government should develop a plan to encourage the consolidation of agricultural areas in large agricultural exploitations, especially in the grain domain, otherwise the current problems will persist for many years to come. The agriculture should become a real priority if we wish that the future highways to be used and for anything else, not only for transporting the imported agricultural products, transit and travels to the holiday destinations.

REFERENCES

[1] Ion Dona, 2006, Economie rurala, Ed. Ceres, Bucuresti
[2] Leonte, Marie Jacqueline Cosette; Giruca, Daniela, 2002, Agricultura Romaniei si aderarea la UE , Iasi, Institul European
[3] Institutul National de Statistica, Anuarul Statistic 2008
[4] PNDR 2007 – 2013 versiunea din decembrie 2009
[5] Raport – Agricultura – potential, oportunitati, supravetuire, Sepptembrie 2009, BCR
[6] www.apia.org.ro
[7] www.mapam.ro
[8] www.insse.ro

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THE IMPLICATIONS OF THE RURAL TOURISM AND ITS CAPITALIZATION WITHIN THE RURAL DEVELOPMENT

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Key words: *rural tourism, rural environment, capitalization, European funding*

Abstract

Many specialists in the rural tourism identified Romania as a country with the largest potentian in Europe in what concerns the development of the rural tourism as a important source of income for both investors and for the contry's budget. The rural tourism is aimed at rising living standards in the rural regions, helping to preseserve the inhereted culture and in the same time to reduce the pehnomenon of migration. The purpose of he paper is to analyze the implications of rural tourism in the rural development.The reasearch follows the following objectives: determining the degree of importance, possibility of funding and determining the interpersonal relationships between different social environements withtin the rural tourism.The tourism facilitates a formal contact of the peopel from different environments, and the ideas and actions, directed twoard superior capitalization of the local resources, inherent occur. The results are the identification of rural tourism within the rural environment through various crtieria of capitalization and potential significant developments of this environemnt through European funding.

INTRODUCTION

To the tourism has been shaped new valences by practicing rural tourism, this new type of tourism being adequate to the modern current era. The rural tourism has the advantage that act to open up new investment opportunities. Thus, the tourism facilitates a formal contact of the people derived from the most various environments and the ideas and actions, guided towards superior capitalization of various local resources, occur inherently. Between the potential tourists of the rural environment can enter and business people who have the ability to compass faster the perspectives of implanting new activities and financial perspectives of them, aspects that can be benefic through their effects for the rural community (jobs, upgrading the infrastructure and of services, entering in the information flow, etc.) Obviously that keeping pleasant memories about the rural holidays can encourage the business man to start the investment in the respective environment. The rural tourism has as purpose the rural development by: improving the living standards helps to preserve the cultures heritage and in the same time to reduce the phenomenon of migration. So the rural tourism is a principal component in the territorial development of the country, fact underlined and by the developed countries (France, Germany, Austria, Scandinavia and Ireland, etc)[2].

MATERIAL AND METHOD

Numerous specialists in the rural tourism has identified Romania as a country with the largest potential from Europe in what concerns the development of the rural tourism a important source of income both for investors as well as and for the state budget. It can be started from the premise that the tourist need rural tourism, but also the village needs the rural tourism. After the agitate life and the stress of big cities, the Romanian or foreign tourist wants a quiet holiday in contact with nature, with the traditional (one of four European is spending its holiday at countryside).

The methodology used is the analysis of the rural environment and its values in the rural tourism by identifying the values and benefits brought by the rural tourism within the rural development.

RESULTS AND DISCUSSIONS

The tourism in Romania focuses on landscapes and its rich history, having also an important contribution to the economy. In 2006, the tourism revenues were only of 2% from PIB, compared to 4% in 2005, one of the causes of this decline it was the very weak promotion of Romania as a tourist destination. Thus the rural tourism has gained ground against the conventional, the areas with the biggest success being Bucovina, Maramures, or Bran Moeciu. According to a report of the World Council of Tourism and Travel on 2007, in terms of growth perspectives of the industry of tourism and travel, Romania ranks on the seventh place from the 176 analyzed countries.

In 2008 Romania obtained concerning the contribution of income from tourism to GDP, only 5,8 percentage from GDP came from tourism activities performed, according to the data transmitted by the World Council of Tourism and Travel. In 2009 the share of tourism in GDP was of only 3,5%, or about 4,5 billion euro. Romania has a huge potential, under-exploited. From touristic point of view, Romania remained behind the neighboring states, as Hungary or Bulgaria.

Although the rural tourism has registered increases, it presents a considerable potential which is not sufficiently exploited. The touristic sector in 2005 comparative with 1998, has recorded an increase of the numbers of accommodation structures (+35,4%), of the level of accommodation capacity (+0,95%) and the number of accommodation places in the touristic pensions came to 22.061 in 2005, from which 50,5% in the rural space. As number o rural touristic pensions their number increased from 2005 from 11151 to 14551 in 2006, but in exchange the holiday villages fell from 266 in 2005 to 110 in 2006.

Rural tourism and its motivations

The Romanian territory presents: a wide variety of historical values – folk art, ethnography folklore, traditions, and historical vestiges – a harmonious natural environment combined with a varied background landscape and picturesque. All these are valences of Romanian rural tourism in particular.

Appeared and developed on the most varied forms of relief since the time of Thracian-Dacian, the Romanian rural settlements have preserved and still preserve in good measure the ancient traditions and customs, a rich and varied folk, original elements of ethnography and crafting, which can be touristic capitalized within an organization strategy and the development of rural tourism.

With the role of underlining the natural landscapes are the touristic villages, where people live there and are maintaining for hundred of years the traditions. The Romanians prefer increasingly more, to spend their weekends and vacations at country, in rural pensions, to the detriment of the resorts more and more crowded. This is why many local investors, and not only, have opened touristic pensions in picturesque areas.

The popularity of the rural tourism has increase in the recent years. From initiatives with individual character it reached to a true alternative to spend the free time. The reason for the tourism development in the rural area is the awareness, by the small farmers, of the necessity of diversification the activities both in the agricultural farm, and outside of it, by engaging in forestry, tourism or appealing to certain activities on determined time within the local economy. According to the specialists the prosperity it isn't on the pure farmer, but on the side of the working farmer, craftsman, forestry, in the purpose of plurality of revenue, in terms of combinations of complex activities.

In this context, it is necessary for tourism to be considered as a starting point to a higher economic level for new perspectives of the economic development in this area. He should be encouraged including by putting in value the projects that follow the protection and assessment of the natural heritage, history and culture, which is the main source of touristic interest.

The rural tourism takes in places relatively unpolluted areas, undisturbed, inhabited by traditional communities, satisfying multiple needs:

- the need to "escape" to reduce the tension state, this being accompanied by an active or passive participation in conducting the touristic activities;
- the need to maintain or to restore the health;
- the need for belonging and love for nature;
- the need for knowledge and education;
- the need linked to the desire of visiting the relatives and friends;
- the need of beautiful and original, etc

The environmental and cultural importance of the disadvantaged agricultural areas can serve as the basis oc economic development through tourism. The future of the countryside is a problem that EU has realized it more than a decade. The problems created by the situation of rural areas (reducing the incomes from agriculture, the rural code, loss of traditions) recommend the development of the rural tourism as stimulator of rural economy.

This type of tourism presents a series of benefits: capitalizes the agricultural areas, natural resources, the cultural heritage, rural traditions, agricultural products, conduct exchanges between the urban and rural revenues, create directly and indirectly jobs, improves the infrastructure. There area number of economic, social and cultural reasons which recommends the development of the touristic initiatives in the rural areas as stimulator of the rural economy.

The rural tourism wasn't born in a spontaneous form, but it was created from the researches and designed by Governments and Ministries of Agriculture and Tourism from the countries of European Community to give answers to a number of problems created by the situation of rural areas in particular, namely:

- strong reduction of agricultural incomes;
- aging and the abandonment of agriculture;
- new environmental application;
- population stability

The main motivations of rural tourism are of the social, cultural and economic order, that can be summarized as follows:

Social reasons

- the agriculture crisis: new economic and legislative conditions from Europe determines the trend of extinction that it manifests the small and traditional households;
- abandonment of crop land, as well as and of tasks with rural specific tasks;
- the unemployment increase among the young ones, rural exodus: the peasants families leave to town to seek work

Cultural reasons

- increase the number of houses from the rural area that aren't occupied or maintained;
- low use of the traditional buildings;
- the disappearance of crafts;
- destruction of local art heritage;
- loss of traditions;
- abandonment of care and concern beside the beautiful places from nature that are offered by the rural space

Economic reasons

- very low incomes from agriculture;
- difficulties in marketing the agricultural products supplied by the peasant households;
- price developments;
- surplus of agricultural products

But the reasons don't stop here, among all factors that stimulates the more vigorous assertion of the rural tourism, highlighting:

The increase of duration of affected time for recreation

The increase of the affected time for recreation is generally an important factor of the rural tourism development. A particular aspect that has consequences on the rural tourism is multiplying the short periods allocated to leisure. To these are added and the possibility of phased performing of the rest holidays. Correlating with other factors, such as the period duration of transport, cost of stay, the deficit of toruistic solution of short duration, results that the perspectives of selecting the rural environment as holiday area increasingly large, at least for the short periods of time.

The increasing of the interest for health maintaining

The increase of the interest for health maintaining records a boom. Even today, in our country, the way of obtaining food is fortunately less artificially made, comparative with the countries highly industrialized countries, it is also true that the stress factors generated by the economical instability, hypertrophy, dysfunctional and polluting the great cities, affects increasingly obvious the health state of the population. The guideline increasingly higher of the stay purpose towards leisure activities, sportive, of decoupling by the daily tension is natural and is entered into a strategy more or less deliberate of health maintaining. The rural areas are excellent placed to offer satisfactions to the most various and sophisticated options, from the foot or cyclist promenades in fresh air to escalades or daring executions from the quiet fishing parties, to the satisfactions offered by tasting drinks and traditional meals.

Authenticity

It is a quality increasingly in demand. In most cases coming from a saturated environment of audio-visual, dominated by powerful industrial products, districts of ineffectual blocks, collective impersonal relations, the tourist appreciates more and more the authenticity, naturalness of country life, warm specific to the small rural communities. The survey conducted by the British Tourist Offices reveals that this quality is placed on the second place after the landscape qualities, between the motivations underlying the option fro country stay.

Peace and physically comfort

The mental peaces and psychic comfort are elements increasingly sought by many tourists, fact that is not surprised, given the level of stress, specifically to the majority of workers. The mechanisms underlying the origin of movement are various and often subtle. If frequently occurs the aspiration to leave the city life. The idea of escape in nature is found almost universally among today's urban habitant desires, and its materialization is produced often in the rural areas. The man usually wishes an alternating of calm feelings with the animated ones, and therefore, it isn't surprising to leave the home from the city in the favor of possibility to be able to find with pleasure in a quiet environment, unpolluted, far from the constrains on urban activities, the rural environment being the one which answers to all these desires.

The affirmation of individualism in the market

The systematic promoting and insistence of certain products to gain a stable segment of consumers, is a practice currently used to impose various consumer product markets. Despite it small size and diffuse of the touristic activities, the rural tourism is able to capitalize this opportunity that can be very beneficial in the conditions in which there are motivation and competence for the popularization and offer selling, respectively receiving tourists.

Theoretically, there isn't rural settlement that can't provide at least one branded product likely to attract the interest of tourist. The precondition is that the brand to be authentic, genuine, and the efforts deposed to impose it to make possible to further awareness and recognition and its searching. Extrapolating this aspect to the Romanian village, it is obviously that at the level of majority of rural settlements, the emblematic defining of those is multiple: the quality of the landscape, soul warmth of the habitants, the works of art and of popular technique, traditional occupations, folk costumes, customs, cuisine, resources of the place make a commune body.

The key is to perpetuate this diversity, but also to detect the elements that are giving extra local specificity and may therefore become branded products, which unique can provide the consecration in the touristic circuit.

Funding opportunities for rural tourism

The financing program for rural tourism development within the rural development it

is PNDR 2007-2013, the measure 313 "Encouragement for toruistic activities", are available public and private funds from the value of 837,26 million of euro since 2008 until 2013, of which the public contribution of EU and of Romanian Government is 544,2 million of euro. The 313 measure has as general objective the development of the touristic activities in the rural areas to increase the number of jobs and alternative incomes, as well as and the increase of attractiveness of the rural space. According to the applicant guide, the specific objectives of this measure is related to creating and maintaining the jobs through tourism activities, especially for youth and women, to the increase of added value in tourism activities, to create and diversification the infrastructure and touristic services but and for increasing the number of tourists and the duration of the visits. The operational objectives aim the improvement of the receiving structures at small scale, the development of information systems and touristic promotion, creation of recreational facilities in the view of ensuring the access at the natural areas of toruistic interest. Are eligible for this measure the projects of investment in the touristic receiving infrastructure, of agro-tourism as well as and types of recreational activities (sportive or recreational).

The eligible beneficiaries are the micro-enterprises with fewer then 10 employees and who achieve an annual net turnover or have total assets in value up to two million euro, equivalent in lei, but and individuals (not registered as economic agents) who will engage that until the date of signing the financing contract to authorize itself with a minimum status of authorized individual and to function as micro-enterprise. Beneficiaries can be and municipalities through their respective legal representatives and the ONG.

To grant the support, the micro-enterprises, both those existent and the newly created must be registered to carry out its proposed activity by the project in rural areas. The eligible rural area of this measure includes all municipalities as territorial administrative units with the village components, while the villages that are belonging to towns and suburban areas aren't eligible.

The beneficiary of the EU funds must demonstrate the viability of investment, to make prove of possessing managerial/marketing skills or in according with the proposed activity through project, or to acquire them until the last payment. Also, the beneficiary must prove the ownership over the land on which will follow to make the investment or the right of concessions for a period of at least 10 years.

The maximum amount of the funds will be up to 100 percent of the total eligible costs, but shall not exceed 200.000 euro/project. For the profit generating investments, the intensity of the public grant support will be up to 70 percent from the total of the eligible expenditures, but will not exceed 70.000 euro by project in the case of investment projects. In agro-tourism will be financed 50% from the total of eligible expenditures, and the total value will not exceed 200.000 euro/project for other types of investments in the rural tourism. The minimum eligible value of a project is of 5000 euro. The applicant can receive funding in advance up to 20 percent of the eligible grant amount to start the project, no matter on what size is.

From September 2008, when it was launched the first session for submission of projects and until now, within this measure were submitted 811 application for funding, and were contracted 207 projects, worth in public value 38,21 million euro. The major interest, as in the case program SAPARD the component of financing of the accommodation structures, 199 of beneficiaries with contract requesting financial support fro the construction, or upgrading the pensions, huts, etc.

CONCLUSIONS

1. If it designed, developed and carefully conducted, the rural tourism can bring substantial benefits to the local communities, offering the opportunity to sustain the local jobs, to improve the demographic structure of the rural areas, to diversify and extend the

enterprises already existent, such as farms, to stabilize the income levels, to improve the environment and local infrastructure, to attract investments or funds, to increase the preparedness level of the local population, to encourage the arts and specific cultural events, etc.

2. The rural tourism contributes, in a first stage, to saving and maintaining the farms and then, by strengthening and its development, is constituted as a prerequisite in ensuring the socio economic development locally and regionally. Therefore, the rural tourism is an economic activity complementary to farms and not just an alternative of a substitution of it.

3. Certain economical factors may reduce the effectiveness of the tourism as a instrument of rural development, including: the leakage of revenue, market volatility, the reduction of multiplier effect, low payments, imported labor, the limited number of the entrepreneurs from the rural areas and the investors conservatism, the threatening of the cultural heritage

4. The expected success is achieved by an overall rural development, based on moderate growth over time and in the benefit of the rural area because, a rapid or disorderly development of the rural tourism may damage the environment, may lead to affecting the ambient of local population.

5. Each folkloric product is a part of diversity of a certain model with quality of unique. The folklore of the rural areas, respectively of the village, is usually well preserved, coherent and balanced.It provides and ensures the identity of each geographical area of the country. Incontestable that over time, the oral culture, the traditions and folklore has suffered strong influences, determined by the evolutionary process of inevitable socio-cultural transformations. However it can be said that the Romanian village successfully crossed periods less glamorous of the history, preserving in a great measure unspoiled the purity of its ancient culture among all factors that stimulates the more vigorous assertion of the rural tourism, highlighting:

- The increase of duration of affected time for recreation;
- The increasing of the interest for health maintaining;
- Authenticity;
- Peace and physically comfort;
- The affirmation of individualism in the market

The idea of escape in nature is found almost universally among today's urban habitant desires, and its materialization is produced often in the rural areas.The beneficiary of the EU funds must demonstrate the viability of investment, to make prove of possessing managerial/marketing skills or in according with the proposed activity through project, or to acquire them until the last payment.

REFERENCES

1] Bold, Ion; Buciuman Eugen, 2003, Spatiul rural: definitie, organizare, dezvoltare , Ed. Mirton, Timisoara

[2] Buta Camelia,2008, Dezvoltarea turismului rural din perspective formarii si perfectionarii profesionale a resurselor umane,teza doctorat, Bucuresti

[3] Nistoreanu, Puiu, 2006, Ecoturism si turism rural, Ed. ASE, Bucuresti

[4] PNDR 2007 – 2013 versiunea decembrie 2009

[5] www.mapam.ro

[6] www.insse.ro

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LIMITATIONS AND POSSIBILITIES OF LIVESTOCK PRODUCTION IN MOUNTAINOUS AREAS OF THE REPUBLIC OF SERBIA

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Key words: *mountainous area, livestock production, climatic changes, regional development, organic livestock production*

Abstract

The territory of the Republic of Serbia consists of areas with various natural characteristics, significant for agricultural production. The mountainous areas differ significantly from lowland and hilly regions. The conditions for their development are less favourable. In mountainous areas we include those on altitude of above 800 m and which terrains are with inclination of 18 degrees. Major territory or total territory with such terrains in the Republic of Serbia, without KM, have 17 municipalities, in west, south and south-east part. There are no such areas in AP Vojvodina. These municipalities are characterized by lower level of development than the average one, under-average areas of arable agricultural land and above-average areas under meadows and pastures. Opposite to benefits expressed in meadows and pastures, there are fewer cattle in them, than it is average for the republic. Here is more intensive decrease of inhabitants' number and characteristic for the most of local authorities units in the country, unfavourable age structure and lower educational level. According to current regulations, all these municipalities rank among marginal areas, which have certain benefits in using incentive assets meant for agriculture and rural development. These areas require even better concern within the policy of regional and rural development, as well as agriculture development, along with application of multifunctional model. Taking into consideration natural conditions and level of natural environment preservation, in following period should pay more attention to livestock breeding development by application of organic production method. This production has a perspective, because it is more valuable in health and nutritive sense than the conventional production, it is in harmony with the requirements of the environment preservation and slowing down the unfavourable process of climatic changes, afterwards increases demand and achieves higher prices. In the paper are given basic characteristics of mountainous area of the Republic of Serbia's central part, points out to movement of livestock production in this region, in short presents the solutions from the regulatory rules on regional development, points out to negative consequences of climatic changes to agricultural production, gives directions to organic production development in these areas.

INTRODUCTION

Mountainous area of Serbia - In this paper, main attention was given to territory of those municipalities in Central part of RS, which total or major part of the territory was on altitude above 800 m or with land inclination of more than 18 degrees. Such local authorities are 17 (15 have the municipality status and two the status of the city – Vranje and Novi Pazar), located on south-west, south and south-east part of Central Serbia. The municipalities are: Bosilegrad, Brus, Vranje, Dimitrovgrad, Ivanjica, Nova Varoš, Novi Pazar, Pirot, Priboj, Prijepolje, Raška, Sjenica, Trgovište, Tutin, Crna Trava and Čajetina. They comprise the territory of around 12 thousand km^2, which is 21,4% of Central Serbia[3]. They consist of 988 settlements or 23,3% of settlements number in Central Serbia (Picture 1).

According to the last census in 2002, in these municipalities lived 536268 inhabitants or 9,81% of whole Central Serbia population. Along with that, 10 of these municipalities were border municipalities, which was additionally aggravating developmental factor. In major of these municipalities, the number of inhabitants decreases faster than the average one for the republic, although in some of them, the condition is more

[3] There are also smaller parts of territory in other local communities, which appertain in mountainous area. See – Strategy of Spatial Development of the Republic of Serbia – study-analytical base: Use of agricultural land, Republic Agency for Spatial Planning, Belgrade, April, 2009.

favourable than the average (for example, population increase in 2007 in Tutin was 11,3 per mill, Novi Pazar 8,5, Vranje 0,7, according to decrease of 4,7 in the republic and 4,5 in Central Serbia. In the municipality Crna Trava that decrease is 28,2 per mill).

Those areas have been pressed by higher unemployment rate and lower income per capita (ranges from 25,4% in Tutin to 88,5% in Vranje of the republic average (2. page 823)).

This area has 648,3 thousand hectares of agricultural areas, or 19,6% of those areas in Central Serbia. It decreases in these areas faster than the average one. In period 1997-2007, the areas have reduced for 1,1%, while in Central Serbia have been reduced for 0,8%. In Central Serbia, the areas under ploughs and gardens in this period have been reduced for 3%, in mountainous areas have been increased for 1,7%. The areas under fodder reduce faster than the average, so they were less for 11,4%, in relation to decrease of 2% in Central Serbia. However, their participation in ploughs and gardens in 2007 was slightly higher than the average (22,7% in regard to 22,2%). The meadows and pastures, together with forests, are the most precious potential of these regions. That is also a base for bigger livestock production. The areas under the meadows in 2007 were higher for around 1% than 10 years ago, while in Central Serbia were increased for 6%. The meadows in this region do about 28% of its total agricultural land, in regard to 17,5% in Central Serbia. The areas under the pastures have been reduced in observed 10 years-lasting period (for 1,8%, and in Central Serbia were increased for 2%). The participation of the pastures in agricultural areas of this region amount 45,6% in regard to the average in Central Serbia (22%). While pastures and meadows comprise around 39,5% of total agricultural land in Central Serbia, in this region they comprise 73,3%. There are more details in the following Table 1.

RESULTS AND DISCUSSIONS

About livestock production in mountainous areas - We saw that terms for livestock breeding in these areas are favourable, because they abound with sufficient pastures for livestock grazing, as well as the meadows for providing food when the livestock is not in pasture. Once were bred livestock here in such number that it had led to degradation of agricultural land. It is no longer a case. Rural population has decreased, so there has been also decreased livestock breeding. It has been characteristic for past thirty years, with acceleration tendency. Such consequences are extremely unfavourable, while, along with other things, huge natural resources stay insufficiently used, tending to be lost.

Short review of number of basic livestock species tendency in period 1997-2007, point out that number of livestock decreases (with exception of cattle number) with higher intensity than in whole republic, i.e. Central Serbia. It is also characteristic for numerous observed units of local authorities from this region. Extremely downturn trend of sheep and poultry number is characteristic (see table 2.).

Something about regulatory rules on regional development - Numerous developmental documents, as well as existing regulatory rules point out to necessity of more equable overall social development of some regions, which mutually differ by numerous parameters. For several years exists the document Strategy of regional development[4], and in last years was brought special Law on Rural development[5], which was regulating also supporting system of regional development, aiming to:

1) provide overall social-economic sustainable development,
2) reduce regional differences in social-economic development and social life, with accent on supporting the development of insufficiently developed, devastated industrial and rural areas,
3) decrease negative demographic trends,
4) achieve the economy development based on knowledge, innovation, modern scientific-technological achievements and management organization,
5) ensure competitiveness development at all levels,

[4] Official Gazette of RS, No. 21/2007
[5] Official Gazette of RS, No. 51/2009

6) set up legal and institutional frame for planning, organizing, coordinating and realization of developmental activities,
7) support inter-municipal, inter-regional, cross-border and international cooperation with mutual interest,
8) achieve more efficient use of domestic natural resources and property, as well as foreign resources, at the republic, autonomous, regional and local level.

Supporting regional development bases on more principles, from which we especially point out: the principle of regional development equability (supporting faster development of insufficiently developed regions, departments and units of local authorities); partnership principle (participation and synergy – policy of regional development based on the partnership and synergetic activity of public, private and civil sector, domestic and international organizations and institutions); and principle of adjustment with EU regulations (setting up legal and institutional frame in harmony with standards, the best practice and regulatory rules of the European Union and domestic legislation).

In accordance with EU practice, for the needs of supporting regional development, the law determines seven regions on Level 2 (NUTS 2) for whole country: Region of Vojvodina; Region of Belgrade; West region; East region; Central region; South region; and Kosovo and Metohija region. There should point out that such determined regions do not represent administrative territorial units and are not legal. According to the authorities in law, the government has determined (by Decree on statistical territorial units' nomenclature[6]), statistical territorial units – Level 3 (NUTS 3), which consist of local authority's units within the districts. The area titles of NSTJ 3 level determine according to names of districts, which territorial units of local authority belong to certain area.

The level of regions' and local authority units' development is determined by their development indexes application, which determines the ministry authorized for regional development, according to determined criteria once a year. Until this paper was written, the ministry did not announce mentioned developmental level. There are still not available data which refer to indexes by statistical territorial units, on level 2 and 3.

According to the law, the regions classify, by development level, into two groups, so in the first are the regions with developmental grade of 75% and above 75% of the republic GDP average per capita, and in the second group – regions, which developmental grade is under 75% of the republic average GDP per capita. Insufficiently developed are the regions from previous second group and the regions in which the number of inhabitants, starting from census in 1971 till observed year, is higher than 50%.

The units of local authority (municipalities and cities), according to development level, classify in four groups: in the first belong the units of local authorities which development level is above the republic average; in the second group – local authorities' units whose development level ranges from 80-100% of the republic level; in the third - local authorities' units whose development level ranges from 60-80% of the republic average and in the fourth group - local authorities' units whose development level is under 60% of the republic average.

There are also familiar to the law **insufficiently developed units of the local authority**, where are considered the units and previously mentioned third group (development level ranges from 60-80% of the republic average) and **extremely insufficient developed units of local authority** (units from the fourth group), than those in which is number of inhabitants was reduced for over 50%(since census in 1971 to observed year) and communities of local authority's units on territory of Autonomous Province Kosovo and Metohija. There is no doubt that all units of local authorities in mountainous regions of Central Serbia, which are this paper subject, will be classified either in insufficiently developed or extremely insufficient developed units in unique list of development, when it become valid.

The unique development list of the regions, units of local authorities and city municipalities, will adopt the government, on proposal of authorized ministry for regional development, no later than

[6] Official Gazette of RS, No. 109/2009

October 31st 2010. The law furthermore specifies kinds of developmental documents (National plan of regional development; regional developmental strategy; program for financing the region's development and other developmental documents in the field of regional development); regional development subjects (the government; authorized ministry for regional development and those authorized for finances and spatial planning; Autonomous Province of Vojvodina; Capital; Agency for Economic Register; Republic Agency for Spatial Planning, according to the law; Development Fund of the Republic Serbia; Local authority's Units, according to the law; National Council for Regional Development; National Agency for regional Development; regional developmental councils; regional developmental agencies; district associations); measures and incentives, determined by the government on proposal of the ministry authorized for regional development, in accordance to appropriate plan documents, directed on project realization, including also support to development of insufficiently developed regions, as well as sources for financing regional development (the budget of RS; budget of autonomous provinces; budgets of local authorities' units; pre-accessing funds of EU; non-return developmental support of international community and other EC programs; developmental credits of international financing institutions and business banks; donations, contributions and gifts from legal entities and physical persons and other sources in accordance to the law).

Climatic changes - The climatic changes on our planet are more and more explicit, while the inhabitants of every country in the world feel their negative consequences. It was proven that they were the consequence of human activities, which have realized opposite to natural laws for 200 years, disturbing natural and biological balance. The effects of glasshouse, caused by uncontrolled emission of harmful gasses, emerged by the fuel combustion, cause these changes to a large extension. A man did not take care about principles of sustainable development, which was adopted, when it was familiar and outspread acknowledgement on this relation harmfulness. Unfortunately, along with this acknowledgement, for a long time has not achieved a consensus on decrease of gas emission in atmosphere, so neither did last summit held 2009 in Copenhagen, at the highest level, still not had given clear limitations, as well as other measures[7]. The climatic changes express by increase of average temperatures, which cause glaciers melting, increase of the seas level, than increasing extreme climatic occurrences, harmful for whole living world. It is realistic to expect that it will come to rainfall decrease in temperate and tropic areas, and to rainfall increase in other areas. It has been already felt in South-East Europe area, where has changed normal disposition of rainfalls, as well as normal annual temperatures. Dry periods become increasingly longer and more frequent. It reflects primarily on biodiversity condition, where numerous plant and animal species have been jeopardized or gone, as well as on agricultural production.

In Serbia, the biggest polluters are from energetic sector, than from transportation sector and partly – agriculture. The climatic changes effect also degradation of agricultural land. Acidity of soil increases, which leads to its degradation and yield decrease. It is necessary to act with adequate measures on climatic changes in this field, especially by adjusting the agricultural production structure, along with tough selection of cultures adjustable to forthcoming changes, intensification of irrigation and drainage of agricultural soil, founding and applying new technologies, as well as other measures. There should say that in Serbia is overall regulations bound to environment protection, whose implementation leads to mitigation of climatic changes, i.e. their consequences. Unfortunately, risks from climatic changes consequences, as well as the consequences regarding non-implementation of strict regulations on environment protection, are still not deeply ingrained in consciousness of

[7] Leaders of 190 countries, which have participated on the Conference in Copenhagen, had not succeeded in adopting legally binding agreement for battle against climatic changes, which would replace existing Kyoto Protocol, http://www.ekoplan.gov.rs/src/Klimatske-promene-46-p1-list.htm.

wider social classes. Therefore are anticipated existing educational and other activities and measures not only welcome, but also necessary and urgent. However, the condition of environment in Serbia is satisfying. It is better than in any other country in surrounding, except Albania, and according to Index of ecological performances (http://epi.yale.edu/Home) it is on 29th place among 163 states[8]. It is, for sure, combination of various circumstances than the environment care itself. However, in last two decades, numerous capacities as polluters of the environment have stopped working; in agriculture has been used small quantities of artificial fertilizers and chemical protective means, therefore the agricultural land is in good ecological condition. The environment is more preserved exactly in mountainous areas. The land, water and air are on high ecological level.

Natural conditions, regulatory rules and condition of organic production in Serbia - Serbia has excellent natural conditions for starting the organic production. Rural areas of the republic are less developed, while there realizes major of primary agricultural production. These areas are ecologically preserved, which is basic assumption for realizing organic production. Among rural areas also exists distinctions, besides all other, concerning developmental level and the environment preservation. In hilly-mountainous and especially mountainous regions of the republic, which are on lower developmental level, the agricultural land is mostly ecologically correct; they have more qualitative water and cleaner air. As we saw, in total agricultural land, the pastures and meadows occupy significantly higher participation than it is an average for the republic, as well as for Central Serbia. It is basic assumption for agricultural production with focus on livestock production. This production decreases faster than average decrease. The condition can be improved only with adequate policy and more significant state support, which by would realize developmental programs on long-term base. **Real possibility for more significant use of these natural resources is in planning start of organic livestock production**. However, already existing livestock production has, to a large extent, the characteristics of organic production, because the livestock feed with ecologically pure food (pastures, hay from meadows), drink clean water, breath clean air, and often are bred autochthonous species of domestic animals, which are more resistant to diseases. There is also inevitable appropriate activity regarding education of the population, especially younger generations for this kind of production, adequate organization in production, placement and other activities which lead to improvement of this production.

Great part should play appropriate associations, which should organize those producers, to connect them with certification bodies – authorized organizations. Providing assured placement of their products is of relevant significance, because it would mean the biggest contribution to improvement of this kind of production. In these areas is possible to organize and process livestock products (meat, milk, milk products, etc.), in a way to additionally employ and keep on these areas certain number of rural population.

There should consider that the regulatory rules of organic production in Serbia are adjusted to the one in EU and it is very strict regarding starting and realizing the organic production. It has been regulated by the **Law on organic production and organic products**[9] and numerous rules. Taking about livestock organic production, according to the law, it can be based on productive units within which are the pastures and other land where produces fodder or provides organically produced animal food for which the certificate was issued; when provides organically produced animal food from mentioned parcels; selection of kinds and species of animals, breeding method, nutrition and health care of the animals, transport and slaughter determine by the methods of organic livestock production. Along with that has been regulated processing method of these products, their package, storage and transport, as well as declaration and certification. The authorized minister for agriculture develops further law provisions by the rule book. Such rule book was brought in 2002 – Official Gazette

[8] For example, Albania is taking 23rd place, Croatia 35th, Romania 45th, Slovenia 55th, Bulgaria 65th, Macedonia 73rd and BH 98th.

[9] Official Gazette of RS, No. 62/2006

FRY, No. 51/2002 according to previous law, which is still in effect.

Several years back have allocated some incentive assets for improvement of organic production, as plant, as well as livestock. The same was in 2009[10], when physical persons were encouraged, along with regulated conditions: 20.000 RSD per hectare of included crop production into organic production and with 30.000 RSD per hectare for fruit, viticulture and vegetable production, but no more than 600.000 RSD per a user. For organic production in livestock breeding, stimulating assets were 15.000 RSD per head of neat cattle, 5.000 RSD per head of small-size cattle, 500 RSD per poultry piece and 1.500 RSD per a hive; the most 800.000 RSD per a user. The physical persons, legal entities and entrepreneurs are supported[11], who deal, under regulated conditions, with production of seeds, seedlings and planting material by methods of organic production, in a way to get 40.000 RSD for crop production, 50.000 RSD per hectare for fruit, viticulture and vegetable production, up to 500.000 RSD per a user.

Besides favourable natural conditions and appropriate regulatory rules, the real condition of organic production in Serbia, as well as in its mountainous areas, is still not seen. There are domestic certification bodies, but also foreign, which, at least for now, do not „render accounts“ to authorized ministry. Therefore is data that the organic production is based on around 1150 hectares of arable land and it should be increased to 600 000 ha (http://www.agropress.org.rs/tekstovi/11184.html). On the list of authorized ministry are 58 registered producers in organic production, out of which only six deal with livestock production. One of them is in two observed local authorities (Pirot and Dimitrovgrad). According to data of Chamber of Commerce of RS, in period of conversion (August 2009), there was 191 heads of cattle, 42 heads of pigs, 50 poultry pieces and 250 hives. It is obvious that this kind of livestock production has been very neglected, which is impermissible and should be improved in future period, not only on terrain, but also in institutional, organizational and stimulating sense[12].

CONCLUSIONS

Serbia has great developmental chance in revival of livestock production, which has all adequate conditions for it. Along with increase of total livestock production, special accent should be put on starting and constant increasing of organic livestock production. For this production, especially in mountainous areas of the republic, there are favourable conditions, while these areas dispose with huge areas under natural pastures and meadows that fulfil all ecological requirements of the organic production. These areas also have high quality of water, cleanest air, as well as the experience in breeding livestock on pasture. However, there are autochthonous livestock species in these areas, which is important for this kind of production. The problems, like as insufficient informing, inappropriate organizing, unfavourable age structure of population and similar, can be overcame only by coordinated activities on national, regional and local level, with well done programs, better financial support, taking into consideration certain assets from EU funds, too. More complete results can be expected only in long-lasting time period. Just acknowledged regulations on regional development should contribute to that. Of course, there should expect some limits, which would run from the climatic changes.

Along with benefits this production provides, as for producers, as well as for consumers, and for improvement of the country's balance of payments, there can come to deceleration processes, but also to stoppage of these regions evacuation, which by should create perspective of great natural resources use, which are in the republic's rural areas, especially its

[10] Decree on allocation and use of assets for supporting the organic production development, for 2009 (Official Gazette of RS No. 21/2009).

[11] Decree on terms and method of incentive assets use for supporting development of seeds, planting material and seedlings by organic production method, in 2009 (Official Gazette of RS, No. 21/2009).

[12] Register of agriculture, that is going to be done in 2011, among many other significance, should provide also data about organic production, which is going to represent real condition on day “D” (31st of October 2011)

mountainous regions (the most jeopardize concerning the population).

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REFERENCES

[1] Katić B., Cvijanović D, Claudiu Cicea, 2009, Organic production in function of environment protection in Sebia – condition and regulations, Ekonomika poljoprivrede, br. 3, pp. 237-338.
[2] Popović Vesna, Katić Branko, Subić Jonel, 2007, Očuvanje ruralnih vrednosti u funkciji povećanja zaposlenosti žena i omladine u planinskim područjima Srbije, Zbornik radova sa Međunarodnog naučnog skupa "Multifunkcionalna poljoprivreda i ruralni razvoj II", održan 6. i 7. decembra, 2007. godine u Novom Sadu, Institut za ekonomiku poljoprivrede.
[3] Zakon o organskoj proizvodnji i organskim proizvodima (Sl. glasnik RS, br. 62/2006).
[1] Zakon o ruralnom razvoju (Službenki glasnik RS, br. 51/2009.).
[4] Izveštaj o stanju životne sredine u Republici Srbiji za 2003. i 2004. godinu;. Agencija za zaštitu životne sredine, Beograd, 2005. (http://www.sepa.sr.gov.yu/).
[5] Izveštaj o stanju životne sredine u Srbiji u 2008. godini, Agencija za zaštitu životnee sredine, Beograd, 2009. (http://www.sepa.sr.gov.yu/).
[6] Pravilnik o uslovima koje treba da ispunjava pravno lice koje izdaje sertifikat, odnosno resertifikat za organske proizvode i o načinu njihovog izadavanja (Sl. glasnik RS, br. 62/2006).
[7] Rakić Beba, Rakić Mira, 2009, Upravljanje marketingom organske hrane, Ekonomika poljoprivrede, br. 3, pp. 343-517.
[8] Uredba o nomenklaturi statističkih teritorijalnih jedinica (Službeni glasnik RS, br. 1091/2009).
[9] http://epi.yale.edu/Home.
[10]http://www.ekoplan.gov.rs/src/Klimatske-promene-46-p1-list.htm.
[11] www.minpolj.gov.rs.
[12] www.perstorp.com.
[13] http://eur-lex.europa.eu/LexUriServ/site/en/.
[14] http://www.agropress.org.rs/tekstovi/11184.html.
[15] http://www.rts.rs/page/stories/ci/story/.html.
[16] www.terras.org.rs
[17] http://www.nin.co.rs/2000-08/31/14258.html

APPENDIX

Picture 1 – Republic of Serbia (counties and municipalities)

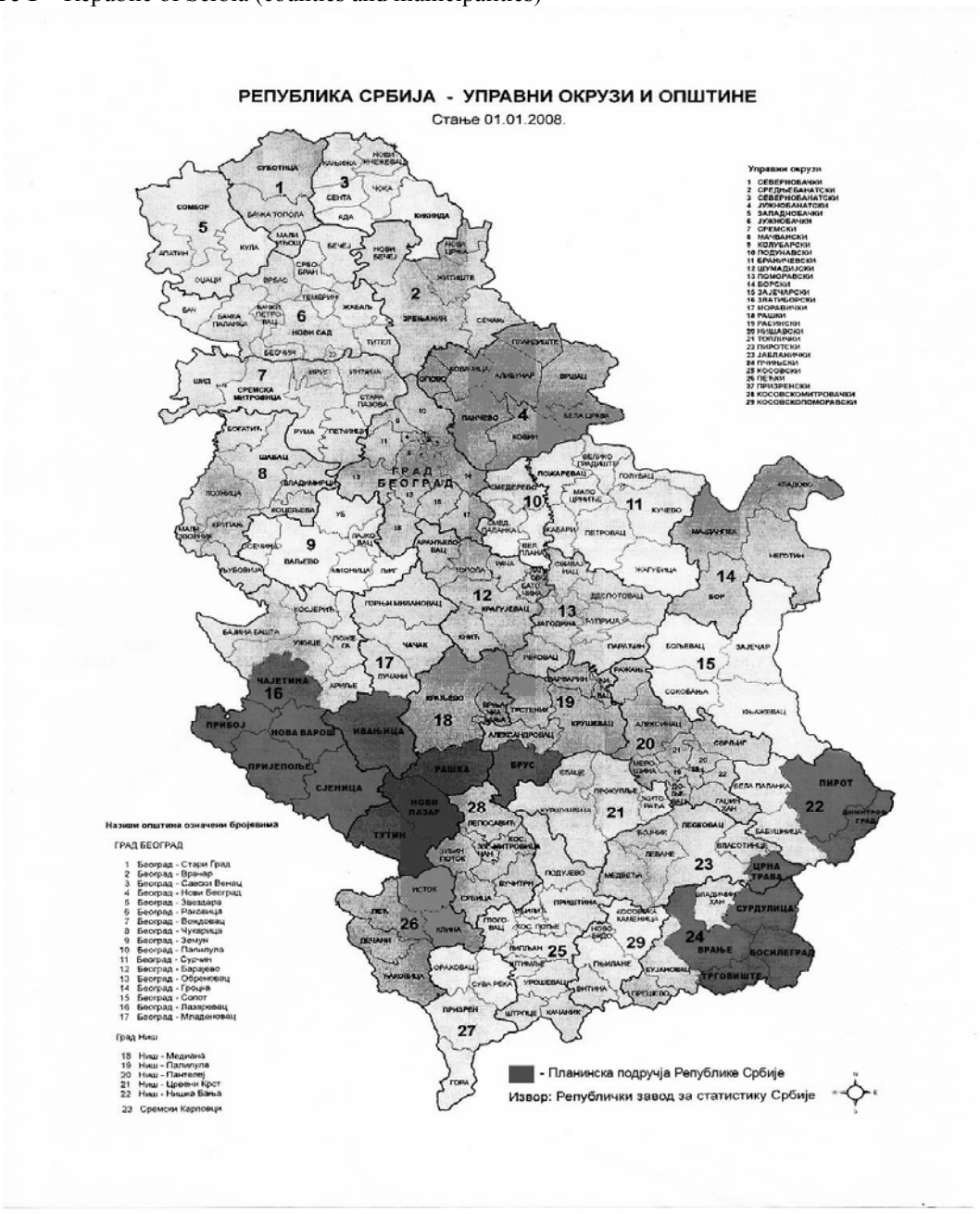

Table 1 - Areas, structure and dynamics of agricultural land use (in hectares)

Level	Agricultural land 2007	Index 97/07	Arable land and gardens	Index 97/07	Fodder crops	Index 97/07	Meadows	Index 97/07	Pastures	Index 97/07
R.Serbia (without KM)	5052957	99,6	3398701	9800	465837	965	620495	1069	835094	1118
Central Serbia	3305516	99,2	1727177	9700	383836	980	578523	1059	728720	1020
Participation in total a. land CS	100.00	-	52,25	-	22,22[1]	-	17,50	-	22,05	-
Bosilegrad	35208	104,7	12229	178,8	1387	124,1	7502	93,2	14538	70,6
Brus	32051	100,0	8743	100,4	2416	102,8	9443	110,4	10919	100,9
Vranje	44552	98,9	20645	96,7	4656	93,3	6512	111,2	14429	98,9
Dimitrovgrad	28987	100,1	5936	84,4	2780	86,0	8179	99,4	14107	108,6
Ivanjica	51281	94,2	14617	101,5	1429	77,6	18914	98,4	14244	99,4
Nova Varoš	33180	100,0	9089	99,6	2251	99,3	9114	102,0	14247	98,8
Novi Pazar	36257	99,9	8600	76,0	1947	69,2	11284	114,8	14473	110,0
Pirot	69887	99,9	19780	93,6	4570	79,1	14232	100,6	32552	105,8
Priboj	18425	100,4	4131	101,8	2473	89,4	6979	100,2	5910	99,1
Prijepolje	39965	101,2	8924	95,1	2582	93,8	10425	97,4	16610	108,9
Raška	33311	99,9	6490	95,4	1787	81,4	8663	111,7	15742	98,8
Sjenica	80767	98,5	8575	95,6	1723	92,0	25619	96,7	46527	100,1
Surdulica	33759	97,6	4793	131,7	410	85,4	7577	93,1	20221	93,5
Trgovište	20873	99,4	7194	173,6	1349	90,6	3743	99,4	9352	74,5
Tutin	39699	100,0	4149	106,1	847	160,4	14665	98,7	20584	100,0
Crna Trava	15718	99,3	306	40,9	27	40,9	7918	111,0	7349	95,5
Čajetina	37354	99,6	2986	94,3	678	65,1	9255	92,5	23948	103,4
Total	**648274**	**98,9**	**146687**	**101,7**	**33312**	**88,6**	**180024**	**100,8**	**295452**	**98,2**
CS=100	**19,61**	**-**	**8,49**	**-**	**8,60**	**-**	**31,11**	**-**	**40,50**	**-**
Participation in total agricultural land	100,00	-	22,00	-	22,71[1]	-	27,76	-	45,58	-

[1]/ In arable land and garden areas.

Source: RIS: Municipalities in the Republic of Serbia, 1997, Belgrade, June 1998, and Municipalities in Serbia 2008, Belgrade, January 2009 and calculation of the authors.

Table 2 - Livestock species, number of heads (pieces) in 2007 and relation to the condition in 1997

Level	Number of cattle	Index 97/07	Number of pigs	Index 97/07	Number of sheep	Index 97/07	Numb. of poultry	Index 97/07
Serbia (without KM)	**1087077**	**82.50**	**3831894**	**93.02**	**1606156**	**91.37**	**16421755**	**73.43**
Central Serbia	**818528**	**75.31**	**2293770**	**94.46**	**1374851**	**92.20**	**9996040**	**68.93**
Bosilegrad	4822	70.25	3281	97.71	8485	58.07	14432	74.09
Brus	8559	99.59	22543	221.25	20567	115.77	44162	81.53
Vranje	9977	69.42	10510	81.00	5412	42.52	114571	21.45
Dimitrovgrad	1827	22.37	1058	8.25	3513	43.14	14895	11.21
Ivanjica	11420	72.31	13165	137.88	24319	72.21	56794	87.01
Nova Varoš	9308	145.37	1830	81.95	10653	66.64	23165	89.13
Novi Pazar	10377	79.98	1490	44.21	8114	57.85	42778	81.44
Pirot	6464	44.65	5490	46.48	13544	25.04	83205	68.31
Priboj	4617	91.52	935	103.20	12052	96.62	16857	65.47
Prijepolje	9454	71.83	594	105.32	11780	68.06	24944	60.32
Raška	5698	83.81	5491	98.58	10619	95.22	42778	66.45
Sjenica	20218	86.18	1268	413.03	18946	60.46	22666	47.37
Surdulica	3398	59.42	3758	71.87	3948	76.50	24198	71.05
Trgovište	2450	90.01	1155	86.84	4305	41.28	28913	266.77
Tutin	12438	115.98	63	-	19484	65.50	20076	113.60
Crna Trava	1373	73.15	555	57.33	842	55.25	6164	68.41
Čajetina	9342	91.50	3899	101.14	30357	98.82	31615	75.20
Total	**131742**	**78.72**	**77085**	**90.64**	**206940**	**64.49**	**612213**	**47.12**
CS=100	**16.08**	**-**	**3.36**	**-**	**15.05**	**-**	**6.12**	**-**

Source: RIS: Municipalities in the Republic of Serbia, 1997, Belgrade, June 1998, and Municipalities in Serbia 2008, Belgrade, January 2009 and calculation of the authors.

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AGRICULTURE DEVELOPMENT IN ROMANIA

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Abstract

Understanding economic agriculture is an important factor in defining development strategy of any country. With economic crisis, relations between different determinants of growth are extremely important. The ultimate aim of agricultural and food economy of Romania is not to be incorporated into the European common market, but to customize, notes and even boost as a deciding factor in determining future directions of economic and social development of all Union. Development opportunities must exceed the impediments of current global crisis. Current situation of Romanian agriculture is nothing but a test of maturity, a trial whose result will materialize positively only in terms of efficient use of Member States' experiences and opportunities realized.

INTRODUCTION

Scientific and technical developments, economic and trade in the last 150 years have said, in agriculture, an overall process of virtualization and merchandising of all its natural-biological processes.
Agriculture, although more conservative and rigid to new technical, has nevertheless some areas where industry has taken before.
During the nearly two centuries, agricultural specialization and productivity differences between regions of the world widened considerably.
Rigor reduce production costs were equally perplexed geography of cities and villages, new forms of division of labour horizontal (territorial) and vertical (subsidiary) were imposed in agriculture.
These structures were passed in Europe, where, especially after the Second World War, witnessing the land accumulation, the devastation of the traditional system of fruit growing, breeding, engine, etc.. These processes made that in half a century, to disappear tens of millions of working in agriculture.
The second agricultural revolution began in Europe after 1945, took place through mechanization, use of chemicals and genetic selection, to ensure food self-sufficiency.
The processes were made by the institutionalization unifying between state and modernized agricultural syndicalism, which favoured the introduction of agriculture in the capitalist system and its subordination of the industrial cycle.
One sector of society has taken for uprooting rural economy symbolism and practices and specific forms of employment.
Various regions have specialized in crop production or in various types of livestock products, the manufacturers of food grievance, occurring farms thousands of animals. He emerged as economies of scale in agriculture, often at the expense of environmental and social dimensions and requirements of agriculture. These specialized farms have always been maintained by public support mechanisms.
Modernization is connected to the globalization of trade, in which significant power is held by Europe and the U.S.. These powers are marked both by statist intervention and by force of industrial groups, the two levels falling in synergy[1].
Particular, the U.S. government never accepted losing control of strategic market of cereals held by the multinational empires of commerce.
U.S. carries constraints for Europeans to open their markets to products (beef hormone produced by the substitution of cereals and oleo-proteins which incorporated in animal feed have to blow milk production of cows, pork and poultry meat).

Facing such environmental and social aberrations, policy-makers are called upon to prove an indisputable responsibility, although the European Commission to the scientific medical evidence attesting to human health damage, has decided in 1996 to show "a cold attitude to not cause adverse reactions in the market"[2].

MATERIAL AND METHOD

Agricultural enterprises of the future must aggregate four cultural levels: global, worldwide, national and local, to fit the logic of the market and world power.

Current rate of agricultural production in developed countries leads to a production damage to the environment.

The oldest objective of a systematic policy of supporting the agricultural sector is to ensure food security for the population up. This means increased production for both consumption to saturation coverage and the requirements resulting from demographic growth.

To support this complex objective, was created in 1945 FAO; since 1962, Europe has food self-sufficiency concerns. Its supporters have raised including the role of agriculture in the economic take-off (in fact often stated in Romania last year and which, viewed in the light of domestic economic developments of farmers, but also in terms of competition and the emergence of large transnational companies agro-food, is something completely exotic, detached from reality and practicality-practice). FAO and the EU are often associated with "state-national" vision of agricultural policies, while the World Bank, for example, is oriented towards international trade and comparative advantages.

The fact is that, as evidenced by the experiences of the last 2-3 decades, if domestic supply system does not work, a country may be exposed to external price manipulation by exporters coming from areas that have experienced strong concentration of agricultural production. Best Western agriculture competitiveness explained less by direct and indirect support, individual and collective agricultural and non-current, but rather by all of the past, the farmers have built their structural advantages, including strong protection from imports they have received to date. The current level high yield Western explained by the annual input current less capital, they are the result of storage of advanced equipment purchased for the low interest loans. Support production and trade of agricultural products and its pressures for liberalization, resulting from continued growth yield and the total amount of food made in developed countries are not only to export instability to countries exposed. Pressures for abandoning protectionist subsidies are a policy in itself, because only the Western countries have gained the means to support. Export credits and foreign food aid are grants involved: lack of agricultural subsidies and support for poor countries may result and decrease land prices, which can be easily purchased by transnational investors, grants and subsidies may increase the price of land. If subsidies create distortions in world trade, their lack of effects and motion generates false, artificial, the domestic prices in different countries, depending on the level of development. Protection against the importation is the recommended support for that is only accessible to poor countries (which have no resources, but which is most of the world community), without the effects of dumping. Globalization of production and consumption pattern of Western advertising and media information society is made before or without globalization methods, techniques, production systems and the Western powers, firms in developing countries can not take no for their own consumption model or to enter the Western market model[3]. Organic farming is with IT, light industry and furniture one of the main resources of the Romanian export.

Certification of organic products. National advisory agency has concluded a cooperation agreement with ECOCERT, private company in France, specializing in survey and certification of organic products. Convention provides for exchanges of information available in France, the European Union and Romania, in agriculture, with the operation and support agriculture and organic farming in particular.

Romania and the EU have established contributions to trade in agricultural products. Negotiations with the EU on bilateral trade arrangements with basic agricultural products

have been completed, the set quota exempt from customs duties. Thus, Romania will benefit from export quotas exempt from customs duties for poultry meat (9,000 tons), pork (15,625 tons), beef (4,000 tons) and meat specialities (of 2,125 tonnes of pig meat, 1,200 tonnes of poultry meat and 500 tons of meat from cattle). In dairy, in addition to the current quota of cheese and sweet cheese (2,800 tons, with an annual increase of 10%) it were established quotas for milk powder (1,500 tons) and yogurt (1,000 tons). Romania still enjoy all quotas for grain and the flour. The fruit was agreed that, in some cases, the application of non-tariff barriers. Concessions agreed with the EU on import of all meat and preparations, cereal, cheese and tomatoes will apply only if all export restrictions are eliminated by the Community. During 2007-2009, Romania has received from the European Union nearly 4 billion euro to support agriculture. The money were distributed on three main areas: direct payments, rural development (which include conversion of labour) and funds for market intervention. Position Paper of the Commission includes a list of names of origin, including 3 types of spirits, 5 types of spirits of wine, 7 types of milk, cheese and 26 other Romanian dishes, and for Sibiu salami, Pleşcoi sausages and Buzau pretzels. Romania will have to prove that it can raise production rates obtained at the European Commission. There were years of work, while for transposition in fact thousands of regulations approved. 2007, Romania's accession to the European Union, noted a new era in the agricultural economy and rural development of our country. Romania must transform its economy in order to quickly integrate into the EU internal market and to enjoy all the positive effects of adopting the Common Agricultural Policy (CAP)[4].

EU membership is probably most pronounced pressure factor for rapid reform of Romanian agriculture and rural economy, given the need for successful integration in European rural economy.

The European model of agriculture is based on a competitive sector, pointing to a market, performing also other functions such as environmental protection, provision of residential settlements more convenient for people living in rural areas and the integration of agriculture with the environment and with forestry. Common Agricultural Policy moving its focus from direct subsidies granted to agriculture (Pillar I of the CAP) to the integrated development of rural economy and to environmental protection (Pillar II of CAP).

Romanian rural economy dominated by agriculture in large part, is still poorly integrated into the market economy. In the current economic situation, of how knowledge and application of marketing techniques depends on the wellbeing of rural and urban, and welfare of farmers.

Romanian manufacturer must operate in line with economic reality existing in the world and national economic and technical methods to apply to devote its stability and efficiency. The manufacturer is forced to produce what is required under domestic and international, to respond promptly to consumer needs, to conduct, therefore, the request for the shaping of their offers.

RESULTS AND DISCUSSIONS

Romanian rural economy has a predominant feature in the very high percentage of subsistence farms, which produce mainly for their own, selling only a small part of produced products. Subsistence farms have limited access to other sources of revenue and therefore welfare of a significant proportion of the rural population depends greatly on the level of profitability of farms.

The program on agricultural perpetuity has started, as an important measure in the mechanism of aggregation of large agricultural areas which will allow an effective agricultural activities so as to resist European competition. This program by small but numerous agricultural landowners are encouraged to sell or rent land owned, they won 100 euro/ha sold/year or 50 euro/ha leased per year[5].

In early 2008, the number of requests for application life annuities reached 37,627, increased significantly as compared with the number of requests made in previous years: 814 requests made for 2006, 23,700 applications recorded for 2007.

To stimulate the transformation of peasant households into commercial family farms, training and strengthening the middle class in rural areas, the budgetary effort has been directed to supporting investments in rural area, stimulating banks participation and developing their skills for agricultural credit.

National Program for Investment was conducted in new plant and animal breeding farms and strengthening existing ones, targeting young families and program support family farms that have at least three cows, a program in which, for the purchase of equipment (tanks for milk cooling, counters and appliances milking, mowing, power generators, feed chopper, etc.).

Thru Farmer Program, that was active in 2006-2007, was submitted 1001 projects with a total declared eligible to request funding for 311.2 million euro. Thus, it is possible to bind all of the funds allocated under SAPARD for the period 2000-2006, from the first half of 2000. During the reporting period continued the sustained implementation of rural development programs financed from the SAPARD fund and the International Fund for Agricultural Development, the deadline for submission of projects end in 2006[6].

Given the need of modernizing the countryside and increasing interest of the beneficiaries for this issue, the Romanian Government approved the provision of public co-financing state budget grants for investment projects under the SAPARD Program, as a tool with the task of co-investment projects eligible under SAPARD standards and for which Community funds were exhausted.

The largest share of agricultural enterprises (approx. 86%) are micro enterprises with fewer than 10 employees. To these are added SMEs around 1,600, which were between 10 and 49 employees. There is such that most agricultural enterprises (97%) have less staff employed.

On the trail the whole transitional period, agriculture has played an important social role, acting as a "buffer" against the socio-economic occupational transition, incorporating a significant proportion of labor force of urban industries[7].

A third of the country's employed population works in agriculture, which places Romania more than 5.9% average of EU27 countries. For this reason, places Romania among the countries with high agricultural potential.

Of the 23.8 million hectares as summed Romania, the country's agricultural area is 14.7 million hectares (61.7%), of which 9.4 million hectares are arable land. Romania is on 7th place in Europe where the agricultural area (Spain, France, Britain, Germany, Italy, Poland) and 5th place as arable land (after Spain, France, Germany and Poland).

One of the conditions that hamper performance in agriculture is a crumbling property in small parcels (less than 3 ha), which requires grouping their holdings need larger areas to be able to switch to an efficient agriculture. This aspect will be regulated by grouping land policy is needed to answer and tasks contained in the government program for 2005-2008 regarding the completion of land tenure reform and to stimulate transformation of peasant households in the nature of family farms commercial and middle class formation in rural areas[8].

Whether Romania would take advantage of its agricultural potential, using the mechanisms available to reach the CAP, would increase the size of GDP / capita growth of gross value added by agriculture, with the main effect of reducing the development gap between our country and the countries of Western Europe[9].

Investigating the situation of agricultural enterprises, in 2008 shows an increase of 6% compared to 2007 the number of agricultural enterprises in general. Number of small and very small enterprises has increased, while the number of medium and large enterprises remained at the same level.

Impact analysis of affiliate to the CAP is a complex process and is not a simple cause and effect type relationship. All measures under the CAP Pillar 1 will affect the whole of agriculture as a productive industry, but also the welfare of each holder of agricultural land, agricultural competitiveness, but also agricultural trade balance and even the national currency exchange rate.

In 2007-2013 period, the support for agriculture (Pillar 1 - Measures for the market) ensures priority through direct payments. Part of the subsidy that correspond to market measures - interventions has a lower weight, and at its end,

near the farmers market to gradually reduce these payments[10].

CONCLUSIONS

Before 2000, Romania's agriculture was not competitive and disparities of the technical equipment, the yield per hectare and per animal, in the exercise of the management in the agro-food system operation, market and economic efficiency were significant from the developed countries.

Reform measures have been unbalanced and there were not accompanied from beginning by a grant system that should provide technical and technological modernization and training of marketing channels on a cooperative or private property system.

Agricultural reform was delayed and was conducted without a legislative basis that should facilitate the formation of market structures. It was not aimed at increasing farm performance.

The land laws have led to excessive parcelling of land. Agricultural policy mechanisms have facilitated the transformation of most of the Romanian agriculture in subsistence agriculture, and the grant system did not stimulate investments for modernization and organization of economic farms.

The process of privatization and restructuring of agriculture has been negative influenced by political factors and lacked scientific validity of agricultural policy decisions.

In Romania, in the year 2007, there were a total of 3,931,350 of farms, of which 99.5% of individual farms, which operates 65.2% of utilised agricultural area (UAA), with an average size 2.34 ha per farm. Units with legal personality is only 0.5% of total holdings, using 34.8% of the UAA and having an average size of 275.37 ha/holding. The average size of farms in Romania is 3.57 hectares, compared to 25 hectares as is the EU-15 average or 18 hectares the average of EU-25.

In Romania, 99.4% of farms are small holdings (less than 8 ESU), 0.3% are small to average holdings (8-16 ESU), 0.2% are average to large farms (16-40 ESU) and 0.1% are large holdings (more than 40 ESU)[11].

Due to deteriorating investment climate and the low correlation between price trends and reassessment of fixed capital, the share of agriculture in total tangible economy evolved oscillating in the range 1989-2007, with general trends of decreasing from 10.9% in 1989 to 1.7% in 2007.

Lack of domestic or foreign capital, made that the investments in agriculture to be lower and lower and the process of creation and development, modernization and restructuring to occur very slowly. The contribution of agriculture to the creation of GDP, varied from a maximum of 21.0% in 1993 to a minimum of 5.7% in 2007 compared with the share of agricultural investment in total investment in Romania, which ranged from 11.7% in 2002 to 3.4% in 2007, we can say that financial resources allocated to agriculture was modest, the funds were not enough for the needs of farms and shows the agricultural marginalization in the process of economic development, low income levels of farmers and lack of stimuli from the market.

Having intermediate inputs per hectare of only 585 euro, Romania is outpaced all old EU countries, as well as new, except Latvia, Lithuania and Estonia. Intermediate consumption per hectare are higher than in Romania by 12.7 times in the Netherlands, 6.0 times in Belgium, 4.2 times in Denmark, 3.0 times in Germany, and the average EU-15 allocated for intermediate consumption 2.3 times more than Romania[12].

Gross value added per hectare is significantly higher in the old EU countries than in Romania (10.1 times in the Netherlands, 4.3 times in Italy, 4.1 times in Belgium, 3.5 times in Greece, 2.3 times in France). Large gaps between Romania and EU countries on average yield and gross value added are based mainly intermediate consumption much higher in these countries. The statement remains valid if we compared the new Member States, Romania was exceeded by almost all countries of the EU gross value added indicator to meters, excluding the Baltic countries.

REFERENCES

[1] This fact was clarified by American administration in 1993, by concept of “total diplomacy” (see Maréchal J.P. - *Humaniser l'économie,* De Bronwer, Paris, p. 12).

[2] Mad cow or production foolness? - *Vache Folle ou Folies du productivism*?, Estelle Deleage, Geoeconomie, nr. 17, 2001, p. 97
[3] Luminița Chivu, Constantin Ciutacu, Valeriu Ioan-Franc, Agriculture between global commercial restrictions and commune policies, Export Printing Press, 2003 pp.35-43
[4] See Ministry of Trade and Economy, Sectoral Operational Program *Increase of Economic Competitiveness*, June 2008;
[5] European Commission, EU Sectoral Competitiveness Indicators, 2008;
[6] Fajnzylber, International Competitiveness: Agreed Goal, Hard Task, CEPAL Review, 36 / 1998;
[7] National Institute of Statistics, www.insse.ro;
[8] Non-Economic Dimensions, Vlerick Leuven Gent Management School, Working Paper series 2008 / 2;
[9] National Program for Rural Development 2007-2013;
[10] National Strategic Plan 2007-2013;
[11] R. Gheorghiu, D. Pâslaru, G. Turlea, Innovation competitiveness in Romanian economy in the context of the Lisbon Strategy, April 2004, www.cerope.ro/;
[12] World Economic Forum, *Global Competitiveness Report 2007-2009*, www.weforum.org;

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NEWS AND PERSPECTIVES ON THE DEVELOPMENT OF RURAL TOURISM, AGROTOURISM AND ECOTOURISM IN THE COUNTY OF ARGEŞ, ROMANIA

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Key words: *rural tourism, agrotourism, ecotourism, rural development, Romania*

Abstract

This scientific paper aims to present briefly the present situation and prospects of the development of rural area of Argeş county through rural tourism, agrotourism and ecotourism. In the same time this paper brings a short contribution to all studies regarding the history and the prospective of the romanian development of tourism and agrotourism domain. Working methods used to achieve this scientific paper were composed of: direct on-site observation, field documentation, analysis of statistical data and consultation with specialised bibliography.Within nowadays modern society conditions, we must focus on countryside environment, respectively on its economical and social development according to rural patrimony and the environment protection. For sure, the development of touristic and agritouristic units within Romanian countryside will trigger positive consequences on economical and social aspects.

INTRODUCTION

Arges county receiving a portion of natural, cultural, historical, architectural and exceptional craft. In this context, the development of tourism in this area is not only possible but also necessary to rationally and effectively exploit all the natural, heritages and human resources.
Research conducted for the preparation of this work are fully justified in the context of the Argeş county area there are many places with tradition in terms of rural tourism development (such as Rucăr, Lereşti, Dragoslavele, Dâmbovicioara, etc.) and a series of locations that can be turned into tourist villages (Arefu, Ştefăneşti, Poienăreii de Argeş, Domneşti, Poienăreii de Muscel, Nucşoara, Corbi, Corbeni, and others).
In developing rural tourism, agrotourism and ecotourism in the county of Argeş be involved, first, local communities and their leadership (County council Argeş), and regional and national governmental and non-governmental (NGOs), such as National Association of Rural, Ecological and Cultural (ANTREC).
In preparation of this work were specifically used data from the doctoral thesis entitled "Research on service activities within the farm. Study case from Rucăr - Bran area" – author: Ion (Săraru) Sia, University of Agronomic Sciences and Veterinary Medicine, Bucharest, 2010.

MATERIAL AND METHOD

The material presented was developed primarily based on studying a number of Romanian and international literature (see references at the end of the paper), the observation of concrete situations on the ground in the documentation of visits - information taken from the county Argeş of

research - based questionnaire conducted in several farms, farmhouses and guesthouses of Argeş county and consultation of numerous articles and studies from internet.
They also consulted a number of official websites of institutions and central and local governing bodies in the area studied, namely: Ministry of Agriculture and Rural Development (MADR), National Association of Rural, Ecological and Cultural (ANTREC) and others.
Research has been conducted in the period 2004 - 2006, in main rural settlements developed in terms of agro-tourist Argeş county, respectively Rucăr, Dragoslavele and Dâmbovicioara.
Data were collected based on questionnaire and were then recorded and processed by conventional methods resulting in a series of tables, graphs and schematic representation.

RESULTS AND DISCUSSIONS

Rucăr - Bran area is located in the North - West of the South - Muntenia region and includes the territorial areas of two counties, namely Argeş and Braşov.
Being the territorial area of the Southern Carpathians, Rucăr - Bran area is individualized by particular climate and geographical.
Historically, populating Rucăr - Bran area is entering a decisive phase after the Romanian state formations one side of the Carpathians, when there first documents and, when there first documents and contributions to shaping broadly, the human settlements on these lands.
Human settlements gradually increases its economic functions, especially its proximity

to Câmpulung Muscel first Romanian capital of the country, where they reigned Basarab I, Nicolae Alexandru Basarab and Vladislav Vlaicu.
Argeş county is one of the most attractive tourist areas in Romania and a area of traditional and authentic spirituality.

In terms of the natural - geographic area is presented as a series of depressions high hills and mountain areas.
The analysis of climatic factors show low thermal amplitude, sheltered from strong winds, low relative humidity, snow rich and long, high insolation with particular valences for tourism.
The most representative common of the Argeş county in terms of tourism and agrotourism development are: Dragoslavele Rucăr and Dâmbovicioara. In *Table 1*, are given administrative elements - territorial organization of the joint.

Table 1. Items administrative - territorial communes and villages in county Argeş

Specification	Area (km^2)	Commons number	Number of villages
TOTAL Argeş county, in which:	6431,2	95	555
Dragoslavele	111,4	1	2
Rucăr	283,6	1	2
Dâmbovicioara	63,1	1	3

Source: Statistical Yearbook Working after Arges county, County Statistics (DJS), the National Statistics Institute (INS), 2007

As can be seen from *Table 1*, Argeş county, covers an area of 6431,2 km², which is against all the South - Muntenia region 17,98%, has a total of 95 communes and 555 villages, which compared to the region is 18,30% and 38,35%.
For commons included territorial - administrative in Argeş county, may establish differentiated situations.
Rucăr is most common area (283,6 km²), and common Dâmbovicioara has the smallest (63,1 km²).

In these areas there are a number of differentiated 2 villages (the villages Dragoslavele and Rucăr) and 3 villages (the village Dâmbovicioara).
Compared with whole villages share Argeş county is between 0,36% and 0,54% and the total area between 0,13% and 0,17%.

Argeş county relief includes the following major subdivisions: depressions, such as depression Podul Dâmboviţei, Rucăr depression, depression Dragoslavele, valleys (Valea Doamnei, Valea Vâlsanului, Cheile Dâmbovicioarei) and mountain massifs, such as Iezer - Păpuşa, Piatra Craiului, Muntele Mateiaş, etc.

The availability of transport routes is a very important indicator in assessing the possibilities of economic and social development of rural areas.

Direct access to an adequate road infrastructure provides prospects for the development of economic activities, facilitate public access to employment, satisfaction of certain services, etc. Relatively developed as a result of location in the middle of the country, Argeş county area is crossed by several major road arteries of communication.

In terms of the economic, Argeş county is defined by a profile of the agricultural product processing and partly food and travel. The current stage of development, Argeş county is characterized by multiple opportunities for recovery of natural resources (mineral resources, forest vegetation, agricultural areas, responsible hunting, etc.), which generated over time the development of agricultural activities and the non-agricultural activities, which led to the proliferation of sources of income.

At the level of several villages are reported crafts and rural industries relating mainly to the processing lane.

Weaving is practiced in every household, in winter, at the loom, realizing "taluri" in the verge in alternating white color - black, "sarici" or clothes of wool Turcan with long wire, etc. Is also noted in the crafts and wood furniture.

Can be highlighted traditional food products in this area identified by the criteria established by the Ministry of Agriculture and Rural Development (MADR), such as cheese mixed Dâmbovicioara, Dâmbovicioara sheep cheese, cow cheese Dâmbovicioara, cheese Rucăr skin, skin cheese Dâmbovicioara, Dâmbovicioara smoked cheese, cheese Rucăr, Rucăr smoked cheese, salt Rucăr ricotta, ricotta Dâmbovicioara salt, ice Dâmbovicioara sheep, sheep Dâmbovicioara pastrami, etc. Among these products cheese of Rucăr („caşcavalul de Rucăr") is a brand that is made with producers Rucăr and locals in neighboring villages. Trade in these products is a prosperous activity in the area.

One can mention in particular is rich in ***common Rucăr*** natural products derived mostly shepherds and raising dairy cows. Over time the inhabitants of this settlement have gained a good reputation with dairy products made from ancient recipes. It is recognized famous smoked cheese and cheese Rucăr (registered trademark).

Rural tourism in Argeş county has experienced a great development especially in the last decade.

Table 2. Farmhouses and guesthouses in Argeş county entered the network ANTREC

Localities	Guesthouses Name (Number Daisies)	Number of rooms (Capacity accommodation)
CETĂŢENI	Vadul Lin (2)	5 (10)
CORBENI	Marinescu (2)	2 (4)
DRAGOSLAVELE	Surâsul Muntelui (2)	5 (12)
LACUL VIDRARU	Baza nautică Vidraru (2)	7 (14)
PODUL DÂMBOVIŢEI	Sârboiu (2)	4 (10)
RUCĂR	Ana (2)	2 (4)
RUCĂR	Cristiana (2)	5 (10)
RUCĂR	Ela (2)	4 (8)
RUCĂR	Folea (2)	4 (8)
RUCĂR	Georgeta (2)	6 (12)
RUCĂR	Ileana (2)	5 (10)
RUCĂR	Luciana (2)	4 (8)
RUCĂR	Mariş (2)	4 (8)
RUCĂR	Marilena (2)	3 (6)
RUCĂR	Rucsi (2)	4 (8)
RUCĂR	Soare (2)	5 (9)
VALEA URSULUI	Pădurea cu flori (2)	4 (8)
Total	-	73 (149)

In ***Dâmbovicioara*** were open no more and no less than 40 guesthouses, wich provides accommodation for tourists. Most attracted investors attracted to cave and surrounding area were Dâmbovicioara of Bucharest and the Israelis. Numerous groups of

entrepreneurs in the Holy Land has arrived in the area Dâmbovicioara to spend some time at the foot of the mountain and a clean area (after Ştefan I., Dâmbovicioara - attractive for Hebrew *(Dâmbovicioara - punct de atracţie pentru evrei)*, TOP NEWS, 27. August. 2008).
In the ***Rucăr*** village are many farmhouses and guesthouses, which grouped 11 agrotouristic units with daisies and recorded in catalogs ANTREC (National Association of Rural, Ecological and Cultural).
May we find *farmhouses and guesthouses* and other rural localities of Argeş county, such as Cetăţeni, Corbeni, Dragoslavele, Valea Ursului, Podul Damboviţei, etc.
Rural tourism was the main objective of economic policy in the Argeş county, which was supplemented by specific policies were considered:
- promoting diversity of economic activities, particularly in rural areas;
- the creation of small and medium enterprises in the agriculture, industrial, artisanal, commercial and service;
- development of transport infrastructure and communications;
- farms processing in unit performing, efficient and diversified activities (with particular reference to the development of agrotouristic services);
- the best use of natural resources and anthropogenic (heritages);
- human potential development and training local people in the development of such areas in terms of social, economic, cultural, ecological, etc.;
- improving social infrastructure and living conditions of rural people, etc.

CONCLUSIONS

1. ***The historical, geographical and natural Argeş county*** individualizes the territorial area of our country and a wealth of resource transformed into one of the most attractive tourist areas in Romania and an authentic tradition and spirituality. Argeş couty is guarded by high ridges of Făgăraş and Piatra Craiului Mountains on the North, by the bald peaks of Leaota Massif on the East, by the Găvanu - Burdea Plain on the South, and on West by watershed from the Olt, Argeş and Vedea basins. The mountainous north region is home to some of the highest peaks of the Southern Charpathians, with 14 peaks over 2400 m. These include Moldoveanu Peak at 2543 m and Negoiu Peak at 2535 m.
2. ***The natural potentialities of Argeş*** is given by: topography of the area, which includes the following major subdivisions: depressions (Podul Dâmboviţei, Rucăr, Dragoslavele), valleys and keys (Valea Doamnei, Valea Vâlsanului, Cheile Dâmbovicioarei) and mountain massifs, such as Iezer - Păpuşa, Piatra Craiului, Muntele Mateiaş, etc., flora area, which is very diverse, great natural richness, wildlife area, which is represented by many species.
3. ***The potential socio - demographic Argeş county*** is a three - dimensional resultant technical characteristics, economic and social manifested at the territorial level
4. ***Argeş county***, covers an area of 6431,2 km², which is against all the South - Muntenia region 17,98%, has a total of 95 communes and 555 villages, which compared the region is 18,30% and 38,35%. *For commons included territorial - administrative county of Argeş*, one can find situations differentiated. Rucăr is most common area (283,6 km²), and common Dâmbovicioara has the smallest (63,1 km²) In these areas there are a number of differentiated 2 villages (the villages Dragoslavele and Rucăr) and 3 villages (the village Dâmbovicioara). Compared with whole villages share Argeş county is between 0,36% and 0,54% and the total area between 0,13% and 0,17%.

4. ***Argeş county economic potential analysis*** captures a number of characteristics that promote the development of multiple economic and social activity, as defined by an agricultural profile, the agrotouristic services and in part by processing food products. The availability of transport routes is a very important indicator in assessing the possibilities of economic development - social rural areas**.** Direct access to an adequate road infrastructure provides prospects for the development of economic activities, facilitate

public access to employment, satisfaction of certain services.

5. *The main areas of activity* that bring revenue in the Argeş county are: agriculture, rural tourism and agrotourism, exploitation and wood processing, animal husbandry, processing and marketing of meat and dairy products, road transport, civil engineering, etc. At the level of villages are reported related rural crafts and industries particularly for processing wood, lane and furniture. May also be highlighted in the area of traditional food products such as dairy products (cheese mixed Dâmbovicioara, Dâmbovicioara sheep cheese, cow cheese Dâmbovicioara, cheese Rucăr bellows, bellows Dâmbovicioara cheese, smoked cheese Dâmbovicioara, Rucăr cheese, cheese Rucăr smoked, salted Rucăr ricotta, ricotta Dâmbovicioara salt, ice Dâmbovicioara sheep, sheep Dâmbovicioara pastrami, etc.) and certain meat products. Among these products "cheese of Rucăr" (caşcavalul de Rucăr) is a national brand.

6. *Fairs and exhibitions*, are common forms in Argeş that as their main presentation and sale of agricultural products and food, and objects from craft and craft activities. They have a permanent (Sunday fairs in some common) or seasonal (monthly, biannual)

7. ***The potential development of agrotourism in Argeş county area*** is based on the attractiveness who is determined by the natural, geographical, and the wealth of human resources. Also, is noteworthy in this area specifically romanian hospitality and many and tasty traditional dishes.

8. ***The main natural tourist attractions of Argeş county*** are: Piatra Craiului Mountains, Iezer - Păpuşa, Mount Mateiaş, keys and Dâmbovicioara cave, etc. The glaciar lakes of Bâlea, Urlea and Podragul do the mountain landscape. A visit to Argeş county would not be complete without and trip to The Transfăgărăşan Road, wich is the most magnificient work of this type in Romania. Situated at an altitude of 2034 meters, it features a tunnel of 845 meters through the mountains peaks of Negoiu and Moldoveanu.

9. At the Argeş county level can be distinguished and a set of *cultural values - historical*, such as the Orthodox churches in the area, monasteries (Curtea de Argeş, Monastery Slănic, etc.), historical relics (the ruins of the roman camp and medieval fortresses from Podul Dâmboviţei, and others. The health care to note the elements of ethnography and folklore, crafts, etc.

Curtea de Argeş Monastery is one of the famous architectural monuments from Romanian country.

10. ***Analysis of development potential of Argeş county*** is required by the need to know area development opportunities through agricultural and non-agricultural activities. Locally and regionally is a guidance on the development of small and medium - sized industry, wood processing, processing of animal hides, etc.

In some common allows the purchase of land for construction of villas, chalets and holiday homes.

11. ***Argeş county level tourism services*** have been increased in recent years, but the rhythms and organization were not correlated with elements of local infrastructure, without ensuring sustainable development.

12. Currently, two areas can be highlighted primary and priority to be considered in the *development programs of Argeş county*, namely: demographic and economic area. This means that rural development is a concept oriented development of specific activities production processes and services and the recovery of many of their results.

13. ***Analysis of development potentialities of Argeş county*** reveals three - dimensional aspect of the proposed rural development, namely:

- specific agricultural production area exists in all municipalities, with special reference to the growth of cattle and sheep;
- processing of raw materials and processing of livestock in traditional regional agricultural products (eg: milk derivatives production of common Rucăr);
- rural tourism services, for which certain municipalities had a growth rate more intense than others, although the natural conditions are relatively similar across geographical area.

14. *Argeş county* receiving a portion of natural, cultural, historical, architectural and exceptional craft. In this context, the

development of tourism in this area is not only possible but also necessary to rationally and effectively exploit all the natural and human resources.

15. *In Argeş county area there are many places with tradition in terms of rural tourism development* (such as Rucăr, Lereşti, Dragoslavele, Dâmbovicioara, etc.) *and a number of locations that can be turned into tourist villages* (Arefu, Ştefăneşti, Poienăreii de Argeş, Domneşti, Poienăreii de Muscel, Nucşoara, Corbi, Corbeni, and others).

16. ***Rural tourism, agrotourism and ecotourism in Argeş county*** experienced a great development, especially in the last decade. In *Dâmbovicioara* were open no more and no less than 40 guesthouses, accommodation for tourists. Most attracted investors attracted to cave and surrounding area were Dâmbovicioara of Bucharest and the Israelis. Numerous groups of entrepreneurs in the Holy Land has arrived in the area Dâmbovicioara to spend some time at the foot of the mountain and a clean area. In *Rucăr* there are many farmhouses and guesthouses, which grouped 11 guesthouses with daisies and recorded in catalogs ANTREC (National Association of Rural, Ecological and Cultural). May we find farmhouses and guesthouses and other

rural localities from Argeş county, such as: Cetăţeni, Corbi, Corbeni, Dragoslavele, Valea Ursului, Podul Dâmboviţei, etc.

17. ***The development of rural tourism, agrotourism and ecotourism in the county of Argeş*** be involved, first, local communities and their leadership, and regional and national governmental and non- governmental, as National Association of Rural, Ecological and Cultural (ANTREC), County council of Argeş, etc.

REFERENCES

[1] Alecu N. I. and collaborators, 2006, Agrotourism and agrotouristic marketing, Ceres Publisher, Bucharest.
[2] Alexandri Cecilia, Davidovici I., Gavrilescu D., 2004, Treaty of agricultural economy, Expert Publisher, Bucharest.
[3] Bran Florina, Şimon Tamara, Nistoreanu P., 2000, Ecotourism, Economica Publisher, Bucharest.
[4] Buianu Vergina, 2006, Agrotourism economy, Terra Nostra Publishing House, Iaşi.
[5] Florian Violeta, Gavrilescu D., Giurcă Daniela, Rusali Mirela, Şerbănescu Camelia, 2002, Restructuring and transition of agrifood sector and rural areas in Romania, Expert Publisher, Bucharest.
[6] Gavrilescu D., Florian Violeta – coordinators, 2007, Rural economy in Romania, Terra Nostra Publishing House, Iaşi.
[7] Glăvan V., 2003, Rural tourism, Agrotourism, Durable tourism, Ecotourism, Economica Publisher, Bucharest.
[8] Ion (Săraru) Sia, 2010, Research on service activities within the farm. Study case from Rucăr - Bran area, doctoral thesis, University of Agronomic Sciences and Veterinary Medicine.
[9] Moga T., Rădulescu Carmen Valentina, 2004, Complex development of rural area, ASE Publishing House, Bucharest
[10] Moinet F., 1993, Le tourism rural, Editions France Agricole.
[11] Ştefan I., 2008, Dâmbovicioara – atraction for Hebrew, TOP NEWS, 27. august. 2008
[12] Statistical Yearbook, Argeş county statistics, The National Statistics Institute (INS), 2007.
[13] ANTREC – National Association of Rural, Ecological and Cultural Tourism, 2002, 2003, National Catalogue of Guesthouses and Farmhouses in Romania, Bucharest.
[14] Guide halls, www.ghidulprimariilor.ro;
[15] The travel guide of Romania, 2003, Publirom Advertising Agency, Bucharest.
[16] www.antrec.ro
[17] www.madr.ro

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THE MACROREGIONAL EVOLUTION OF RURAL EMPLOYMENT STRUCTURES

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Key words: *labour market, employment structure, employment level, demand for labour*

Abstract

The study identifies the causality relations between the rural labour market characteristics and those specific to employment structures: the more the non-agricultural employment level in the rural area increases, the more the human values specific to a rural area are used and the more flexible and inclusive he labour market is. Another category of relationships refers to: the employment structures' modernity level and the diversity and range of opportunities for the economic diversification of the rural space and to the impact of unemployment on the employment model. The structural characteristics analysis showed that the pressure put by unemployment leads to accelerating the implementation of measures to stimulate the creation of jobs and/or to adapt the supply of labour to the volume and structure of the qualifications required on the regional market. The consequence is an ample process of rural employment reorganisation materialised differently according to the macroregional economic-social conditions.

INTRODUCTION

The rural employment structures are determined by the macroregional economic-social development model, by the characteristics of the demand for labour and the strategic adjustment of the labour supply to the requirements of the economy. The differences between macroregional employment models are caused by the level of economic development and modernisation specific to each macroregional rural area; the population of Macroregion 1 is affected by the lowest employment rate compared to the other macroregions; this index is maintained at 54.8%. the population in Macroregion 2 records the highest employment level compare to the other macroregional entities, the value of this index being 63.9% in 2007.

The educational requirements of the rural labour market have an increasing trend; in the employed persons educational structure the ratio of those with higher education is increasing. These requirements seem to be higher at the level of Macroregion 1 compared to the national rural average, the ratios of higher education graduates to the overall population being higher and increasing at an accelerated pace (in 2007 the ratio of employees with higher education being of 4% in Macroregion 1 compared to only 3% at national level). The employment structures and their relationship with the labour market depend on the macroregional specificity beginning with the demographic one and ending with the social one.

MATERIAL AND METHOD

The study of the employment structures evolution used the statistical analysis. The sets of indicators were the following: the labour recruitment source reflected in the active population size; the current employment structures reflected in the employment size; the

labour supply reflected by the unemployment size; the demand for labour reflected in the vacancies characteristics. The analysis if performed at two levels: at the level of each macroregion; comparatively between the two development regions which make up a macroregion in order to identify the interregional disparities characterising the labour market and the needs for corrective intervention in order to stimulate employment in non-agricultural domaNIS. A typological analysis of the rural space was also performed: significantly rural and predominantly rural for each macroregion and component region; the significantly rural space is defined as having a percentage of rural population ranging between 15-50%, the predominantly rural space has a population exceeding 50%. This feature was quantified for each macroregion and the rural profile was established; this method was also used within the development regions, components of macroregions. The analysed interval is 2005-2007. The main data sources were: Labour Force in Romania: Employment and Unemployment, NIS, 2008, Household Labour Force Survey, Labour Force in Romania. Employment and Unemployment (AMIGO), 2000- 2008, TEMPO ONLINE. Regional Statistics, Structural Survey in Agriculture, 2005, Regional Development Plans 2007-2013, Strategic Regional Frameworks 2007-2013, Employment Programmes for 2008, CEA, EUROSTAT, UNDP (2004) National Human Development Report 2003 – 2004; UNDP (2005) National Human Development Report 2005, National Strategic Reference Framework 2007-2013, Government of Romania 2006, Annual SME Report 2008, The National Employment Strategy, 2004-2010.

RESULTS AND DISCUSSIONS

At Macroregion 1 level, the diversification level of the economic activities in the rural area is higher compared to the national average. The secondary and tertiary sectors are expanding, their importance to employment increasing from 47% in 2005 to 50.5% in 2007. the most dynamic sectors are industry and constructions, which manage to attract the largest percentages of the population employed in agriculture; the ratio of persons employed in industry and constructions to the overall population increased from 25.5% in 2005 to 28.1% in 2007.

Table 1: The evolution of the employed population structure in the rural area according to domaNIS of activity In Macroregion 1 and in its component regions (2005 -2007)

	As % of the area total and region total					
	Agriculture		Industry and constructions		Services	
	2005	2007	2005	2007	2005	2007
Rural total	**64.2**	**61.2**	**18.6**	**19.9**	**17.1**	**18.8**
M 1	**53.0**	**49.4**	**25.5**	**28.1**	**21.4**	**22.3**
North-West	58.6	56.3	21.9	23.8	19.3	19.8
Centre	44.6	39.7	30.8	34.2	24.5	25.9

Source: NIS (2006) Labour Force in Romania. Employment and Unemployment in 2005; NIS (2008) Labour Force in Romania. Employment and Unemployment in 2007

At Macroregion 1 level, compared to the national rural average, the ratios of higher education graduates to the overall employed population are high and increase at an accelerated pace (in 2007: the ratio of employees with higher education being of 4% in Macroregion 1 compared to only 3% at national level). The educational requirements match the nature of the economic activities performed at macroregional level, as it is well-known that this macroregion is one which concentrates the highest diversity of non-agricultural economic activities. Thus, Macroregion 1 has the educational structure of the employed population with the smallest percentages of persons with low education level. Both regions that make up Macroregion 1 have educational structures of the employed population higher than the national average, with upward trends in training requirements. By comparison, the Centre Region stands out, with 4.5% of the employed population having higher education and only 33.1% having low level education in 2007.

The gross volume of the labour supply, expressed in the total number of unemployed persons registered in Macroregion 1, varied in the interval 2005-2007. The risk of becoming unemployed is higher for the young, whose unemployment rate is the highest, with upward trends in Macroregion 1. Thus, the incidence of unemployment among the young aged 15 to 24 increased from 16.0% in 2005 to 19.6% in 2007, while the general unemployment rate for

the overall working age population was of 6.7% in 2005, respectively 6.3% in 2007. As the educational level increases, the unemployment rate decreases – a normal trend in a functional market economy. This trend is maintained both at the level of Macroregion 1, and at the level of the Centre Region. The exception is the North-West Region, where the unemployment rate for persons with higher education is higher than the one for persons with secondary education and higher than the regional one (3.5% compared to 3.4% region total).

Table 2: The unemployment rate according to education level at national, Macroregion 1 and component regions level in 2007

	Unemployment rate			
		Education level		
	Total	Low	Secondary	Higher education
National	**4.9**	**4.4**	**5.3**	**3.7**
M 1	**5.8**	**7.3**	**5**	**2.8**
North-West	3.4	3.7	3.2	3.5
Centre	9	13.2	7.1	2

Source: our own processing of the statistical data available in "Labour Force in Romania. Employment and Unemployment", NIS 2008

The supply of jobs in Macroregion 1 matches, in terms of structure, the employed population distribution according to activity sectors, the largest number of vacancies being in industry and constructions (60.2%) followed by services which account for 45.3% of jobs. At Macroregion 1 level there is a more important labour deficit in the segment of unskilled workers, who are offered 22.7% of the total vacancies, compared to only 17.1% at national level.

At Macroregion 2 level, the economic activities diversification level in the rural area is much lower compared to the national average; the secondary and tertiary sectors are expanding slowly, their cumulative importance to employment increasing from 26.9% in 2005 to 27.6% in 2007. Both regions making up Macroregion 2 have educational structures of the employed population lower than the national average, with tendencies towards a relative stagnation in training requirements. By comparison, the North-East Region stands out, where the employed population educational structure worsened, due to the decrease in the percentage of employees with higher education from 2.1% in 2005 to 2.0% in 2007. The employment structure of the rural population in the North-East Region is dominated by the primary sector in which over 76.0% of the employed persons worked in 2007. The secondary and tertiary sectors are poorly represented in the employment structure of the region, both representing a little over 11% of the overall employed population. The employment structure of the rural population in the South-East Region is dominated by the primary sector, in which 64.0% of the employed persons worked in 2007.

Table 3: The evolution of the employed population structure in the rural area according to activity sectors in Macroregion 2 and in the component regions (2005 -2007)

	As % of the area total and region total					
	Agriculture		Industry and constructions		Services	
	2005	2007	2005	2007	2005	2007
Rural total	**64.2**	**61.2**	**18.6**	**19.9**	**17.1**	**18.8**
M 2	**73.1**	**72.4**	**12.9**	**13.4**	**13.8**	**14.1**
North-East	75.1	76.4	11.9	10.9	12.9	12.6
South-East	69.1	64.3	15.1	18.4	15.7	17.2

Source: NIS (2006) Labour Force in Romania. Employment and Unemployment in 2005; NIS (2008) Labour Force in Romania. Employment and Unemployment in 2007

The gross volume of the labour supply, expressed in the total number of unemployed persons registered at Macroregion 2 level, varied in the interval 2005-2007. The risk of becoming unemployed is higher for the young, whose unemployment rate is the highest, with upward trends in Macroregion 2. Thus, the incidence of unemployment among the young aged 15 to 24 increased from 11.1% in 2005 to 12.6% in 2007, while the general unemployment rate for the overall working age population was of only 4.4% in 2005, respectively 4.0% in 2007.

The unemployment rates specific to the rural areas in Macroregion 2, both for the overall working age population and for the young and the old, are inferior to the national average, both in 2005 and in 2007. The unemployment rate in the rural area according to education level at Macroregion 2 level does not confirm the importance of the education process in facilitating access to the labour market; we notice almost equal unemployment rates for those with higher education and for those with low education levels. At the level of the development regions making up Macroregion 2, there is no statistical causality relation between education and unemployment, which

indicates a labour market imbalance (as the educational level increases, the unemployment rate decreases – a normal trend in a functional market economy).

Table 4: The unemployment rate according to education level at national, Macroregion 2 and component regions level in 2007[13]

	Unemployment rate			
		Education level		
	Total	Low	Secondary education	Higher education
National	**4.9**	**4.4**	**5.3**	**3.7**
M 2	**3.5**	**2.4**	**4.7**	**2.5**
North-East	2.1	1.4	2.9	3.2
South-East	6.2	4.7	8.1	1.4

Source: our own processing of the statistical data available in "Labour Force in Romania. Employment and Unemployment", NIS 2008

The job supply at Macroregion 2 level is in the sectors fostering economic-social progress – the secondary and tertiary ones -, most vacancies being in industry and constructions (44.3%), followed by services which offer 44.0% of the jobs. It appears that at Macroregion 2 level there is a higher labour deficit in the segment of unskilled workers, who are offered 20.5% of the total number of vacancies, compared to only 17.1% at national level.

At Macroregion 3 level, the economic activities diversification level in the rural area is higher compared to the national average; the secondary and tertiary sectors are developing, their importance to employment increasing from 45% in 2005 to 49% in 2007.

The most dynamic sector is that of services, which manage to record the highest ratios to the population employed in agriculture; the ratio of the persons employed in services to the overall employed population increases from 21.6% in 2005 to 25.2% in 2007. The employment structure of the rural population in the South Region is still dominated by the primary sector of the economy, in which 53.3% of the employed persons worked in 2007. The general trend is to reverse the ratio of forces between the primary sector, on the one hand, and the secondary and tertiary sectors on the other. The latter seem to gain more and more and reshape the order of rural employment structures. If in 2005 agriculture provided jobs to 58.5% of the employed population, in 2007 its importance to employment decreased to 53.3%. The employment structure of the Bucharest-Ilfov Region is dominated by the tertiary sector, in which 55.9% of the employed persons worked in 2007, followed by the secondary sector which provides jobs to 28.8% of the employed population. This structure has clear urban significance acquired in time.

Table 5 The evolution of the employed population structure in the rural area according to activity sectors in Macroregion 3 and in its component regions (2005 -2007)

	As % of the area total and region total					
	Agriculture		Industry and constructions		Services	
	2005	2007	2005	2007	2005	2007
Rural total	**64.2**	**61.2**	**18.6**	**19.9**	**17.1**	**18.8**
M 3	**54.9**	**50.7**	**23.4**	**24.0**	**21.6**	**25.1**
South	58.5	53.3	22.8	23.7	18.7	22.9
Bucharest	15.6	15.3	30.3	28.7	54.0	55.8

Source: NIS (2006) Labour Force in Romania. Employment and Unemployment in 2005; NIS (2008) Labour Force in Romania. Employment and Unemployment in 2007

The gross volume of the labour supply, expressed in the total number of unemployed persons registered in Macroregion 3, varied in the interval 2005-2007, to amount to 64,914 persons in 2007. The risk of becoming unemployed is higher for the young, whose unemployment rate records high values, with and upward trend. Thus, the incidence of unemployment among the young aged 15 to 24 increased from 19.2% in 2005 to 19.8% in 2007, while the general unemployment rate for the overall working age population was of only 7.7% in 2005 and 7.1% in 2007.

The unemployment rates specific to the rural areas in Macroregion 3, both for the overall working age population and for the young and the old, are superior to the national average, both in 2005 and in 2007. The risk for the active population not to have a job is therefore higher in Macroregion 3 compared to the overall rural area, active measures to boost the creation of jobs being necessary.

The evolution of unemployment in the two regions matches the macroregional trend, in terms of both volume and structure, what differentiates the regions being the value of the indicators.

The unemployment rate in Macroregion 3 is the highest of all the macroregions, and the differences between regions are important, being caused by different demands for and supplies of labour.

[13] These data are valid for the entire unemployed population

Table 6: The unemployment rate according to education level at national, Macroregion 3 and component regions level in 2007

	Unemployment rate			
		Education level		
	Total	Low	Secondary education	Higher education
National	**4.9**	**4.4**	**5.3**	**3.7**
M 3	**6.4**	**6.5**	**6.4**	**6**
South	6.2	6.2	6.2	6.5
Bucharest-Ilfov	9.1	11.4	8.6	3.1

Source: our own processing of the statistical data available in "Labour Force in Romania. Employment and Unemployment", NIS 2008

The unemployment rate in the rural area according to education level at Macroregion 3, respectively Bucharest-Ilfov development region level (except for the South region) confirms the importance of the education process in facilitating access to the labour market.

The supply of jobs at Macroregion 3 level is in the secondary and tertiary sectors: most vacancies being in services (55.4%) followed by industry and constructions which provide 43.9% of the jobs. At Macroregion 3 level there is a relatively low labour deficit in the category of unskilled workers, who are offered 9.0% of the total vacancies, compared to only 17.1% at national level.

Macroregion 4 has a high level of economic activities diversification in the rural area compared to the national average; the secondary and tertiary sectors are developing, their cumulative importance to employment increasing from 30.6% in 2005 to 35.1% in 2007. The employment structure of the rural population in the South-West Region is dominated by the primary sector in which 73.4% of the employed persons worked in 2007. In the evolution, we notice that the importance of agriculture to employment decreases relatively slowly, the percentage of persons employed in agriculture decreasing at an annual rate of only 2.7% in the interval 2005-2007. The secondary and tertiary sectors are poorly represented in the employment structure of the region, both representing a little over 12% of the overall employed population. In the employment structure of the rural population in the West Region, the primary sector of the economy fills the top position as job supplier; 48.3% of the employed population of the region worked in agriculture in 2007. The secondary and tertiary sectors together provide jobs to 51% of the employed population, higher employment opportunities being provided in the industry and constructions sector. Between 2005 and 2007, the ratio of agriculture to the rural employment structure decreased by 2.0%, the excess being labour being absorbed by the secondary and tertiary sectors in a relatively balanced way. The regional non-agricultural economy is dominated by the secondary sector where 30.2% of the employed persons in the rural area worked in 2007. The decrease in the dependence on agriculture led to an improvement in the standard of living for the rural population in the West Region.

The gross volume of the labour supply, expressed in the total number of unemployed persons registered in Macroregion 4, varied in the interval 2005-2007, to amount to 42,356 persons in 2007.

Table 7 The evolution of the employed population structure in the rural area according to sectors of activity in Macroregion 4 and in its component regions (2005 -2007)

	As % of the area total and region total					
	Agriculture		Industry and constructions		Services	
	2005	2007	2005	2007	2005	2007
Rural total	**64.2**	**61.2**	**18.6**	**19.9**	**17.1**	**18.8**
M 4	**69.4**	**64.8**	**16.8**	**18.6**	**13.7**	**16.4**
South-West	78.7	73.4	10.9	12.6	10.3	13.9
West	50.3	48.3	29.0	30.2	20.6	21.4

Source: NIS (2006) Labour Force in Romania. Employment and Unemployment in 2005; NIS (2008) Labour Force in Romania. Employment and Unemployment in 2007

The risk of becoming unemployed is higher for the young, whose unemployment rate records the highest value in the case of this demographic category. Thus, the incidence of unemployment among the young aged 15 to 24 increased from 10.6% in 2005 to 15.0% in 2007, while the general unemployment rate for the overall working age population was of only 4.8% in 2005 and 5.2% in 2007.

The unemployment rates specific to the rural areas in Macroregion 4, both for the overall working age population and for the young and the old, are inferior to the national average, both in 2005 and in 2007.

The unemployment rate in the rural area according to education level in Macroregion 4 does not confirm the importance of the education process in facilitating access to the labour market, except for the West Region.

Table 8: The unemployment rate according to education level at national, Macroregion 4 and component regions level in 2007

	Unemployment rate			
		Education level		
	Total	Low	Secondary education	Higher education
National	**4.9**	**4.4**	**5.3**	**3.7**
M 4	**3.5**	**3.9**	**5.3**	**3.5**
South-West	2.1	2.6	4.8	3.2
West	6.2	6.9	5.9	3.9

Source: our own processing of the statistical data available in "Labour Force in Romania. Employment and Unemployment", NIS 2008

At the South-West Region level, we notice the existence of relatively high unemployment rates in the case of persons with higher education compared to the unemployment rate of the persons with low education level.

The job supply in Macroregion 4 is in the sectors specific to industry and constructions (58.9%) followed by services which provide 35.4% of the jobs. At Macroregion 4 level, there is a more important labour deficit in the segment of unskilled workers, who are offered 23.6% of the total vacancies, compared to only 17.1% at national level.

CONCLUSIONS

At Macroregion 1 level, the labour recruitment source is faced with a higher ageing risk compared to the overall Romanian rural area; the number of the active population aged 15 to 24 decreases by 13.6% in 2007 compared to 2005, the number of the old active population increases by 9.7% in the same interval. The rural labour market in Macroregion 1 is faced with the risk of an old labour supply, and between the two component regions there are significant differences in terms of the amount of such a risk.

At Macroregion 2 level, the labour recruitment source is faced with an ageing risk comparable to the overall Romanian rural area: the number of the active population aged 15 to 24 decreases by 9.8% in 2007 compared to 2005, the number of the old active population increases by 0.7% in the same interval. On the long term, Macroregion 2 will be faced with risk of active population ageing because the willingness to work seems to increase significantly in the 45-54 age group by 38.3%. the rural labour market in Macroregion 2 is faced with a moderate ageing risk for the labour supply.

At Macroregion 3 level, the labour recruitment source is faced with a low ageing risk compared to the overall Romanian rural area, the number of the active population aged 15 to 24 decreasing by only 0.9% in 2007 compared to 2005, the number of the old active population increased by only 5.8% in the same interval. The number of the old active population is only 10% higher than the number of the young population. The rural labour market in Macroregion 3 is faced with a moderate ageing risk for the labour market supply.

At Macroregion 4 level, the labour recruitment source is faced with a high ageing risk, the number of the active population aged 15 to 24 being smaller compared to the old active population. The downward trend of the labour recruitment source is visible in all age groups in the macroregional rural area, except for the age group 35-44. The rural labour market in Macroregion 4 is faced with a high ageing risk for the labour supply, the number of the old active population being 19.0% higher than the number of the young one in 2007, with upwards trends as far as this gap is concerned.

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REFERENCES

[1] NIS (2006) Labour Force in Romania. Employment and Unemployment in 2005

[2] NIS (2008) Labour Force in Romania. Employment and Unemployment in 2007

[3] http://lmv.anofm.ro/indet.php (03.04.2009

[4]http://www.anofm.ro/1079_numarul-total-de-someri-inregistrati-si-rata-somajului-pe-tara-si-pe-judete-la-data-de-31-03-20

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FIELD ANALYSIS REGARDING THE EMPLOYMENT NEEDS IN THE RURAL AREA, IN A MACROREGIONAL PROFILE

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Key words: *employment needs, rural area, macroregional profile*

Abstract

The present paper represents an abstract of the analysis regarding the employment needs in the rural area, in a macroregional profile, performed following field studies developed within the POSDRU 13/5.2/S/11 no. 3930 study – "The labour market development through the promotion of non-agricultural occupations in the rural area". The analysis pursued the identification of the professional qualification/re-qualification of four target groups: people employed in the subsistence agriculture, rural women, young unemployed people and rural managers, from the development regions of North-West (Macroregion 1), North-East (Macroregion 2), South (Macroregion 3) and South-West (Macroregion 4).

INTRODUCTION

The identification of the employment options, expectations and needs of the target groups was done according to certain demographic and social characteristics, some of them being predictive variables for the employment universe of the subjects in the studied communities. The target groups have different structures, according to the objectives and purposes of the field inquiry; for the target group "people employed in the subsistence agriculture" the operators wanted to interview especially men, rural households' leaders in order to establish their employment expectations, those of the women being identified in another target group. The structure of the young unemployed people and of the rural managers has not been influenced by any methodological request, such that they are the actual structural model of the two target groups, which is different from one investigated system to another.

The empiric hypotheses of the field analysis are the following:

- as the economically marginalized groups – rural women, people employed in subsistence agriculture; young unemployed people – have a richer educational capital the grater the economic and social insertion in the non-agricultural sectors, thus reducing the social disparities;
- the employment behaviours, latent or manifested, are generated by the present employment status, being even more socially pronounced as there is an institutional preoccupation, at the community level, that is more clearly defined;
- the interpolation in the labour market circuit is more emphasized as the employment expectations, aspirations coincide with the job offers;
- the gearing of rural managers in professional perfecting/training can determine both a sensible increase of the degree of professionalism and a positive perception at the rural communities level of their status.

MATERIAL AND METHOD

In order to perform the field analysis a series of investigating and knowing the employment needs of the target groups techniques and strategies was used [1].
The methodology included a series of rules and principles for the development of the inquiry, the working tools to gather and analyze the data, the identification criteria, the certification of the quality of the research criteria, the strategies of the application and the theoretical construction, the integration of particular theories into more general theories [2].
The research method used was the direct sociological inquiry which took into consideration gathering information through conversations with the subjects. With the help of this type of inquiry there were collected information regarding the people composing the target groups, their opinions regarding their own occupations, their employment expectations and the degree of acceptance of the types of courses for the non-agricultural occupations. The inquiry technique used was the questionnaire – adapted for each of the four target groups.
Because the field studies assumed collecting data regarding the structures, the employment aspirations and the needs for professional qualification/re-qualification of four target groups (people employed in subsistence agriculture, rural managers, rural women, and young unemployed people) we called upon the stratified sampling method in order to determine the cutting form the whole population of the investigated commune, of the sub-samples for each of these target groups. The information regarding the structure of the population of the communes, for the four target groups has been obtained from statistic sources (NIS – the Census of the population and houses – to determine the volume of female population, the General Agricultural Census – to determine the number of subsistence farm leaders, the Enterprises statistics – to determine the volume of the local managers population) and from the County and Territorial Unemployment Agencies to determine the volume of the total population of "unemployed young people".
In order to process the data obtained following the field studies developed within the project, in March 2009, the SPSS 12.0 (Statistical Package for the Social Sciences) Program for Windows was used – which contains statistic analysis and data management tools, presented in an active graphic area, with descriptive menus and dialog boxes which allow an easy access to the majority of the program's functions.

RESULTS AND DISCUSSIONS

There is a potential of employment expectations directly related to the options for training courses and professional perfecting, generated by the acute need to have a job, a certain source of permanent income.
The reflex of the employment interest is sociologically visible also in the options, training expectations, the qualification/ requalification plane, which are determinative for the possible non-agricultural qualifications in the rural area.
The percent of the people interested in the participation and graduation of the professional training and perfecting courses is different form one target group to another, as well as from an investigated system to another (Table 1).

Table 1. The structure of the interest regarding the participation to professional training and perfecting courses (%)

Target group / Investigated system	People employed in subsistence agriculture	Young un-employed people	Rural women	Rural managers
Macroregion 1	51.1	71.4	59.1	83.3
Macroregion 2	58.5	100	88.1	76.2
Macroregion 3	84.1	77,8	97.8	68.4
Macroregion 4	77.8	94.6	82.7	78.3

As to where the motivational categories which form the bases of the potential interest regarding the participation to qualification/re-qualification courses are concerned, these are different starting from the simple necessity to ensure the "financial independence" and going to the complex motivation composed by: the accomplishing of the "financial independence", the need to have "activities outside the household" and then need to have a correspondence between the occupation and the performed studies (Table 2).

Table 2. Determinant motivational structures of the target groups / investigated systems

Target group / investigated system	People employed in subsistence agriculture	Young unemployed people	Rural women
Macroregion 1	I need money	I want to be	Financially

	for my family + activities outside the household	financially independent	independent + according to studies + activities outside the household
Macroregion 2	I need money for my family	I need money for my family + according to studies + financially independent	I need money for my family
Macroregion 3	I need money for my family	I need money for my family + financially independent	I need money for my family + according to studies
Macroregion 4	I need money for my family + activities outside the household	I want to be financially independent	I need money for my family + financially independent

In the case of negative type motivation – this being the factor which can determine the refuse of employment – for all target groups there is a motivational complex composed of the financial elements and of those generated by the act of working, form inadequate working relationships to the distance from home (Table 3).

Table 3. Inhibitive motivational structures of the target groups / investigated systems

Target group / investigated system	People employed in subsistence agriculture	Young unemployed people	Rural women
Macroregion 1	Long distance + unsatisfactory salary	Unsatisfactory salary + unfavourable working conditions	Inadequate working relationships + long distance
Macroregion 2	Unsatisfactory salary + long distance	long distance + unfavourable conditions + inadequate working relationships	Unsatisfactory salary + lack of adequate qualification+ long distance
Macroregion 3	Unsatisfactory salary + unfavourable conditions + long distance	Lack of adequate qualification	Unsatisfactory salary + unfavourable conditions + lack of adequate qualification
Macroregion 4	Long distance + unfavourable conditions	long distance + unfavourable conditions + inadequate working relationships	unfavourable conditions

In fact this is an employment and social emancipation process which takes place in stages: "the young unemployed people" have complex motivations, generated by the act of working, "the rural women" are beginning to become aware of the act of working beyond their immediate requests, and the "people employed in subsistence agriculture" have motivations determined mainly by the financial aspect of the work.

As for the professional training/reconversion courses, they are different from one target group to another, as well as from one investigated system to another. The evaluation of the interest shown for these courses was done with the help of the interest indicator, calculated according to the scale of the shown interest, from the maximum interest graded with 5, to the maximum disinterest graded with 1.

Macroregion 1

-People employed in subsistence agriculture: the majority of the courses expected by this target group are included in the area of agricultural occupations: the value of the interest indicator is of 2.74. For the non-agricultural occupations the indicator varies from 1.30 to 2.30.

-Young unemployed people: most of the courses they expect are included in the area of non-agricultural occupations; the educational interest is oriented towards jobs in constructions (3.00), trade (3.00) and services (2.80). The interest for occupations in the agricultural sector is present and is manifested by an indicator of 2.00.

-Rural women: most of the training and professional reconversion courses expected are included in the area of non-agricultural occupations; the educational interest is oriented towards trade occupations (2.81), tourism (2.92) and agricultural products processing industry (2.54). For the agricultural sector occupation there is an emphasized manifested interest of 2.38.

-Rural managers: the professional training and perfecting courses, polarizer of the employment interest for the "rural managers" group are: sales management (3.90), European projects management (3.30) and innovation and quality management (3.10).

Macroregion 2

-People employed in subsistence agriculture: most of the professional training and reconversion courses expected by this target group are included in the area of the non-agricultural occupations; the interest indicator for the agricultural occupations is of only

1.83. For the non-agricultural the indicator varies between 1.63 and 3.38.

-Young unemployed people: most of the courses expected by this group are included in the area of non-agricultural occupations; the educational interest is oriented towards jobs in services (3.45), trade (2.85), and tourism (2.85). For the occupations in the agricultural sector the manifested emphasized interest is of 2.05.

-Rural women: in this case, the majority of the courses are included in the area of non-agricultural occupations; the institutional interest is oriented towards occupations in the food industry (3.14), trade (2.59), textile industry, clothing, leather and footwear (2.49). For the occupations in the agricultural sector the emphasized manifested interest is of 2.08.

-Rural managers: the professional training and perfecting courses, polarizer of the employment interest for the "rural managers" group are: European projects management (2.94), sales management (2.78) and hostel manager (2.56).

Macroregion 3

-People employed in subsistence agriculture: most of the professional training and reconversion courses expected by this target group are included in the area of the non-agricultural occupations; the interest indicator for the agricultural occupations is of only 2.24. For the non-agricultural the indicator varies between 1.11 and 3.24.

-Young unemployed people: they are headed mainly towards courses in the non-agricultural area; the educational interest oriented towards occupations in constructions (3.00) and services (3.00). For the occupations in the agricultural sector the manifested interest is poor – 1.86.

-Rural women: this target group is also headed just like the young unemployed people, towards courses in the area of non-agricultural occupations; the educational interest is oriented towards occupations in the food industry (3.27), in the textile industry, clothing, leather and footwear (2.86), trade (2.64). In the same time, there is an emphasized manifested interest for the occupations in the agricultural sector of 2.98.

-Rural managers: the professional training and perfecting courses, polarizer of the employment interest are: European projects management (3.77), sales management (3.50) and the agricultural products processing management (3.00).

Macroregion 4

-People employed in subsistence agriculture: most of the professional training and reconversion courses expected by this target group are included in the area of the non-agricultural occupations; the interest indicator for the agricultural occupations is of only 2.31. For the non-agricultural the indicator varies between 1.46 and 3.29.

-Young unemployed people: in this case most of the courses expected are also included in the area of non-agricultural occupations – the processing industry of the agricultural products (3.39), tourism (3.00), and constructions (2.89). For the agricultural occupations the interest indicator is of 2.33.

-Rural women: the majority of the courses expected by this target group are included in the area of non-agricultural occupations – the food industry (3.47), textile industry, clothing, leather and footwear (3.00), trade occupations (2.30). In the same time, for the occupations in the agricultural sector there is an emphasized manifested interest, the value of the indicator being of 2.77.

-Rural managers: the professional training and perfecting courses, polarizer of the employment interest for the "managers" group are: sales management (3.72), European projects management (3.33), and that products processing management (2.78).

The analysis of the employment needs and that of those determined by the professional training/education was performed based on employment theoretical models. Due to the specificity of the rural employment need and especially due to the manner it is built and amplified there were adapted two theoretical models of the employment needs and was quantified that the degree of topicality and the intensity of the non-agricultural employment

necessities and of those of employment training:

-The theory of processing information relative to the occupation in which the process of the employment choice is conceived as a process of solving problems [3]. As such, the successful solving of employment problems, assumes an efficient processing of the information in the following three fields: self knowledge, employment knowledge and decision-making abilities;

-The theory of the opportunities' structure [4]. This assumes a sociological approach of the occupation through which a priority place is given to the variables: social class or existing opportunities on the labour market at a given time. More than that, it is considered that filling a position is determined mostly by a system of social stratification.

As a conclusion the analysis of the employment needs' structure and especially of those of professional training was funded on the two theoretical models; the theoretical dimensions considered where the following:

-The rural actor which belongs to the four target groups is defined occupationally according to the social status he owns; the social proximity of an occupation and the way to reach it, are done according to the educational structures and the occupation ones it has already passed through;

-The rural actor is determined occupationally by the existent requests on the labor market at a given time;

-The rural actor belonging to the four target groups makes an employment choice and thus makes an employment training choice according to the nature of the self knowledge, of the employment knowledge and of the nature of the employment decision.

Macroregion 1

-People employed in subsistence agriculture: the educational and employment expectation is clearly defined due to the strength of the financial motivation; the educational expectation is more intense in two cases: courses for occupations in constructions and wood processing are intensely expected by those with a negative perception of the economic status; courses for non-agricultural industrial occupations and for food processing are intensely expected by those with a positive perception of the economic status.

-Young unemployed people: the educational expectations are determined significantly by the perception model of the social status; in the process of positive perception the maximum intensity of the educational expectations is registered for the courses required by trade, services and constructions occupations.

-Rural women: the educational structures determine a high employment and educational interest; "the rural women" who graduated from university have a maximum interest for the trade occupations: 4.25. The perception in terms of positive discrimination, economical and/or social as well as the equality of chances determines the most intense educational, educational expectations; the orientation of the educational interest is made, in this case, towards tourism, food industry and trade.

-Rural managers: the correlation of expectations and the nature of the status perception identify a significant relationship between the positive perception and the strong intensity of the educational expectation.

Macroregion 2

-People employed in subsistence agriculture: the educational and employment expectation is clearly defined due to the strength of the financial motivation (the main reason of the employment choices being ensuring the financial stability and security of the owned household) being explained by the nature of the perception of the economic status.

-Young unemployed people: the main determinant, in this case, is the model of the perception of the social status – the target group of the young unemployed people is "socially sensitive" to the satisfaction of the "need for social acknowledgement", "need to be esteemed" which determine a more accentuated expectation which compensates the negative perception of the social status.

-Rural women: the educational expectations are influenced by the way of perception of the economic, social and equality of chances discrimination. The intensity of the educational expectations is very strong for the subjects who give equality of chances from a

social point of view and which are oriented towards trade, textile industry and food industry occupations.
-Rural managers: the educational options are dependent on the social and educational characteristics of the subjects; before being a manager all respondents had other occupations (all those interviewed had previous occupations).
Macroregion 3
-People employed in subsistence agriculture: the educational and employment expectation is much more clearly defined as compared to the solely employment expectation; this discrepancy is generated by the strength of the financial motivation and can be explained also by the nature of the perception of the economic status. The values given to each employment group are higher for the negative perception of the economic status.
-Young unemployed people: the educational expectations are inhibited by the perception of the economic status; the target group of the "unemployed young people" is "socially sensitive" to the satisfaction of the "need for financial security", which determines a much more emphasized expectation which compensates the negative perception of the economic status.
-Rural women: in this case, the main determinant is represented by the way of perception of the economical, social and the equality of chances discrimination; there is a strong determination for the courses of food industry, trade and tourism of the women which consider themselves favourite for an eventual employment detrimental to men.
-Rural managers: the educational options are dependent to the social and educational characteristics of the subjects; before being managers 84.2% of the respondents had other occupations, for example out of the total of those who had previous occupations, 18.8% worked in the industry, 31.3% worked in trade, 31.3% worked in services.
Macroregion 4
-People employed in subsistence agriculture: the educational and employment expectation is much more clearly defined as compared to the solely employment expectation; this discrepancy is generated by the strength of the financial motivation and can be explained also by the nature of the perception of the economic status. The values given to each employment group are higher in the case of the negative perception of the economic status.
-Young unemployed people: also in the case of this investigated system, the educational expectations of the young unemployed people are inhibited by the perception of the economic status, but the target group is "socially sensitive" to the satisfaction of the "need of financial security" which determines a much more emphasized expectation which compensates the negative perception of the economic status.
-Rural women: there is a similar situation to those of Macroregion 3 – the determinant factor is represented by the way of perception of the economical, social and the equality of chances discrimination. The intensity of the educational expectations is very strong for the subjects which give equality of chances from a social point of view and which are oriented towards textile industry, food industry and trade occupations.
-Rural managers: the educational capital determines the arising of educational needs in maximum limits: the highest value of the educational need was registered by the managers which graduated high education: 5.0 for the European projects management.

CONCLUSIONS

The educational program proposed following the field analysis regarding the employment needs in the rural area is specific to every type of investigated system and was determined by the following elements:

- The local demands for labour – established according to the local managers' evaluations;
- Then needs, employment aspirations of the target groups;
- The vocational characteristics of the partners included in this project

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labour market development through the promotion of non-agricultural occupations in the rural area".

REFERENCES

[1] Jarz E., 2006, Dictionary of Statistics and Methodology, Sage Publications, London

[2] Mărginean, I., 2000, Proiectarea cercetării sociologice (The projecting of sociological research), Editura Polirom, Iaşi

[3] Peterson, G.W, Sampson, J.P, Reardon, R.C, Lenz,J.G, 2003, Core Concepts of A Cognitive Approach to Career Development and Services, Center for the Study of Technology in Counseling and career Development. Dunlop Success Center, Florida University

[4] Roberts, K, Hunt, D., 1991, Organization Behaviour, PWS – Kent Publishing Company, Boston

[5] xxx Baza de date realizată în urma studiilor de teren în cadrul proiectului POSDRU 13/5.2/S/11 – The database collected during the field studies of the POSDRU 13/5.2/S/11 project

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APPLYING THE EFFICIENCY PRINCIPLES IN THE FINANCIAL, HUMAN AND MATERIAL RESOURCES MANAGEMENT WITHIN THE FRAMEWORK OF OARZ BISTRIȚA-NĂSĂUD

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Key words: *financial resources management, animal breeding management*

Abstract

The paper presents the improvement of the managerial activity within the framework of an animal selection and amelioration unit in Bistrița-Năsăud county. The drawing up of certain present-day strategies and material expenses assessment is aimed at improving the managerial activity, in compliance with the EU requirements.

INTRODUCTION

The government's decision to employ managers in the public institutions is a challenge for the board to apply their management skills and to make the best of the time, human and financial resources available, so as to render more efficient the activities carried out and to obtain the best possible results.

MATERIAL AND METHOD

The paper is based on an ample documentation within OARZ Bistrița-Năsăud and it took into consideration all the regulations in force at the present moment. The results were interpreted in order to maximize the efficiency of the activities carried out within OARZ Bistrița-Năsăud.

RESULTS AND DISCUSSIONS

In order to actively participate in the reform process and to meet the European Union requirements, it becomes absolutely necessary to **improve the managerial activity**, so that decision making may ensure the harmonization of the institutional policy with the regulations, directives and recommendations of the European institutions in as far as animal breeding development and improvement are concerned.

To achieve this, our institution will concentrate on two main directions, namely:

The rational distribution of the financial resources on well defined activities in order to attain the objectives set in compliance with the economic principles of efficiency and efficacy.

1.Rendering human resources management more efficient.

In as far as the first direction is concerned, the following actions will be taken:

- devising annual valid strategies, planning expenses depending on the institutional objectives.
- measuring expenses and results and constantly improving them.

In order to attain the aims set, aims that are part of the governmental policy, an essential element of the annual strategy of expenses planning consists of **the rigorous delineation of effects and effort in time and space,** based on a correct and objective dimensioning of the annual budget depending on the priorities generated by the personnel scheme, the material resources that ensure the carrying

out in good conditions of the activities specific to our institution.

The annual planning of the expenses with personnel and material resources will be influenced by the consideration of the entire effort implied by all types of resources and will reflect the complexity of the effects (direct and propagated) in various domains (economic, social, ecologic, cultural, political).

As material resources are actually useful and necessary tools in the well-functioning of the institution (buildings, parking lot, other fix means and inventory items), the presence or absence of some of these, as well as the necessity of maintenance, determine the prioritization of the actions and a redirecting of the financial resources towards new objectives that should guarantee the efficiency of the activities that are specific to our institution.

Expenses and results will be measured on a monthly, quarterly and annual basis, analyzing the activity calendar and the financial-accountancy situations, permanently comparing the results obtained against the effort implied. We will monitor the conversion of all efforts into effects.

As tertiary credit sequencer we will take all the necessary steps in order to ensure that budgeted credits are allotted depending on their purpose, and that the institution does not contract payments that cannot covered from the budget.

In as far as the second direction – **Rendering human resources management more efficient** is concerned, the following actions will be carried out:

1.Competence-based promotion and discovery of new forms of pecuniary or psychological motivation depending on the budget and personality of each employee.

2.Implementing a relational system based on delegating authority and making personnel more responsible.

Human potential represents the most important resource within the institution, which is why we propose that employee training, employee involvement in activities they can carry out successfully, moral and material stimulation, as well as team spirit, rank first among the manager's priorities, thus contributing to the improvement of the relational system.

Professional performances will lead to an objective and realistic establishment of professional hierarchies that will contribute to the promotion of an institutional culture meant to guarantee the involvement of all the employees within the institution, in order to increase performance, recognize merits, promote, motivate and increase group cohesion.

These aspects will generate a real and objective perspective on the promotion of a salary scheme that would ensure equity, favourable moral impact and the stimulating pecuniary motivation, under the conditions of national financial restrictions.

We are aware of the fact that within the present-day context, change management plays a very important part, and that it presupposes a new approach to candidate recruitment and selection activities (public workers or contractual personnel).

The institution's object of activity is an outstanding one at national level and of strategic importance in the field of agriculture, which is why it becomes absolutely necessary that each candidate entering the system should comply with all the rigors imposed by the law.

To attain the institutional aims, we will act so as to ensure the organizational, technical and material conditions necessary for the correct and efficient carrying out of all the processes that are specific to the object of activity, while making sure that our activity will guarantee "a cautious approach to budget deficit" within the OARZ Bistrița Nasăud.

CONCLUSIONS

In the present day context and based on the data gathered we can infer that change management plays a very important part presupposing a new approach to candidate recruitment and selection activities. OARZ Bistrița Năsăud will act in such a way as to ensure the organizational, technical and material conditions necessary for efficient activities and specific processes carried out within the present unit.

REFERENCES

[1] Brătianu, C, 2000, Management strategic, Ed. CERES, Bucureşti
[2] Tindeche Cristina, Condei Reta, 2003, Modalităţi de îmbunătăţire a activităţii de management la nivelul unei societăţi cu profil agro-alimentar, în Simpozionul ştiinţific naţional, bucureşti, pag. 83-93
[3] XXX ANARZ, Controlul oficial al producţiilor în România, 2000-2008
[4] XXX Legea 63/21.03.2008 şi HG 8/16.01.2009

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THE IMPORTANCE OF ANIMAL BREEDING AND AMELIORATION IN THE BISTRIȚA-NĂSĂUD COUNTY

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Key words: *animal breeding and improvement, services*.

Abstract

The paper presents animal breeding in Bistrița-Năsăud county. Due to the favourable natural conditions and to tradition, animal breeding ranks among the top activities within the county.

INTRODUCTION

Cattle breeding is an important branch of the Bistrița-Năsăud county agricultural production, as it ensures consistent income to the farmers in the area. The authors of the paper would like to bring to the attention of specialists major issues confronting the local and national Animal breeding.

MATERIAL AND METHOD

The present paper is based on the study of the documents existing in OARZ and APIA, Bistrița-Năsăud. The paper is aimed at presenting the county natural conditions that favour animal breeding.

RESULTS AND DISCUSSIONS

Animal breeding has occupied an important part within the Bistrița-Năsăud county agriculture, due to tradition and to the favourable natural conditions. Large areas of pastries and natural meadows have made bovines and sheep occupy the most significant part. The Revolution of 1989 has brought about significant changes within the animal breeders community, both locally and at a national level.

Problems:

- excessive fragmentation of the agricultural areas (45% under 1 hectare, 24% between 1 – 2 hectares, 31% over 2 hectares)
- lack of associations
- low mentality of the animal breeders
- poor dissemination of information and poor training
- the old age of most animal breeders, the youngsters being tempted to turn their attention to other economic fields or to go abroad
- lack of machines and agricultural equipment
- gap between land and work
- lack of trust in one's own power and lack of responsibility in the case of private initiative
- small and unspecialized exploitation
- difficulties in obtaining a credit
- poorly developed market whose functioning does not rely on the rules of the market economy

- the slow privatization of the various agricultural sectors

Potential

- considerable human resources
- over 50% of the population inhabits the rural area and works in agriculture'
- well trained specialists in agriculture
- a large number of youngsters working in agriculture and of specialists trained abroad

Out of the numerous problems mentioned above what we have considered to be a priority was the organization of associations, professional training and service development. For this reason, starting with 1995 two projects have been initiated in the county, namely Rebiat and Profordar, projects supported by Switzerland and which have been aimed at improving the lifestyle of cattle breeders by increasing competence and by involving them into the improvement of the access to the outlet market of the agricultural products and in the economic development of cattle farms. The main activities these projects supported have been the following:

- basic and continuous training of the breeders, including time spent in Switzerland by the young people involved in agriculture, in order to purchase tractors and agricultural machines
- the founding of 170 local associations of cattle breeders set as democratic, independent and lucrative structures working for and supporting their members (pilot groups and associations, committee members training, founding collection units for the milk produced in the associations, the taking over and administration of the communal meadows, experience exchanges and trips in Romania and abroad, etc)
- supporting artificial insemination services by organizing a system on circuit routes using cars
- supplying the school of Dej with equipment and supporting the training of people performing artificial inseminations
- supplying the milk laboratories of Arad, Bistrița and Cluj with the necessary equipment
- organizing over 150 animal exhibitions
- msc importation and the import of animals of high genetic value

The specialists of OARZ Bistrița-Năsăud have played a very important part in the carrying out of these activities. After the associations have been formed they have grown more and more aware of their importance and have been more and more involved into activities to the benefit of their members.
All these activities, as well as the state support measures, have contributed to rendering this specific sector of animal breeding in our county more dynamic, which has resulted into the founding of quite a large number of animal farms.

CONCLUSIONS

Bistrița-Năsăud county animal breeding and amelioration is confronted with a series of problems (lack of associations, small cattle farms, lack of animal breeding equipment and agricultural machines, a poorly developed animal breeding market, etc.), issues that should be solved as soons as possible in order to improve animal exploitation technologies which will eventually result in an improvement of the animal breeders' life.

REFERENCES

[1] Cornel Podar, 2002, Îndrumătorul crescătorului de vaci de lapte din microferme private din România, Ed. Tipomur, Tg Mureş.

[2] Constantin Velea, 1999, Producția, reproducția și ameliorarea animalelor, vol. I, II, Ed. Tehnică Agricolă, Bucureşti
[3] XXX Institutul Național de Statistică, Anuarul Statistic al României, 1995-2008.

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FOREIGN LANGUAGE TEACHING IN ROMANIAN UNIVERSITIES. A NEW PERSPECTIVE

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Key words : *Foreign language teaching, specialized language, cognition,skills*

Abstract

The teaching of foreign specialized language in universities has to respond to the continuous change in the students' profile, on one hand, and on the changes in demand on the work force. At the same time, due to the learning experience students bring in the foreign language class, the language teacher has to identify the learning styles preferred by his students and to adapt the classroom activities to match those styles. In order to do this, the teacher has to identify them, along with the needs that are obvious for a certain profession. The foreign language teaching should take into account the new findings of research in cognition, memory and learning generally, and language courses have to be scheduled so as to ensure the necessary amount of practice in each of the four main language skills: reading, writing, listening and speaking, allowing sufficient time and opportunities for each to be exploited extensively.

INTRODUCTION

The teaching of foreign languages in universities has to take into account the changes Romania and the rest of the world have been going through over the past decades and the trends set for the future years. It is undeniable that English is an international language and, under the circumstances, it undergoes changes in structure and vocabulary, at the same time imposing alterations on most of other languages. The present paper discusses the implications of this situation and of the changes in teaching methodology for the development of the foreign language class at tertiatry level, so that the young professional be able to use the foreign language confidently and fluently in social and professional contexts. The literature review emphasizes the concept of foreign languages for special purposes, the impact of assessing learning needs and strategies and the latest discoveries in the field of neuroscience and psychology, all having a strong influence on the planning of the teaching process and the assessment of students, taking into account the contemporary tendency towards independent academic work. The conclusions will present a set of suggestions for the improvement of the teaching and learning English - and other foreign language – in Romanian universities.

MATERIAL AND METHOD

The specialized language includes all the lexical units pertaining to a scientific and professional field and is normally used by a group of people to communicate, orally or in writing, in a certain domain. It has a limited spread and can easily be understood by everybody in that particular field. Its origin dates back to the time when the need to transmit discoveries and innovations in production occurred, but the written scientific vocabulary is much older. It can be traced to Ancient times, when masters taught their scholars their "art" and did not want this to be shared with the lay people. Thus, within the wider field of specialized languages, two different sub-groups could be identified: one referring to the vocabulary used mainly in written texts to define concepts, ideas and theories, and another used firstly for naming objects, pieces of equipment and processes and which was used basically for oral communication for very long periods of time.
Nevertheless, language itself relies not only on vocabulary, but also on the grammar structure of the language and the special patterns that can be identified within the formal register which is associated to the idea of specialized literature.
The aims of teaching-learning a foreign language at tertiary level are as different as

students themselves; there are many wanting to study the language to assist them in their future career, and others who also pay attention to the cognitive change/development the study of the foreign language triggers. A third group will try to grasp a deeper knowledge of the culture that underlies the particular language they are studying. And, last but certainly not least, there is also the group of students who will learn the foreign language only because it is a compulsory subject of the academic curriculum. The ESP teacher has to cater for all these groups quite equally, also struggling to form/maintain/develop a high degree of motivation, along with the awareness of the learning strategies that can improve learning and help proficiency, in the end leading to the ability to study and notice changes in the language long after the person is not a student anymore.

The past years have brought about a dramatic change in the structure of student population in most universities in Romania; more and more adults returned either to complete their studies, attending master or PhD programmes or became first-time students, in order to change their careers altogether. As a result of this trend, the regular group of students is nowadays a mixture of people with different backgrounds, life and academic experiences, expectations, cognitive abilities and time for study.

Adult students differ from their younger peers in a number of ways:

- have a personal well-established pattern of learning;
- can be critical of the teaching methods;
- can readily engage in abstract thought;
- are more disciplined;
- are under-confident of their L2 performance if their previous experience with learning a foreign language was not successful;
- are more anxious;
- present fossilized errors in the target language;
- depending on the methodology used during previous study of L2, they can resort to language transfer more often.

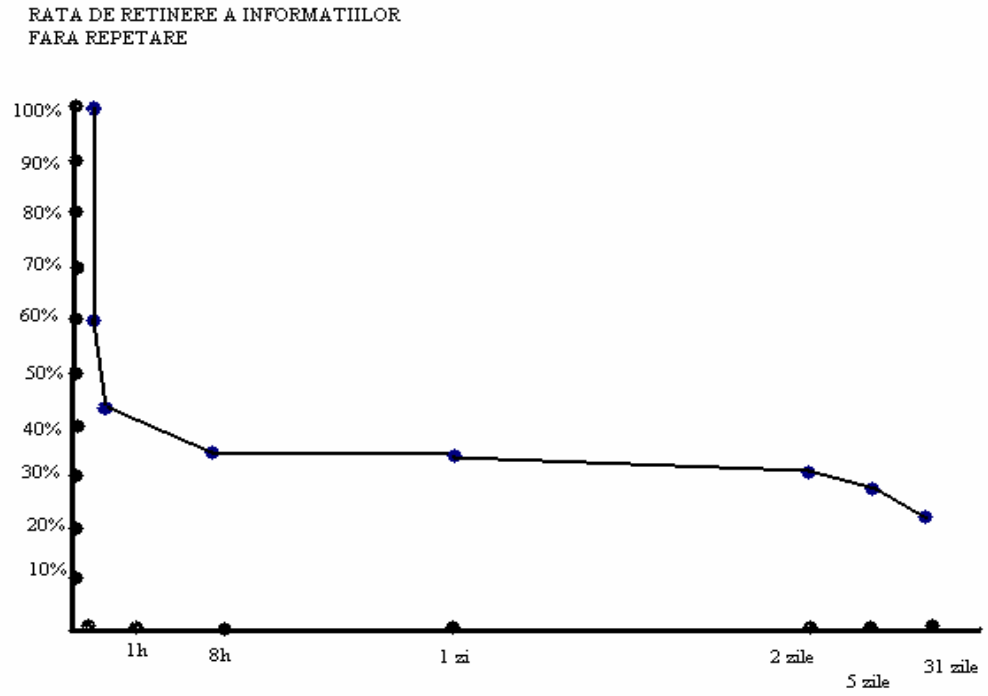
Methods used in the teaching of foreign languages range from grammar translation to computer assisted language learning, but also the direct method or community language learning, for example. Perhaps the most significant difference lies in the weight each of the four skills (reading, writing, listening and speaking) is given and, of course, the pedagogical approach to learning generally, as well as the foreign language. In terms of teaching and of tasks and activities, these extend from explicit teaching of grammar, supported by repetitive exercises in the fom of drills and translations using the vocabulary taught, to complete lack of grammar explanations and to the freedom to start using the foreign language when the learner feels confident enough to do so. The choice the Esp teacher has to make to help his students learn as much as possible taking into account the constraints imposed by the academic curriculum, the students' profile and their academic and professional needs will have to find a balance among all the above-mentioned criteria, along with the available coursebooks and the teachers' own preferred teaching style. A teacher's teaching style can be described according to five main groups of variables: 1. the cognitive emphasis on information/skills; 2. the features of communicating with students, in terms of organization, clarity, coherence, ability to raise students' interest and motivation and to involve them in cognitively-demanding activities, 3. class management: teacher- or student-centred lessons, 4. attitude towards students' progress, 5. preferred types of activities: plenary, group-work, individual.

Considering the needs exhibited and acknowledged by students themselves, there seems to be a re-evaluation of translation in ESP courses. Students and professional people need to read extensively, but they also need to write and to speak. Under the circumstances, translation can prove a valuable and time-saving method to teach specialized vocabulary, in contexts that are typical for the scientific communication.

New insights in the organization of foreign language courses, both general and specialized, are offered by the development of neurosciences and other sciences of cognition. Information that involves complex cognitive processes on a repeated basis activate the brain.

The understanding of brain activity and of memory in general, has trigged the need for enhanced practice, a fact extensively shown by research.

Time between repetitions	20 min	1hour	9 hours	24 hours	2 days	6 days	31days
Average score	58%	44%	36%	34%	28%	25%	21 %



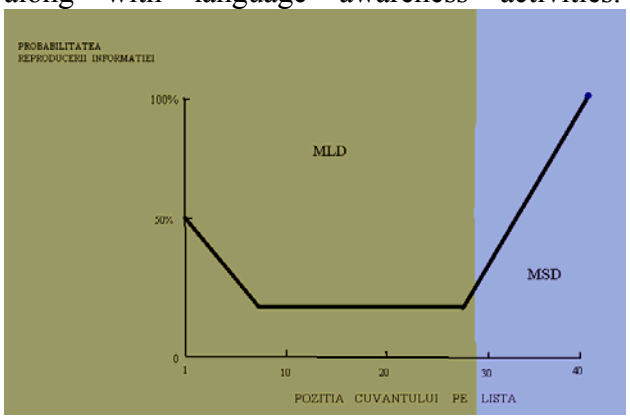
The first to tackle the importance of repetition was Herman Ebbinghaus, over 100 years ago. He was also the first to show the rate at which forgetting occurs in the absence of repetition. He represented his findings in the so-called 'curve of forgetting', and the results of his experiment show that, the longer time is allowed to pass between repetitions, the less is remembered. In the experiment, Ebbibghaus introduced 7 different time intervals, as mentioned above .

The same information has been also also represented in the graphic from the left side.

As can be seen from the above table and graph, most of forgetting occurs within the first 24 hours after learning. This means that if the information is not repeated, it may be lost because it has no opportunity to be stored in the long time memory (LTM). As long as the teaching process of foreign languages is concerned, the impact is that learning sessions should be scheduled so as to allow the reinforcement of knowledge before it is permanently lost. This conclusion is reinforced by research undergone in other connected fields, which emphasize for example the importance of position of words (this refers to experiments, but the results need to be understood and transferred in the overall organization of the course). An example of an experiment is that conducted by Glanzer and Murdock, which emphasize the idea that information is more easily recalled if it is presented at the beginning and towards the end. This is because the first information has the time to be processed from the short-term memory and transferred into the log-term memory, whereas the most recent one is still kept active in the short-term memory. Their findings are presented in the following diagram, which shows that newly-presented information is 100% available while still in short-term memory, whereas the rate of recall drops to about 50% for the information stored in MLD. The bulk of the information only reaches about 10 to 20%, though, a percentage also influenced by the degree of activation (how often the information is used after storage).

RESULTS AND DISCUSSIONS

The above information, along with the requirements set for professionals in a globalized world, imposes a set of changes in the general approach to the importance and meaning of the foreign language course in universities.
Due to the changes in students' abilities and motivation, but also to the requirements of the professional performance in the foreign language, language teachers should include activities like oral and written presentations along with language awareness activities.



Adapted after Glanzer, 1972, Murdock, 1962

The most important change, that allows for all the other methodological ones to be implemented, should concern the scheduling of the foreign language course in a different manner: in later years, not in the 1st-2nd, and at least twice a week.

It is doubtless that learning a foreign language is a complex process which produces long lasting effects on the learner, irrespective of the outcome. At the same time, the rate of success has to be understood as the effect of a multitude interdependent factors, among which the personality and expertise of the language teacher plays a major part.

CONCLUSIONS

1. In a guide on independent studying, Neacsu emphasized the need to understand the process of teaching-learning as the result of collboration between teachers and students, with a clear orientation towards attaining a set of instructional objectives and which aims to creating new behaviors in students and finally leading to the independent learner the present-day world needs.

REFERENCES

[1] Harmer, J.(2000). The Practice of English Language Teaching. Pearson Education Ltd.
[2] Hollett, V., Carter, R.(1989). Speaking Activities for Professional People. Oxford University Press, Oxford
[3] Nation, P. (2000). Designing and Improving a Language Course. *English Teaching Forum,* 38(4), October 2000
[4] Neacsu, I.(2006). Invatarea academica independenta. Ghid metodologic. Editura Universitatii din Bucuresti
[5] Shumin, K. (1997). Factors to Consider: Developing Adult EFL Students Speaking Abilities, *English Teaching Forum,* 25(3), July 1997

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STIMULATION OF CROSS BORDER COLLABORATION BETWEEN THE LOCALITIES SREBĂRNA –BULGARIA AND CIOCĂNEŞTI – ROMANIA, IN THE CONTEXT OF SUSTAINABLE RURAL DEVELOPMENT

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Key words**:** *sociological study, monograph, cross border collaboration, development needs, rural communities.*

Abstract

The aim of the sociological study is to highlight the mutual representations and perceptions of the Romanian and Bulgarian communities, of the level of sympathy and availabilities to collaborate in the new European context, for sustainable rural development. The obtained results allow to find the ways of action and the points of common interest that can constitute the base of the collaboration intensification and a closer approach between the two communities. A number of 38 respondents were questioned belonging to the Bulgarian community (Srebărna and Vetrina) and a number of 38 respondents belonging to Ciocăneşti community.

INTRODUCTION

The development of regional cooperation along the borders is a priority for EU, re-confirmed being by the third report on Cohesion, the revision documents of the structural funds and the financial perspective for the period 2010 - 2013. The development of joint projects is the key of this cooperation, leading to the creation of new opportunities for the concerned areas and to the over passing of some economic, social and political obstacles due to the existence of an international border. The border region South East Romania and the border region North-East Bulgaria is characterised by the existence of some university centres and of a high percent of high education graduates in the agricultural sector, high percent of young population who knows at least two international languages, aspects that lead to the need to give a remarkable importance to the professional integration and to the increase of managerial performance in the sector of agricultural activities so that to reach to the level of European efficiency and performance standards.

MATERIAL AND METHODS

The research was made under PHARE project, that aimed the stimulation of the collaboration between the inhabitants in the localities SREBĂRNA -Bulgaria and CIOCĂNEŞTI – Călăraşi – Romania in the context of the European Union extension.

The methods used were ***the monograph and survey based on questionnaire***.

For a better knowledge in order to identify new forms of cooperation, the questionnaire was applied to a number of 76 persons in the two communities, Romanian and Bulgarian: opinion leaders, persons in the local public administration, entrepreneurs, young persons (38 persons in the Romanian part, 38 persons in the Bulgarian part).

The questionnaire contained 16 questions of which 3 focussed ones (pre-codified questions, opened, list of attributes, scales, associated words). The questions were formulated based on four items:

- ✓ *Item 1*: inter-knowledge and sympathy (question 1 and 7)
- ✓ *Item 2:* actual level of collaboration and opportunities of collaboration in the future (questions 2,3,8,4,5,12,13,6)

- ✓ *Item 3:* orientation on values (Questions 9 and 10)
- ✓ *Item 4:* social representations in the context of the European Union accession (Question 11)

RESULTS AND DISCUSSIONS

The socio-economic added value, that the Romanian-Bulgarian cross border cooperation generates becomes visible in various ways by: mobilisation of the endogen potential, by the consolidation of the local and regional authorities as partners, initiators of cross border cooperation; participation of the actors in the economic sector and education; opening the labour market, compliance of qualifications with the EU requirements; development of collaboration between education, research and SMEs, also creation of more jobs in these sectors. ***The institutional added value*** supposes: the active involvement of the citizens, authorities, political and social groups, of both parts of the border; functioning of a partnership on horizontal and vertical, despite the fact that there are different structures and sectors; projection, implementation and joint funding of cross border programs and projects.

Following the data processing in the questionnaire the following aspects were obtained:

* ***The level of inter-knowledge*** is different in the two communities. Most Romanian know few things about the Bulgarian neighbours (65,78%) and 13,15% many things.

Most Bulgarian do not know almost anything about Romanians (68,42%), few things 28,94%, and 2,63% many things.

It was remarked also that the level of sympathy between the Bulgarian and Romanian is very high, the Bulgarians being the most sympathised by the Romanians, and the Bulgarians sympathise most the Romanians after the Russian, who are on the I place.

The first place occupied by the Russian can be explained by the Slav origin of both people and by the traditional relations between Bulgaria and Russia.

The conclusion is that there is a positive perception between the Romanian and Bulgarian that can be a solid base for new opportunities of collaboration and cross border cooperation.

*Regarding ***the actual level of collaboration and opportunities of collaboration in the future***:

The Romanians gave the following categories exemplas of relations: of business with commercial character; cultural (folk festivals); sharing experience in agriculture sector; meetings between the local authorities; in education sector; sportive meetings.

The Bulgarians gave the following categories of answers: family links; friendship links.

We remark that the few examples given by the members of the Bulgarian communities relate only to personal relations strictly. The difference between the Romanian answers and the Bulgarian answers can be explained by the fact that the Romanian decision makers and the civil society involved more than the Bulgarian part in developing some cross border projects in the administrative sector, culture, education, businesses.

Conclusion : The collaboration is more supported by the Romanian part existing more experience, information and availability.

* The differences appear ***in case of appreciating the level of development of cultural relations***: the Romanians consider them as having a medium level, and the Bulgarians as being poorly developed. The difference can be explained by cultural projects and partnerships initiated by the Calarasi local authorities with partners in Silistra. In case of personal relations although both categories of Bulgarian and Romanian respondents appreciated as poorly developed still the percent of Bulgarians that answer this way is higher (76.31%) than the percent of Romanians (57.89%). The difference could be explained by the existence in Ciocăneşti commune of a small community of persons that settled over the Danube in Ciocăneşti – Sârbi quarter, and the family relations still exist.

Remarkable is the existence of some singular choices such as fishing on the Danube indicated only by Romanians and the local self

governing and ecology indicated only by the Bulgarians.

It is remarked that there is a high level of compatibility that expresses the existence of joint interests regarding the sectors in which the collaboration can be extended and developed.

The Romanians expressed a high interest to the experience in vegetable growing, traditions and customs, tourism, gastronomic art.

Positive appreciations to the human qualities of the Bulgarian neighbours can be remarked.

The Bulgarians indicated a wider range of things that World like to learn/take from the Romanian neighbours.

A remarkable interest was for the Romanian life style and mode, then the experience in agriculture, in business development, traditions, customs, culture. They expressed interest to find out/take over the modalities the Romanian partners use to keep the young in the villages, to fight against unemployment, to create the infrastructure for the development of the rural tourism.

Also there is interest for the sector of local administration and democratic mechanisms of local government.

* Another item had the role to evaluate ***the availability of the neighbours to develop businesses in the common space within the European Union.***

It is found out that the Romanians' interest for joint businesses is much higher than the Bulgarians'.

Still we estimate that there is a real development potential in the business sector - 34.21% of Bulgarians and 55.26% of Romanians expressing such an option.

*Another item aimed the identification of ***the existing needs in the two communities***:

The Romanians gave the following answers:

- Creation of new jobs especially for the young
- Development of infrastructure – roads, sewerage, gas supply
- Development of tourism in the Danube area
- Environment protection
- Labour force training in agriculture
- Expertise transfer and best practices in agriculture and administration
- Creation of facilities for the companies
- Measures of social protection for the socio-economically disadvantaged persons
- Increase of educational act quality
- Development of cultural life
- Increase of local administration involvement for the improvement of the locality aspect
- Arrangement of recreation places and playgrounds for children
- Programs of citizen education

The Bulgarians consider that people life can be improved if they consider the following actions:

- Creation of new jobs
- Development and modernisation of infrastructure
- Social protection of the old persons by building houses for the old men and a club for the old men
- Provide facilities for small and medium sized enterprises
- Improvement of school infrastructure
- Arrangement of playgrounds for children
- Establish a history museum
- Investments in eco tourism
- Initiation of projects in the environment sector and involvement of the local authorities

We notice by studying the two lists that there are sectors of common interest but also different experiences and expectations. We consider that the two partners can benefit by the other one expertise in attracting certain aims under joint projects. Also we can organise experience sharing focussed on an item belonging to a certain sector or we can elaborate common strategies.

For example: development of localities and infrastructure, tourism development in the Danube area, development of agricultural and economic strategies to fight against the unemployment, social protection of the disadvantaged persons, development of small enterprises, development of the competences of the local authorities to initiate and develop projects with external support in the perspective of the structural funds.

* ***Another item was included in research starting from the definition given by Mahler to the values*** „The values are abstract ideas about what it is correct, desirable and well most members of a society must aim".

The first item referred to the importance in the subject life of the faith, education, work, family, friends, wealth, spare time, saving, diligence, respect for the old persons.

We mention that our question regarding the values proposed to surprise more the behaviours guided by values not the values themselves. The reference point of the values is in this case the community, being the one that imposes the values not being isolated individually.

Table 1. Comparative analysis of the data in the two communities

Place	ROMANIANS	BULGARIANS
I	Truth	Family
II	Family	School
III	Diligence	Friends
IV	Success	Work
V	School	Truth
VI	Respect for the old persons	Diligence
VII	Work	Respect for the old persons
VIII	Friends	Faith
IX	Faith	Saving
X	Wealth	Interesting life
XI	Interesting life	Success
XII	Saving	Amusement
XIII	Amusement	Wealth

The truth is considered very important for the Romanians, this being probably related to the truth requested insistently by the Romanian society regarding the events in 1989 and not only. The truth theme is insistently promoted in the Romanian mass-media. The family is situated on the first place by the Bulgarians and could be related to the frustration felt by the village inhabitants as the young left to towns, but also the adhesion to a greater extent to the traditional values of the village. This is confirmed also by the presence on the second place of the family in the hierarchy of the values at the Romanians.

At the Bulgarians the school is on the second place and it is associated to the learning and personal development, whereas at the Romanians it is situated on the fourth place this meaning probably a decrease of population trust for the school.

The diligence is situated on the third place at the Romanians, and the Bulgarians consider that friends are on the third place in the order of importance in life.

We could say that the Bulgarians orientate to the cooperation and support of community and the Romanians are based more on personal effort.

The values situated on the last places, that is the less important are the following:

- At the Romanians: interesting life, saving and amusement
- At the Bulgarians: success, amusement and wealth

The transition state and the material difficulties can explain the situation on the last places of amusement, wealth, saving and interesting life.

The presence of success on the last place in case of the Bulgarians could be explained by a certain scepticism regarding the chances the actual society offer. The success is related usually to work and chance.

At the same time it is noticed an orientation to the modern values, more accentuated in the Romanian community.

If we correlated these tendencies with the economic development and especially with the infrastructure development in the two communities we notice that the more modern values seem to be associated to the relatively modern infrastructure.

* related to the social representations in the context of accession to the European Union, the analysis highlighted the association sectors: economic, politic, social, ideological. Also the association quality: positive or negative.

The Romanians associate the democracy especially with factors of social then economic nature. Among the social factors a negative social factor appears – uncertainty.

The Bulgarians associate the democracy especially with factors of political nature, then economic, all being positive.
The Romanians associate the market economy especially with economic factors but also social and political factors. It is noticed the association with the two negative factors – poverty (social) and perturbations (politic).
The Bulgarians associate the market economy with the economic factors especially social and political factors. It is noticed the association with two negative factors: poverty (social) and perturbations (politic).
The Bulgarians associate the market economy with the economic factors especially but also political ones. It is remarkable a negative association – „it does not exist"
The Romanians associate the law with the factors of political nature among which a negative factor: offence
The Bulgarians associate with the political factors among which a possible negative one: it is not known.
The Romanians associate the environment protection with the social and ideological factors. Among them a negative one: disaster.
The Bulgarians associate with the social and ideological factors among which a negative one: danger.
The Danube is associated in both cases with positive factors, most of them of economic nature.
In case of the Romanians the local community is associated with the factors belonging to all categories, but especially with political factors. It is noticed the association with the term „crowd", that has pejorative character.
The Bulgarians associate the local community almost exclusively with the political factor, with an exception ideological „unit".
The Romanians associate the Bulgarians with positive factors such as neighbourhood, kinship, friendship, fellowship.
There is also an association with disadvantage.
The Bulgarians associate the Romanians with positive terms: friends, neighbours, unity.
The Romanians associate the administration especially with factors of political nature but also economic and ideological nature. Among these negative factors appear: bureaucracy, corruption, easy gains.
The Bulgarians associate especially the administration with social factors, less politically or ideologically. No economic factor appear as associated. In case of the Bulgarians the administration is associated also with negative factors such as : corruption, bad services and bureaucracy. Also remarkable the presence of both groups of association of administration with corruption and bureaucracy.
The Romanians associate the European funds especially with economic factors but also with the other categories of factors. Among these an association with negative term appear „robbery".
The Bulgarians associate the European funds with factors that belong almost in equal measure to all categories. The economic is more representative. All factors are positive.
Both communities have an optimistic vision, predominantly positive related to important elements of integration in the European Union, a mutual positive perception and realistic expectations.
Also the analysis of the social representations reveals us the gaps, weaknesses, such as: competition, poverty, bureaucracy, theft of European funds, legislative chaos, social insecurity, threats due to the poor management of environment.
The Romanians achieved a higher number of negative associations than the Bulgarians. This could signify a higher involvement in the community, critical attitude and more responsibility.

CONCLUSIONS

1. The study allowed the identification of opportunities of development, cooperation and collaboration based on the estimation of the level of sympathy and mutual perception between the two communities in Romania and Bulgaria, population representation and availabilities to collaborate in the new European context.
2. The positive perception between the Bulgarian community and the Romanian one is a solid base for the extension of the cross border relations. Starting from the fact highlighted by the research of the level of

inter knowledge that the Romanian know more things about the Bulgarians and they do not know almost anything about the Romanians, we consider that the Romanian part could initiate in the future information campaigns (leaflets, brochures printing, etc.) that lead to a better knowledge of the Romanian communities in Calarasi area.

3. The actual level of collaboration for the economic sectors and between the authorities is appreciated as being medium by both parts and poor the sector of personal relations, and the Bulgarian part appreciates as poor the cultural relations also. So there is a high potential of development of all relations especially of the cultural ones.

4. The activities specified by both partners with high level of compatibility are: activities in agriculture, business development, traditions and customs, fight against unemployment and keep the young in the village, infrastructure development, rural tourism, language learning, local administration, education.

5. From the analysis of development needs it resulted that for both communities the most stringent needs are the creation of new jobs and infrastructure development. The future partnership could rely on these two topics. We mention the Romanians' wish to take over the Bulgarian experience in tourism and vegetable growing and the Bulgarian wish to learn from the Romanian experience regarding the local administration, social protection of the old persons, culture and life style. They can become also topics of some future projects.

6. As regards the orientation on the values of the two rural communities, Romanian community and Bulgarian one it is noticed that the traditional values occupy an important place in their life more significantly, in Bulgarian case for example: work, family, honour. At the same time the modern values start to be more and more present in the village life more accentuated in the omanian life: learning, success. It is obviously that both communities develop at present a process of restructuring of value orientation that will be accentuated by the European Union integration.

7. In the sector of social representations related to the European Union accession, the conclusion is that both communities have a predominantly positive, optimistic vision and realistic expectations in the understanding perspective.

So there are both common aspects and interests but also expertise, different competences, opening for collaboration and lings consolidation, a mutual positive perception and a high potential for the initiation and development of some cross border projects and conclusion of partnerships.

REFERENCES

[1] Own researches under PHARE cross border projects.
[2] Fiche of Ciocăneşti locality, Călăraşi – Romania
[3] Fiche of SREBĂRNA locality –BULGARIA

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ROMANIAN VILLAGE, INSUFFICIENTLY USED TOURIST PRODUCT - CASE STUDY- CĂLĂRAŞI COUNTY

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***Key words*:** *rural tourism, rural tourist patrimony, rural tourist product*

Abstract

The Romanian village, by rural tourism, can become a gate of entrance in the worlds of Romanian traditions and popular customs". The rural area, considered in the actual approach an area with multiple primary, secondary and tertiary activities must constitute a major concern for research. Thus, the paper proposes the compared analysis, in the light of European rural tourism, of the Romanian village as insufficiently used tourist product. The agro tourist development is the most efficient alternative for the rural area especially in the areas with historical background and with natural tourist sights. This activity would bring additional incomes to the inhabitants and even to local budgets, would allow the development of rural infrastructure

INTRODUCTION

The closeness of Călăraşi county to the Danube creates a remarkable tourist attractiveness but insufficiently exploited. The high number of picturesque isles, the ramification of the main course of the Danube by unique branches creates a natural landscape that incline to relaxing and unique conditions to practice the sportive hunting and fishing. The using of the Danube, with its wild isles, with the Delta flora and fauna of the lakes and ponds full of fish, to which hunting in the leafy forests is added all could be equivalent to the development of a sector of sportive tourism, in an original natural and ecologic landscape. The rural area in Calarasi can be a destination of the rural tourism and agro tourism due to the presence of traditional rural settlements, peasants' houses and farms and agricultural works.

MATERIAL AND METHOD

The research achieved at the level of Călăraşi county, aiming to identify villages in Calarasi as insufficiently used tourist products. The village was analysed from the perspective of internal and international agro tourism development that is the most efficient alternative for the rural area especially in the areas with historical background and natural tourist sights. This activity could bring additional incomes to the inhabitants of the villages in Calarasi even local budget that would allow the development of the rural infrastructure. The villages in Călărăşi, that by their specific, originality, cultural and historical identity, by ambiance of the natural landscape and resources richness could be an original tourist product for the internal and international tourism.

The Romanian village, by rural tourism, can become „ an entrance gate in the world of Romanian folk customs and traditions and". The rural area considered in the actual acceptance a space with multiple primary, secondary and tertiary activities, must be a major concern for research. Thus, the paper proposes to compared analyses, under the European rural tourism, of the Romanian village as an insufficiently used tourist product.

RESULTS AND DISCUSSIONS

In the conditions of constant and efficient application of the agrarian policies, according to PAC, in the year 2025 notable mutations will produce. Synthetically, the year 2025 will mark an important moment in running the process of sustainable development, concretized by the

existence of a modern agriculture, of high economic, social and ecologic efficiency, the Romanian agriculture becoming a force in Europe, able to face the competition that is on the European agricultural markets and not only. The Romanian village will shape the elements of modernity, discrepancies on economic and social level compared to the urban area that will shade off.

The village or the agrotourist area represents the real space of attractiveness, in which all element of local development merge. Among the agro tourism activity and socio-economic development of the rural areas there is a relation of correspondence and mutuality: thus the increase of tourist circulation is made by the general development of the rural areas, development that is achieved by the intensification of the tourist attraction.

The development of the accommodation offer when a constant quality framework appears, that has as main property the improvement of the architectonic aspect of the village. Changes appear also in the conception of those who will build. They will accept the existence of an architect inn order to achieve some functional constructions, with a higher level of comfort, benefiting by this both the owner and the tourist. As a result of the intensification of the tourist circulation economic activities develop on local level aimed to satisfy the increased demand of agricultural and non agricultural products. Indirectly an increase of the number of jobs will achieve both in the tourist activity and in production activity and in services. As a result of the development of agro tourist activities fundamental transformations are made at the villages level, both as regards the number of activities developed and their quality. The capitalization of the entire potential (natural and anthrop) of the rural localities and regions by agro tourism supposes putting into practice some individual and public measures that can be synthesised such as:

a) achievement of functioning of farms on the principle of autonomy in administration and organisation, in management, self development and self control.

b) ensuring funds of faros development by own effort of the faros and by credits from the credit banks with low interest.

c) the intervention of the state at the community level: by investment funds at central level for rural constructions and especially for infrastructure (roads, railways, bridges); and by support of localities from the funds remained at the local councils availability.

The variety of rural areas typology imposes to take into consideration the differences existing in the elaboration of the development measures of the agro tourist activities. The possibilities to register the rural localities in the tourist circuit are practically unlimited, considering the multiform variety of rural area. The Romanian rural area allows the elaboration of an extremely diverse range of tourist products, according to the specific resources and territorial localization. The wide range of offer constitutes a major advantage of the Romanian tourism, implicitly the rural tourism. Beyond the hotels with medium or high comfort level, specific to the tourist towns and tourist resorts, the rural area provides an infinity of profitable possibilities: pensions, camping and accommodation in the peasant houses can support a wide range of activities such as walking, cultural tourism, fluvial tourism, fishing, hunting, horse riding, winter sports, cycling tourism etc. there can be competition between two tourist products of same nature, but it disappears among the products of different nature, as they are destined to some different clients. There is no competition between the hotel tourism and the camping, between motel and peasant house with arranged receptions, between fishing and cycling tourism, between museum visit and nautical sports etc. consequently, each range of products must be adapted to the specific of each market.

The best range is an assemble of tourist products destined to some clients, as much varied as possible, including at the same time the rich ones and the poor ones, "adventures" and sedentary persons, the young and old, family persons and non family etc. Proposing a range of more extended services creates justified options to gain new markets. Each type of rural settlement provide particular possibilities and rise specific problems. Thus, it can be said that the tourist product provided must be elaborated depending on the presence

of various components, related to the individualised character of settlements.

Table 1- Distances to the Danube

Localities	Distances (km)	
	Effective	Averages
Călăraşi county	-	**6,4**
Of which: Chiselet commune	4,5	-
Dorobanţu commune	8,5	-
Mânăstirea commune	8,4	-
Căscioarele coomune	9,8	-
Chirnogi commune	6,3	-
Ulmeni commune	7,3	-
Borcea commune	**0,3**	-

Călăraşi county has 8 units of tourist accommodation from which 3 are pensions. Calarasi has a real tourist potential especially as regards the practicing the specialised tourism. The county fauna represents a real attractiveness for those who practice hunting. Competitions of hunting can be organised, hunting with falcons (that needs minor investments), also fishing contests can be organised, species that populate the waters in the county being named in all region. The distances until the Danube River of the localities included in the territorial structure of the Danube terraces are contained in table 1

The rural tourist product is the result of assembling some elements of local natural and antropic tourist resources (cultural, historical and human), as well some elements of infrastructure, of tourist equipment accommodation, other heterogeneous services. The rural tourism is a concept that includes all tourist activities that develop in the rural area. In Blegium, France, Germany, Luxemburg, Holland, the rural area indicate areas that are different of the urban ones, of coast or mountains. In Italy the term indicates those areas that are nor urban or coast so it includes the mountain regions. In Italy the term indicates those areas that are nor urban, or coast and include mountain regions. In Ireland and England the analysed term is practically synonym with the notion of “country region”, this being totally different by the urban one. Spain, Portugal and Greece have the tendency to assimilate the term of rural area with the areas where the agricultural production achieves. It is find out that in Europe the term of “rural area” has different meanings. It is known that the tourist product represents in essence the measure of tourist activity regarded as economic activity in a certain dimension, volume, structure or quality; by its destinations the tourist product can constitute a message addressed to the potential consumers (tourists), who by their option - concretized in the presence of the moment of component services providing, generate tourist flows respectively tourist consume.

In case of village as tourist product, the focus is on elements of natural aspect and especially, those linked to cultural and historic aspect (rituals, customs, developing a quiet life, in a traditional way, in conditions of a more reduced mechanisation), and as regards the population, it is needed to achieve more direct, personal contacts, so that the tourists know closely the interests and activities specific to those places. The process of creation of these tourist products must be preceded by a market survey and a good knowledge of the target clients profile, clients who could be adults, over 40 years old, family persons, with high education, with average and high income, willing to escape in a quiet place, relatively isolated, where a traditional style of life is maintained. Rural tourism practicing is made in a well preserved rural area, with its rustic specific, but it does not needs necessarily activities in primary sector.

The rural tourism practicing is made in a well preserved rural are, but it does not need necessarily activities in the primary sector. A space without people and products cannot comply with the rural tourism attention and the same the rural tourism does not find all the dimensions of but in a lively way of receiving of the native population.The spontaneous hospitality is important, but must be accompanied by a tourist formation. In the rural area, on the other hand, the own initiative must integrate both in a local development plan, and in a general one. Despite the fact that the rural area transforms itself permanently, it must be admitted the fact that the rural features, such as for example presence of some proofs belonging to primary traditional activities (agriculture, animal growing, wood exploitation) are essential needs in order to talk about a rural area prepared for tourist exploitation.

The Romanian or foreign tourist want a quiet holyday in contact with nature, with traditional (an European of four spends its holyday in the country side) after an agitated period and full of town stress.

On the other hand, the village needs the rural tourism. The future of the rural area is a problem and the European Union was aware of it more than ten years. The problems created by the situation of the rural areas (reduction of incomes in agriculture, rural exodus, traditions losing) recommend the development of the rural tourism as stimulator of the rural economy.

This type of tourism presents a series of advantages: uses agricultural spaces, natural resources, cultural patrimony, village traditions, agricultural products, achieves changes between urban and rural incomes, creates directly and indirectly jobs, improves the infrastructure.

In Romania, as well in the European Union, from relative causes, major differences appeared clearly between certain regions, differences that generally were not favourable to the rural area compared to urban area. This generates a lower living level of the population in the rural area (education, health, possibilities of employment, incomes level), fact that leads to increasing social tensions, attracting the needs to involve the responsible political factors. In order to diminish the causes of these differences, in EU associations were establishes and financial funds were allocated, even special laws appeared, that has a more and more important role in the development of the rural area.

The special funds established and put made available by EU are accessible only in the conditions of existing some well defined regional development programs. It is considered much more important the life quality than the quantity of consumed goods. Among nature, society and economy, the constant element is nature, the other ones existing only by their interaction. From this point of view, only natural needs are essential, decisive, and the society especially the economy must be adapted to them. The social efficiency of the regional development and especially the rural one is ensured by partnerships and programs, and the economic efficiency by resources concentration and co-financing.

Ţhe countries in the centre and East Europe under reform need more and more attention. Special political strategies must be implemented to solve the specific problems, but the implementation of these problems must be achieved by each country. In the year 1987, EU Council proposes the re-launch of the rural area by an extended program that has as objectives: maintaining the cultural identity and saving and capitalizing the European cultural patrimony as factor of improving the life and as source of social, economic and cultural development. More countries, more regional and more topics were considered. The topics had diverse significations, diverse dimensions and local particularities.

The following work scheme was proposed: the specialists in all Europe identified the routes and elaborated maps a common symbol was created for the visualization on the entire European territory the coordination of a group on associative actions with public and private partners addressing mainly to the young. These beginnings achieved by an workshop created - ATEART-Cross border workshop pour l'Environement et les Actions en Rural Teritoire. Tha aim was that of regional development, of cross border closeness, of favouring the knowledge of other peoples, accepting differences and promotion of common cultural dialogue, that lead to the protection of natural and spiritual wealth of each people. The actions became pilot actions to serve as examples that will be on the whole European territory.

Both rural tourism and agro tourism suppose the development of alternative tourist activities in a rural sector, led by the local population and based on the natural and local antropic potential. The accommodation takes place in the villagers' houses, and the tourists can participate actively in the local community life, identifying with them during their stay. The main reasons of a tourist that chose this type of tourism should be: return to nature, knowing and temporary adhesion to groups belonging to rural area, active relax, air cure and consume of fresh foods from the guests house, sport, hunting, fishing, trips.

The development of these types of alternative tourism within the rural areas in Calarasi would attract a series of benefit results such as:

stopping the migration of the population and even stimulation of return from the big urban centres by creating some new jobs in the tourism sectro and even offering the possibility to obtain some additional incomes; ensure the living conditions and civilization in the rural area similar to the urban one; preservation and protection of the rural environment; using of products in the own house; capitalizing the resources the area has; development and favouring the change of urban and rural culture; recovery of traditional dwellings for the tourist use and their preservation, as well other cultural resources that the region has; support of local community and development of disadvantaged spaces.

The minimal requirements for the sustainable development of the rural tourism and agro tourism in Calarasi area derive from the following aspects: need of some investments in infrastructure, restoration, preservation; achievement of a social and economic connexion between the localities authorities to achieve common projects of agro tourism support; existence of some strategies and a development program by which the local community can use all types of capital (natural, human, economic, cultural); elaboration of a common financial strategy for the correct use of the incomes obtained; formation of a technical assistance to support the tourists, the owners of pensions, the tourist agencies; achievement of a tourist identification mark; existence of some norms and concrete juridical regulations for the elimination of conflicts of interests, ensure the population and tourists safety. According to these criteria, at the level of the seven communes with agro tourist potential on the Danube terraces – respectively, communes Chiselet, Dorobanţu, Mânăstirea, Căscioarele, Chirnogi, Ulmeni, Borcea, some agro tourist or rural pensions can be created, that could provide original special programs to the tourists or can function according to certain model of French, German or English origin, such as:

„guests rooms" (according to French model) in a local house, built in classical architectural style and specific to the area, adequately equipped and can be rented for more nights, the tourists benefiting by three daily meals provided by the hosts;

„camping at the farm" (according to the French model) that can practice during the summer time and can organise in special arranged places or in special reserved places inside the houses;

„experience" (according to the German model) that supposes the accommodation in the villagers houses and providing some special programs of cycling tourism, avitourism, collection and recognition of medicine plants etc, that invite the tourists to spend a day in the nature or within some spaces arranged specially for this purpose;

„holyday in the agricultural house" (according to the German model), a experience of holyday in the family, at hosts that own an agricultural property (a small orchard, arable lands with diverse cereal cultures, an orchard for the animal growing), providing thus to the tourists the possibility to participate in the daily agricultural life, to taste some products specific to the area, to participate in the fabrication process of some goods such as preserved fruit compotes, sweets, dairy products, natural juices, providing also the possibility to understand and know all the agricultural activities and advantages of the rural area;

„sleep over the night in the hay" (according to the German model) is a program by which the tourists are guided to spend at least one night in a hay pile or in a shed;

„peasant houses independent of the host house or camping lands" (according to the English model) suppose accommodation in house annexes not in the house in which the hosts live.

Lastly the modalities of sale the rural tourist product must be specified and that is:

“agro amusement” (fruit collection, animal caring, watering the fruit trees);

“agro amusement” (trips in the nature, hiking, cycling tourism, hunting or fishing, avitourism, identification and collection of some plants, driving with tractor or horse carts);

“Agro education” (improving the tourism knowledge as regards the agricultural production, the modalities of using the obtained products, knowledge about life in the country side, traditions and holydays, culinary recipes, and modalities to prepare them, etc);

“agro commerce” (using by the tourists the products obtained, for example sale of fish caught in a fishing day).

Considering the multitude of possibilities offered by the natural landscape, human and economic background, we can say that these three elements could represent the three "pillars" to support a possible intense tourist development in this area.

CONCLUSIONS

The seven communes with agro tourist potential on the Danube terraces respectively, Chiselet, Dorobanțu, Mânăstirea, Căscioarele, Chirnogi, Ulmeni, Borcea communes, in order to become tourist product must aim the following exigencies:

1. To establish clearly the objectives, to highlight the strong points and to remedy the deficiencies to become points of attraction;
2. To use efficiently the resources of any nature, to plan, monitor and control the human, material and money resources to reach the objectives;
3. To communicate internally (all persons interested and involved in the village becoming) and externally (with the environment, especially with the guests – arrived tourists);
4. To coordinate the activity within the multi disciplinary teams that contain different people, various professions, different organisations, but with the well mentioned and unique aim;
5.To maintain in attention permanently a general assemble of becoming in order to reduce the risk areas and to work efficiently the details;
6. To appreciate what must or not be done, before execution and to implement an adequate quality standard;
7. To reduce the costs by maximisation of works efficiency and resources allocation.

REFERENCES

[1] Crețu D,(coord.) 2008, Creation and administration of an agro tourist house, Ed. Agora, pg. 52-75
[2] Bold, I., Buciuman, E., Drăghici, M.,2003 – Rural area, definition, organisation, development, Ed. Mirton, Timişoara, pg. 69-73
[3] Nistoreanu P. (coord.), 2003 „Ecotourism and rural tourism", Ed. a II-a, Ed. A.S.E., Bucuresti.
[4] Stoian Elena, 2005 „Quality Management in agro tourism and catering", course notes, USAMV, Bucureşti
[5] Tocquier,G., Zins M., „Marketing of tourism", Ed.Gaetan Morin, Canada, 1999, pag. 157

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TECHNICAL AND ECONOMICAL PREMISES FOR BIOMASS PRODUCTION , FAST GROWING PLANTATIONS OF HYBRID POPLARS

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Key words: *poplar clones, biomass, internal rate of return*

Abstract

The paper aims to argue for the biomass fast-growing poplar plantation from economical and technical point of view. In the context of the growing interest of the investors and the Government for promoting the efficient production and usage of the biomass, the paper gives useful comparative data for several versions of plantations based on fast growing forestry species. There are descriptions of the results of the latest research concerning establishment, maintenance and productivity of the experimental biomass plantations established in different site conditions, as well as the assessment of the economical risks associated with the versions presented. The paper also contains a comparative assessment of the potential investments by using usual financial indicators. Through the obtained results, one can drop the conclusion that those types of investments in biomass plantations can be viable solutions for low efficient agricultural land, as a result of the climate change.

INTRODUCTION

The Objective of the European Commission Communitarian Strategy ”Energy for the future: renewable sources of energy’’ assume that the portion of the contribution of the renewable energy sources of the member countries should reach 20% of the total primary resources till 2020. For Romania, the first option in this respect is the utilization as fuels of the biomass resulting from the forestry sector (forestry waste) and also the biomass produced by cultivating low productive agricultural or degraded land. The remaining from forest harvesting and wood processing is widely spread in low accessibility areas therefore their utilization is expensive. In this context, production of biomass through fast growing species, mainly using hybrid poplars, is more and more interesting. Applying such initiatives on large scale in our country has technical and economical uncertainties that are addressed, partially by this paper. It is based on date delivered by a series of experiments regarding the productivity of certain hybrid poplar clones and on a series of economic assumptions and presents the results of some simple investments analysis that offer some conclusions regarding the efficiency of the forestry biomass plantations.

MATERIAL AND METHOD

The assessment consist in collecting the following information: on one side, technical data regarding the biologic material and the productivity of the plantations and on the other hand economical data regarding the costs for land, plantation establishment and management and the possible revenues from biomass put into the market.

Technical data regarding the biologic material and plantations productivity

For assessing the plantations productivity, an experimental plantation using hybrid poplar clones was established in spring 2008. This plantation was designed for 2 years production cycle. The plantation is located in the Danube Delta on a flat plane resulted from a former lake bottom. The soil has a heavy texture (clay

for about 90-120 cm), and the underground water level is about 1.5-2.0 m deep during the vegetation season. The land was ploughed in the autumns and disked in the spring before the establishment that was made using 30 cm small cuttings 30 cm long and 15-22 mm thin, with at least 3 viable buds. 6 high productivity clones were selected and used: AF2, AF6, AF8 and Monviso (provenience Alasia New Clones), Turcoaia, Sacrau 79 (provenience ICAS Romania). The experiment was organized in randomized blocks with 3 repetitions. The spacing assures a 6,666 plants/ha.

In the first year after the establishment, till august the soil was mobilized four times on the entire surface. The plantation was irrigated 2 times /month depending on the level of precipitations. Treatments against insects were also applied. In the second year the soil was mobilized twice. No irrigation and insect's treatment needed. Periodic measurements for diameter and high were made. After the second year the biomass was harvested by cutting at 5 cm above the soil. The fresh resulting biomass was measured. The diameter was measured at 10 cm above soil, and the weighing of the biomass was done using precision tools.

For the utilization of the land, two versions were considered: 1) the land is acquired (the values were collected by transactions price assessment in 2008 for the lands that have proper conditions for poplar) and 2) the land is rented (again, the prices resulted from assessing the prices of year 2008).

Production of the regeneration material

The assessment takes into consideration the costs for mother plants cultivation establishment for production of small cuttings. Mother plants cultivations establishment consist in: choosing the right location, preparing the land, establishment of the mother plants and their maintenance: weed and insects killing, harvesting the small cuttings, clearing the stamps, sprouts individualization, manufacturing the small cuttings. The optimum age (in terms of productivity) of the mother plants was considered, and the cuttings production rhythm was optimized starting with the unitary assumption that the dimension of the biomass production plantation is about 1000 ha. For calculating the price for producing the regeneration material we made several assumptions:

- the total aria of the plantation is 1000 ha
- the plantations were established in a 4 years period – the solution for optimizing the ratio between the surface of the nursery and its productivity for the designed purpose;
- after establishing the plantation the nursery can also be used as biomass production unit
- the establishment and maintenance technology for the biomass plantation is the classical one used at this moment in Romania;
- mechanical works are outsourced;
- the density of the plantation is 7000 plants per ha;
- Indirect spending level reaches 15%.

Plantation establishment

Costs estimation was based on bills of quantities for 1000 ha of biomass plantation, using time norms and unitary wages that are common presently in the forest sector. The bills of quantities and values contain all the spending including personnel, machines ant materials and the taxes for the salary fund.

Plantation management costs include: supervision, current administration, plantation maintenance, harvesting and works for favoring the regeneration of sprouts and bringing the sites back to its original status.

Revenues from selling the biomass

In the absence of an established market in Romania, we used for assessment purposes the prices that are usual in neighbor countries (Hungary, Czech Republic, Lithuania and Poland) anticipating an evolution more or less similar of the market.

For the purpose of the assessment the following variation factors:

- biologic material;
- geographic area (reflected in land acquisition /renting quotas);
- ecological conditions affecting productivity (graded in three categories);
- usage of the land (rented vs. acquired).

For every version considered we calculated the net present value (NPV) of the cash flow and also the internal rate of return (IRR) by

estimating the cash flows for a period of 20 years (maximum 8 cycles).

RESULTS AND DISCUSSIONS

Results of the experiments regarding biomass production

In table 1 there are the recorded results by clones for the experiment aiming the biomass production estimation.

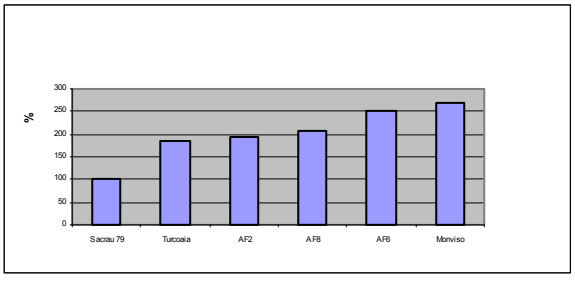
Table 1 Average diameter, average height and fresh biomass recorded within the experiment after the first 2 year production cycle

Clone	Average diameter (cm)	Average height (m)	Fresh biomass (to/ha)
AF2	5.6	6.5	42.00
AF6	5.8	7.0	54.48
AF8	8.1	6.6	45.06
Turcoaia	4.6	5.7	40.27
Monviso	6.0	7.0	58.50
Sacrau 79	4.1	5.3	21.58

The biggest value for the average diameter was recorded for AF8 clone (8.1 cm) and the biggest average height was recorded for AF6 and Monviso, all of them having Italian provenience. The biggest biomass quantity was recorded for Monviso (58.5t/ha). Comparing those values with the values of productivities in the origin country, we can see that the production in Romanian conditions is lower, possible because of the fertility of the soil. Results of the Italian experiments can be found on the site of the company breading the clones (www.alasiafranco.it/biomassa).

Representative for the differentiation of clone productivity is the graphical representation in figure 1 - the witness was considered the Sacrau 79 clone, the most productive clone in Romania.

Fig. 1 Biomass production of the tested clones in the Nufarul nursery, comparison with SACRAU 79



Results of the investment assessment

After entering all the data into the calculation sheets a sensitivity analysis was made and the results can be followed in the following tables.

Table 2: Sensitivity analysis assumptions

Geographical region	Price for land (EUR)	Price for renting the land (EUR/year)	Price for biomass (EUR/dry biomass)
Oltenia	1000	100	20
Baragan	1400	130	20
South Moldavia/ Danube Delta	1100	90	20

In the absence of researches regarding the difference between the adaptability of the experimented clones in different ecological conditions, all the calculations were made for the most productive clone. The date regarding the price for land can be affected by some tendency of the market. For 2009 and 2010, the market is rather blocked, and the prices are expected to drop. This tendency can only increase the interest for such investments. Table 3: Sensitivity analysis

Region	Base with land acquired	Base with land rented	Base without land costs	10% increase in productivity
Oltenia	12.56	13.52	21.12	22.45
Baragan	10.34	11.12	17.45	19.14
South Moldavia/ Danube Delta	8.23	9.11	15.31	16.99

Nevertheless, it is important to mention the fact that the investments can not be implemented very soon, considering the fact that the market for biomass is still very young and the biomass production and the development of the burning plants have to go hand in hand.

CONCLUSIONS

1. The model can be used for many other factors influencing the investment decision, including different technical options, possible subsidies, etc
2. The biomass production is definitely an option not only for a effective renewable source of energy but also for long term moderate

profitable investments (note that the associated risks are quite low);
3. If some speculative aspects regarding the price of the land are also considered, the investment can become even more attractive;
4. For a 20 years investments, renting the land seems the best options under the current acquisition prices;
5. Plantations for biomass may be profitable but costly to establish;
6. Research regarding the ecological adaptability of the tested clones may conduct to more accurate results.

REFERENCES

[1] Baratto, G., Bergante, S., Facciotto, G., Annunziati, M., 2008: Studies of Poplars and Willows Short Rotation Coppice Establishment. 23rd Session of International Poplar Commission, Beijing-China. Abstract of Submitted Papers, 15.

[2] Fara, L., Filat, M., Chira, D., Fara, S.and Nutescu, C., 2009: Preliminary Research on Short Cycle Poplar Clones for Bioenergy Production. Proceedings of the International Conference RIO 9. World Climate&Energy Event, 17-19 March 2009, Rio de Janeiro, Brazil. 127-132.

[3] Filat, M., Chira, D., 2004: Researches concerning introduction in culture of the poplars and willows species/clones with superior forest productive potential and increased resistance to adversities. Anale ICAS. 47. 83-99.

[4] Turcu, D., 2006:– Realizarea unei culturi energetice forestiere (sursă energetică regenerabilă) într-o zonă slab productivă pentru culturi agricole, în scopul verificării rezistenţei speciilor şi varietăţilor de arbori cu creştere rapidă în condiţii de sol degradat, evaluarea producţiei de lemn (biomasă), selectarea unor tehnologii mecanizate de cultivare/recoltare şi tocare, în vederea utilizării energetice. ICAS - Referat ştiinţific final.

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PROGRESES IN DEVELOPMENT OF PRODUCER GROUPS AND PRODUCER ORGANIZATIONS IN ROMANIAN FRUIT AND VEGETABLE SECTOR

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Key words: *value of marketable production, CMO, member, PG, PO*

Abstract

This paper aims to presents the development of producer groups (PGs) and producer organizations (POs) on fruit vegetable sector during 2007 and 2009, as the main means of measuring the degree of implementation of the common market organization (CMO) in Romania. It is based on statistics provided by the Ministry of Agriculture and Rural Development. Data were analyzed from the perspective of the following indicators: number of PGs and POs, the area used by members of these forms of marketing, value of marketable production (VPC) and amount of financial support received from the public purse. During the reported period the number of GP increased by 275% in 2009 compared to 2008 and the number of POs stagnated. Regarding the area used by members of these forms of associative marketing, this increase from 1115, 5 ha in 2007 to 3230,5 ha in 2009. Given the annual doubling of land used by members of the PGs and POs, the CMO are seen by producers as an alternative for development of the marketing chain in fruit and vegetable sector.

INTRODUCTION

Horticulture is an important agricultural sector of national economy with high added value that can provide a decent life style for many producers and traders in Romania. Politics of this sector has to meet market requirements by reducing price fluctuations, the imbalance between supply and demand, encourage consumption of fruit and vegetables by ensuring the competitiveness principles.

In 1989 the areas planted with vegetables had reached 289.6 thousand hectares and 290 thousand hectares occupied by fruit trees [1]. Currently, according to an overview of the Agency for Payments and Intervention for Agriculture, areas for which area payments were required in 2008 not exceeding 46 thousand hectares for vegetables and 105 thousand ha for fruit trees. Considerable decrease of the areas occupied by fruit trees and vegetables in particular has an explanation in collapse of the network for marketing of fruits and vegetables from the communist period. In the common market organization (CMO) the role of this network marketing is assumed by associative forms of marketing called producer groups and producer organizations. These forms of associative marketing are formed on the initiative of farmers and for them benefit with substantial financial support for the establishment and improvement of a network of specialized marketing.

Producer organizations [2] are the main actors of the CMO in fruit and vegetables whose role is to concentrate supply and adaptation to market demand, acting on behalf and in the interests of producer members. Producer organizations receive Community financial support under an approved operational program, to engage quality production including organic production, environmental protection, marketing activities, promotion and innovation and for measure prevention and crisis management. To ensure greater efficiency of operational programs, Member States shall develop a national strategy which sets out the procedures and eligibility of expenditure of operational funds.

Where specialized associative forms of fruit and vegetable trade do not meet all the requirements for recognition as a producer organization, they are recognized for a maximum of 5 years as producer groups. This

recognition is granted upon acceptance by the Member State of recognition plan which has phased in semesters all administrative and investment activities that enable to increased competitive ability of the producer group. In fact, the overall objective of this plan is to obtain recognition at the end of the implementation status of PO. Financial Support for Implementation of recognition is dependent on the value of marketable production and on the value of the investment made by producer group and is capped at:

- 10% of the costs of managing and operating in first and second year of the recognition that in future years will decrease by 2% annually, and
- up to 75% (+ 50% Community funding up to 25% national funding) of the value of investments included in the recognition plan.

These forms of support are simultaneously and individually calculated for each group of producers. Eligible expenses under the scheme of financial support are related to construction of facilities for the reception and storage, purchase of machinery and specialized equipment for handling, sorting, labelling, packaging and transport to the market of member's production. Given the low level of organization of fruit and vegetable sector, Romania is the only EU state where groups of producers receive 75% of the value of investments in the funnel recognition for building reception and storage facilities, purchase of machinery and specialized equipment for handling, sorting, labelling, packaging and transport to the market of members.

From this perspective, this paper will analyze the development of producer groups and organizations in Romania during 2007-2009. Areas managed by the members of these forms of marketing are the main indicator for measuring the degree of organization of fruit and vegetable market and the level of implementation of common market organization in Romania.

Community budget for implementation of specific measures of CMO's fruit vegetables (approximately € 1.4 billion spent in 2005) is not assigned to the Member States as national financial tires like in the wine sector, and this stimulates the development of producer groups and producer organizations by generating competitiveness between Member States in terms of its absorption. This is stimulated by the fact that fruit and vegetable sector receiving the highest rate grant from the Community budget allocated to Pillar I (16.3%) [3].

MATERIAL AND METHOD

Producer groups and producer organizations have been weighed against the following indicators:

- number of producer groups and producer organizations;
- the area used by members of these forms of marketing;
- value of marketed production;
- amount of financial support received from the public purse.

The data relating to the indicators mentioned above were collected by the Ministry of Agriculture and Rural Development in 2007-2009. In developing the conclusion of this study was envisaged statistical interpretation of data, the budget for the sector at Community level and degree of implementation of the CMO's laws in Romania.

RESULTS AND DISCUSSIONS

In 2007 Romania has recognized a single organization and not a producer group. In the fooling years the number of producer organizations remained unchanged while the number of producer groups achieve 11 in 2009, see Fig. 1.

In Fig. 2 is the evolution of land used by members of producer groups and organizations during 2007-2009 reported in the area planted with fruit and vegetables in Romania for the same period.

Following data analysis there is a volatile tendency area occupied by fruit and vegetables in Romania to a steady growth of area under fruit and vegetables cultivated by members of producer groups and producer organizations. These two contrary trends show a positive trend towards organization of fruit and vegetable

chain with long-term beneficial effects on the sector economy.

Fig. 1 The number of producer groups and producer organizations

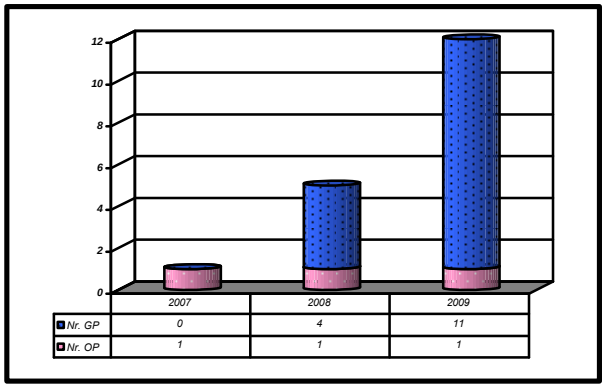
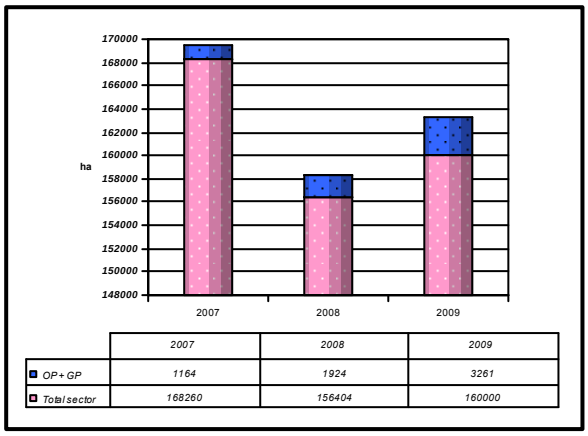


Fig. 2 The ratio of total area planted with vegetables and fruit used by members of the GP and OP



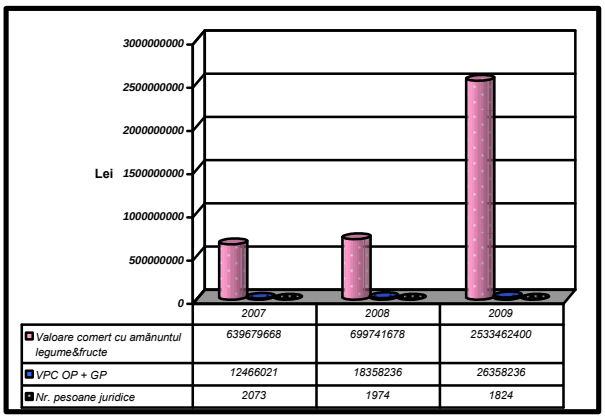
In Fig. 3 is the evolution of marketed production of producer groups and producer organizations belonging to the period 2007-2009 comparative to developments in the same period of the fruit and vegetables retail value made by legal entities registered for VAT.

producer The value of marketed production [4] is the value of the entire member's production sold thru the PG's or PO's and for which they have recognition. Analysing data result an increase of almost 400% of retail value for fruit and vegetables in 2007-2009.

To significantly increase the retail value of fruit and vegetables in 2009 has contributed the increase of 280% compared to 2007 the areas administered by members of producer groups and organizations. This development emphasizes the positive trend of organizing fruit and vegetable chain in Romania.

Financial support from public funds (EU and national) is presented as the sum of all forms of support specific for producer groups and producer organizations.

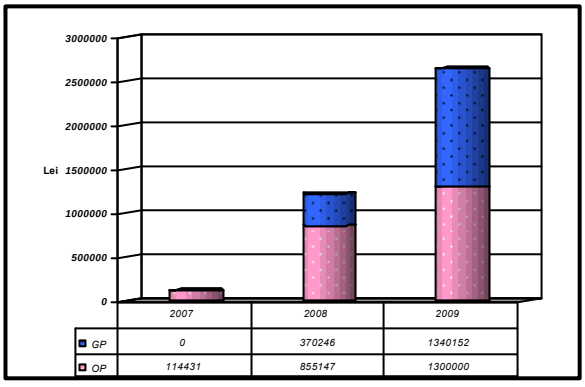
Fig. 3 Report of the retail value of fresh fruit and vegetables and SVC's registered GP and OP



Producer organizations may receive financial support up to 50% of the operational fund approved in 2007, 2008 and 2009. Given the specific legislation the operational fund can't exceed the 4.2% of marketed production. Member States that have a low degree of organization may provide to producer organizations a state aid worth 80% of the producer organization contribution to operational fund. Producer organizations in Romania has benefited from financial support only in 2009.

In fig.4 is shown the evolution of the annual amount of financial support received from producer groups and producer organizations in Romania from public funds in 2007-2009.

Fig. 4 Evolution of the annual amount of financial support received by PG's and PO's



Analyzing the data, we can see a trend in the growth of the amount of financial support accessed by producer groups and producer organizations, from 114,431 lei in 2007 to 2,640,152 lei in 2009. Reported to the

Community budget spending under Pillar I for producer groups and organizations about 2.670 billion in 2007 [3], the financial support accessed by producer groups and organizations in Romania in 2009 is totally insignificant (0.1%). Taking into account the areas occupied by vegetable and fruit plantations in the EU 27 [5] and Romania and the Community budget allocated to producer groups and producer organizations, the optimum value which can be access by Romanian producer groups and producer organizations is about 142 million lei.
Photo 1 is presenting the first building for reception, storage, sorting, packaging, labelling and delivery of vegetable production, done by accessing Pillar I by producer group "SC Paradisul Legumelor Curtici & Macea s.r.l".

Photo 1. Producer group "SC Paradisul Legumelor Curtici & Macea s.r.l"- space for reception, storage, sorting, packaging, labelling and delivery of vegetable production

CONCLUSIONS

1. During the pre-accession period Romania has not done a intensive policy, supported by information and legislation transposing of the specific organization of fruit and vegetable which resulted in absorption of irrelevant amounts from the Community budget;
2. Increasing land used by members of producer groups and producer organizations have a significant influence on the retail value of fresh vegetables and fruits being a clear sign of organization and development of the fruit and vegetables sector;
3. Although the extent of absorption of EU funds are significantly increased, compared to optimal absorption of these funds, Romanian PG's and PO's have accessed about 2% in 2009;
4. Keeping the absorption degree of EU funds in 2009, Romanian PG's and PO's will have reached optimal absorption only in 2027.

REFERENCES

[1] Nicolae Ştefan, Gheorghe Glăman, Bulbuc Cristian, 2008, Istoria horticulturii, Editura Academiei, Bucuresti, vol. 3
[2] x x x – Regulamentul Consiliului nr. 1234/2007 de instituire a unei organizări comune a pieţelor agricole şi privind dispoziţii specifice referitoare la anumite produse agricole („Regulamentul unic OCP")
[3] x x x – http: //ec.europa.eu/romania/documents/agenda/fv-reform_c2_11-01-07-janvier-zk_ro.pdf
[4] x x x – art. 52 din Regulamentul Comisiei nr. 1580/2007 de stabilire a normelor de aplicare a Regulamentelor (CE) nr. 2200/96, (CE) nr. 2201/96 şi (CE) nr. 1182/2007 ale Consiliului în sectorul fructelor şi legumelor
[5] x x x - http: //epp.eurostat.ec.europa.eu/portal/page/portal/agriculture/data/database

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RISK COMMUNICATION AND FOOD SAFETY ISSUES

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Keywords: *risk, system, food- safety*

Abstract

Facing intensive food scandals such as BSE, nitrofen, or acrylamide, risk management cannot be successful without a dialogue involving those in charge and relevant stakeholders. Certainly, communication cannot reduce risks for everyone, but has an important impact on whether different risk assessments lead to a societal or economic crisis. In this regard, the performance of responsible authorities is often lacking.

INTRODUCTION

The scientific and technical issues in relation to food and feed safety are becoming increasingly important and complex. The establishment of a European Food Safety Authority, hereinafter referred to as 'the Authority', should reinforce the present system of scientific and technical support which is no longer able to respond to the increasing demands on it. Pursuant to the general principles of food law, the Authority should take on the role of an independent scientific point of reference in risk assessment and in doing so should assist in ensuring the smooth functioning of the internal market. Furthermore, the Authority should provide a comprehensive independent scientific view of the safety and other aspects of the whole food and feed supply chains, which implies wider-ranging responsibilities for the Authority. These should include issues having a direct or indirect impact on the safety of the food and feed supply chains, animal health and welfare, and plant health.

MATERIAL AND METHOD

The Authority should contribute through the provision of support on scientific matters, to the Community and Member States' role in the development and establishment of international food safety standards and trade agreements. The confidence of the Community institutions, the general public and interested parties in the Authority is essential. For this reason, it is vital to ensure its independence, high scientific quality, transparency and efficiency. Cooperation with Member States is also indispensable. The Authority should cooperate closely with competent bodies in the Member States if it is to operate effectively. An Advisory Forum should be created in order to advise the Executive Director, to constitute a mechanism of exchange of information, and to ensure close cooperation in particular with regard to the networking system. Cooperation and appropriate exchange of information should also minimize the potential for diverging scientific opinions.

The Authority should take over the role of the Scientific Committees attached to the Commission in issuing scientific opinions in its field of competence. It is necessary to reorganize these Committees to ensure greater scientific consistency in relation to the food supply chain and to enable them to work more effectively. A Scientific Committee and Permanent Scientific Panels should therefore be set up within the Authority to provide these opinions. In order to guarantee independence, members of the Scientific Committee and Panels should be independent scientists recruited on the basis of an open application procedure. The lack of an effective system of collection and analysis at Community level of data on the food supply chain is recognized as a major shortcoming. A system for the collection and analysis of relevant data in the fields covered by the Authority should therefore be set up, in the form of a network coordinated by the Authority. A review of Community data

collection networks already existing in the fields covered by the Authority is called for.

Improved identification of emerging risks may in the long term be a major preventive instrument at the disposal of the Member States and the Community in the exercise" of its policies. It is therefore necessary to assign to the Authority an anticipatory task of collecting information and exercising vigilance and providing evaluation of and information on emerging risks with a view to their prevention. The Commission remains fully responsible for communicating risk management measures. The appropriate information should therefore be exchanged between the Authority and the Commission. Close cooperation between the Authority, the Commission and the Member States is also necessary to ensure the coherence of the global communication process. The independence of the Authority and its role in informing the public mean that it should be able to communicate autonomously in the fields falling within its competence, its purpose being to provide objective, reliable and easily understandable information ((EC) No 178/2002).

The Authority shall communicate on its own initiative in the fields within its mission without prejudice to the Commission's competence to communicate its risk management decisions. The Authority shall ensure that the public and any interested parties are rapidly given objective, reliable and easily accessible information, in particular with regard to the results of its work. In order to achieve these objectives, the Authority shall develop and disseminate information material for the general public. The Authority shall act in close collaboration with the Commission and the Member States to promote the necessary coherence in the risk communication process. The Authority shall publish all opinions issued by it in accordance with Article 38. The Authority shall ensure appropriate cooperation with the competent bodies in the Member States and other interested parties with regard to public information campaigns ((EC) No 178/2002).

Food and feed business operators at all stages of production, processing and distribution within the businesses under their control shall ensure that foods or feeds satisfy the requirements of food law which are relevant to their activities and shall verify that such requirements are met. Member States shall enforce food law, and monitor and verify that the relevant requirements of food law are fulfilled by food and feed business operators at all stages of production, processing and distribution. For that purpose, they shall maintain a system of official controls and other activities as appropriate to the circumstances, including public communication on food and feed safety and risk, food and feed safety surveillance and other monitoring activities covering all stages of production, processing and distribution. Member States shall also lay down the rules on measures and penalties applicable to infringements of food and feed law. The measures and penalties provided for shall be effective, proportionate and dissuasive ((EC) No 178/2002).

The European Commission has just introduced TRACES, a new IT system designed to improve the management of animal movements both from outside the EU and within the EU. TRACES will consolidate and simplify existing systems and create better tools for managing animal disease outbreaks.

The ability to communicate directly and openly with consumers on food issues will give the Authority a high public profile. The Authority will need to make special provision for informing all interested parties of its findings, not only in respect of the scientific opinions, but also in relation to the results of its monitoring and surveillance programs. The Authority must become the automatic first port of call when scientific information on food safety and nutritional issues is sought or problems have been identified. It will also need to ensure that appropriate information on these issues is published, as part of its commitment to re-establishing consumer confidence. Clearly the Commission will continue to be responsible for communicating risk management decisions (White Paper on Food Safety, 2000).

Where a food safety emergency occurs, the Authority will collect, analyze and distribute relevant information to the Commission and Member States, and will mobilize the necessary scientific resources to provide the best possible

scientific advice. The Authority will have to respond rapidly and effectively to crises, and will take a key role in supporting the EU response. This will promote improved planning and handling of crisis situations at the European level, and will demonstrate to consumers that a pro-active approach is being taken to deal with problems. The Authority will operate the Rapid Alert System, which allows the identification and rapid notification of urgent food safety problems. The Commission will be part of the network and will therefore be informed on a real-time basis. Depending on the nature of a crisis, the Authority may be requested to carry out follow-up tasks, including monitoring and epidemiological surveillance (White Paper on Food Safety, 2000).

Specialization in the agri-food sector has led to an immense growth in productivity. However, it has also led to an increase in complex customer-supplier relationships in agri-food chains.

In recent years producers and consumers have become more and more aware that quality of agricultural products depends on the performance of individual links within the complete production process. In contrast, quality management efforts of the various organizations of a supply chain are separated rather arbitrarily. Various boundaries exist between:

-Organizations - quality management and efficiency improvement activities are limited to internal processes at specific links of a netchain.

-Production stages - diverse organizational cultures exist at the different levels of production.

-Nations - different languages, different production methods and quality and information standards, differences in executing EU legislation.

Quality Management is a structured system for satisfying internal and external customers and suppliers by integrating business environment, continuous improvement and maintenance cycles. EN ISO 9000:2000 ff. has been widely accepted as a framework for implementation of quality management systems and demands, amongst other things, the principles of: process approach; continual improvement; mutually beneficial supplier relationships.

A QMS encompassing the horizontal and vertical dimension of a netchain can provide a means to better steer its complexities. Driving force is the recognition that each organization in a netchain can enhance its performance and the product quality by integrating its goals and activities with other organizations to optimize the results of the entire chain.

Research is carried out in the following steps to develop the reference information model:

1. Analysis of inter-enterprise relationships.
2. Analysis of product and process quality information exchange and additional chain information needs by different stakeholders.
3. Mapping of the location, frequency of data collection and administration of quality information sources (database, paper based) in order to suggest potential application integration or interfaces with a central system.
4. Development of an information model for pork net chains.
5. Implementation of a food chain information system according to the model.
6. Validation, review and finalization of the reference information model.

RESULTS AND DISCUSSIONS

Inter-enterprise relationships and organizational set-up vary in each pilot chains.

They could be categorized as:

-Closed system - stakeholders define quality specifications and information standards in contractual arrangements.

-Open system - external organisations (i.e. 1KB, QS) determines production requirements and provides an organizational framework for customers and suppliers in the netchain.

-Mixed system - quality specifications and information standards of open systems combined with extra arrangements of the specific netchain.

Though the pilot chains are differently structured, they have set up similar information exchange systems between their stakeholders. Up to now, it is organized point to point and paper based, though computerized databases are capturing information (especially at abattoir and extension services). The two pilot chains

with closed quality systems carry out a more advanced information exchange between the links, where it is used as a resource for planning and controlling. Though defined as very useful by the producers, a structured feedback to their suppliers (breeder, etc.) is not established in any of the three chains.

Additionally, individual links of the chains process further details on the products and processes for their own use. Reports of veterinarians, extension services and auditors are available in paper form in formats provided by the relevant quality systems. Since all this information is stored separately it serves rather for documentation purposes and ad hoc corrective measures, instead of being a means to steer the continuous improvement process. Therefore, it is so far only of minor assistance for chain wide information exchange, reporting, efficient analysis and early warning activities.

Based on currently existing information sources a concept for a maximal useful data input into a central pork chain information system has been developed. A number of specific types of information have been defined as valuable for chain-wide and individual planning and controlling purposes and is listed in the reference information model. The information can be retrieved from different stages of production and is grouped as:

-Product Information: Identification, Provenance, Smallest identifiable unit, Supplier assessments, Public Meat inspection results, Organ results, Classification.

-Process Information: Information on production sites, Breeding program, Transports, Slaughter, Vaccinations, Parasitical regimes, Feeding, Health and hygiene status, Laboratory results, Quality program audit results.

-Extended information: Quality program specifications, Salmonella antibody level calculations and trends, Supplier categorization calculated on supplier assessments.

This reference model can be seen as a blueprint for a comprehensive food chain quality information system. However, the content is adjustable to meet the specific organizational arrangements, technical environment and information needs of each netchain.

CONCLUSIONS

1. Information exchange in netchains is more and more established, but often paper based and point-to-point. A variety of databases contain valuable information. To set up a cost effective quality information system, which meets the demands described above, existing information sources should be linked or integrated into a comprehensive database. A reference information model for pork netchains can assist in reducing costs and handling the complexity of the implementation of such systems. However, this can only act as a recommendation. Chain actors themselves ultimately have to decide on their level of information exchange.

2. Additional information does not necessarily lead to knowledge gain. For an efficient use of a central information system, available data has to be specifically processed and made available for the various stakeholders. Data warehousing technology is a means of integrating this information to support effective information exchange, continuous improvement process and provide an added value for all stakeholders of a netchain in a chain.

REFERENCES

[1] Schulze Althoff and Petersen, 2004
[2] White Paper on Food Safety, 2000

[3]http://ec.europa.eu/dgs/health_consumer/library/press/press37_en.html

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THE FLEXIBLE APPROACH OF THE SECOND PILLAR OF CAP TO MAXIMIZE ADVANTAGES FOR EU FARMERS: ROMANIAN CASE

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Key words : *CAP, rural development measures, EAFRD contribution, rural areas, sustainable agriculture*

Abstract

Agricultural sector faces several challenges, such as the increased need for management of production risks, fighting climate change, more efficient management of water, making the most of the opportunities offered by bio-energy and the preservation of biodiversity. One the best way of adjusting the CAP in order to meet these challenges is through Rural Development Pillar. Common argument is that using rural development measures can avoid some unintended consequences of agricultural policy, especially the increasing inequality within agricultural sector. The farms' capability of income generation and its competitiveness could be therefore increased, while strengthening rural economy. This paper is trying to highlight the choice made by EU farmers in order to take the advantages of different EU support actions. We will proceed to a comparative analysis of the content of the programmes and of their implementation at the level of some member states. Based on the existing databases and reports as of 30 September 2009 (Eurostat databases, European Environmental Agency databases and reports, DG AGRI statistical, monitoring and financial reports) we will try to assess the possible advantages of Romanian farmers.

INTRODUCTION

Agricultural sector faces several challenges, such as the increased need for management of production risks, fighting climate change, more efficient management of water, making the most of the opportunities offered by bio-energy and the preservation of biodiversity. One the best way of adjusting the CAP in order to meet these challenges is through Rural Development Pillar. There is a great amount of literature on the effects of agricultural policy from various aspects (Gardner and Rausser, 2002). Literature on the CAP reform stresses the increasing role of second pillar during reform procedure. Common argument is that using rural development measures can avoid some unintended consequences of agricultural policy, especially the increasing inequality within agricultural sector.

The current rural development policy 2007-2013 is strongly orientated towards flexibility of programming. The programming exercise works in a decentralized way, in a framework of partnership between the EU and the Member States and regions concerned. This allows rural development programmes that are tailor-made to the situation of a specific country needs, based on a set of 42 measures (Excluding the "511 – Technical assistance"). This array of measures, targeting social, economic and environmental outcomes, could be considered to maintain a degree of coherence if they are regarded as mutually supportive and based on strategic analysis at national and regional level to maximize value. A comparative analysis between EU farmers choice after two year of implementation could provides valuable inputs concerning the coherence assumption of the NRDP.

MATERIAL AND METHOD

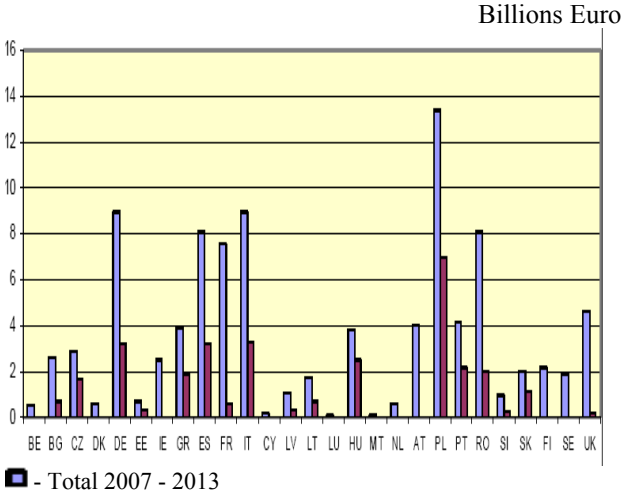
The paper provides a qualitative and comparative analysis of the programmes content and of their implementation at the EU level. The aims is to highlight the choice made by EU farmers in order to take advantages of different EU support actions, according to the specific country situation. The paper is based on the existing databases and reports as of 30 September 2009 (Eurostat databases and Environmental Agency databases - CORINE

Land Cover, Farm Accountancy Data Network (FADN), Farm Structure Survey (FSS), European Environmental Agency reports, DG AGRI statistical, monitoring and financial reports, MARD Rural development report on 2008, Statistical Projects situation at 19.02.2010).

As a first step, the rural development measures are analyzed and compared, mainly by means of data analysis and literature study. Two types of information are used in this purpose: statistical and administrative information on the status of the implementation of Rural Development Policy (physical and financial monitoring of the measures). Finally the study touches upon the current implementation of rural development policy.

RESULTS AND DISCUSSIONS

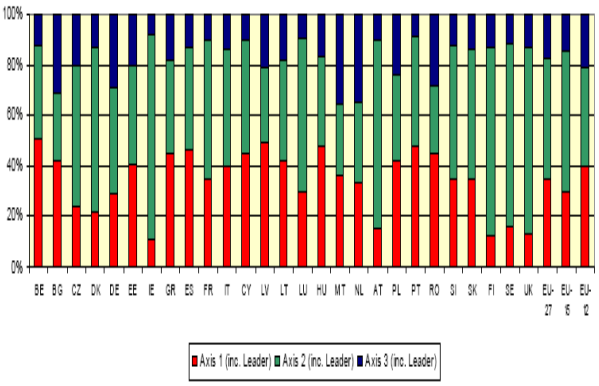
Within the framework of the new Financial Perspectives, rural development was allocated 77.6 billion euros from EAFRD envelope over the period 2007-2013[14]. This amount is distributed among Member States.



Graph no 1. Community support for rural development in the 2007-2013 programming period

Rural Development Programme 2007–2013 is divided on four axis:– Improving the competitiveness of the agriculture and forestry sector, – Improvement of the environment and the countryside, – The quality of life in rural areas and diversification of the rural economy, – Leader.

Graph 2. presents the relative importance of the 3 main axes, as percentage of the EAFRD contribution devoted to these 3 axes. Despite the common minimum percentages, the picture looks quite different in the various Member States.



Graph 2: Relative importance of the 3 thematic axes by Member State, programming period 2007-2013

Romania has one of the most important percentages allotted to the measures of Axis 1 (40.13%), lesser however than Belgium, Latvia, Hungary, Portugal Spain, Cyprus, Greece contribution to this axis. The contribution allocated to Axis 3 is also one of the highest (25.6%), superior only in Malta and in the Netherlands (33.7%), Bulgaria (27.9%), Germany (28.5%).

There are interesting conclusions when one analyses the measures each SM chooses to emphasize within the three axes. Axis 1 measures are primarily intended to improve the efficiency of agriculture and forestry sector, to enable them to confront the competitiveness issues resulting from an open external trading environment. The results will be a better trained agricultural workforce, with an improved age structure, a better land structure, subsistence farms entering the market, modernized commercial agriculture, improved value added and produce quality, which will further enhance the productivity and competitiveness of agricultural and forestry sector. The support will mainly be oriented towards the small and medium enterprises, considered to be better able than big commercial enterprises to develop new products, to valorize the local resources through innovation and adaptation.

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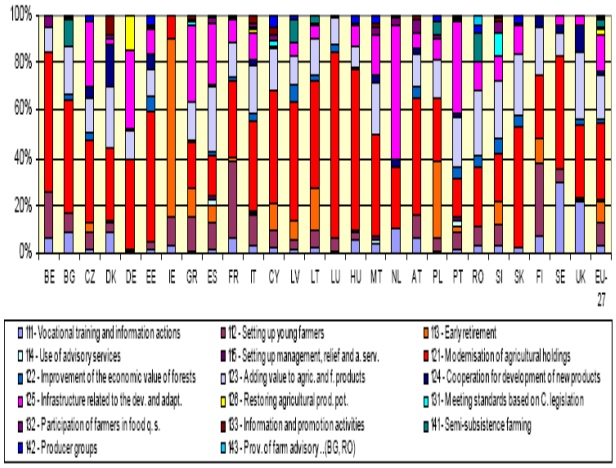
At EU-27 level, within axis one, the measure "121 – Modernisation of agricultural holdings" shares 30.3% of the EAFRD, being the most relevant almost in every Member States. Romanian allocation to this measure range below to this average, which is quite an opposite to Latvia, Hungary and Lithuania approach, but similar to Spain, the Netherlands, Portugal, Slovenia, Finland approach. For Romanian programme, the most valued measure within this axis, is "123 - Adding value to agricultural and forestry products", followed by "121 – Modernisation of agricultural holdings", together sharing about half of axis resources.

The low level of specialization of Romanian agricultural holdings and lower production effectiveness are the important factors to provide adequate support to cover the costs of agricultural holdings adjustment to increasing Community requirements.

We also find that some considerations could be done concerning the economic efficiency of targeting a relatively large share of the Axis I allocations on semi subsistence farms. We must expect that competitiveness, modernization and restructuring are core issues under this axis, but we do not expect that this particular measure will contribute to this overall objective. It could be justified by the importance of the semi subsistence farming in Romania (78%, the highest percentage in EU), but we also notice different approaches undertaken by countries with similar conditions (Hungary, where 77.5% of farms are considered as semi subsistence) and where no allocation for this measure was allotted. The mid evaluation report of RD plan will probably reveal the advantages of one or other approaches.

Within axis 3 measures, the "322 – Village renewal and development" has the highest share with 25% in the EU-27. This share is the highest in Romania, representing 63% of the EAFRD contribution allocated to axis 3).

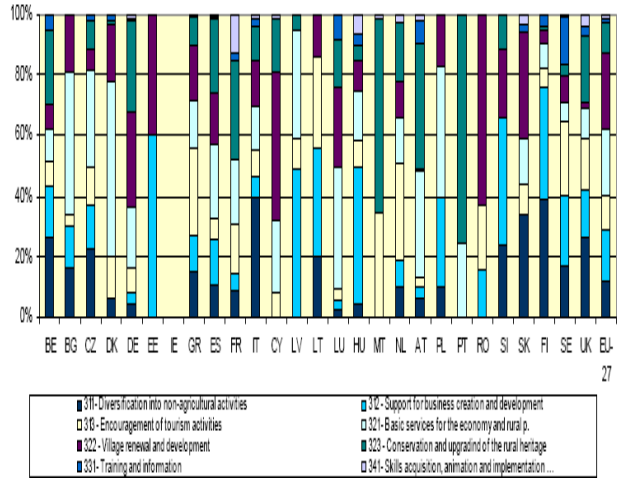
In fact, this measure aimed at improving the quality of life in rural area and creating synergy which positively influences the rural populations it is the most relevant of all RNDP.



Graph 3 Relative importance of axis 1 measures per Member States in % within the total EAFRD contribution allocated to this axis, programming period 2007-2013

We notice quite a variety of approaches that SM uses in order to fullfil the objectives of this axis: Italy and in Finland devote 40% of the total EAFRD contribution of theaxis 3 to for the measure "311 – Diversification into nonagricultural activities"; the measure "321 – Basic services for the economy and rural population" plays the major role within axis 3 in Denmark (58%); and Ireland has has no EAFRD financial allocation to the axis 3 (this objective is fully implemented using axis 4 (Leader) measure 413).

Concerning the implementation of selected measures, declarations of expenditure at the end of 2008, counted for 11.1 billion euros (12% of the financial plans for the period 2007-2013 for the EU-27). Romania has one of lowest ratio between the planned expenditure and the amount of declaration of expenditure (1%), comparing with in Ireland (31%), in Luxembourg, in Austria and in France (25%), but also Lithuania (5%), Bulgaria (3%). One of the causes of the financial execution is the late implementation, the first measures being started in Mars 2008, but we can also specify, the composition of the programme (types of chosen measures), the previous experience in the implementation of measures etc.



Graph 4 Relative importance of axis 3 measures per Member States in % within the total EAFRD contribution allocated to this axis, programming period 2007-2013

The value of selected projected increased to 25% of the financial plans for the period 2007-2013 at the end of february 2010. A more detailed analysis, according to the purpose of this shows strong discrepancies between assigned values and those required in the projects submission sessions.

Table 1: Comparison between the planned expenditure (financial plan) for the period (2007-2013) and the requested amount, per measures, at 19.02.2010, in %

Measure	Applied projects /financial plan %	Selectated projects/ financial plan%	selection rate
112	26.80	4.23	15.22
121	192.12	69.94	34.71
123	72.67	45.36	65.68
141	13.39	13.02	97.21
142	1.25	0.08	37.50
312	109.70	5.96	5.18
313	32.80	9.95	27.37
322	600.65	66.61	9.58
431.1	10.27	10.08	99.11
TOTAL	**129.33**	**25.70**	45.78

Thus the amount requested for the projects submitted until 19.02.2010, exceeds the amount allocated to Romania for 2007-2013 (129.33%). Not all measures seem to be attractive for farmers, the pressure decreasing from 600% for the measure 322 – "Village renewal and development"- and192% for the measure "121 – Modernisation of agricultural holdings", to 1.25% for 142 measure - "Producer groups".

CONCLUSIONS

The paper contributes to the analysis of the rural development policy measures degree of coherence. The current rural development policy 2007-2013 is designed towards flexibility of programming, each national rural development programme being tailor-made to the situation of a specific country needs, based on a set of common measures.

We tried to capture the different approaches used by member states concerning the financial allocation per axes, choice of the most appropriate measures and, further, the financial allocation to each of them. We also tried to have a first assessment of how they match the needs identified at national and local level and contribute to the achievement of national strategies. The results show the coherence assumption of the RNRDP but the amount allotted for certain measures significantly influence on the application for support and on the success of application. Owing to the composition of programmes and the characteristic of measures the following measures have the relatively highest ratio between the amount requested until the end of 2009 and the financial plans for the period 2007-2013) within the axis: axis 3 – "322 – Village renewal and development" ;axis 1 – "121 – Farm modernisation".

REFERENCES

[1] Rural development in the European Union, Statistical and economic information. European Union Directorate-General For Agriculture And Rural Development, December 2009;

[2] Roger D. Norton, 2003, Agricultural development policy, Willey.

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PROJECTIVE STUDY ON THE SETTING UP OF A MODERN DUAL PURPOSES CATTLE'S EXPLOITATION BY MODERNIZING A DAIRY COW'S CLASSIC STABLE

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Key words : *dual purposes cattle, autochthonous breed, Bălțata Romaneasca, Montbéliard, animal welfare,*

Abstract

The new guidelines in dairy cattle exploitation aim at increasing animal welfare so that they could express their productive genetic potential. In this paper we present the technical analyses conducted in order to modernize the Moara Domneasca's cattle farm. We used classical methods of work, namely observation, mathematical calculation, simulation and use of AutoCAD computer program. At the Moara Domnasca's farm there was a classic shelter for cows, with a "head to head" setting, on two lines. The barn was converted into a shelter with free maintenance, provided with individual rest spaces (berth type) for dairy cows.The young cattle sector it was also improved, each age having appropriate facilities for rest, exercise and feeding. The farm will be populated with dual purpose heifers of Bălțata Romaneasca and Montbéliard (20 heads), so that students of our university should be able to do analysis and comparative studies in terms of adaptability and performance in dairy and meat production.

INTRODUCTION

The exploitation of milk cows represents the mix of technical, technologic, economic and health and veterinary measures applied in order to maximize and increase the efficiency of milk production, while maintaining the normal health state of the animals. If improvements ensure the genetic potential of milk cows, exploitation values this genetic potential. In the developed countries, the exploitation of milk cows is rational, which is why the level of the milk production is quite near to the genetic potential. In our country, the technology for the exploitation of milk cows is critical, which is the reason for which milk cows only achieve about 2/3 of the production potential. Under the circumstances, improving the exploitation of milk cows, following a complex and creative analysis of the all the elements involved in the technology appears necessary. Modern exploitation of milk cows is based on adequate management and technologic principles. The greater diversity and the industrialization of the production involves that the milk obtained within the farm be processed in direct relationship with the market requirements. Generally speaking, it is recommended to achieve a high degree of milk processing to obtain a wide variety of dairy products, ensuring stability and efficiency both for the producer, and for the processor. Modern marketing has to be developed for market research both from a quantitative point of view, and from a qualitative one, as well as for identifying the most efficient ways to market the products.

MATERIAL AND METHOD

The study was performed in order to modernize the farm cattles within the SDE Moara Domneasca. The experimental station had a classic shelter for cattles, with stalling „head to head". The project took into account the available space, as follows: length 74 m, with different compartments and width 8.7 m.
The number of milk cows included in the modernization project mounts to 20 heads, grouped by physiologic and technologic criteria. Consequently, separate areas for milk

cows, cows in mammary repose, a delivery area and an isolation area will be disposed. Age-dependent compartments will be built for the youngsters. With all these guilding provisions, the shelter has to be divided inside, thermally insulated and fitted with the necessary facilities. The study is based on the classical research methods, namely the observation, the mathematical calculation of the spaces, the simulation and the use of the comuter programmet AUTOCAD. When the building is finished, the shelter will be populated with heifers from the breeds Montbeliarde and Bălțată românească.

RESULTS AND DISCUSSIONS

Having production on farms with optimal size and dimension is the minimum condition for the increase in production and economic efficiency. The concept of *farm* size refers to the qualitative aspect of the organization of the production and its level of increase. *The farm dimension* refers to the quantitative aspects of the organization of the production and is closely connected to production quantity.
The extent with which the investments multiply the positive effect of natural and biologic conditions is reflected in the level of the average output, of production cost and of profit.

Table 1: Numerical representation of cattle classified according to age On the farm Moara Domnească

Nr. Crt.	Age group	Number of heads
1	Milk cows	22
2	Cows in farrowing house	2
3	Cows in isolation (infarmry)	2
4	Pregnant cows	4
5	Heifers	9
6	Females 11-16 months	8
7	Females 7-10 months	5
8	Females 3-6 months	5
9	Females 0-2 months*	5
10	Males 0-2 months*	5
11	Males 3-6 months	5
12	Males 7-10 months	5
13	Males 11-16 months	8

*Will be lodged in individual compartments outside the shelter

Based on the projected number of cattle, the following goups of cattle was calculated, to have living space built for (tab. 1).

THE MILK COWS DEPARTMENT

The number of milk cows included in the modernization project is 22 heads. Using the existing built facilities, the shelter was divided inside, thermally insulated and fitted with the necessary facilities. The shelter will be divided as follows: resting area ; feeding, movement and evacuation of dejections ; -access pathway for the feed.
The resting area is made up of a row of sleeping boxes, placed along the longitudinal wall of the shelter. The size of the sleeping boxes is : 2.50 m long and 1.25 m wide, ensuring thus enough space for the animals to rest and, at the same time, limiting their possibility to turn over and to defecate on the rest. To maintain the hygiene, a transversal bar will be placed to force the animal to step back when changing position. The boundaries between the resting area and the movement area will be settled as follows: a 20 cm threshold will mark the limits of the areas. The floor will be of concrete covered with straws, and the sleeping boxes will be separated by metal bars.
The movement, standing in the feeding area and evacuation of the dejections area is 3 m wide, ensuring the animals enough space to move and also to stand at the feeding front. It is slightly biased towards the fosse that collects the liquid manure. Dejections will be evacuated with a piece of equipment with scraper plough. The surface of this area should ensure good adherence for the animals while moving.
In this area the space has to allow two animals to move in different directions, while a third stands at the feeding front. In the feeding area, a feeding front of over 1.25 m/animal is provided.
The manger has a size that ensures enough capacity for the feeding of animals, a „table”-like manger, with a wall towards the animal (0.2 m wide.)
The feeding front will be provided with a self-blocking grill so that the animal can be immobilized for different manoeuvres (individual feeding, health requirements, etc.).

The animals will exit from the milking room towards the hall through a metal gilled gate 1.25 m wide. Animals will return into the shelter after milking, along a hall with metal bars with an access gate 1.25 m wide.

The access path for feed administration is 3m wide and allows the distribution of feed mechanically or semi-mechanically. The entrance and the exit from the shelter will be through two doors placed at the end of the shelter, which allow the entrance of the tractor with tug. The table below shows the main building measurements projected for the compartment of milk cows.

Table 2: The main building measurements for the compartment of milk cows

Specification	UM	Val.e
Shelter width	m	8.7
Shelter length	m	30
Feeding path width	m	3.0
Manger width	m	0.2
Height of the edge of the manger towards the animal	m	0.4
The height of the bottom of the manger over the floor	m	+0.2
Feeding front width	m/cap	1.25
Width of the path for standing, movement and evacuation of dejections	m	3.0
Sleeping box width	m/cap	1.25
Sleeping box length	m/cap	2.50
Height of the grill separating sleeping boxes	m	1.0
Length of the grill separating sleeping boxes	m	2.0
Access gates	m	1.25

The manger will be table-like, so its width facilitates the entrance of the tug into the shelter. The shelter will ensure a microclimate according to the norms of the European Union (tab. 3). The table below presents the main microclimate parameters in the milk cows shelter.

Normal constant values	UM	In the stable
Optimal temperature	^{0}C	8-16
Relative humidity	%	75
Lightning	on m^2 window/floor lucs	1/8-1/12 ; 50-60
Carbon dioxide (CO_2)	in volume %	3.5
Amonia	‰	0.1
Sulphur hydrogen	‰	0.02-0.3
Air current speed	m/s	2
Air requirement/ animal: -winter -summer	m^3/cap	 50 200
Necessary cubic requirement/ animal	m^3	15-20

Table 3:Main microclimate parametres

Maternity and insulation areas. Two delivery boxes for the cows will be placed at the end of the shelter (cow and calf). The overall surface of the delivery area is 2.5x 4.0 m (5m^2/pair). Inside the delivery box there is enough space, the rest being on a thick layer of straws. Two other boxes (5m^2 area) will be placed in this area, to allow the isolation of ill animals. In this area, the compartments are separated and the hygiene is strictly observed (table 4).

The animal intake. Animals from the BR and Montbeliarde breeds are bought as heifers, IV to VI months pregnant, so that mechanic miscarriages caused by transportation are avoided.

Table 4: Microclimate parametres in the delivery area

Specification	UM	Min	Max	Optimal
Temperature	^{0}C	14	24	20
Relative humidity	%	55	70	-
Air current speed	m/s	0.1-0.2 winter	1.0 summer	-

The delivery will take place in the boxes at the end of the shelter. The cow will be moved in that box a week before delivery, and will remain there for another week after delivery. During its first week, the valf will stay with its mother, to benefit from colostrum. After the first week, the cow is moved in the group of dairy cows, and the calves in mineral cotton boxes (unicellular boxes) outside the shelter. They will be kept in these boxes until the age of 3 months. The boxes for the calves will be placed on a surface sheltered from the wind, so that no air currents form, on a flat surface which can easily be cleansed. They contain the paddock and the box proper for the calf resting. The size of this ensemble is 1.0m x 2. 0 m. At the feeding front the box is provided with space for the pots for milk, water, concentrate and a grill for hay. The roof will be made of sandwich panou.

THE YOUTH COMPARTMENT

At the age of three months, the calves are moved to the youth group, in collective boxes, separated according to gender. The males will follow a feeding programme typical for intensive weight gain, whereas females will be raised for reproduction. *The female and şi male youth aged 3-6 months* will be transferred in the shelter, in collective boxes, separated by

gender. The surface of a collective box is 5.7 m x 3.0 m, ensuring a surface of 3.42 $m^{2/animal}$. The collective box is made up of a resting area, movement area, standing at the feeding front and evacuation of the dejections. The resting area is laid with straws, which are changed regularly.

The feeding front for each animal is 0.6 m. The surface for every animal increases wihth the other groups, so that resting and movement are possible. Pregnant heifers and pregnant cows will be maintained in a separate compartment, ensuring a surface of 5.7m x 10 m (4.38 m^2/animal).

The microclimate parametres are:

- temperature 10-14 ^{0} C for the 3-6 months group, 10-14 ^{0} C for the 6-12 months group, 8-14 ^{0} C for the12-16 months group;
- humidity 70-75% for the 3-6 months group, 70% for the 6-12 months group, and for the12-16 months group;
- air volume winter and summer –25-160 m^3/h for the 3-6 months group, 30-170 m^3/h for the 6-12 months group, 35-180 m^3/h for the12-16 months group;
- air currents speed summer-winter 0,3-0,8 m/s for the 3-6 months group, 0,3-1,0 m/s for the 6-12 months group and 0.3-1.2 m/s for the12-16 months group;
- the surface of paddock 3 m^2 /animal for the 3-6 months group, 5 m^2 /animal for the 6-12 months group and 5 m^2 /animal for the12-16 months group.

Heifers will be taken for reproduction when they have reached 75% of the adult weight.

Males will be taken to slaughter house at the weight requested by the beneficiary.

Milking rate. A milking hall type “fir-tree”, with a capacity 1 x 6. will be used. From the shelter, the cows will taken, along a corridor placed in the paddock towards the milking hall, and after milking they will go back to the shelter through a gate directly opening in the stable. The milk in the milking hall will be taken directly to the cooling tank.

The size of the milking hall: -width of the corridor for the cow 1.45 m; -depth of the milking corridor 0.85 m; -width of the corridor of the milker 2 m; -length of the milking platform (nr. Of cows1.150 +2.100) 9.0 m -the access in the milking hall will be through a corridor 1.30m wide and 15.0 m long; -the cows will be taken out of the milking hall through a corridor 1.30m wide and 5.5 m; -the milk room - depending on the milk tank; -the min vacuum pump room; -the min. attendant room; -bathroom and shower; -office, maybe tests.

The milk room

The size of the milk room is 2.90 m x 3.88m. A tank of 1,000 l fitted with an automatic washing device and a cooling device at the temperature of 4 C° is necessary to store the milk obtained from 4 milkings for 2 days. A 100 l maintained clean by fitting a sink and a drain trap for the water. The floor will be covered with floor tiles and the walls with white wall tiles boiler will be placed to provide the hot water necessary for washing. The room will be

Milk cooling tank – capacity 1,000 litres, of stainless steel, cylindrical, vertical, adjustable feet for uneven surfaces.

CONCLUSIONS

1. The optimal size, economically speaking, of a plant is represented by those dimensions of its production compartments (ground size included), which allow the full rational use of the land , of the material means and of the work force to obtain a maximal production per surface, of high quality, with as small expenditure as possible, and a high degree of profitability under the economic and natural conditions available.

2.The optimal size of a plant specializing in animal breeding refers to the number of animals from a certain breed, in the same category or in different categories (age or gender), that can be exploited with maximum efficiency under given technical, feed supply and work force.

3. The modernization of the farm for milk cows within the Moara Domneasca SDE begins with the existing shelter and taking into account the new regulations in the field. The project aimed to set up a pilot farm for the students, as well as for the farmers in the area. The cows will be raised in a maintenance free shelter, and milking will take place in a special room, which will make the milk cleaner.

REFERENCES

[1] Georgescu, Gh. şi col.(1987) – Farmer Green, Ceres Publishing House, Bucharest
[2]Silvaş, E.(1998) – Upgrading technologies of cattle breeding, Didactic and Pedagogic Publishing House, Bucharest
[3] Vidu Livia (2002) – Research on improving dairy cattle farms in standard modules for the private sector, doctoral thesis, Bucharest
[4] x x x –Project no. 135200/2009-UTSGC – MADR.

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THE OBJECTIVES FOR THE IMPROVEMENT OF THE MANAGERIAL ACTIVITY IN OARZ - BISTRIȚA-NĂSĂUD COUNTY

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Key words: *improvement and reproduction, management, services*.

Abstract

The activity of the OARZ specialists must contribute to the improvement of the amelioration and reproduction activity, to the development of the animal breeders associations. Improvement of the management activity is aimed at reducing expenses with the official production inspection and control of farm animals.

INTRODUCTION

Given that management is a means of rational leadership and of structuring and organizing activities, of establishing objectives, in the present paper we have aimed at presenting the objectives necessary for the improvement of the managerial activity in OARZ Bistrita-Nasaud.

MATERIAL AND METHOD

In order to establish the objectives, we have used the interview and questionnaire filling method aimed at assessing the managerial activity within the unit in question.

RESULTS AND DISCUSSIONS

The office for Animal Breeding Improvement and Reproduction has played and continues to play a very important part in the improvement of the number of animals and to contribute to the development of the private structures of the breeders who will have to get involved and to organize the animal reproduction and improvement services based on the principles of the market economy.
The services of reproduction and official control of the production are services that bring no money to the person who organizes and carries them out. This is the reason why animal breeders associations must organize themselves as trade units that should also carry out trade activities (msc and animals import-export, auction based selling of animals), activities that would bring money to these organizations so as to allow them to support production control, the genealogic register, the IA service).
The organization strategy of these services must take into consideration the way in which these are organized in other European countries, as well as the regulations drawn up by international bodies regarding reproduction and animal amelioration (ICAR, INTERBULL). All the accredited private organizations must comply with the national strategy in the field.
The state inspection carried out by the OARZ specialists must contribute to the improvement of the amelioration and reproductive activity, to the development of accredited breeders associations involved in the carrying out of these services, to the rising of awareness and to the changing of the farmer's mentality in order to participate to and use these services in their own farms.
The objectives and activities necessary to achieve this, are mainly aimed at offering efficient services in the field of reproduction and animal selection, as well as of other direct or indirect activities established by the

ANARZ, and on the other hand at improving managerial activity. OARZ is responsible for the implementation of the strategies in the field of reproduction and amelioration at the level of the county, but one must also take into consideration the fact that some of the services carried out by OARZ have been transferred to the private sector, being the responsibility of the accredited private organizations. Suggesting efficient strategies and debate with private organizations must be a constant preoccupation of the OARZ board. Given that these units have not yet been developed and have not yet taken the financial and human resources to the level of the OARZ requirements, these must aim not only to carry out inspection and control, but also to actually support these organizations. Given that the unit includes well prepared, experienced specialists these must get involved into the training of the animal breeders and of the farmers with regard to the specific issues involved in animal reproduction and selection. Last but not least, a part of the objectives must be focused on the improvement of the managerial activity, on finding solutions for the reduction of expenses and of using human resources as efficiently as possible.

AIM	ACTIVITY	Observations
1. REPRODUCTION		
An efficient service of artificial insemination that should work for animal breeders	1. Implementing a database in all the accredited organizations – data transfer in the national database 2. Extending the I.A routes 3. Transferring nitrogen supply to the accredited organizations at a regional level and reducing the amount of nitrogen used for insemination 4. Increasing the number of artificial inseminations at least up to 70% of the royal number 5. Monitoring the msc purchase by the OARZ 6. Ms production of swine in the laboratory of Beclean and extending the dissemination to the surrounding counties 7. The professional training of the insemination operators as well as their accreditation and authorization 8. Monitoring the activity of the operators and of the accredited organization	National programme supported by the state Supporting the supply of machines, material base transfer from the state The accredited organization OARZ The accredited organization OARZ The national school supported by the state
2. AMELIORATION		
Improving the animal production control	1. Enlarging the number of cattle in the milk production control to at least 20% of the royal number and including mainly the breeders of a large number of cattle 2. Improving the database for the control of production and its integration into the national database (individualization, reproduction, genealogic register) 3. The quick transmission of the results to the breeders 4. Certifying the genetic value of animals 5. Organizing the genealogic register at a regional level integrated within a national programme 6. Continuous training of the controllers 7. Equipping the laboratory to allow for the quality of milk, as a regional laboratory and personnel training 8. The annual classification and quality assessment of the persons involved in the process of natural reproduction 9. The transfer of the production control for sheep to the animal breeders organizations 10. Participation to the selection and classification activities in the stud farm of Beclean 11. Supporting and participating to animal exhibitions	OARZ monitoring - there will be no control of the small number exploitations ANARZ The accredited organization Proposal annex 1, 2 OARZ participation OARZ with budgeted funds OARZ ANARZ OARZ OARZ

3. INSPECTION ACTIVITY		
Improving the activity of animal breeding inspection	1. Approving animal import and export 2. Authorization and inspection of the natural reproduction units 3. Verification and certification of the meeting of standards for bonuses and subventions 4. Inspection and assessment of the animals that are part of the genetic patrimony 5. Monitoring and inspection of controllers, operators and specialists within the private organizations carrying out specific amelioration services	OARZ – control programmes and reports
1. SUPPORTING	**ASSOCIATIONS AND FARMERS**	
Developing animal breeders associations	1. Participating to the general assemblies and to all the activities organized by the associations 2. Mediating the role and importance of the associations 3. Organizing and participating to associations board trainings 4. Monitoring and supporting the associations carrying out amelioration and reproduction services 5. Counseling the association boards	OARZ
Training farmers	1. Visits to farms and counseling farmers owing a large number of cattle 2. Organizing courses and training farmers with regard to issues of amelioration and reproduction 3. Introducing primary evidence in animal breeding farms (on computers in the farms with milking facilities) and primary evidence to the rest of the farmers	OARZ
Using successful management	1. Organizing the basic activity based on annual, monthly and weekly programmes and setting specific tasks to each employee 2. Weekly analysis of the activity of each department 3. Systematic annual assessment 4. Implementing a relational system based on delegating authority and rendering personnel more responsible 5. Devising a valid annual strategy of planning expenses depending on the institutional objectives 6. Measuring expenses and results and continuously improving them	OARZ manager

REFERENCES

[1] Bratianu C, 2000, Management strategic, Ed. CERES, Bucureşti
[2] Constantin Velea, 1999, Producția, reproducția şi ameliorarea animalelor, vol. I, II, Ed. Tehnică Agricolă, Bucureşti
XXX ANARZ, Controlul oficial al producțiilor în România, 2000-2008, Bucureşti
XXX Institutul Național de Statistică, Anuarul statistic al României, 1995-2008
XXX Legea 63/21.03.2008 şi HG 8/16.01.2009

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AGRITOURISM AND RURAL TOURISM IN ITALY

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Abstract

The most recent guidelines of the EU Agricultural Policy suggest new objectives for agricultural production, thus imposing an increasing attention towards natural resources, landscape and biodiversity. Mainly because of the globalization of markets, the mechanisms of protection currently used in agricultural economy are no more actual nor sustainable. All the primary sector, and in particular small and medium farms are now looking for new balances, for new products for national consumption and for export. New solutions need to be found in the short and in the long term, also as a consequence of the abrupt climate changes. For many small farms the push towards marginalization that is nowadays occurring, leads to a strong abandonment of farmlands and to the exodus of farmers that look into other activities for new sources of income. In this context different activities that are related to the influx of tourism and which find their most vivid expression in agritourism and rural tourism are being developed mainly in privileged areas of central Italy.

In recent years, the interventions of the European Community, aiming to support rural development, are pushing farmers towards the establishment of more efficient farms. In any case, all the activities in the farm must be completely addressed to the sustainable use of the rural properties. Indeed, the economic growth, that can also be considered as the improve of the quality of life, cannot be parted from environmental protection.

In this context, the increase in the produced quantities as well as the efforts to contain or to reduce the costs of production are showing more and more limitations. On the basis of the new guidelines of the European Community Agricultural Policy, the system of price supports for agricultural products and the quota-policy is now undergoing a phase of rapid stopping. In addition, mainly because of the globalization of markets, all the mechanisms of economic protection are no more sustainable, while the unpredictable fluctuations of prices, due to the actions of supranational potentates - as those leading to the recent incidents in the sector of cereals demonstrate- are disturbing the market.

Meanwhile, the numerous applications of genetic engineering in plants and animals are continuously provoking lively debates which are characterized by a severe animosity, with strong opponents and tenacious supporters debating in many different set-ups, thus reflecting a conflict that is apparently unsolvable also at the scientific level. Despite the European Community introduced special measures to safeguard the presence of farmers in rural districts, even when they undergo marginalization, many farmers, owners of small to medium farms, are still showing serious doubts on the survival of their business, particularly when it is of traditional type. The first effect is manifested by the abandonment of many agricultural areas, starting from the most marginal ones, because of their remoteness or due to their low fertility. Hence it is the farmer himself who runs away abandoning his farm.

As a consequence, the diminished presence of human activity in many rural areas leads to a strong contraction of the traditional activities and in particular of those related to the continuous maintenance of the estate. All of this leads to a net loss in the multi-functional potential of agriculture itself. "Multifunctionality" is represented by a series of many services that farmers have always offered for free to the community. Let us remember the “protective function” and in particular the hydrogeological one , that is

necessary in landscapes created by man through the centuries. Man has laboriously modelled the slopes of both hills and mountains, with a wonderful series of terraces that are now often in a position of marked instability. The regulation of water resources by the continuous maintenance of the drainage ditches has been carried out throughout the whole year, in the light of a constant and harmonious relationship among mountain, hill and plain soils. Let us also bring to mind the “ecological function” of rural areas related to faunal and floral resources, to the biotic communities and to the fixing of carbon, that lead to strong positive effects on the environmental quality. And yet, the “function of landscape”, linked to its peculiar and picturesque beauty, also created by man over time, can be preserved by the maintenance of agricultural activities only and by the presence of man as a consequence.

In many farms, several economic sectors from the primary one to industry have developed over the centuries, thus highlighting a different "multi-sectoral” or multi-activity" degree. As an example, we want here to refer to the presence in the farm of the “oil-mill”, where through a series of processes olives are grinded to produce the oil. Also, the presence of wine cellar, where the transformation of grapes into wine takes place through advanced technologies, indicates that the farmer has been active in a particular economic sector.

Through these activities, from the transformation of the products to their marketing, the farmer is looking for new spaces to enhance his income, keeping into the farm a part of the value-added. In a context of profound changes and challenges within our agriculture, that often is not so profitable, another economic activity is now playing an increasingly important and interesting role. I refer to the activity of agritourism, that has being taking place for years in our country sides thus becoming a widespread reality, especially in advantaged, beautiful places of Central Italy and, to a less extent, in our Alps, even though they are in a state of economic marginality. Agritourism represents a very interesting formula that is somehow alternative to the traditional models of tourism. Here in fact, the tourist, who is usually with his family, can spend a short or long period of holiday in an accommodation that is a real farm also. On the other hand, the farmer can fuse a more or less substantial supplement of his income deriving from a highly varied series of commercial business, with the active conduction of his land. It is important to stress that all the activities that take place within the agritourism and that characterize and diversify a farm from another, must be constantly well integrated into the agricultural factory system. The 2006 Italian Framework Law on agritourism, categorically states that the agritourism activity must only be performed by agricultural entrepreneurs, that can be individual or assembled in groups or organized in a corporate form.

Agritourism, that has been growing over time in professionalism and quality, is certainly an appropriate activity to fuse tradition with innovation.

Consumers are manifesting an increasing need to gain food certainties

A new sensitivity is rising towards the market, pushed by a more and more widespread knowledge of the products, by the many food scandals or the proliferation of allergies together with medical and legislative approvals, all of this creates the suitable setting for the improvement of all the wholesome and organic farm products with a designation of origin.

These products can be largely available within the farm where the agritourism is performed, mainly because of the direct relationship that creates between the customer and the farmer.

The latter one also takes advantage from this "short chain" and in particular, from this immediate connection between the producer and the consumer , with mutual economic benefits.

It is not easy to quantify the importance of organic farming linked to organic farms where the agritourism is performed, that should represent nearly 10% of all Italian agritourism.

In addition, the variety of the food products coming from the organic agriculture is very relevant for the extremely heterogeneous climate conditions that occurred and overlapped over the time.

We can say that in Central Italy and in Tuscany in particular there are almost a quarter of all Italian organic agritourism farms.

Within the agritourism activity all those products with a designation of origin, that are typical and local and that derive from the agricultural production of the whole region and not only from the farm, are thus strongly enhanced.

Obviously the products of farms must have a leading position and the Italian National Framework Law that I already mentioned, also assigns each regional government to legislate on the matter.

The recent Regional Law of Tuscany that was approved last December 22nd, 2009 organically regulates all the activities that can be performed in holiday farms, and aims to promote the diversification of business activities in farms to foster the integration of the income of farmers, the permanence of agricultural workers in rural areas, the so-called "short chain" and the consumption of the farm products.

This regional law in the frame work of the national one, aims to combine the maximum freedom of enterprise with land, environment, and health safeguard.

All of this is accomplished through a real simplification of the administrative procedure to start an agritourism business, thus implying, as a first example in Italy, the adoption of a very strict disciplinary of controls.

The Regional Law of Tuscany admits as agritourism activity:

- To provide accommodation in proper rooms in the farm;
- To give hospitality to campers in open spaces;
- To dish meals, foods and drinks, by making use of the farm products that can be integrated by other ones coming from different farms in the same Region and by extending this service to other guests that are not lodged in the farm;
- To organize many activities: education, cultural report, social activities, traditional activities that involve the local communities linked to the rural world.

All the employees in agritourism, here including the members of the entrepreneur's family and the workers admitted under employment contracts in the agricultural sector are considered as agricultural workers in the current framework of welfare, insurance and taxes.

A strong recovery of the rural built heritage is now manifesting with the spread of agritourism thanks to a set of soft loans for renovations that must absolutely preserve the architectural and typological characteristics of the farm buildings often representing real jewels for form and harmony.

The entrepreneur of the agritourism activity must always be personally present and he must be professionally prepared also to supply foods and drinks to his guests.

Those who choose agritourism as a holyday, are continuously looking for and discovering new rural areas, since they wish to leave behind the many problems related to life in big cities, they manifest a palpable appreciation for an almost-return to nature. However, in expressing their preferences, they always demonstrate very demanding towards a series of comforts, for example they consider essential an easy access to agritourism farms. At last, a discriminating aspect in the choice of the region that will be the destination of the agritourism holyday, is related to the prices of the offered services.

Concerning the phenomenon of "rural tourism", it comprises a set of economic initiatives that consist of organized forms of receptivity in the countryside, far from urban areas, aiming to realize a better fruition of rural spaces with the participation of both agricultural and commercial entrepreneurs.

Let us recall the Regulation Law CE n° 1698/2005 on the support to rural development , where a fundamental role in ameliorating the quality of life is addressed to rural tourism.

The Framework Law n° 135 / 2001, dealing with tourism in Italy, highlights the importance of rural spaces and of marginal and typical economies under the light of tourism.

All of this in the context of an integrated rural development and of its territorial disposition, with the background logic of systematic interventions on the territory.

Tourism in Italy has gained a particularly relevant economic importance for many years, representing today more than 11% of National GDP and it is continuously evolving and expanding.

This phenomenon involving an intense and incessant touristic flux of both Italian and foreign tourists, is generally taking place in traditional touristic locations, and in particular it tends to concentrate in the towns of Venice, Florence and Rome; then it spreads to widely known holyday resorts on the Alps , on the Apennine or at the seaside.

In these last years, a fraction of the tourism flux turns its attention to the different offers of rural tourism that is complementary to urban life. The evolution of the demand for recreation and tourism, is related to the availability of free time and to the relationship between the widely known three variables: personal preferences, prices and income, as well as to a higher sensibility towards environmental values.

In this context, "gastronomic tourism" results much more dynamic than the cultural one since the main business turns around wine and on the research of nice couplings with typical regional recipes. The "wine roads" give evidence to this reality. They are ruled by the National Law 268/1999 and defined as "routes provided with signals and advertised with appropriate road signs, that connect natural, cultural and environmental values to vineyards and wine-cellars of farms that are opened to the audience; they represent a promotion for viticulture areas and for their relative productions that thus result advertised, commercialized and used in the shape of a tourism offer.

Rural tourism and Agritourism thus represent particularly valuable activities as well as a necessary source of income for farmers.

REFERENCES

[1] Ciani Adriano,Ricci Riccardo, 2001, The multifunctionality of farms and the world perspectives of rural tourism in the frame of rural integrated and sustainable development strategy ,in International Conference on New directions in managing rural tourism and leisure: local impacts ,global trends,p.1-13, Morgan Mitchel and Irene Kirkpatrick Ed., Ayrshire, Scotland.

[2] Ferrucci Nicoletta, 2006, L'agriturismo fra tutela dell'impresa e valorizzazione del territorio,in Quaderni I Georgofili, 2006-V, p.63-68, Società Editrice Fiorentina, Firenze.

[3] Menghini Silvio,Savignano Alessandra, 1996 , L'agriturismo e la ricreazione rurale in Toscana, in Genio Rurale, n° 9 , p.52-66, Edagricole, Bologna.

[4] Paoloni Lorenza,2009, L'agriturismo come attività agricola, in Convegno su Il diritto agrario vigente tra novità e tradizione , p. 1-29, a cura dell 'Associazione italiana cultori di diritto agrario (A.I.C.D.A.),Lodi.

[5] Santucci Fabio Maria, 2003 , Sintesi tra territorio,agricoltura e impresa nello scenario della globalizzazione,in Convegno su La pequena empresa agricola y los desafios de la globalizacion ,p.1-29 INDAP-CEPAL-UNDP, Santiago del Cile.

[6] Strambi Giuliana, 2006 , Agriturismo e valorizzazione dei prodotti agro-alimentari tipici, in Quaderni I Georgofili, 2006-V, p.89-100, Società Editrice Fiorentina ,Firenze.

[7] x x x - Legge n° 135, 2001, Riforma della legislazione nazionale del turismo,in Gazzetta Ufficiale 20 aprile 2001, n° 92.

[8] x x x – Reg. C E n° 1698, 2005, Regolamento del Consiglio sul sostegno allo sviluppo rurale da parte del Fondo europeo agricolo per lo sviluppo rurale – FEARS - ,in G U U E , 21 ottobre 2005, n° L 277.

[9] x x x - Legge n° 96, 2006 , Disciplina dell'agriturismo, in Gazzetta Ufficiale 16 marzo 2006, n° 63.

[10] x x x - Legge Regionale n° 55 , 2009 , Atti del Consiglio Regionale della Toscana, modifiche alla Legge Regionale 23 giugno 2003, n° 30 , sulla disciplina delle attività agrituristiche in Toscana.

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LEADER AXIS ENGIN FOR RURAL DEVELOPMENT IN THE EUROPEAN UNION

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Key words: *rural development, Leader Axis , durable development, local actors , public private partnerships*

Abstract

An important component pf Common Agricultural Policy (CAP) is represented by rural development policy which promotes durable development meaning a new approach of economic, social and environment aspects. In the EU -27 , rural area represents 90% of the total area and here about 60 % of population is living .Leader Axis named "Links between actions for rural development" is a communitary initiative launched by the EU Commission and co-ordonated by General Division for Agriculture and Rura Development . The paper aimed to evaluate the impact of Leader+ approach at the EU level analysing three study cases from differenet areas (Italy, Ireland, Spain) characterized by a large variety of relief , culture and population density. The conclusion was that no matter what country the Leader area is situated , what matters is the objective analysis of the problems which various communities are facing and then on this basis to set up the local and regional development programmes. The new solutions found by the presented GALs are highly transferable and have represented successful projects meeting the standard requirements to be considered "the best Leader+ practices ".

INTRODUCTION

An important component of Common Agricultural Policy (CAP) is represented by rural development policy promoting durable development which means a new approach of economic, social and environment items. In the EU -27 , rural area represents 90% of the total surface and here about 60 % of population is living . Leader is a new approach of the EU rural development policy , it is a method of strenghtening and promoting rural development of the local communities , which could etermine considerable changes in the daily life of the people living in the rural environment, which encourages new solutions to old and new problems and becomes a laboratory for strenghtening local capacities and testing the new ways of covering the needs of local communities .

Even from its beginning in 1991, Leader has offered the EU rural communities the required tools for playing an active role in modelling its own future. Leader has been developde along the time together with the common agricultural policies and the evaluation analysis has proved that it is a tool efficiently operatindecisions concerning rural environment adapted to a large variety of needs of rural areas.

Within Leader + , financial aids are alloted to partnerships , GALs provided by public, private amnd non profit sectors in order to put into practice programmes of local development in their territories.

The purpose of this paper is to stusy the impact of Leader approach upon rural development into the EU.

MATERIAL AND METHOD

In order to attain the proposed objective, three tsudy cases of the Leader approach have been analysed into the EU.

In order to assure an objective assessment and to compare the three cases , the project background , history , main activities and results and also problems issued have been presented .

RESULTS AND DISCUSSIONS

West Cork - Ireland

Project Context. The extraordinary landscape amd intact environment , combined with a history and culture rich in diversity and interest is the specific feature of West Cork region. This region has many areas of special protection and areas belonging to the national patrimony as well as marine and forest natural reservations . In the past , the main components of the local economy have been agrofood and fishing sectors . The surface of the region is 3,150 s.km where 109,000 inhabitants are living.

Brief History . The project initiative have been launched by West Cork Local Action Team and is an integrated local development strategy focused on the advantages offered by this region in the agrofood and tourism fields.

West Cork has an unique image and identity which lays at the basis of business development strategies and starting from this point it was issued a sofisticated and detailed landmark concept for the development , implementation and management of some quality criteria.

Main actions. Project landmark concept consists of various research , vocational training , investments and marketing activities . A series of development programmes have been run such as: e-commerce , research , environment protection , food quality control , vocational training , visitors accomodation , facilities for tourists , meat and milk production , touristic leaflets , web site, fairs, thematic tours , touristic packages.

Results. The landmark ideea has been involved in several events and brought substantial benefits for the region but also for the enterprises .

The project determined the employment increase, regional promotion , landmark recognition by consumers , development of new enterprises and products , profitability increase , market enlargement and quality standards improvement.

Problems arised. In the research and development stage of the project a lot of time and resources have been used especially for the involvement of the local „actors „ and for helping the local population to be aware of its duty to give its contribution to the project .A major problem in the project development was to demonstrate that it is very important for the development of the region infrastructure and participating enterprises. The initiative has permenetly operated as a development initiative and not as a commercial entity. The project has established linksbetween individual and various actions which could be developed within an integrated strategy.

Conclusions. The success of the project has been determined by the solutions of integrated development of the local enterprises, which have not been respected by the conventional development agencies. The animation and building capacities sustained by Leader + Programme represented the critical points for the project development . Numerous initiatives have been sustained in the field of the development of communities , environment , social capital and patrimony representing just a few of the main values of landmark proposal.

GAL Piemont - Italia

Project context. GAL is situated in the South West part of Piemont region , in the area of Gesso province and cosists of five communities . The region is characterized by a alrge geographical , cultural and environmental homogenity which a coomon setting up of the project activities . GAL has identified common objectives and stratgies destinated to an unique approach of economic and socila development . The population living in the area is 60, 000 inhabitants and the surface is 2,424 s.km.

Brief history . GAL has made the proposal to increase value added of the local products.The objectives of the project have been the region promotion by means of agricultural products and to facilitate the acces to the market for the local products. The project intended to help small and medium sized enterprises in competition with some supermarket chain monopolising the market.The collaboration between small producers groups has allowed the identification of new possibilities for its durable maintaining in the market .

Main activities . The project comprises two main activities as follows : 1.Setting up a pilot project focused on the cultural identity for the local development for the identification of the best market for the individual producers in order to hekp them to maximize their profit; 2. Selection and support for the propsals and investments developed by small and medium sized groups of enterprises.

Results. Two invitations have been launched to the selected local enterprises. A number of 11 enterprises , joined in three small scale chains, have participated o the first initiative. The second one has involved 22 enterprised grouped in 7 production chains dealing with the following sectors: Piemont beef sector, medical plants , fruit, wines, bluberries , cheese and fresh pastas .

Even the producers from the areas situated in inaccessible zones have participated to these initiatives and obtained support to improve their conditions.

Problems arised. This approach has been an agreement because the candidates sigend as common agreement for all the enterprises from the same proposal . Another problem was that only large enterprises could take part and expressed their intention to cofinance 60% invetments and this was a challenge for small enterprises with a low economic power

Conclusions. The project added value developing a new approach based on local government and puttin into practice a policy focused on the area and its key problems. One of the problems was the large scale distribution which has determined the building of new marketing abilities .

GAL Galicia-Castilla Spain

Project Context . The area represents a territory charaterised by high mountains, hills, rivers and lakes , a rich cultural patrimony , including two Spanish regions Galicia and Castilla y Leon, but econommy is less developed mainly based on agriculture . The landscape is attactive and besides the cultural patrimony represents potential resources for economy diversification by developing touristical attractions. The municipalities have noticed that it is needed as more torusitical attactions to be developed in the area. The GAL decided to support the restoration of some buildings with a cultural importance in the area. The local population is represented by 9,037 inhabitants and the surface is 1,061 km^2.

Brief history . The local Council of A Veiga noticed that the physical and cultural patrimony of the city is not enough put into evidence , because the existing strategy is promoting mainly the natural and cultural resources .

Main activities . After a long period of discussions with the local population representatives about 50 inquiries of potential sites have been received asking to be included in the cultural network. Finally , three water mills , a bridge , agricultural tools and sewing machines have been selected. Some public buildings with unique features have been also selected. The local volunteers have received responsibilities concening the presentation of the cultural patrimony.

Results. The restored collection of sites and nadmade crafts of the cultural patrimony have increased the number of visitors in the city. Besides tourists , many groups of scholars intereste to learn more about the rural architecture and life style . Another purpose of the project was to encourage local population to become more involved abd create social capital based on the assessment of the cultural patrimony . The local population still keeps the keys of the buildings and the ones presenting the architectural features of the area give examples , make demonstrations related to the old look of the buildings and the use of owen and traditional tools

Problems arised . Some of the proposed sites were owned by people who did not allow to be visited by tourists and this is the reason why they have not been included in this network.

Conclusions. The project implementation has stimulated the development capacity in the area by cooperation and confidence .

CONCLUSIONS

The West Cork Project – Irelanda. The landmark initiative is based on the unique image and identity of the region, having a close relationship with the approach in the area. The products marketed under this landmark have deep roots in the region tradition .The project supporters have been involved in setting up a network joining agencies and GALs at national level .

GAL Piemont - Italy

The whole action is dedicated to solve delivery problems of the local producers as well as to develop new capacities becuase the market is monopolized by chains of huge drugstores The

partnership is based on economical chains able to compete in a large scale delivery system.

GAL Galicia-Castilla Spain

The involvement of local population representatives in the selection and promotion process of the cultural patrimony attractions has been a good ideea , a good method to integrate the item in the natural and cultural resources of the area. The public opinions are useful in order to create a dynamic attitude of the people living in the rural areas charaterized by a weak involvement in the public life.

The analysis of the three study cases (Irlanda, Spania şi Italia) has allowed to draw the following conclusions :

- Development strategies suitable to the area have been approached ,
- -The development stratgies have been established and implemented from „down and up" starting from the loca needs,
- Public-private partnerships and local action groups have joined their efforts,
- Integrated and multisectorial actions have been carried out,
- New solutions for old problems have been found,
- In all the cases , cooperation among local actors has played the main part .

The presented GALs have established contact , distribution and marketing networks both inside and outside the area.

The results and experience accumulated in these GALs could be transferred to other territories.

In all the cases , the public opinion has been used in order to encourage a dynamic involvement of the people living in the rural areas .

All these projects could be considered among the best Leader +practices and have proved the efficiency of this approach in the communities where they have been implemented.

REFERENCES

[1] A selection of Leader+Best Practices, 2009 / 4 EN
[2]A selection of Leader+Best Practices, 2008 / 3 EN
[3]Leader+ Observatory, FlashNews, Issue 78, 31 March, 2008
[4]Leader Magazine, SPECIAL FOCUS Leader achievements: A diversity of territorial experience 11 • 2008EN

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RURAL DEVELOPMENT – CASE STUDY CĂLĂȚELE AREA, DISTRICT OF CLUJ

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Key words*: rural development, European financing projects, modernization, accommodation offer*

Abstract

The paper aimed to present the results of the research process based on questionnaires. Questions have followed mainly agrotouristic offers. The conclusions of the research lead to the idea that, on a medium period of time, the analyzed area proves development potential, perfectly harmonized with the environment – a local element particularly generous in landscape and landforms.

INTRODUCTION

The essay presents the results of the research based on questionnaires, following the agrotouristic offer of Călățele area in Cluj County.
The purpose is the economic and social development of the area, through elements such as: the best revaluation of local resources, tradition revival, development of rural tourism and agritourism, creation/reabilitation of urban infrastructures and enhancement of the geographical position, fully respecting the environment.

MATERIAL AND METHOD

The commune of Călățele is situated in central-west of Cluj County, at 65 km from Cluj Napoca and 15 km from Huedin; **Călățele** (in Hungarian - Kiskalota, in German - Kelezel) is a commune in Cluj County, Transylvania, Romania. It consists of 6 villages: Călățele, Călata, Dealu Negru, Călățele-Pădure, Finciu, Văleni.
Access routes: E 60, DJ 108.
The teritory of Călățele is situated in the contact area between Huedin-Călățele Depression and the extraordinary zone of the Apuseni Mountains in Transylvania.
Călățele has a elongated geographical development in the direction of Călata Valley, bounded at South by the commune of Beliş, at West by Mărgău, at North by Sâncrai, at East by Mănăstireni and Râşca.

Fig. 1. The map of Cluj County

A big part of Călățele is situated in the mountain area known in the field literature as the Mountains of Gilău – Muntele Mare / the Great Mountain, belonging to the Apuseni Mountains group, formed in a giant granite dome with peripherical stripes of crystalline schists, presenting a weaker metamorphism towards the exterior. Northwards, the township lies in the moutainous Depression of Huedin-Călățele, in a rather faded landforms in the shape of gentle hills, in monoclinic, separated by large valleys, with permanently flooded meadows.
The climate is moderate continental, with annual average temperatures of 4-8^{0}C.

Infrastructure:

1. the commune is completely electrified;
2. drinking water network pipes cover 80% of the total necessary;
3. communication is achieved through fix telephone connection;
4. local roads are asphalted up to 30% of the total area;
5. the railway station is situated at 15 km distance from the center of the commune;
6. TV cable installed;
7. the nearest gas station is at 15 km from the commune;
8. the township uses a waste materials manipulation system;
9. the airport is at 60 km away.

European financing projects approved and in course of approval for the development of Călățele commune, to be made by local authorities:

1. modernization of the „Citera" forest road;
2. building of sewerage network in Călățele;
3. regularization of the main village valley;
4. modernization and renovation of local schools and kindergardens;
5. modernization and renovation of local community cultural centers;
6. infrastructure development by reparation and modernization of the local road network;
7. settlement and construction of a food market.

RESULTS AND DISCUSSIONS

Questionnaire regarding the rural tourism offer and the rural development of Călățele commune, Cluj County. The theme of this questionnaire is the rural development of Călățele community situated in Cluj County by practicing rural tourism. The respondents number counted a total of 98, all of them inhabitants of Călățele, inquired in the period October 01-10, 2009.

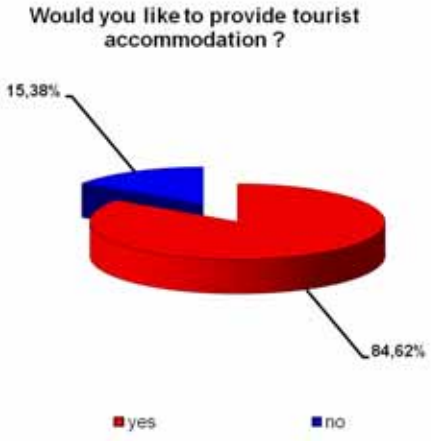

Fig. 2. Local accomodation offer

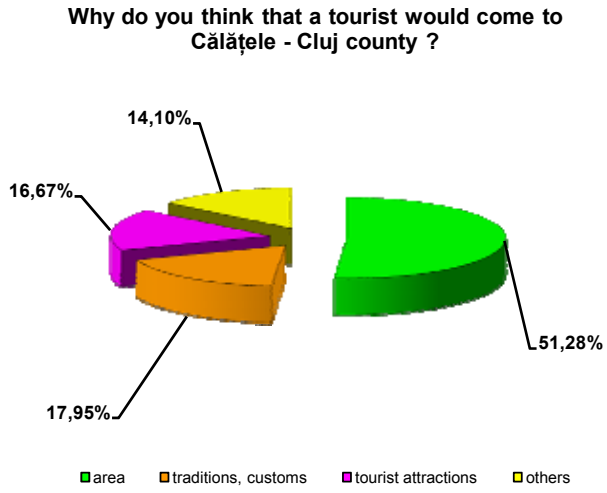

Fig. 3. The motivation of the tourism offer in the area

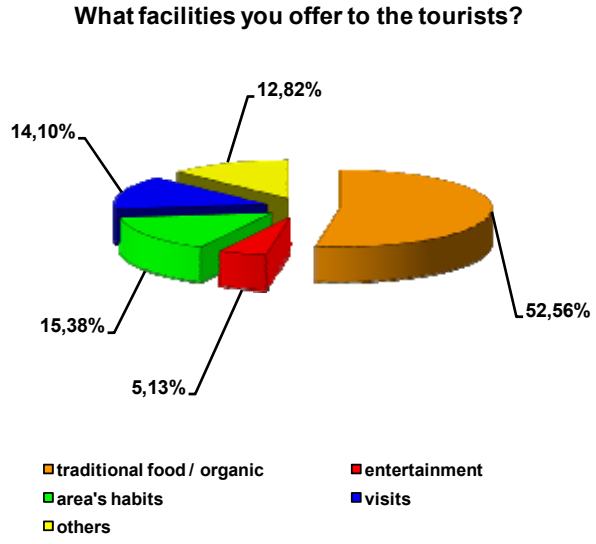

Fig. 4. Motivation of area tourism offer

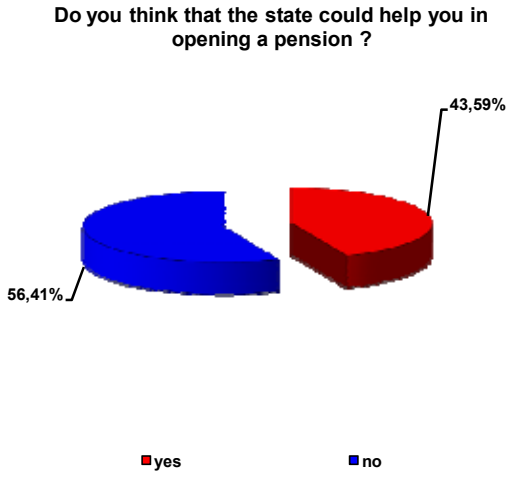

Fig. 5. State authorities implication in foundating a touristic hostels

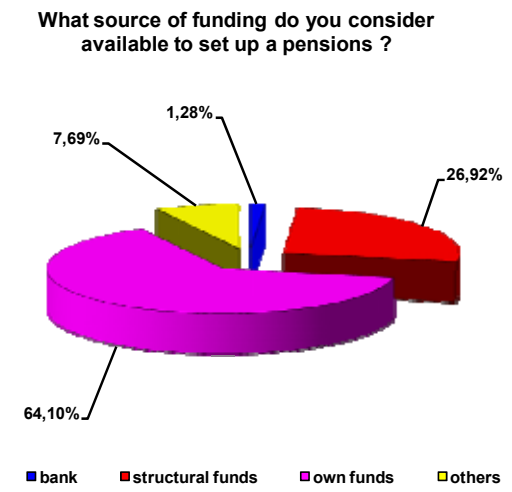

Fig. 6. Accessible financing source in hostel establishment

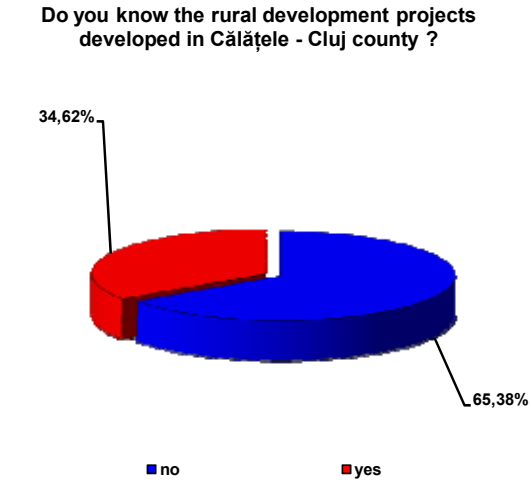

Fig. 7. Rural development projects of the area

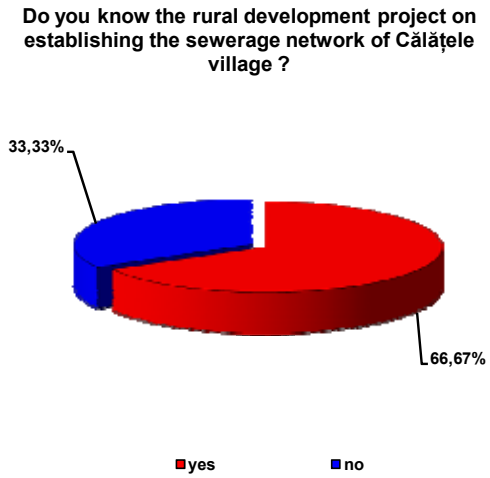

Fig. 8. Sewerage network system projects

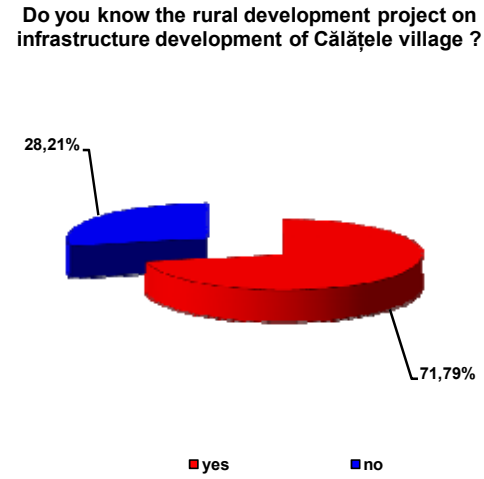

Fig. 9. Information regarding the area infrastructure development

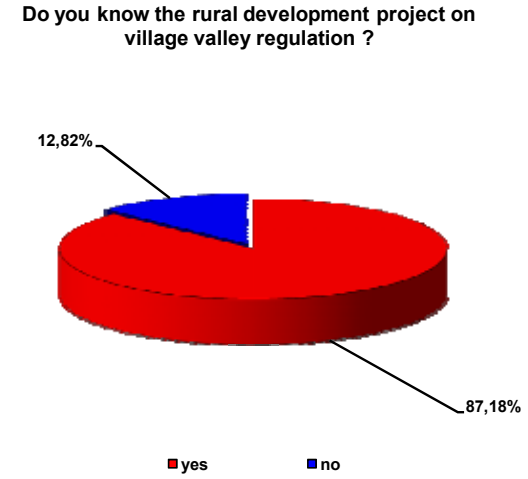

Fig. 10. Information regarding the regularization of the main village valley

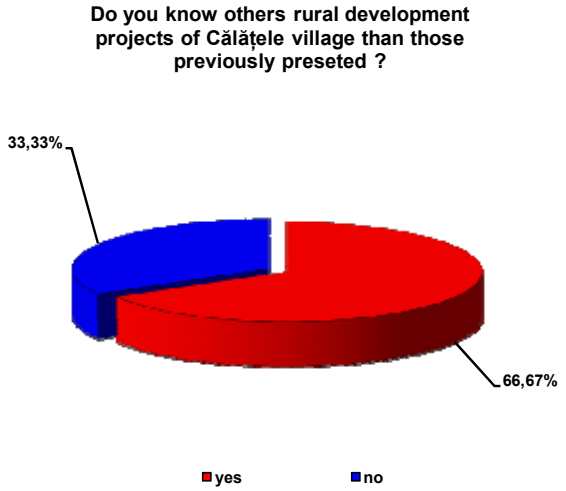

Fig. 11. Information regarding other rural development projects

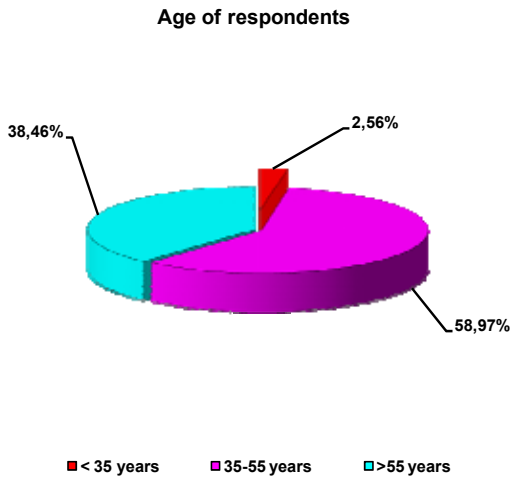

Fig. 12. The age of repondents

CONCLUSIONS

Călățele has the potential to become one of the most economically and socially developed areas, through the best valorification of local resources, the revival of traditions, the development of rural tourism and agritourism, the creation and rehabilitation of urban infrastructure, and the strategic emphasis of its geographic position, fully respecting the environment.

According with this potential of Călă□ele area the priorities for the future are:

1. The increase of both national an international visibility of Călățele pursuing tourism development, tourist attractions, investitions and investors, and in order to facilitate the financing of local development programs in domains such as: tourism, infrastructure, society, economy, culture, etc.
2. Professional training in strategic areas such as: agriculture, forestry, rural tourism, agritourism – for as many inhabitants as possible in the villages that make up Călățele as an administrative area;
3. Revival of local traditions: dance, way of living, craft – with obvious effects on the local employment level;
4. Ceasing the environment and soil degradation due to the economic activities and house solid waste materials;
5. Exploitation of the local resources in order to develop a solid local economy by increasing the local employment level;
6. Founding a solid network of authorized households for practicing rural tourism;
7. Creation and promotion of local events (*Sons of the Village* – the celebrating commune day, church dedication day, etc.);
8. Promoting the good practice of organic agriculture in order to attract tourists so as to develop local rural tourism;
9. Creation of training programs for those involved in rural tourism and of ecology courses;
10. Afforestation of soil degraded areas;
11. Implementation of special systems for selective waste collection;
12. Establishment of a local waste landfill;
13. Sustainable agricultural practices adapted to the climatic and soil conditions in the area;
14. Diversified agricultural activities in order to generate profit;
15. Associations of local farmers;
16. Application of efficient marketing policy.

REFERENCES

[1] Lechințan V., 2006, Călățele: Studiu monografic study, Ed. a II-a. ISBN 978-973-686-900-6.
[2] Berca M., 2000, Ecologie generală şi protecția mediului, Ed Ceres, Bucuresti, Capitolul I.

[3] Alecu I. N., Constantin M., 2009, Agroturism şi marketing agroturistic, Ed All.
[4] Ciocanel B., Porojan D., 2009, Bazele sondajului, Ed Irecson.
[5] Funar S., 1999, Marketing agroalimentar, Ed Digital Data Cluj.
[6] Pop Grigor P., 2005, Mănăstireni şi Mănăşturu Românesc: satul sufletului meu, Ed Studia, Cluj-Napoca, ISBN 973-8390-31-1.
[7] Rusu M., 2008, Pensiune turistică şi agroturistică, Ed Rentrop si Straton.
[8] Tripon, M., 2003, Belişul sub ape: credințe legate de viața omului în satul Beliș. Schiță monografică a vieții spirituale, Cluj-Napoca, Ed. MO, 336 p.
[9] xxx- http://ro.wikipedia.org/wiki/Călățele,_Cluj
[10] xxx http://www.searchromania.net/harta_harti/cluj/Calatele/
[11] http://www.citynews.ro/cluj/eveniment-29/unitati-de-ingrijire-la-calatele-47283/
[12] http://www.madr.ro/pages/ue/cap7-agricultura.pdf

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RESEARCH ON ISSUES MORPHOLOGICAL, HYDROGEOLOGY AND GEOGRAPHICAL SPATIAL PLANNING OF FAGARAS MOUNTAINS - ACCUMULATION AREA VIDRARU

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Key words: *alignment, topographic map, geographic integration, planning tourism planning, erosion*

Abstract

This work is intended as a modest study of environmental changes, on the upper Arges, as a result of anthropogenic activity. Geography and planning lies with the other sciences, particularly important task in its main knowledge on how training and development of an area. In preparing this work staggered work was conducted in three stages: (1) Stage documentation. At this stage existing bibliographic material was studied and a series of topographical maps. We also used a range of climate and hydrological data, which we have taken from weather stations. (2) Stage of land. On the ground were a number of routes traveled for consultation on the spot to order physical-geographical elements, the mapping, and to gather information from locals. The work includes illustrative material (photos), which I tried playing different geographical issues, and complement and support the claims of the text. (3) Drafting stage.

INTRODUCTION

Fagaras Mountains are the largest part of the eastern third of the Southern Carpathians, between the Olt Defile Red-Turnu Caineni the west and Dambovita valley on the eastern side, individually by massive increase, typical alpine landscape with peaks reach the maximum relief altimetry Romania: Negoiu Moldoveanu 2544m and 2535m. Are unique in the Romanian Carpathians landscape is, but given the expansion of glacial relief and periglaciar, the energy landscape with the highest rates in the country, which justifies the name given by Emmanuel de Martonne of "Transylvanian Alps" for the Southern Carpathians [7].

The area studied in this paper falls within the following limits:

- The southern boundary is the alignment of crystalline mountains Ghiţu Mountains Pleaşa-Bee, Mount Magura, Mount Munţişor.
- Eastern and western limit is the latest extension of the northern ridge of Fagaras in the east of Mount Scrapers, Mount and the Western Mountain Paltinul Clăbucet Stoil Mount, Mount Ştiubeaua.
- Northern boundary was chosen at random. Normally it would have to be the northern ridge of the Fagaras Mountains (upper Arges basin processes directly affected by the joint action of rivers that spring from Buda goat and two circuses ice). How this would have been impossible to make works of degree, was chosen as the northern limit of the inter Piscelu Black Mountain and Mount Hammer, Goat Valley and Valley of Buda.

MATERIAL AND METHOD

Tourism potential, far from being studied and particularly exploited until now was not the subject of a regional study of geography of tourism have been developed and published works of popular tourist items under the "Touring Club of Romania" and "Tourists Society in Romania ". The current work in terms of addressing this massive mountain tourism may be mentioned the contributions of Manţiu O. (1963), V. Balcescu, M. Cicotti, Em.Cristea (1974).

The presence of extensive areas well completed morphometric favored the development of intense pastoral life with old and many of transhumance routes and a specific toponymy, issues raised with great interest both as

geographers and sociologists, ethnographers: John Cone, Mara Pop, Emmanuel de Martonne.
Based on research conducted in previous phases, phase-road documentary and that was for preparing the work plan, the preparation and drafting chapters staggered cartographic material.
In preparing the work to take account of the principles of spatiality, causability and geographic and spatial integration of tourism planning and working methods was used as the common physical-geographical methods, such as observation method and comparison method and the specific methods, to those used in geomorphology, climatology and other disciplines of geography and spatial planning.

RESULTS AND DISCUSSIONS

Fagaras Massif is divided into a depression in the tectonic (Depression Lovište), largely differentiated by erosion in crystalline schist gneeiss and epinoss (River Lady-River), and two sectors of unequal scope: Braşov County and Mountains Cozia-Iezer [2].
Large axial sag Slatina region (River Lady) clearly separates the massive spread and high Iezerului the narrow ridge only a few km and low (peak Cozia-1677m, vf. Ghitu 1622m) tail.
Lovistea as depression inter-Carpathian of tectonic origin, occurred in the sedimentary basin Cretaciul Higher closely with training Getica Depression.
After the structural consolidation, erosion becomes dominant graders will create pediplina Carpathian (Cretaceous-Oligocene), the differentiation stages that are reflected by the posting of two steps:
- Higher level that I could name Podeanu after area of maximum extension and representative, at 2000-2200 m altitude;
- The edge, with the highest frequency at 1800-1900 m, with the appearance of rounded curbs at the edge "southern leg.
This area is equivalent Borăscu erosion level, dominated the landscape of a waste-gipfelflour (denudational upper level, named by A. Penck), which I Sârcu (1958), is subdivided into:
- Higher level, the highest, corresponding to the main ridge, which peaks between Suru and Urlea (held by almost 40 km), includes 40 peaks at a level of 2300-2400 m, including over 2500 m.
- The level below the highest ridge tops, represented the northern slope of the sharp edge, parallel with the appearance of typical alpine increases.
Vidraru Lake is located in the upper valley Arge, extending and depression Titeşti.Este Brezoi-powered two arteries which spring from the glacial basin of Fagaras (Capra and Buda). Hydropower plant served by the lake is called Cetãþuia Vidraru in literature is known as the factory - the parent, Gheorghe Gheorghiu-Dej, February 16, Corbeni - Arges.
The hydropower development of the river Arges known several steps:
- Stage 1942 - 1954 was the failure to achieve 178 m between 581.8 m and 760 m and average flow entering the uzinaj was 7.37 m3 / s, derived exclusively from Arges River without secondary headrace.
- Stage 1955 - 1960 in which it was intended to increase the average flow and fall capture side. Average flow increased to 19.67 m3 / s capture of neighboring tributaries and fall increased to 324 m, and the erection of the dam resulting from 96 to 166 m.
Dam site was determined position of economic, hydrological, morphological and geological, and for determining the conditions that will operate the lake during the operation was necessary to study the characteristics of the basin oro-basin system, upstream of the dam site, so that knowledge these features allow assessment of erosion intensity and measures to be taken to combat and fighting flood.
The dam is concrete with a boldness coefficient of 5.5 (ratio of length squared product carried by the canopy and the height and volume of the dam). The contour dam is embedded in granite gnaisuri resistant and waterproof, ensuring maximum stability work and impermeability of the best. The dam has a height of 166 m, width at the base to be 25 m, the canopy of 6 m and 307 m long dam is located over the road that is part of the bus Transfagarasan (see Photo 1 and 2).



Photo 1 Crown dam Vidraru Photo 2 Dam Vidraru

Lake of the Vidraru has a length of 15 km, an area of about 900 meters from the normal retention volume of 465 million m3 and is 78% of the annual stock of water of the river Arges, of which 320 million m3 is useful volume (see Photo 3). Lake led to mitigate the flood wave on the river Arges and the removal of the effect of flooding of 10,000 hectares.


Photo 3 Lake Vidraru

To be captured Arges basin river waters were built more dams and headrace (Gr Pop, 1996). Their characteristics on river basins are presented in Table 1:
- Barrier can function as a temporary threshold leading to changes in longitudinal profile of Arges and other rivers that Vâlsan Topolog clear etc.
- The dam has interrupted the continuity of evolution of the river Arges in longitudinal and transverse profile.
- Acting as a regulator of dam flow with changes in the leak downstream of the dam, but can function as a reservoir of water (water used in case of exception).

Table 1: Capture the main and secondary abstractions Basin Arges (as I. Mateescu, 1965, quoted by Gr Pop, 1996)

River	Basin area of Front (km2)	Flow Average (m3/s)
River Lady	210,0	5,75
Drăghina Mare	10,0	0,25
Bradului	3,1	0,06
Cernatul	42,6	1,14
RIVER LADY TOTAL AND AFFLUENT	265,7	7,20
Vâlsan	67,9	1,78
Dobroneagu	15,4	0,32
VÂLSAN TOTAL AND AFFLUENT	83,4	2,10
RAUL'S TOTAL HEADRACE-VALLEY OF FISH-VIDRARU	349,0	9,30
Topolog	80,4	2,26
Valea lui Stan	19,7	2,26
Valea Limpedea	7,9	0,16
TOTAL SECONDARY Inc	457,0	12,12
Argeşul	286,0	7,55
TOTAL	743,0	19,6

Building the dam required major changes in Vidraru geo-morphological aspects of the region:

After dam construction took place radical changes in river dynamics and slopes, producing the changes in the ratio of solid and liquid phases, ie solid flow increase. Fragment size transit diameter > 200 mm is 15% of solid flow. The dam can be considered as a type of threshold, a threshold induced by humans, it leading to a new level of local input and default based on changes in the processes of erosion and accumulation, currently being highlighted "regressive accumulation.
The planning scheme was based on 2 main principles:
- Concentration of the hydroelectric potential by concentrating flows and falling water
- Complex, using full, harmonious combination of plants and hydroelectric energy production with water saving.
Different nature of these schemes and location of planned targets required a number of studies topographical, geological, geotechnical, etc.. At the same time, preserve the image of flooded region, have made detailed observations on the geo-morphological Cuvete Vidraru accumulation lake.

Exploit the potential of natural

By building the dam and installation Vidraru accumulation lake, it was necessary clearing of large areas of timber.

Parallel recovery products grew accessories (raspberries, blueberries, blackberries, mushrooms), hunting and fishing products. Guideline forestry in perspective is intended to extend laricel culture, prevent falls due to wind, finding more appropriate and intensive forms of treatment of trees and promote natural regeneration of beech and fir [8].

The agricultural sector is limited to occupying 24.000ha grassland pasture and meadow and forest area 28.000ha alpine and underalpine meadows of the northern side are third. Grassland and forest area has production side of good. In a rational exploitation of the manure treatment and application of calcium amendments, their productivity can be increased from 5000-green mass 6.000kg ha to 30,000 ha green mass-40.000kg.

Hydropower potential of fast mountain rivers began to be exploited through micro-hydro, originally used to supply electricity to huts (Negoiu and Goat) and then for the supply of electricity needed to forestry isolated. High potential and the possibility of providing autonomy to the national electricity system is cost effective to build micro fueled tourist cabins, weather stations and logging or careers.

Arges River with its tributaries form one of the basins of the utmost importance that the hydropower potential. Road construction around the lake and then "Transfagarasanul" made possible the most economical operation of forestry in southern massif.

The tourism potential is one of the most important of our mountains "Recovery of the last century began, on the northern side and on the south by the beginning of our century.

Output from the accumulation lake Vidraru added possibility to practice water sports and access time of tourists from the capital was much shortened by making highway: Bucharest-Pitesti. But a disproportionate amount is maintained between the two slopes on the north side chalets are concentrated most interest-Suru, Bârcaciu, Negoiu (with a large opening on the picturesque valley of Sărății), Bale, Podragu towers, Sat.

Photo. 4. Cabana Capra

Photo. 5. Fortress Poienari

Vidraru accumulation in the lake area there are several tourist cottages: River empties Cumpana, in line Vidraru lake cottage is situated Cumpana, hut with an accommodation capacity of 80 seats (Photo 4). Access to the cabin is both Tranfăgărășan and the forest road.

Also on Lake Vidraru longer Argeseanul House is situated cottage, located immediately after dam Vidraru on Tranfăgărășan and downstream of the dam, the keys are guarded by fortress Poienari Arges (Photo 5).

CONCLUSIONS

To highlight the main physical and geographical characteristics of the area studied were given physical and geographical conditions. Thus, it highlighted the relationship between geology and landscape, climate-vegetation-soil.

The relief was given in terms of genes. Were described to the relief arising from the action modeling factors that have succeeded in time.

Currently shaping this area takes place under the influence of temperate-continental, remarked to a number of current geo-morphological processes. In regions dominated highest run-off processes, torrentialical, freeze-thaw, altering, and lower regions, river erosion.

Climate, its parameters imposed by the distribution of vegetation and soils. Thus, the area studied, in terms of bio-geographical fall in the mixed forest floor, beech and conifers. Soils on growing vegetation are brown acid, brown podzolic, podzolic brown eroded litosol.

Height, massiveness and high degree of fragmentation Fagaras Mountains were less accessible than all other divisions of the Southern Carpathians, but has not ruled out human actions and changes in relief, the environment, sometimes quite strongly felt. Grazing, logging, movement in general and more recently led to further technical work processes of denudation and the occurrence of destabilization of the substrate, which shows increasing in some areas of geo-morphological risk.

Fagaras Mountains offers tourist attractions of prime importance, including the richness and variety of forms, especially in alpine floor, but not the extent of their facilities.

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REFERENCES

[1] Erdeli, G., Istrate, I., 1995, Potențialul turistic al României, Editura Universității, Bucureşti
[2] Grecu, Florina, 1997, Fenomene naturale de risc (geologie şi geomorfologie), Ed. Univ., Bucureşti.
[3] Honţuş Adelaida, 2005, Geografia Turistică şi Agroturistică a României, Editura CERES, Bucureşti
[4] Honţuş Adelaida, 2009, Geografia Turistică şi Agroturistică a României – Ediția a-II-a revizuită, Editura CERES, Bucureşti
[5] Honţuş Adelaida, 2005, Amenajarea turistică a teritoriului, Editura CERES, Bucureşti
[6] Ielenicz, M., 1999, Geografie generală (I. Geografie fizică), Ed. Fundației "România de Mâine", Bucureşti.
[7] Popescu, N., 1990, Țara Făgăraşului- studiu geomorfologic, Editura Academiei Române, Bucureşti.
[8] Posea, Gr., Popescu, N., Ielenicz, M., Grigore, M., 1987, Harta geomorfologică generală, Sinteze geografice, II, Tipogr. Univ. Bucureşti.

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RESEARCH ON ANALYSIS AND PROFESSIONAL OCCUPATIONAL STRUCTURE IN THE RURAL NON-FARM IN PROFILE MACRO-REGION 1

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***Key words*:** *Social surveys, unemployment, occupational structure, employment, working population, rural household*

Abstract

In the present study will present assessment situation on the labour market in Romania, for macro 1 (North-west and center region), the evolution of the phenomena of employment, unemployment, which are targets in household labor force survey.Designed as a valuable source of information on employment, the survey provides a coherent manner, essential data on all segments of the population, with many opportunities to link and structure after demo-socio-economic characteristics different, in terms of international comparability. The method used in this analysis method was face-to-face interview. Registration information in the survey questionnaires was done by interviewing people for 15 years and over, to address housing households investigated. Representativeness refers to both household structure and population distribution by area, gender and age groups.

INTRODUCTION

Evaluation of current situation on the labor market in Romania, the evolution of the phenomena of employment, unemployment and inactivity are the objectives "Structural analysis of occupational and non-agricultural work in rural Macroregion's profile.

Designed as a valuable source of information on employment interelectoral investigation provides a coherent manner, essential data on all segments of the population, with many opportunities to link and structure after demo-socio-economic characteristics different, in terms of international comparability .

Under investigation, persons resident - temporary and permanent - in Romania, members of households in selected dwellings [3].

MATERIAL AND METHOD

Data were gathered through face-to-face interview. Registration information in the survey questionnaires was done by interviewing people for 15 years and over, to address housing households investigated.

Interviews were evenly distributed along the quarter, achieving a continuous research.

Reference period (for most of the questions) was weeks from Monday to Sunday including pre-registration. For some questions there are other reference periods: the last four weeks, last year, following two weeks, the last three months of the year or period of the previous year.

The investigation was conducted on a random sample of housing representative at the country level and by region, using a two-stage sampling plan.

Representativeness refers to both household structure and population distribution by area, gender and age groups.

RESULTS AND DISCUSSIONS

1. Occupational analysis in the year 2007

Active population in rural Macroregion one, was formed in 2007 from 950.11 thousand people, of which 894.88 thousand people were employed.

Employment rate of population in rural areas was for the age group (15 - 64 years) of 54.8%, lower than urban where he reached 57%.

Population structure by age, by sector of activity, farming sector reveals an occupancy rate of 9.1% for the age group 15-24 years and 19.7% for the age group 55-64 years.
Regional employment structure is differentiated according to specific economic and social factors.

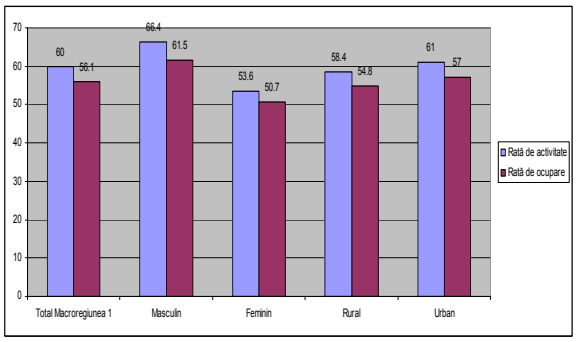
Table 1: Profile macroregional of employment in 2007 (%)

Indices / area macroregion	Activity Rate*	Employment Rate**
Macroregion 1 (15-64 ani)	60,0	56,1
- male	66,4	61,5
- female	53,6	50,7
- rural	58,4	54,8
- urban	61,0	57,0

* the proportion of active population in total population,
** proportion of employed population in total population;
Source: Employment in Romania: Employment and unemployment-t in 2007, NIS, 2007: write pages

In 2007 the active population of working age (15-64 years) consisted of 2.21845 million people. Significant share in the total working population already own men (55.3%), and persons residing in urban (60.43%). Young people (15-24 years) represented 9.8% of the working population, more than half (51.69%) with an address in rural areas.

Graph 1
Rates of activity and employment by sex and area of residence



Activity rate of working age population (15-64 years) was 60.0% in 2007 and recorded higher levels for the male population (66.4% versus 61.5% for female population) and for the urban (61.0% versus 58.4% in rural areas).

Employment rate of working age population (15 - 64 years) was 56.1% in 2007, men having a value of 61.5% to 50.7% for females. Analysis by area of residence reveals a lower share of employment in rural areas only 54.8% to 57.0% in urban areas.

Table 2: Profile of the regions that are part of Macroregiunea 1 - Employment by education level – 2007 %

Macro / Regions	Activity rate			
	TOTAL	Level of education		
		Superior	Fair	Poor
MACROREGION ONE	**60,0**	**87,1**	**67,3**	**37,0**
Male	66,4	86,9	71,4	46,5
Female	53,6	87,4	62,6	29,7
Urban	61,0	87,3	66,7	23,2
Rural	**58,4**	**86,1**	**68,2**	**45,6**
NORD-WEST	**59,6**	**87,0**	**66,2**	**38,9**
Male	64,4	86,4	69,3	44,9
Female	54,9	87,8	62,7	34,4
Urban	60,4	87,2	66,4	21,1
Rural	**58,6**	**85,7**	**65,9**	**48,8**
CENTRAL	**60,4**	**87,2**	**68,4**	**34,8**
Male	68,5	87,5	73,7	48,4
Female	52,2	86,9	62,5	24,1
Urban	61,7	87,3	67,1	25,3
Rural	**58,2**	**86,7**	**71,1**	**41,6**

Table 3: Profile of the regions that are part of Macroregiunea 1 - Employment by education level - 2007

%

Macro / Regions	Employment rate			
	TOTAL	Level of education		
		Superior	Fair	Poor
MACROREGION ONE	**56,1**	**84,4**	**63,2**	**33,1**
Male	61,4	84,0	66,7	40,3
Female	50,7	84,7	59,3	27,5
Urban	57,0	84,5	62,3	19,4
Rural	**54,8**	**83,7**	**64,8**	**41,6**
NORD-WEST	**57,0**	**84,7**	**63,3**	**36,5**
Male	61,1	83,8	66,0	41,3
Female	52,8	85,8	60,2	32,9
Urban	57,4	85,0	63,0	18,5
Rural	**56,4**	**82,7**	**63,8**	**46,5**
CENTRAL	**55,1**	**84,0**	**63,0**	**29,1**
Male	61,8	84,3	67,3	39,1
Female	48,4	83,6	58,3	21,3
Urban	56,5	83,9	61,6	20,3
Rural	**52,7**	**84,9**	**66,0**	**35,4**

Activity rate by educational level shows that most of the employed population is recorded at higher education level with the following values for the 2 regions: 85.7% in North - West

and 86.7% in the center region. The lowest level is recorded at low educational level with the following values: 48.8% in North - West and 41.6% in the center region. Employment rate by educational level shows that the highest values recorded at a higher level as follows: 99.5% in North-West and 99.1% in the center region, the lowest values are recorded at low (region North-West with 78.2%, 87.1% with the center region).
To The North-West in 2007, employment by educational level showed the following values: Higher educational level, age group "15-64ani" 99.5%, of which the lowest values in the age group "15 -24 years' of 7.7%.

2. Analysis of rural occupational 2005-2007

In the period 2005-2007, while Central region shows an increase in the share of working population (about 3%) and occupied (approx. 2.5%), the entire macro trend is downward.

Table 3: Evolution of employment in rural areas within Macroregion and development of regions

Year / Indicator / region	2005		2007	
	Activity rate	Employment rate	Activity rate	Employment rate
Macroregiunea1	58,8	54,8	58,4	54,8
North-West Region	60,5	57,5	58,6	56,4
Central Region	56,6	51,4	58,2	52,7

Source: Employment in Romania: Employment and unemployment-2006,2007, INS, 2007

The degree of diversification of economic activities, by multiplying the income sources that involve contributing to reducing risks from agricultural activity as the sole occupation of household members - deleted seasonality of obtaining income shocks caused by natural phenomena attenuate the negative effects on agricultural production etc..
Thus in 1 Macroregiunea employment in 2007 was 442.669 people and 467.298 in 2005, so there was an increase of 5.56% in 2005 compared to 2007.
In The North-West population employed persons in 2007 was 295.175 and 308.308 persons in 2005, registering a growth of 4.44% in 2005 compared to 2007. The age groups "15-24" was an increase of 26.19% for the years 2005-2007, and the group "25-34 years" of 20.25% in 2005 compared to 2007.

Table 4: Breakdown by sectors but agriculture / age groups

		2005	2007
MACROREGION 1			
Total population occupied	**people**	**467298**	**442,669**
total 15-64 ani	%	87.6	84.2
Age groups			
15-24 ani	%	11.4	9.1
25-34 ani	%	20.5	16.6
35-44 ani	%	17.9	19.9
45-54 ani	%	20.1	18.9
55-64 ani	%	17.8	19.7
65 ani si peste	%	12.2	15.8
1.1 NORTHWEST REGION			
Total population occupied	**people**	**308,308**	**295,175**
total 15-64 ani	%	86.3	82.2
Age groups			
15-24 ani	%	10.6	8.4
25-34 ani	%	19.0	15.8
35-44 ani	%	18.1	18.6
45-54 ani	%	19.8	19.1
55-64 ani	%	18.8	20.3
65 ani si peste	%	13.7	17.8
1.2 CENTER REGION			
Total population occupied	**people**	**158,990**	**147,494**
total 15-64 ani	%	90.5	88.1
Age groups			
15-24 ani	%	12.9	10.2
25-34 ani	%	23.3	18.3
35-44 ani	%	17.5	22.5
45-54 ani	%	20.8	18.5
55-64 ani	%	16.0	18.6
65 ani si peste	%	9.5	11.9

Source: Employment in Romania: Employment and unemployment-2006,2007, INS, 2007

The CENTER region employment was 147.494 persons in 2007 and in 2005 of 158.990 people, registering a growth of 7.79% in 2005 compared to 2007. The age groups "25-34 years" there was an increase of 27.32% for the years 2005-2007, and the group "35-44 years" a fall of 22.22% in 2005 compared to 2007.

Rural Occupational Structure

The degree of diversification of economic activities, by multiplying the income sources that involve contributing to reducing risks from agricultural activity as the sole occupation of

household members - deleted seasonality of obtaining income shocks caused by natural phenomena attenuate the negative effects on agricultural production etc [3] and [5].

Share of population employed in secondary and tertiary sectors in Macroregiunea One was about 2007. But 51% is visible in the period 2005-2007 a trend of the importance of employment in agriculture at village level. Is observed as a decrease of 3.53 percentage points of people employed in agriculture and hence an increase in people employed in non-agricultural activities.

Table 5: Change in structure of the rural population employed in industry sectors

	Agriculture	
	2005	**2007**
Rural Romania	**2734920**	**2622707**
% population occupied	**64.23**	**61.27**
% pop 15-64 ani	60.23	56.61
Macroregion1-	**467298**	**442669**
% population occupied	53.00	49.47
% pop 15-64 ani	49.78	45.30
Northwest Region	**308308**	**295175**
% population occupied	58.68	56.35
% pop 15-64 ani	55.14	51.61
Central region	**158990**	**147494**
% population occupied	44.62	39.75
% pop 15-64 ani	42.21	36.88

Source: NIS (2005,2007) workforce in Romania. Employment and unemployment.

Table 6: Change in structure of the rural population employed in industry sectors

	Industry and construction	
	2005	**2007**
Rural Romania	**794882**	**853378**
% population occupied	18.67	19.94
% pop 15-64 ani	20.79	22.37
Macroregion1-	**225053**	**251832**
% population occupied	25.52	28.14
% pop 15-64 ani	27.34	30.52
Northwest Region	**115195**	**124675**
% population occupied	21.93	23.80
% pop 15-64 ani	23.87	26.49
Central region	**109858**	**127157**
% population occupied	30.83	34.27
% pop 15-64 ani	32.23	35.88

Table 7: Change in structure of the rural population employed in industry sectors

	Services	
	2005	**2007**
Rural Romania	**728314**	**804699**
% population occupied	17.10	18.80
% pop 15-64 ani	18.98	21.03
Macroregion1-	**189366**	**200382**
% population occupied	21.48	22.39
% pop 15-64 ani	22.89	24.18
Northwest Region	**101873**	**104015**
% population occupied	19.39	19.86
% pop 15-64 ani	20.99	21.90
Central region	**87493**	**96367**
% population occupied	24.55	25.97
% pop 15-64 ani	25.56	27.24

Table 8: Change in structure of the rural population employed in industry sectors

	TOTAL	
	2005	**2007**
Rural Romania	**4258116**	**4280784**
% population occupied	100	100
% pop 15-64 ani	100	100
Macroregion1-	**881717**	**894883**
% population occupied	100	100
% pop 15-64 ani	100	100
Northwest Region	**525376**	**523865**
% population occupied	100	100
% pop 15-64 ani	100	100
Central region	**356341**	**371018**
% population occupied	100	100
% pop 15-64 ani	100	100

In territorial, changes in population structure occupied by branches and sectors of activity is consistent with economic and social development. The primary sector is predominantly in the Northwest region where over 56.35% of employment practice agriculture, down from 2.34 percentage points since 2005. Area Occupational Center in contrast with other regions, farmers share of total employed population was only 39.75% in 2007.

CONCLUSIONS

Northwest Region

Activity rate of rural population in North-Western figure in the year 2007 to 58.6%, which is below the national rural average (65.1%) with approx. 6.5 percentage points. Between 2005 and 2007, regional activity rates

increased relative to the issue about 1.03 percentage points - from 60.5% in 2005 to 58.6% in 2007. Characterized population decline and the region, which is why young population quotas have been significantly limited deformation generating the age pyramid.

Employment of population of the region is 56.4% in 2007, which resulted in an adverse economic dependency ratio region. This report undergoes degradation over time, the dynamic regional employment rate is decreasing in the interval 2005-2007 from 57.5% to 56.4%. Thus, if a thousand people in 2005 to 738 ‰ returned occupied inactive and unemployed, in 2007 ***the dependency ratio*** increased to 772 ‰.

Population structure of the region occupied by ***employment status*** is a reflection of the occupational structure and remains as with the regions of Moldova dominated by occupational status characteristic forms of traditional agrarian economy - self-employed and unpaid family workers together totaling 4.10% of population occupation (2005-2007). Note, however, is the increasing trend of importance to categories of status involved in contractual relationships in the labor market - the share of employees fell from 99.8% in 2005 to 99.6% in 2007 (for the age group - "15-64").

Central Region

Activity rate of rural population stood at the center region of 2007 to 58.2%, the lowest value in comparison between all regions of Romania. No center region is no exception to the rule of increasing importance in the share of active population in total population, said index value in 2005 accounts for 56.6%.

Employment of population of the region is 52.7% in 2007, rising 0.96 percentage points lower than the rural average of the indicator pointed to Macroregion 1. The region's employment level has decreased significantly in the period 2005 - 2007 increased from 51.4% in 2005 to 52.7% in 2007. Thus, if a thousand people in 2005 to 944 ‰ returned occupied inactive and unemployed, in 2007 ***the dependency ratio*** decreased to 897 ‰.

Structure of employed population by ***employment status*** of the region is currently dominated by employees. Following the momentum in the share of registered employment outside agriculture workers decreased from 99.9% in 2005 to 99.6% of employment in 2007. This phenomenon was accompanied by upward mobility of lower status groups - self-employed and unpaid workers famille. The share of unpaid family workers decreased from 92.9% in 2005 to 89.3% in 2007, they were the first for the new occupational opportunities offered by firms operating in industry and services accounted for a chance to overcome the status of persons dependent almost exclusively on agricultural land. The share of workers on their own remained relatively constant, which demonstrates that the ownership of agricultural land intending to develop commercial farms through which to meet demand for food markets.

Region's population has therefore reviewed the overall economic benefits of development generating new occupational opportunities, leading to supplement the cash income of rural household.

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REFERENCES

[1] Constantin Anghelache, 1999, “Statistică generală – Teorie şi aplicaţii”, Editura Economică, Bucureşti
[2] Marginean Ioan, 2000, Proiectarea cercetarii sociologice. Iasi, Editura Polirom.
[3] Rotariu Traian, Badescu Gabriel, Culic,Irina, Mezei Elemer si Muresan Cornelia, 1999, Metode statistice aplicate în stiintele sociale. Iasi, Editura Polirom.
[4] Note metodologice din “Buletin statistic lunar”, INS, Bucureşti, nr.1-6/2007
[5] Precizări metodologice privind cercetarea statistică “Indicatori statistici pe termen scurt”, INS, Bucureşti, 2006

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PROSPECTS OF DEVELOPMENT IN ROMANIAN ORGANIC BEEKEEPING

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Key words**:** *organic beekeeping, evolution, specific indicators, Romania*

Abstract

The paper aimed to present the evolution of organic beekeeping sector during the period 2006-2009 in Romania. It is based on the statistical data provided by Ministry of Agriculture and Rural Development. The data have been processed into the following indicators: the business operator numbers, the bee families, and the quantity of certified organic honey. During the analyzed period, the number of bee families and of organic certified business operators have continuously ascending. The production of organic honey has growth in the analysed period, from 6 tones in 2000, to 18000 tones in 2009. It can be also observed an augmentation of the exported quantity. Due to the interest for this product on the external markets, The Ministry of Agriculture and Rural Development propose a series of measures to increase the competitiveness of Romanian ecological products, of the exporters and to promote the apicultural products on the external markets.

INTRODUCTION

According to the declaration of the consultant for the European Organic Monitor, Amarjit Sahota, Bio market in Romania will have the highest growth potential in the European organic industry in the next 5 years, because in the Romanian agriculture have not been used, in recent years, so many chemicals, the soils are clean, but best to get European certifications and begin organic production [1]. Because honey represents 52% of processed organic products in Romania, the importance of addressing issues related to the development prospects of the sector are obvious.
In this context, the paper presents an analysis of the evolution of honey production in our country, in order to put into evidence the evolution of the business operator numbers, the bee families and the quantity of certified organic honey in the period 2006-2009.

MATERIAL AND METHOD

The main objective of the research is to enable to all stakeholders of the Romanian organic beekeeping chain to have the necessary information to conduct their production and their commercial activities; this fact means a better orientation, especially to foreign markets. Due to the low consumption of bee products by the Romanian people, domestic market does not present a significant potential that could be exploited.
In order to characterize the evolution of honey production, the following indicators were used: the business operator numbers, the number of bee families and the quantity produced of certified organic honey. The period analyzed in this study was 2006-2009. The data, collected from The Ministry of Agriculture, Forests and Rural Development, have been statistically processed and interpreted.

RESULTS AND DISCUSSIONS

Beekeeping, as a branch of agricultural production, has been, since ancient times, one pursuit valued by human society, initially for its products (honey, pollen, royal jelly, propolis, beeswax and bee venom) and later, including in present, for the contribution of these insects to

the increasing of crops, fruits, vegetables and seeds production from pollination. Currently, in the context of globalization, beekeeping gains new valences, the target of its practice being not only getting high production, but also a significant efficiency. This is achieved through diversification, getting quality products, practicing the organic beekeeping, choosing the most effective marketing channels, promote consumption in compliance with health and environmental protection.

Romania is among countries with well developed beekeeping; this is a consequence of the large number of bee families we have, of the important quantity of honey produced, of the diversification of production, of the beekeeping scientific research results and of the specialists training services.

The future of the Romanian Beekeeping chain is based on answers to several interrogations:

- Are the actors of bee chain able to face the current economic crisis?
- Romanian bee products are quite well known internationally?
- How do Romanian beekeepers face the unfair competition that brings the penetration of synthetic but very cheap honey from other countries?
- How to increase domestic consumption of honey, especially of local honey, which is superior to the Asian varieties that started to flood the local market?
- How should be respected the principles of the traceability in the case of bee products?
- What are the possibilities to promote these products in Romania and internationally?
- How can be changed the subsidies flow in a non-bureaucratic one?
- How to access European funds for investments in the field of beekeeping?
- How to encourage the practice of organic beekeeping?
- How to encourage the export?
- How to make external partnerships?

The answers to these questions are not simple at all; they should take into account the great diversity of apiaries, the marketing of bee products and the legislation.

In this sense, it is absolutely essential to make an analysis of Romanian beekeeping sector, in order to support all those involved within this chain.

Operational situation of the Ministry of Agriculture, Forestry and Rural Development shows that the number of bee families and the honey production increased during the period 2001-2008, as follows [2]:

Table 1. Evolution of beekeeping sector during the period 2001-2004

SPECIFICATION	UM	2001	2002	2003	2004
Effective	Thousands of families	745	781	840	892
Total production of honey	Thousands of tones	12,6	13,4	17,4	19,0
Per capita consumption of honey	Kg	0,300	0,400	0,442	0,500
No. of subsidized families	Thousands of families	-	600	200	300
Export	Thousands of tones	6,9	5,7	9,6	12,3

Source: own processing after data from the National Institute of Statistics, Romanian Statistical Yearbook

Table 2. Evolution of beekeeping sector during the period 2005-2008

SPECIFICATION	UM	2005	2006	2007	2008
Effective	Thousands of families	930	975	990	1100
Total production of honey	Thousands of tones	18	18	19	21
Per capita consumption of honey	Kg	0.5	0.4	0.5	0.5
No. of subsidized families	Thousands of families	417	687	690	700
Export	Thousands of tones	6.6	9.6	10.5	11

Source: own processing after data from the National Institute of Statistics, Romanian Statistical Yearbook

Organic Beekeeping is a dynamic sector in Romania. As the first certified organic producers in beekeeping are recorded in 2000; production of organic honey in 2000 was around 6 tones, compared to 2800 tones, in 2009. The diagnosis of Romanian beekeeping sector reveals key indicators that show an ascending trend. In the year 2009, the number of bee families was 68,500, compared to 2006 when their number was 37,260 (Fig 1).

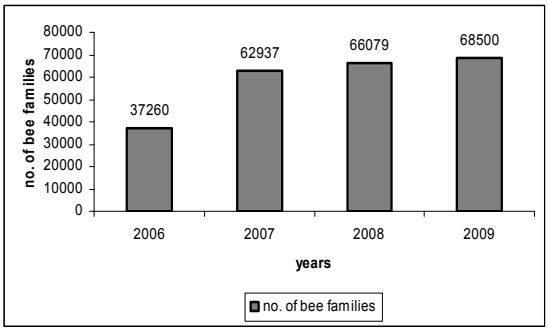

Fig. 1. Evolution of the number of bee families

Source: own processing after data from the National Institute of Statistics, Romanian Statistical Yearbook

The amount of organic exported honey from Romania to other countries reached the level of 1400 tones annually (Fig 2).

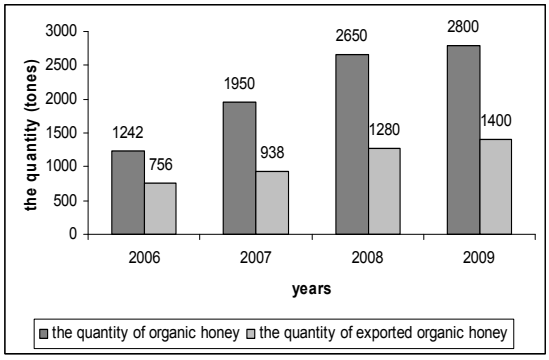

Fig. 2 . Evolution of the exported organic honey
Source: own processing after data from the National Institute of Statistics, Romanian Statistical Yearbook

The business operator numbers in the organic beekeeping sector has continuously ascending from 350 in the year 2006 to 620 in the year 2009, as a result of the increasing demand for this product (Fig 3). This is a consequence of the fact that consumers became more and more conscious about the benefits of health food and of healthy lifestyle.

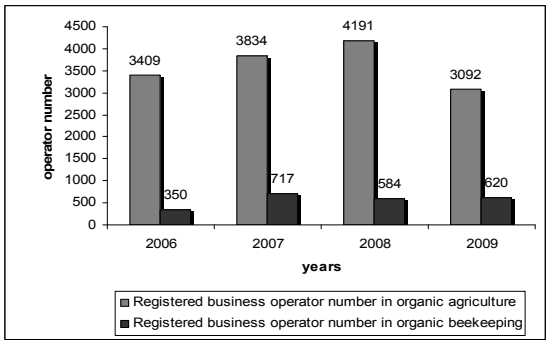

Fig. 3 . Registered business operators number in organic beekeeping for 2006-2009
Source: own processing after data from the Ministry of Agriculture, Forests and Rural Development

The organic production is covered at European level by the Regulation (EC) no.834/2007 on the production and labelling of organic products and by the Regulation (EEC) no. 889/2008 modifying detailed rules of Regulation (EC) no. 834/2007.
Application of laws relating to organic production is observed in organic inspection and certification bodies that release organic product certificates. They control the whole chain of the product, beginning to the cultivated land, and continuing by inspecting the processes by which it is obtained the final product.
The Ministry of Agriculture and Rural Development proposes a series of measures to increase the competitiveness of Romanian ecological products for export, in order to promote the apicultural products on the external markets.
Steps to be taken by a producer of organic products involve:

- a conversion period or a transition one, from the conventional to the organic apiculture, in which operators must comply with rules established by the Standing Council Regulation (EEC) no. 2092/91; the recommendation for the conversion period in the case of beekeeping is 1 year (if the family was bought from conventional apiaries).
- Registration of the organic beekeepers, to the Department for Agriculture and Rural Development in the county of each operator (the registration is governed by the Order no. 219 of 21/03/2007 that indicates the Rules for registration of operators in organic farming).
- The control and the certification of organic agricultural products are made in Romania, at present, by private certification and inspection bodies. Following inspections conducted by regulatory bodies, operators who have complied with the rules of production will receive a certificate of organic products and will be able to label their products as organic.
- Organization of marketing of organic products is an important pathway of organic farming; only the registered traders can sell their organic products through various channels on the food market: farm-gate sales, sales through wholesale stores, sales in specialized stores, on-line sales for organic products, seasonal sales markets.

On the list of MADR processors, beekeeping operators and traders can be found, among other organic operators, Apidava Ltd., a Romanian Dutch Company, which exports organic honey in Netherlands, Germany, Austria, England, Poland, Macedonia, France, Italy, Sweden, Canada, USA, Japan, Singapore.

Apidava is one of the biggest processor and exporter of natural and organic honey that currently processes between 1500 and 2800 tones of honey per year

CONCLUSIONS

It is very important and also necessary to study the development of the Romanian beekeeping chain in the context of harmonization of the national legislation with the EU regulations regarding the organic food products. The results of the research helped to identify possible solutions that lead to the increase of the organic honey production and consumption:

1. intensify and diversify the bee products, with emphasis on organic products;
2. increase the number of bee families and their biological and productive performance;
3. Ensure the quality of bee products, by following the principles of traceability.

Studying the marketing of organic bee products reveals a number of conclusions, among which the most important are:

- Romania has a significant potential in order to increase the number of beehives,
- The increase of the domestic consumption of honey could be achieved through consumer education programs by awareness about the beneficial effects of consuming these foods for a healthy life and by informing consumers about the various opportunities to consume honey and other bee products; in this regard, it is recommended to adjust the supply of honey producers and processors to the needs of honey consumers regarding the honey varieties and the types of packaging.
- The reduced consumption of honey is a consequence not only of the lack of information, but also of the purchasing power of the population.

REFERENCES

[1] Amarjit Sahota , Europeean Organic Monitor, 2009, Organic food hits Eastern Europe
[2] Ministry of Agriculture and Rural Development, 2009, Documentary Releases - beekeeping sector;
[3] x x x – National Institute of Statistics, Romanian Statistical Yearbook

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RURAL FAMILY COMMUNISM

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Key words : *family environment, distribution roles, migration, social relations*

Abstract

Romanian Communism, in its first years, may be treated as "a modern project". Forced industrialization of the years 1950-1960 has rushed urbanization, the collapse of extended family, for a waiving of the population in the agricultural lifestyle.Social relations were concentrated mainly in family space, avoiding public space. Village and community are replaced by the impersonality of relations closed daily and urban agglomerations. However, the relationship with the urban village, the majority of a generation migrants from rural areas remains a powerful model "diffuse mixed household" in which children in the city become a common budget and manages the older generations remain in their village.Regarding family, was promoted women into the labor market and social policies to encourage birth pronatalist (banning abortion). New social norm was that women's participation in employment given the labor required. Regarding the division of family tasks were preserved traditional habits that women's role in private space was to perform single tasks related to education of children and household care. Arguably, the improved standard of living but traditional family values were specific to the countryside.

INTRODUCTION

Family is an independently dynamic system that integrates social mechanism, with a pronounced historical character. Thus rural social dynamics as a whole, was passed on dimensioning household, the functionality and role of the family.
In this material I will analyze the mutations identified occurred in the family (rural household) village settlements in the evolutionary process of ante and post-revolutionary period and the effects of demographic policies in this period.

MATERIAL AND METHOD

To characterize the demographic changes of the rural population in the period 1966-1992 we used the following indicators: ruralization rate, birth rate, overall mortality rate, infant mortality, natural increase, the number of people of rural household assets [1].
Statistical data from censuses and statistical yearbooks were processed to identify the main coordinates of the family's demographic and social areas, from the communist period.

RESULTS AND DISCUSSIONS

Rural population under socialism has registered a gradual downward trend, a direct consequence of the cooperativization forced industrialization of agriculture and the urban environment. Thus, rural population to 7.01.1992, compared with the July 1, 1973 fell by 1 648 853 people (from 912 to 736 438 men and 415 women).

Table 1 Dynamics of major demographic indicators of the rural population in Romania

Year	Rate ruralization	Birth rate	Infant mortality rate	General mortality rate	Natural growth
25.01.1948	76,6	26,2	148,0	16,1	10,1
21.02.1956	68,7	26,3	85,8	10,6	15,7
15.03.1966	61,8	16,1	48,9	8,9	7,2
1.07.1970	63,1	22,6	51,2	10,4	12,2
5.01.1977	56,4	20,4	35,1	11,5	9,1
1.08.1980	54,2	17,7	32,4	12,0	5,7
1.07.1985	50,0	15,5	29,6	13,0	2,5
1.07.1989	46,8	16,8	29,3	12,9	3,9
7.01.1992	45,7	12,9	25,7	14,8	-1,9

Steady decline in rural population was due to type-casting process, rural-urban migration, but in a largely progressive and steady decline of natural increase (negative values in 1992 - 1.9 ‰) .(table 1)
The birth rate in the rural area population was drastically reduced from 26.2 ‰ in 1948 to

16.8 ‰ in 1989. The trend of lower birth rates continued at an accelerated pace after the events of 1989, such as the census in 1992 this indicator had a value of 12.9 ‰[3].

Significant differentiation of the rural population birth rate is observed at the regional level, as counties in Moldova register higher values of this indicator in comparison with those of the Banat and Transylvania.

Decree 770/1966 introduced banning abortion. The consequence is to increase the birth rate in the next period, then recover to initial valoriiile. Banning abortion does not mean eradication and practicing it, with dramatic effects on physical and mental health of women[2].

Overall mortality rate of rural population register for the whole period taken into account the high value at alarming rates lasts infant mortality rate, although compared with the base year (1948) has fallen by over 5.5 times. Low natural growth rate in 1992 can be explained not only by declining birth rates, as growth indices of mortality. This is confirmed by higher levels of female fertility in rural collectivity.

Table 2 Distribution of rural households depending on the working, the censuses of 15.03.1966 and 7.01.1992.

The working-household	**Households to 15.03.1966**	**Households to 7.01.1992**
Households without active persons	7,54	30,62
Households with 1 person active	19,68	26,34
Households with 2 people active	50,23	27,64
Households with 3 people active	14,16	9,95
Households with 4 people active	6,65	4,16
Households with 5 people active and more	1,74	1,29

In 1966 about 70% of rural households had 1-2 persons in their component assets. Households consisting of 3-4 active people over 20% of their total. Households consist of 2-4 people representing over 63% and active people flock back to an average household is estimated at 3.5. (table 2)

Census of 1992 revealed large increases in the number of rural households without active person, from 7.54% in 1966 to 30.62% in 1992[4]. Reduced the share of households consisting of 2-4 active people, from 63% in 1966 to 41% in 1992, following the migration process. Average number of people return to rural households is 3.12.

CONCLUSIONS

1. Change reproductive behavior of rural population, a drastic reduction in the birth rate;
2. Overall mortality of the rural population is influenced by demographic aging trend accentuated by the rural population, the increasing morbidity due to deficiencies in rural health, poor living standards, heavy work in agriculture;
3. Demographic family size has decreased due to geographical and occupational mobility of rural, slowdown birth and natural growth of rural population decline;
4. A low strength active constituents of household, as the share of households consisting of 5 persons and over.

REFERENCES

[1] Maria Fulea , 1996, Coordonate economice si socio-demografice ale satului romanesc in tranzitie, Editura Academiei Romane, Bucuresti , 84-116.
[2] Adrian Neculau, 2004, Viata cotidiana in comunism, Ed.Polirom, Iasi , p. 234-253.
[3] x x x –Institutul National de Statistica , Anuarul statistic al Romaniei , 1974, 1975-1988, 1989-1992
[4]x x x – Institutul National de Statistica, Recensamantul populatiei si locuintelor din 7.01.1992

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FAMILY IN THE TRADITIONAL ROMANIAN VILLAGE

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Key words : *village community, family status, joint property, family relationships*

Abstract

The most important feature of rural social life is that society is not static phenomenon, but is always subject to changes that cause changes in all its components, including within the family, which is functionally related both individuals and society overall he belongs.Village joint property is a joint Romanian family households, based on a territory ruled jointly, in which the community itself has prior rights and larger households constitutive rights, rights exercised by the governing body called the council. Village community is primarily a governing body of the village but interfamiliale or intrafamiliale governing relations.Family life is governed by clear rules specifying the relations between the spouses, children-parent report, influence of social environment on families, especially in the socialization of children, family social status.

INTRODUCTION

Changes that occur in society affects the characteristics of rural families, so in the study of traditional Romanian family in the village we will consider two main issues:

- analyze the traditional Romanian village, the village communities
- rural family characteristics with the social space of inter-village .

MATERIAL AND METHOD

A significant contribution to the study of the Romanian village owe an illustrious representative of a Sociological School of Bucharest, Professor Henri H. Stahl. Thus in Paperl "Contributions to the study of Romanian villages in common" presents the organization of the Romanian village during the transition from a natural economy and a" simple production of goods ", in a cash economy and a massive" capitalist production of goods ", so the penetration of capitalism in agriculture.
Method used by the Bucharest School of Sociology in analyzing the family unit is monographic method. Monograph is an exhaustive study of a comprehensive social realities. Family unity is an independent set of events spiritual, economic, legal and political, conditioned space, biological, psychological and historical, integrated a series of relationships and social processes.
Significant in terms of rural families in traditional villages of the study is the work "Research Monograph of the family", made of Xenia Costaforu, social worker in interdisciplinary teams launched in the interwar period Romanian Sociological School, villages Runcu Cornova, Fundu Moldova Nerej, Dragus.

RESULTS AND DISCUSSIONS

Nature of the joint property deriving from the traditional Romanian village constituted "is an association of family households, based on a territory ruled jointly, in which the community itself has prior rights and larger households constitutive rights, rights exercised by the governing body called the council"[1]. Management is by the village community was, by all its members, not by a person or group of persons. "People good old" occupied a place at the forefront, being integrated in a complex parish. [3]
Community, as meeting the crowd of villagers, not only have administrative role. Community life of the village are not limited to common economic interests, but includes all social life,

including the internal life of the family of each individual life, both material and spiritual.

Family study intends to present the external environment acting on family life[2]:

- the space refers to the territorial characteristics: location, climate, type of terrain that influences issues studied;
- the biological target village and its demographic characteristics: age at first marriage, birth, divortialitatea, mortality, life expectancy, specific diseases, etc.,
- presents the historical evolution of family forms, the gradual transition from extended family, to form more flexible, tight family;
- psychological context refers to religious life, morality, family, important landmarks in the growth and education;
- economic events as the family presents a workshop production autarchic nature, family solidarity has an important role in this context, related work in the field;
- spiritual events, participation in religious life, in various forms of entertainment suited to every age;
- legal events relate to such assets being family inheritance mode of wealth, family and inheritance system, are important aspects of family life, governed by customary land;
- administrative and political events is related to family interaction and administrative policymakers of that period;

CONCLUSIONS

1. Motivation marriage by a number of factors: the custom and tradition, by imposing on relatives and the community, through its determination of the individual;
2. Barriers to marriage: the distinction of race, religion, coming from different social classes;
3. Equality between spouses, conjugal fidelity, assuming the role of leader, the degree of individual freedom and respect for each personality are factors that lead to living together of spouses;
4. Reasons for termination of cohabitation between spouses: the difference of age, illness, conjugal infidelity, lack of care towards children and her husbands personal defects, intrigue on the part of relatives or strangers;
5. The custom of the earth, the ultimo-genitura male is a patriarchal way of providing old age because parents house remains the smallest of the brothers, with the obligation for them to take care of his parents;
6. Wealth is a wealth of joint property, in which children are entitled to take a share by endowment;
7. Burden-sharing in the household is made differently, depending on age and sex;
8. Relationships are based on system interfamiliale family or neighborhood.

ACKNOWLEDGEMENTS

Sociology School of Bucharest has important scientific contributions to understanding forms of cohabitation family in rural Romanian society. Monographic method is a particularly useful research tool for studying rural communities.

REFERENCES

[1] Henri H. Stahl, 1998, Contribuţii la studiul satelor devălmaşe româneşti, Editura Cartea Romaneasca , Bucuresti , Capitolul 2, p. 25-50, vol. II
[2] Xenia Costaforu, 2005, Cercetarea monografica a familiei, Ed.Tritonoc , Bucuresti , p. 85-215.
[3]Florentina Boiangiu, 2008 , Sociologie rurala, USAMV- IDD, Bucuresti, p. 45-49

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INTERNATIONAL PROGRAMS AND PROJECTS E FOR THE SUSTAINABLE DEVELOPMENT OF THE RURAL AREA - CASE STUDY, CĂLĂRAŞI COUNTY

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Key words**:** *rural development, rural area, programs of rural development, funds use, economic integration.*

Abstract

The rural development at EU level and Romania is an activity of vital importance by the dimension of the rural area, expressed by the surface owned, as well by the percent of the population employed in various activities. If we take into consideration at Romania level also the aspects related to the living conditions of the inhabitants, the services accessibility, the development of physical and social infrastructure, the dimension of the rural development can be transformed into a national dimension. As a conclusion, it is needed the promotion of the rural development programs in all areas of the country, within a concept of rural development regarding the economic and social integration of the Romanian village. Of course, this is possible only by attracting foreign capital in advantageous conditions, in order to support the investment programs, and by training the human resources to use efficiently these funds.

INTRODUCTION

The policy of rural development appeared in the first phases of PAC application. Since the creation of CEE the rural areas contained big changes, especially as a result of the diminishing of the number of farmers. These evolutions made the rural development be a more and more stringent political concern. The policy of rural development must re-establish the connexions between the agriculture and nature, to maintain and to try to keep a cleaner environment, to promote the population stabilisation in these areas.

The main objective of the European Union in the fundamental reform of the first "pillar' of the Common Agricultural Policy in 2003 and 2004, aimed first of all the rural development. Thus, the European Commission adopted on 14th July 2004, the proposal of modification of the EU rural development policy, aiming the consolidation and simplification of the actual system of grants, for the period 2007-2013, by the creation of the *European Agricultural Fund for Rural Development (FAEDR) that replaced the European Fund for orientation and Agricultural Guarantee* (FEOGA), with the role to comply with the exigencies imposed by the enlarged European Union, with a series of major discrepancies regarding the rural area and the living level of the rural population.

MATERIAL AND METHOD

The community development policy of the rural areas, although autonomous, is approached in a concept of global integrated development that contains all the components of social and economic life in these spaces. Gradually, the rural development policy started to cover not only the disadvantaged areas, but also the entire European rural area. As it is known, the EU member states have full liberty to chose the rural development policies in the existing socio-economic conditions in these countries, policies that are in accordance with the Common Agricultural Policy.

The technical reasons that determined this modification refer, mainly, to a high number of programs, programming systems and different systems of financial management and control that exist in the current period of programming and led to the significant increase of administrative task of the Member States and of the European Commission and to the reduction

of coherency, transparency and monitoring of the rural development policy.

RESULTS AND DISCUSSIONS

The main modifications that were taken into consideration by the new rural development policy are oriented to the following fields: grouping all existing measures in an unique instrument of funding and programming; the need to adopt an European strategy for rural development hat will be the base of the elaboration of the national strategies; giving much more liberty to the member states as regards the modality of programs implementation, by reducing the number of detailed rules and the eligibility conditions; orientation mainly of the rural development programs to the real needs of the rural environment.

A. Projects implemented under Pre-Accession Funds in Călăraşi county

A.1.UNDER I.S.P.A. PROGRAM

THE PROJECT – TECHNICAL ASSISTANCE FOR THE ELABORATION OF PROJECTS IN THE SECTOR OF DRINKING WATER AND USED WATER IN ROMANIA - MASTER PLAN, CALARASI COUNTY - (Measure ISPA no. 2003/RO/16/P/PA/013-4). The project funded by the European Union under **ISPA pre-accession fund**, by which it was aimed the elaboration of projects in the environment sector – sector of drinking water and used water, that are to be implemented in Calarasi county, under the Structural Funds, in the programming period 2007 – 2013

A.2. UNDER PHARE PROGRAM

THE PROJECT – COUNTY CENTRE FOR CITIZEN INFORMATION (PROGRAM PHARE RO 9707.01 – FUND OF LOCAL PUBLIC ADMINISTRATION MODERNISATION) THAT HAD AS Objective: The consolidation of the social dialogue with the citizens of Călăraşi county, by developing a strategy that facilitates the circulation of information flow in double way, between the different levels of local public administration and citizens, contributing to the increase of efficiency and performance of the local public administration.

The project value (Euro): 86 882 EURO (of which 49 568 EURO Călăraşi County Council contribution)

A.3. UNDER SAPARD PROGRAM

Table 1. Projects funded in Călăraşi county, on **measure 2.1 – Development of rural infrastructure – sub measure „Roads in rural areas"**
- RON -

No crt.	Objective name	Beneficiary	Project value
1.	Modernisation of local roads DS. 1121, 1622, 825, 2172,1929,32,10 **4,5 Km**	Vlad Ţepeş Local Council	1.174.477
2.	Modernisation of local interest roads **4,2 Km**	Frăsinet Local Council	2.875.882
3.	Modernisation of local interest roads **7 Km.**	Ciocăneşti Local Council	3.394.477
	TOTAL		**7.444.836**

Table 2. Projects funded in Călăraşi county, on measure 2.1 – Development of rural infrastructure – sub measure „Water supply in rural areas"
- RON -

No. crt.	Objective name	Beneficiary	Project value
1.	Water supply of the villages Mitreni and Valea Roşie	Mitreni Local Council	**3.137.515**
2.	Extension and modernisation of water supply in Spanţov commune	Spanţov Local Council	**956.483**
3.	Water supply of the villages Săruleşti and Sănduliţa	Săruleşti Local Council	**905.503**
4.	Extension and modernisation of water supply in Grădiştea commune	Grădiştea Local Council	**1.070.391**
5.	Modernisation and extension of the water supply system	Draglina Local Council	**1.421.323**
6.	Drinking water supply in Gălăţui village	Al. Odobescu Local Council	**684.542**
	TOTAL		**8.175.757**

Table 3. Projects of rural infrastructure funded by sapard program measure 2.1 „development of rural infrastructure" – according to GD 1512 / 29.11.2005 - EURO -

No. crt.	Project name	Beneficiary	Project value
1.	Modernisation of commune road DC 32A Belciugatele-Cojesti	**BELCIUGATELE** Local Council	**541.902**
2.	Rehabilitation of commune road. Asphalting 3 km of road	**CHIRNOGI** Local Council	**668.587**
3.	Modernisation of commune road 5,17km	**FRUMUŞANI** Local Council	Eligible value: **996.847** + non eligible value supported by the Government: **197.642** Total value: **1.194.490,48**
4.	Modernisation of commune road: 3,8 km	**RADOVANU** Local Council	**990.000**
	Total		**3.394.978**

A.4. PROJECTS IMPLEMENTED UNDER EUROPEAN COOPERATION PROGRAMS

1. Development of institutional capacity in order to develop the infrastructure in Romania – Instruments for an efficient and sustainable management of the road infrastructure in Calarasi county and Calarasi municipality The project was funded under the Cooperation **Program between Flanders and Central and East European countries (session 2007).** The project in total value of ***136.475 Euro,*** was implemented during *24 months*, in the period ***01.01.2008 - 31.12.2009.***

2. PROJECT "ITALY - ROMANIA : RESOURCES IN NETWORK, ACTIONS OF FORMATION FOR THE LOCAL PUBLIC ADMINISTRATION DEVELOPMENT". **The project was funded under** Memorandum of Agreement between U.N.C.J.R. (National Union of the County Councils in Romania) and U.P.I. (Union of Italian Provinces), **signed on 31st May 2006. The project in total value of** *55.560 Euro,* **was implemented during** *12 months*, **in the period** *01.02.2007 - 31.01.2008.*

A5. PROJECTS IMPLEMENTED UNDER THE WORLD BANK

1. CONTROL OF POLLUTION IN AGRICULTURE. The project objective: reduction on long term of discharging nutrients and other polluting substances of agricultural origin in the Danube and Black Sea by the integrated management of soil and water and sustainable ecologic use of natural resources in two embanked precincts.

The project addressed to the rural area and aimed the manure management, the integrated management of embanked precincts Boianu-Sticleanu , the ecologic restoration in Călăraşi-Răul embanked precincts, monitoring of water and soil quality, consolidation of regulation capacity on environment policies

Project value (USD): 10,8 million USD (0,29 million USD Călăraşi County Council contribution)

2. RESTRUCTURING OF PLACING CENTRE „CUORE" FĂUREI. Project objective: creation of a social infrastructure in the sector of institutionalised child protection. **Project aim**: Creation of 3 little house family type (12 children per house) in the localities Ulmu, Făurei, Ciocăneşti. **Project location:** Ulmu, Făurei, Ciocăneşti Călăraşi county. **Project value**: 185 thousand EURO (PHARE 2002 - Ro9905.02-CL 056 B)

B. Post-accession projects

B1. UNDER THE EUROPEAN REGIONAL DEVELOPMENT FUND

*** UNDER *the Regional Operational Program 2007-2013 – priority axis 2, Major Field of Intervention 2.1. "Rehabilitation and modernisation of county roads, urban streets – including construction/rehabilitation of ring roads", the projects:***

A) "Modernisation and rehabilitation of the county road DJ 301 section Fundeni - Budesti, km.13+000 - km.36+578". The project is funded by **the European Union**, funding contract ***no.231/12.05.2009*** – total value of the project: ***43.795.745,88 lei***, duration of project implementation : ***31 months.***

B)"IMPROVEMENT OF ACCESS TO THE EUROPEAN TRANSPORT NETWORK TEN T7 IN CALARASI COUNTY, BY THE REHABILITATION AND MODERNISATION OF DJ 201B, KM.19+000 - KM.39+950, ON THE ROUTE LIMIT OF IALOMITA COUNTY- VALEA ARGOVEI

AND DJ 303, KM.26+294 - KM.48+278 VALEA ARGOVEI - MANASTIREA".
The project is funded by the European Union, funding contract ***no. 430/07.07.2009*** – total value of the project : ***44.944.350,96 lei***, duration of project implementation : ***31months.***
C)"MODERNISATION AND REHABILITATION OF THE COUNTY ROAD DJ 303 SECTION CALARETI - VALEA ARGOVEI KM.0+000 - KM.26+294".
The project is funded by **the European Union**, funding contract ***no. 564/08.10.2009*** – total value of the project: ***55.557.533,56 lei***, duration of project implementation : ***31 months.***

B2. UNDER THE COHESION FUND

Under The Sectorial Operational program for Environment 2007-2013 – Priority axis 1, Major Field of Intervention 1.1. "Extension/modernisation of water/used water system", the project "EXTENSION AND REHABILITATION OF WATER AND SWEREAGE SYSTEMS IN CALARASI COUNTY" . The project is funded by **the European Union**, funding contract ***no. 91.803/09.10.2008*** – total value of the project : ***440.395.303 lei***, duration of project implementation: ***62 months.***

B3. UNDER THE EUROPEAN SOCIAL FUND.

Under the Operational Program Administrative Capacity Development 2007-2013 – Priority axis 1, Major Field of Intervention 1.3. "Improvement of organisational efficacy", the projects:

A) "Personalised training for a modern pubnlic administration". The project is funded by **the European Union**, funding contract ***no 28/07.08.2009*** – total value of the project: ***1.312.972,35 lei***, duration of project implementation : ***12 months.***

B) "Development of professional competences within the local public authorities in the fiels of project management and public procurement". The project is funded by **the European Union**, duration of project implementation: *12 months***.**

Development of rural economy by the diversification of economic activities in the rural area, in order to maintain and/or to create jobs and some alternative incomes within the peasants' houses.

Table 3. Centralization of post – accession projects, under implementation

Project name	Funding line	Project value
"Modernisation and rehabilitation of the county road dj 301 section Fundeni - Budesti, km.13+000 - km.36+578"	Regional Operational Program 2007-2013 – Priority axis 2, Major Field of Intervention 2.1. "Rehabilitation and modernisation of the county road network, urban streets – including construction/rehabilitation of ring roads"	43.795.745,88 lei,
"Improvement of the access to European road transport network section ten T7 in Calarasi county, by rehabilitation and modernisation of DJ 201b, km.19+000 - KM.39+950, on the route limit of Ialomita COUNTY- Valea Argovei and DJ 303, KM.26+294 - KM.48+278 Valea Argovei - Manastirea"	Regional Operational Program 2007-2013 – Priority Axis 2, Major Field of Intervention 2.1. "Rehabilitation and modernisation of the of the county road network, urban streets – including construction/rehabilitation of ring roads"	44.944.350,96 lei,
"Modernisation and rehabilitation of the county road DJ 303 SECTION Calareti - Valea Argovei KM.0+000 - KM.26+294"		55.557.533,56 lei,
COHESION FUND		
"Extension and rehabilitation of the water and sewerage systems, in Calarasi county"	Sectorial Operational Program for Environment 2007-2013 – Priority axis 1, Major Field of Intervention 1.1. "Extension/modernisation of water/used water systems"	440.395.303 lei

. Development of human resources by the improvement of the continuous professional training

Increase of living standard in the rural area by the improvement and development of the social infrastructures and of those needed for a sustainable agriculture.

In the rural area, the roads constitute the most important transport route, but the quality and in general, their development and traffic is not still compliant with the European standards. Only a half of the communes have direct access to the road networks and because of this it can be said that the actual road network serves only 3/5 of the total of rural population. Moreover 25% of the communes cannot use the roads in

the periods with precipitations (Study, World Bank, 2007). In 2008, the public roads in Romania covered a surface of 89.914 km, and among these 80% represented county roads and commune roads. The works made during the last years concentrated especially on repairing and modernisation of the network of national roads. The limited financial resources caused the commune and county roads to be seriously neglected, and the quality and their use level decreased dramatically. Only 10,6% of the county roads and commune roads were modernised, among which 30,7% were covered with light road coverings. As regards the situation of the commune roads, at the county level (NUTS 3) a low level of modernisation is registered (only 11,24% of the commune roads are modernised), and this leads to consequences on the development of the productive activities and commercial changes. The percent of the commune roads in total of public roads, at the county level vary between 17% in Calarasi county and 56% in Buzau county. Of the total of commune roads a very low percent is represented by the modernised commune roads, varying between 0,28% in Harghita county and 25,15% in Olt county (5 of the counties – Botosani, Buzau, Covasna, Tulcea and Vrancea do not have modernised commune roads).

CONCLUSIONS

1. Adaptation, modernisation and development of the rural economy in an integrated coherent vision, by the promotion of the development of the rural non agricultural enterprises and a big participation of all economic agents and institutions interested in this complex process, represent an option that is worth being considered. This implies also the reduction or correction of negative effects of the adapting process of the rural areas, by preservation and maintenance of rural society traditions. The priorities that must be taken into consideration for the development of the rural economy are:

a) *Construction of the community capacity to develop activities in the rural area and to have access to resources and for these the following actions are needed:*

- Achievement of some coordination structures for rural development;
- Formulation of a program of rural enterprise to ensure support for projects that promote the adaptation, modernisation and development of the rural areas;
- Creation of local working groups for the elaboration of the socio-economic strategies;
- Initiation of training programs for the local administrations staff;
- Creation of information centres in the main fields of interest in each municipality near town halls, schools or culture houses;
- Creation of intermediate agencies for the labour force employment;
- Increase of funding for socio-economic programs;
- Development of training programs for job creation.

b) Development of small enterprises and economic activities at local level, by practicing the following measures :

- Investments in development, modernisation, improvement of road infrastructure;
- Extension and modernisation of communication infrastructure;
- Creation of facilities (juridical, financial) for the creation of local enterprises to produce specific/traditional products (industrialization, wood and not wood products) ;
- Extension of consultancy centres for the small and medium sized enterprises and service providers;
- Placing a SMEs representative at the level of local council;
- Training of local persons, and improvement of partnership conditions for the development of craftsmen activities.

c) Improvement of local image and creation of new identity of regions favourable for the development of tourist enterprises and services by adopting the following measures:

- Creation at local level of a cultural centre to promote the traditional products;
- Support of cultural activities and traditional programs and their coordination at regional level;
- Preservation of local culture and traditions;
- Ensure facilities for the development of the rural tourism (ecologic, forest tourism);
- Funding of a tourist marketing study;
- Improvement of tourist services quality;

• Improvement of local communities participation in tourism development.

2. The measures proposed to be funded under the National Plan for Agriculture and Rural Development cannot ensure but in percent of 25 - 30% the solving of problems the Romanian rural area face with, such as: lack of some viable exploitations, processing units that must be modernised, lack of rural infrastructure, insufficient development of services, old rural population, an accentuated migration of the young and women to the urban etc.

3. Under these circumstances, it is best to continue under the National Program for Rural Development 2007 - 2013 some measures such as those regarding: the modernisation of agricultural exploitations (measure 3.1), increase of added value of agricultural products (measure 1.1) and forest products (measure 3.5), professional training for the farmers (measure 4.1), support of producers group (measure 3.2), agro-environment (measure 3.3), diversification of non agricultural activities (measure 3.4), encourage the tourist activities (measure 3.4), the first afforestation of the agricultural land (measure 3.5).

REFERENCES

[1] Crețu D., Constantin D, 2008, Creation and management of an agro tourist household, Alas Publishing House, Călăraşi , 2008,Chapter 3, p. 61-78

[3] x x x – Statistical data, Călăraşi Direction for Agriculture and Durable Development

[4] x x x – Statistical data, County Office of Pedologic and Agrochemical Studies

[5] x x x – Statistical data, Călăraşi Agency for Environment Protection

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IMPORTANCE AND DEVELOPMENT OF SERVICES IN THE RURAL SPACE - CASE STUDY, CĂLĂRAŞI COUNTY-

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Key words: *rural industry, value of service providing, service quality, rural clients.*

Abstract

The development of the rural industry and services must represent a fundamental objective of the authorities duet to their economic and social implications on the inhabitants of the villages. Regardless what group they are in, the services providing that are to be concluded or developed, aim to ensure the more complete use of the labour force and the increase of the population incomes in the rural area. The units that provide services for agriculture must take into account especially, the adequate time management. It will take care not to overload with clients because of the agriculture specific. If they will work under time pressure, the services will not be of high quality. It is also important the determination of the services tariffs that measure the value perceived by the client and that reflect the quality and value of the service providing. Taking into consideration the poor financial state of the agricultural exploitations, the tariffs must be established at an acceptable level, to allow the profit achievement by the providing unit

INTRODUCTION

A way to revalorise the rural area in the regional economic context is the development and promotion of sectors of services specific to it and activities based on the use of local resources. O the potential of the rural area, regarded mainly only by existent agricultural surfaces and activities related to their work, are based on the existence of some specific insufficiently explored resources and can constitute an alternative and at the same time an opportunity of diversification of rural economy. The measure, aims the orientation and support of private sector to activities related to agriculture and with non agricultural specific in the field of agro food processing, manufacture processing and agro tourism. The adequate development of this sector contribute to the formation and consolidation in the region of a middle class with decisive role in social stability and in increasing the life quality in the rural area.

MATERIAL AND METHODS

In the rural area in Calarasi a series of non agricultural activities develop (rural tourism, agro tourism, processing of some agricultural raw materials, commerce, transports etc.), that have a positive impact on the rural communities, contributing to the ensure supplementary incomes and to increase the level of use the labour force.

At present there are deep disparities at regional level, and especially between the urban and rural areas, as regards the business sector, because of an insufficiently developed infrastructure in the rural areas, lack of financial resources, difficulties in credit accessing, but also a reduced level of entrepreneurial training.

The study was based on the Development plan of Muntenia Region, statistical data of the Regional Department of Statistics Calarasi, Department for Agriculture and Rural Development Calarasi and County Office for Agricultural Consultancy.

RESULTS AND DISCUSSIONS

The more diversified the structure is, the more favourable the social implications are: possibilities to employ the labour force, population stability, maintain the young in the rural area (with possibilities to work in non agricultural activities, but related to agriculture), guaranteeing thus the different sources of incomes for the rural population;

complementarity in using the labour force; use of partial time of the employees in private familial agricultural farms etc

Thus it is imposes the need to create alternative jobs, as well sources of additional incomes from non agricultural activities, together with the re-orientation of the labour force to non agricultural productive activities and to the development of services for the rural population. The rural area must be not conceived as a predominantly agricultural area.

Other difficulties in the rural area are linked to the access of medical and educational services, the access of the rural population to basic education and to health services is hindered by the poor transport services, with a negative impact on the urban – rural flow of the doctors and teachers. The adequate roads represents an essential condition for the economic development, besides the other sectors of human and social development.

Drinking water supply

To ensure a current **drinking water network** represents another major problem that **condition the life** and the development of economic activities in the rural area. Only 33% of the inhabitants in the rural area (3,4 million of inhabitants) have access to the public water network, as regards the hot water network the situation is much more critical. Given this, most houses (70%), use the wells for the water consume. In 2008, 43,6% of the total length of drinking water supply is in rural areas and 56,4% in urban areas.

Public sewerage network

The public sewerage network is still in an early phase in the rural area, at the end of the year 2008, 503 communes (16% of the total of rural population) benefited by a sewerage network. The differences between the urban and rural areas are very big as regards the sewerage infrastructure. In 2008, 88,2% of the length of pipelines crossed the towns and only 11,8% the villages.

Waste management

In the rural area, in general, the services for the waste management are poorly developed or even inexistent in some localities. As a rule, the transport to the storage places is made individually by the generators. A small part of the rural localities and especially those rural localities situated near the urban centres are served by services organised only for the waste management. Besides the deposits of municipal waste in the urban area, in Romania 3.686 deposit spaces were identified in the rural area with a surface of at most a hectare. The closure and ecologisation of the rural deposits, finalised until the end of the year 2009, once with the extension of the waste collection at rural level also, the achievement of the transport system, transfer and opening of zone deposits.

Electric power

In the rural area, the connection to the public networks of electric power supply remains a problem. In Romania there is a number of 37.977 houses situated in 1.772 rural localities partially electrified and 3.327 houses situated in 121 localities not electrified (MIRA-2009).

Heating energy

The services for heating energy supply are limited in the rural area, only 0,5% of the total of heating energy being distributed in these areas, due to the fact that many of the factories that produced this energy and distributed it to the villages nearby reduced their activity or gave up to these services providing. Therefore, at national level only 26 of rural localities benefit by this service. As regards the heating by heating station, only 2,4% of the houses in the rural area benefit by this service, while 89% of the houses use stoves based on wood, charcoal, petrol.

Access to internet

At present, in the rural areas the access to internet is very limited, only some public institutions benefit by it especially; as it is needed to improve the competitiveness in almost all fields of activity and as there is a problem of productivity in the rural economy, as regards the facility of the access on the market and to information, it is essential to exist access to internet by cable in more rural areas. The internet connection infrastructure in broadband is an interdependent problem of basic infrastructure in the rural area.

Education and training

The human capital presents remarkable importance for the rural development. The rural development and diversification of the rural economy depend on the level of education, knowledge and qualification.

Although the improvement and maintenance at an adequate level of the basic infrastructure is an important element in the socio-economic development of the rural area, the professional training represents "the engine" , for a good development.

The education and training are essential for the rural communities, but also at regards the school infrastructure obvious discrepancies exist.

Also it can be said that the number of schools in the rural area exceeds the needs of population, the education quality is reduced, on the one hand due to the insufficient equipment of the educational infrastructure, and on the other hand due to the level of teachers training/experience. Most schools need renovations, furniture, basic supplies and teaching materials. The infrastructure and facilities related to the vocational education and primary education constitute important instruments for the conversion of the agricultural labour force in non agricultural labour force. The professional and primary education structures are essential for the professional reconversion of the agricultural workers, as most farmers have only elementary knowledge of mechanics and in other technical sectors.

The poor level of training reflects in the quality of the labour force in the rural area, being a restrictive factor for the economic development in this area. The diversification of the economic activities is not supported by workers with training or experience specific to various types of jobs, as the educational system was not adapted to the specific requirements in the rural area.

The education institutions in the rural area, represented by the kindergardens, primary units and secondary units are poorly equipped as regards the technical and teaching material. IT technology and hardware and softeware equipment are rarely met within the schools in the rural area while the equipment needed for the vocational training or for the apprentices is obsolete or is missing. A supplementary problem is the difficulty to attract qualified staff in the rural areas. In general, it can be said that, in the rural areas, the education is even more poor from qualitative point of view than in urban areas, due to the permanent problems of funding.

As regards the number of **kindergardens** this was at the level of the year 2008 of 1526 of which 218 in the rural area.

Also the units of **primary and secondary education** in the rural area represented 73,9% of the total number of schools at national level.

During the analysed period, the number of education institutions in the rural areas decreased, as a consequence of the restructuring of the education system and lack of qualified teachers.

As regards **the participation level** of the individuals in the educational process, in the school year 2008 – 2009, a percent of 31,3% of the total population registered in the education system studied in the rural areas. The percent of the rural population with high education represents 1,8% of the total population aged 15 years and over, being a consequence of the low level of access and insufficient incomes.

As regards the **continuous training** in the rural area, the percent of the adult population aged between 25 – 64 years who participate in education and training registered an increase from 0,2% in the year 1998 to 2,5% in the year 2008. still, compared to the urban area, that registered in 2008 a percent of 4,3%, this indicator is situated at inferior level. The population average in the rural area, aged between 25 and 64 years and with medium and high education level is of 55%.

The stability of **the incomes in the hous**e has a strong effect on the participants to the educative act. The children in the work families with low incomes or in the families of pensioners are two times more exposed to the risk of school abandon, comparatively to the children in the families with a stable source of income. Besides, in the rural area, the situation is more dramatic as it appears the increased risk of school abandon by the children in the described situations. Other reasons of the school abandon found out especially among the children in the rural mountain communities are: extreme poverty, lack of transport means and poor motivation regarding the economic gain as result of education. The poor quality of education in the rural areas, due to the lack of

qualified teaching staff acts also as a non motivating factor.

Supply and access to medical service represent a key problem to ensure a better quality of life in the rural communities and for the economic and social development of the rural areas. At the same time, the rural areas, especially with dispersed population, represent unique provocations for the services management and use. It is needed also to improve the community support for the vulnerable groups, such as old persons, especially those who live in isolated places. The problem of the old persons in the rural areas did not enjoyed attention from the concerned part; as in other countries, this group needs a special care, as there is not yet available qualified staff. Thus, in the year 2009, at national level, from a total number of 168 units for adults assistance only 19 units represented hostels for old persons. At the level of the year 2008, in the rural space, there were only 81 children houses.

CONCLUSIONS

1. The promotion of development of agricultural functions of the rural areas accompanied by the equal promotion of non agricultural functions of these areas. This model is comparable with the economic and social policy of the European Union, its main objective consisting of reduction of development disparities between the EU regions and implicitly, the reduction of development discrepancies between the rural and urban.

2. The adoption of those measures to solve on the one hand the problem of rural infrastructure, but also the structural problems of the agriculture, on the other hand. These wishes will be achieved by the reduction of the number of persons who gain their living from the agricultural activity, a direct effect of these actions being the liberation of some lands, and this will generate the merging and consolidation of viable farms. This will lead to the increase of efficiency of the Romanian agriculture, to the promotion of managerial skills of the farmers and orientation of agricultural activities to profitable investments, including integrated projects.

3. Given the current situation of the rural sector and the limited available funds, it is needed to use them rationally and efficiently by a correct distribution of funds for rural development to carefully selected actions and priorities, such as:

- Maintenance of quality and diversification of the rural area in order to obtain a balance between the human activities and preservation of the natural resources.
- Improvement of living standards in order to ensure a sustainable employment of the rural areas and to contribute to the territorial balance both from political and social point of view.

REFERENCES

[1] NS – Statistics Notebook – Pre school and school education, 2009.
[2] Creţu D. şi colab, 2008, Creation and management of an agro tourist household, Alas Publishing House, Călăraşi , Chapter 3, p. 50-55
[3] x x x – Statistical data, Călăraşi Direction for Agriculture and Durable Development
[4] xxx - Annual Statistics of Romania, 2009
[5] x x x – Statistical data, Călăraşi Agency for Environment Protection

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HACCP'S ORIGIN AND JUSTIFICATION

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Keywords: *HACCP, system, food- safety*

Abstract

Consumers are constantly demanding safe food products. Increasingly, they are questioning food safety, especially after the latest food scandals. As a consequence, EU food regulations have become stricter and business operators require self-checking systems for their companies (CCE 2000a; CCE 2000b; Law 20/2002; Regulation 178/2002). Thus, the agri-food sector has to be aware that control is not the government's responsibility, but rather the business operators themselves are responsible for establishing self-checking systems to ensure safe food production.

INTRODUCTION

The HACCP (Hazard Analysis Critical Control Point) system is worldwide considered as an appropriate tool for self-checking, since it is a focused approach to identifying and subsequently controlling those points or steps of the agri-food chain essential to guarantee food safety.

MATERIAL AND METHOD

The application of HACCP to food production was pioneered, during the sixties, by the Pillsbury Company with the cooperation and participation of the National Aeronautic and Space Administration (NASA), Natick Laboratories of the U.S. Army, and the U.S. Air Force Space Laboratory Project Group to ensure the safety of the food that astronauts would consume in space. NASA wanted a "zero defects" program assurance against contamination by bacterial and viral pathogens, toxins, and chemical or physical hazards that could cause illness or injury. At that time, it became clear that in order to produce safe food products it was necessary the classic monitoring systems, based on the inspection of the finished product, evolved toward a system of preventive control during production. This control of the process would control the occurrence of hazards, and thus it would ensure a high level of confidence in the finished product (Mortimore and Wallace, 1998). During the 1970's, in the chemical sector it was very common to use the well-known technique of Failure, Mode and Effect Analysis (FMEA). This technique is characterized by the study of each one of the stages of the process, by analyzing what can go wrong, the possible causes of the problem and its probable effects (ICMSF, 1988).

Taking this system as a reference, another similar system was elaborated but applied to the agri-food industry. Thus, the HACCP system was established during that decade. Similar to the FMEA technique, HACCP searches for hazards related to food safety, and subsequently establish management and control mechanisms designed to ensure the safety of the product and its safety for consumers. In summary, the HACCP is a preventive food control system whose objective is food safety.

HACCP was first described publicly in 1971 at the National Conference on Food Protection. After a public outcry following a botulism outbreak involving canned soups, the U.S. Food and Drug Administration (FDA) ordered the first use of HACCP by regulation in 1973 for all low-acid canned foods.

The United States National Academy of Science recommended in 1985 that the HACCP approach should be adopted in food processing establishments because it was the most effective and efficient means of assuring the safety of the food supply.

In 1988, the International Commission on Microbiological Specifications published a

book on HACCP for Foods (ICMSF, 1988). Two years later, in 1990, the Codex Alimentarius Commission fCAC) and Codex Committee on Food Hygiene (CCFH) started to prepare draft guidelines for the application of the HACCP system. Recognizing the importance of HACCP for food control, the twentieth session of the Codex Alimentarius Commission, held in Geneva, Switzerland from 28 June to 7 July 1993, adopted the *Guidelines for the application of the Hazard Analysis Critical Control Point (HACCP) system* (ALINORM 93/13A, Appendix II). The Commission was also informed that the revised General Principles of Food Hygiene draft would incorporate the HACCP approach. Also in 1993, the European Union officially recognized the HACCP methodology as a standard production method for food manufacturers to implement and maintain a production control system. The recognition was established in the Directive 93/43/BEC on the hygiene of foodstuffs. From that time, Member States had 30 months to integrate this Directive in their laws. As a consequence, all food manufacturing facilities within the EU were forced to work in accordance with 5 of the 7 principles from January 1, 1997. In 1994, the FDA announced plans to require the use of HACCP in the seafood industry beginning in 1997. In 1995, the USDA announced plans to require HACCP in all meat and poultry plants under its jurisdiction, beginning in 1998 to replace the "poke and sniff method. The USDA program, prior to 1996 HACCP implementation, established baseline prevalence levels for the presence of microbial organisms such as *Salmonella* in meat and poultry.

In June 1997, the revised *Recommended International Code of Practice - General Principles of Food Hygiene* (CAC/RCP 1-1969, Rev 3 (1997)) was adopted by the Codex Alimentarius Commission during its twenty-second session.

The Codex General Principles of Food Hygiene lay a firm foundation for ensuring food hygiene. They follow the food chain from primary production to the consumer, highlighting the key hygiene controls at each stage and recommending an HACCP approach wherever possible to enhance food safety. These controls are internationally recognized as essential to ensure the safety and suitability of food for human consumption and international trade.

In 1998, the FDA announced plans for implementing HACCP for all fruit and vegetable beverages, and is now considering whether to establish HACCP as the food safety process standard throughout all segments of the food industry under its authority. Beginning in 1999, the FDA incorporated HACCP into the *Food Code,* the biennially published reference for the prevention of foodborne illness in restaurants, grocery stores, and institutions such as nursing homes and hospitals. Since the *Food Code* serves as model legislation for all states and territories, many state governments now require evidence of HACCP processes for establishments under their purview.

USDA data released in 2000 and 2001 showed significant reductions in bacterial levels across a variety of food products following HACCP implementation. Numerous academic researchers have also found evidence documenting the usefulness of HACCP in reducing the levels of foodborne pathogens in food production and food service.

HACCP is here to stay, and is becoming an international requirement. The Codex Alimentarius Commission, the international food standards-setting body overseen by United Nations agencies, the Food and Agriculture Organization (FAO), and the World Health Organization (WHO) now recommend HACCP adoption worldwide, and the EEC, with the proposal of the Regulation of the European Parliament relative to the hygiene of food products, makes the fulfillment of all the principles of the HACCP established in the Codex obligatory. Also, HACCP is now embedded in the General Agreement on Tariffs and Trade (GATT), and nations are rushing to implement the process to ensure the safety of their domestic products and to survive in fiercely competitive world food markets.

RESULTS AND DISCUSSIONS

The HACCP concept is a systematic approach to hazard identification, assessment and control.

From the moment something goes wrong, it is possible to act and react quickly and efficiently. This prevents large sets of products being rejected and public health being endangered. This system eliminates disadvantages inherent in control by inspectors and microbial end product control. By concentrating only on those factors, which have a direct effect on the safety of the food product, no energy and money should be spent on less important factors. This system is cheaper and more effective compared to the traditional control systems.

By focusing on the critical points, which influence the safety and quality of food products over the complete production line, producers can show now that they are controlling the production conditions and that safe products are provided. Moreover, inspectors are now able to check the effect of the measures in the long term, where earlier inspections gave a picture at a given moment.

The HACCP system is a preventive, company-specific, quality system starting at the selection and purchase of raw materials, ingredients and packaging materials, following the complete production process and ending at the final product, ready for consumption.

Nowadays HACCP is a system internationally recognized and used. The benefits of the application of HACCP to consumers, companies and the administration have been clearly demonstrated. Although its use focused initially on industry, nowadays it is applied to other sectors such as distribution chains, sales, catering, and traditional food product processing, etc. The structured approach of its application makes it useful for the products currently marketed, as well as for new products to be manufactured in the future.

Some of the most relevant benefits are:

■ It increases food quality and safety, with a positive impact on the collective health and common well-being, since it is a preventive control system of food processing that maximizes the possibility that these food products are safe.

■ It provides confidence to clients, the administration and the agri-food operators. The companies that use this system to manage the safety of their products show that they take their responsibilities seriously and that they comply with the legislation on food safety and hygiene.

■ It facilitates commercial exchanges within and outside the European Union (EU), due to the safety assurance it provides to the administrations of different countries. One of the most important obstacles to this, which was prevented for a long time by the establishment of a Single Market in the EU, was the assurance of safety of food products produced in countries outside the European Union, since the effectiveness of administrative controls was very different from country to country. The European Commission found the solution in the HACCP System, in which the responsibility for the health assurance was not under external controls, but under self-checking systems.

■ It is applicable to the entire agri-food chain. Although the primary sector - production of raw materials (agriculture, livestock farming and fisheries) is exempt from the obligation to apply this system, the latest food safety scandals highlighted that this is the weakest link of the chain. Current proposals from international bodies aimed at the necessary application of HACCP in the primary sector will soon be a reality.

■ It is sufficiently flexible so as to adapt the necessary changes, such as: improvements in the design of equipment, improvements in processing and technological advances associated with the product. Its application is possible for those products currently marketed, as well as for new ones that can be manufactured in the future.

■ It provides documented evidence that the process is self-checking, and allows for planning of ways to avoid problems, instead of waiting for them to occur to control them. Documents and records allow, in the event of audits by public health inspectors, easier, more efficient and more precise control. It will demonstrate the company's compliance with the legislation at all times, present or past.

■ The system is an important economic saving for companies as well as for the Public Administration. With regard to companies, this saving is a consequence of minimizing Quality Control efforts, thanks to the preventive approach; significantly reducing the costs due to operational failures (losses due to wastes,

reprocessing, production halts, loss of orders, etc.); facilitating the immediate application of corrective actions, when deviations are detected; and allowing an effective use of resources, focusing and channeling expenditure where it is really essential. With regard to the Public Administration, the saving is a consequence of: reducing medical costs caused by the alteration of consumer health; reducing productivity losses due to sick leave; and reducing costs of inspection and monitoring in companies.

■ The HACCP system, in the agricultural sector, is a preliminary stage essential for the implementation of other wider quality management systems such as the ISO 9000-2000 series.

CONCLUSIONS

1. Some of the different Quality Assurance System (QAS) models internationally applied to the whole industrial sector, and therefore to the food and agri-business industry, are: BRC (British Retail Consortium), IFS (International Food Standard), ISO 9000-2000 family, and more recently, the EFQM (European Foundation for Quality Management). The model described by the ISO 9000-2000 standard has highest international recognition and, to a large extent, is the referent for the certification of quality systems. It is mainly aimed at preventing and detecting the presence of faulty products during their production and distribution and at ensuring, by means of preventive and corrective actions, that products that do not meet the specifications will not appear again. The ISO 9000-2000 series encourages business organizations to increase client satisfaction by means of the compliance of its specifications, as well as highlighting continuous improvement.
2. In the agri-food industry, the ISO 9000-2000 series can be used to process food that complies with the specified requirements, as in any other industrial sector. But HACCP must also be used in this sector, as it is essential to ensure food safety,. Therefore, both systems are supplemented to provide the maximum level of confidence: ISO 9000-2000 in terms of quality and the HACCP in terms of food safety management. In the agri-food sector, the interrelationship between both quality systems is so evident that the Codex Alimentarius in its Guidelines for the application of the HACCP states (Codex, 1993): "The application of HACCP is compatible with the implementation of quality management systems, such as the ISO 9000 series, and is the system of choice in the management of food safety within such systems."
3. In fact, the combined application of both systems is referred to in the 2001, ISO 15161 standard, which establishes the Guidelines for the application of the ISO 9001-2000 in the food and drink products industry. The ISO 15161 standard lists the specific points of ISO 9001-2000 standard and the principles of the HACCP as follows: "ISO 9001:2000, allows an organization to integrate its quality management system with the implementation of a food safety system that is more effective than the application of either ISO 9000 or HACCP alone, leading to enhanced customer satisfaction and improved organizational effectiveness".

REFERENCES

[1] www.fao.org/spfs/spfs-home/en/

[2] http://www.iso.org/iso/iso_catalogue/management_standards.htm

[3]http://www.clubafaceri.ro/info_articole/122_calitate_iso_9001/2654/Scurt+istoric+al+standardelor+din+familia+ISO+9001.html

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RISK MANAGEMENT AND FOOD SAFETY ISSUES

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Abstract

The three components of risk analysis should be applied within an overriding framework for management of food-related risks to human health. There should be a functional separation of risk assessment and risk management, in order to ensure the scientific integrity of risk assessment, to avoid confusion over the functions to be performed by risk assessors and risk managers, and to reduce any conflict of interest However, it is recognised that risk analysis is an iterative process, and interaction between risk managers and risk assessors is essential for practical application.

INTRODUCTION

Food business operators should control food hazards through the use of systems such as HACCP.
They should:

- identify any steps in their operations which are critical to the safety of food;
- implement effective control procedures at those steps;
- monitor control procedures to ensure their continuing effectiveness; and
- review control procedures periodically, and whenever the operations change.

These systems should be applied throughout the food chain to control food hygiene throughout the shelf-life of the product through proper product and process design.
Control procedures may be simple, such as checking stock rotation calibrating equipment, or correctly loading refrigerated display units. In some cases a system based on expert advice, and involving documentation, may be appropriate. A model of such a food safety system is described in Hazard Analysis and Critical Control (HACCP) System and Guidelines for its Application. (Recommended international code of practice for general principles of food hygiene).

MATERIAL AND METHOD

The precautionary principle has been invoked to ensure health protection in the European Community, thereby giving rise to barriers to the free movement of food or feed. Therefore, it is necessary to adopt a uniform basis throughout the Community for the use of this principle. In those specific circumstances where a risk to life or health exists but scientific uncertainty persists, the precautionary principle provides a mechanism for determining risk management measures or other actions in order to ensure the high level of health protection chosen in the Community. In specific circumstances where, following an assessment of available information, the possibility of harmful effects on health is identified but scientific uncertainty persists, provisional risk management measures necessary to ensure the high level of health protection chosen in the Community may be adopted, pending further scientific information for a more comprehensive risk assessment. Adopted measures shall be proportionate and no more restrictive of trade than is required to achieve the high level of health protection chosen in the Community, regard being had to technical and economic feasibility and other factors regarded as legitimate in the matter under consideration. The measures shall be reviewed within a reasonable period of time, depending on the nature of the risk to life or health identified and

the type of scientific information needed to clarify the scientific uncertainty and to conduct a more comprehensive risk assessment. Food safety and the protection of consumer's interests are of increasing concern to the general public, non-governmental organizations, professional associations, international trading partners and trade organizations.

It is necessary to ensure that consumer confidence and the confidence of trading partners is secured through the open and transparent development of food law and through public authorities taking the appropriate steps to inform the public where there are reasonable grounds to suspect that a food may present a risk to health ((EC) No 178/2002).

Risk management is defined within Codex as the process of weighing policy alternatives in the light of the results of risk assessment and, if required, selecting and implementing appropriate control options, including regulatory measures. The outcome of the risk management process, as undertaken by Committees within the Codex Alimentarius system, is the development of standards, guidelines and other recommendations for food safety, the national situation it is likely that different risk management decisions could be made according to different criteria and different ranges of risk management options. The overall objective of Codex is to ensure consumer protection and to facilitate international trade.

Risk managers, in developing approaches to managing risk, utilize the risk characterization that results from the risk assessment process. An important principle that was recognized by the 1995 consultation was the functional separation of risk assessment from risk management.

The significant worldwide increase in foodborne illness that has been recognized in recent years, especially arising from enteric organisms, suggests the need for more effective control using internationally agreed risk management methods.

Risk analysis is widely recognized as the fundamental methodology underlying the development of food safety standards. As recognized in the 1995 consultation, risk analysis is composed of three separate but integrated elements, namely risk assessment, risk management and risk communication. That consultation recognized risk communication as an interactive process of exchange of information and opinion on risk among risk assessors, risk managers, and other interested parties.

RESULTS AND DISCUSSIONS

Managers should ensure effective procedures are in place to deal with any food safety hazard and to enable the complete, rapid recall of any implicated lot of the finished food from the market. Where a product has been withdrawn because of an immediate health hazard, other products which are produced under similar conditions, and which may present a similar hazard to public health, should be evaluated for safety and may need to be withdrawn. The need for public warnings should be considered.

Recalled products should be held under supervision until they are destroyed, used for purposes other than human consumption, determined to be safe for human consumption, or reprocessed in a manner to ensure their safety (Recommended international code of practice general principles of food hygiene).

Facing a product recall

The past decade has witnessed the development and implementation of elaborate systems in order to guarantee that food products and raw materials for food products meet all the demands made by governmental agencies, manufacturers, food distributors or consumers. Despite all these efforts, from time to time defects in food products and raw materials occur. Examples are sensory deviations, microbiological spoilage, contamination with product-foreign compounds or contamination with product-foreign particles. Sometimes the defects can be so severe that a product recall is inevitable.

Frequently, the decision-making process in a product recall is hampered by a lack of information as to the nature of the defect and the possible consequences of the defect. With respect to a product recall important decisions are to be made in a very short time (Kersten, 2000).

Finding the cause and judging the consequences

Long-standing experience in examining quality defects and providing trouble-shooting strategies is a prerequisite to answering questions like 'what is the nature of the defect?' and 'what is the health risk, if any?' For providing relevant information widespread experience is necessary as well as the highest quality equipment that can identify e.g. a minute quantity of a contaminant that causes deviation. The compound is to be isolated from the food and is to be identified by one of a range of the most advanced analytical techniques available. Sometimes defects are of microbiological origin and the expertise of microbiologists who are familiar with product and process parameters that determine the microbiological quality of foods is necessary.

Once a suspect compound has been identified, top toxicologists need to be consulted to assess the health risk, if any, resulting from consumption of the substance causing the defect.

General plan for crisis management

The Commission shall draw up, in close cooperation with the Authority and the Member States, a general plan for crisis management in the field of the safety of food and feed (hereinafter referred to as 'the general plan'). The general plan shall specify the types of situation involving direct or indirect risks to human health deriving from food and feed which are not likely to be prevented, eliminated or reduced to an acceptable level by provisions in place or cannot adequately be managed solely by way of the application of Articles 53 and 54.

The general plan shall also specify the practical procedures necessary to manage a crisis, including the principles of transparency to be applied and a communication strategy ((EC) No 178/2002).

Crisis unit

Without prejudice to its role of ensuring the application of Community law, where the Commission identifies a situation involving a serious direct or indirect risk to human health deriving from food and feed, and the risk cannot be prevented, eliminated or reduced by existing provisions or cannot adequately be managed solely by way of the application of Articles 53 and 54, it shall immediately notify the Member States and the Authority. The Commission shall set up a crisis unit immediately, in which the Authority shall participate, and provide scientific and technical assistance if necessary ((EC) No 178/2002).

Tasks of the crisis unit

The crisis unit shall be responsible for collecting and evaluating all relevant information and identifying the options available to prevent, eliminate or reduce to an acceptable level the risk to human health as effectively and rapidly as possible. The crisis unit may request the assistance of any public or private person whose expertise it deems necessary to manage the crisis effectively. The crisis unit shall keep the public informed of the risks involved and the measures taken ((EC) No 178/2002).

A rapid alert system for the notification of a direct or indirect risk to human health deriving from food or feed is hereby established as a network. It shall involve the Member States, the Commission and the Authority. The Member States, the Commission and the Authority shall each designate a contact point, which shall be a member of the network. The Commission shall be responsible for managing the network. Where a member of the network has any information relating to the existence of a serious direct or indirect risk to human health deriving from food or feed, this information shall be immediately notified to the Commission under the rapid alert system. The Commission shall transmit this information immediately to the members of the network. The Authority may supplement the notification with any scientific or technical information, which will facilitate rapid, appropriate risk management action by the Member States. Without prejudice to other Community legislation, the Member States shall immediately notify the Commission under the rapid alert system of:

- any measure they adopt which is aimed at restricting the placing on the market or forcing the withdrawal from the market or the recall of food or feed in order to protect human health and requiring rapid action;
- any recommendation or agreement

with professional operators which is aimed, on a voluntary or obligatory basis, at preventing, limiting or imposing specific conditions on the placing on the market or the eventual use of food or feed on account of a serious risk to human health requiring rapid action;

- any rejection, related to a direct or indirect risk to human health, of a batch, container or cargo of food or feed by a competent authority at a border post within the European Union.

The notification shall be accompanied by a detailed explanation of the reasons for the action taken by the competent authorities of the Member State in which the notification was issued. It shall be followed, in good time, by supplementary information, in particular where the measures on which the notification is based are modified or withdrawn. The Commission shall immediately transmit to members of the network the notification and supplementary information received under the first and second subparagraphs.

Where a batch, container or cargo is rejected by a competent authority at a border post within the European Union, the Commission shall immediately notify all the border posts within the European Union, as well as the third country of origin. Where a food or feed which has been the subject of a notification under the rapid alert system has been dispatched to a third country, the Commission shall provide the latter with the appropriate information. The Member States shall immediately inform the Commission of the action implemented or measures taken following receipt of the notifications and supplementary information transmitted under the rapid alert system. The Commission shall immediately transmit this information to the members of the network.

CONCLUSIONS

1. Participation in the rapid alert system may be opened up to applicant countries, third countries or international organizations, on the basis of agreements between the Community and those countries or international organizations, in accordance with the procedures defined in those agreements.

2. The latter shall be based on reciprocity and shall include confidentiality measures equivalent to those applicable in the Community ((EC) No 178/2002).

REFERENCES

[1] www.fao.org/spfs/spfs-home/en/
[2] ftp://ftp.fao.org/codex/Newsletters/Newsletter_04_Jan2010.pdf
[3] http://www.who.int/foodsafety/publications/micro/jan1997/en/index.html

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COLLECTION OF WILD PLANT AND ANIMAL SPECIES AS A FACTOR OF RURAL DEVELOPMENT: CASE STUDY OF REPUBLIC OF SERBIA

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Key words: *organic production, rural development, Republic of Serbia.*

Abstract

Available socio-economic indicators define Serbia as mostly agrarian country, in which to agricultural production is assigned role of developmental priority in near future. From many factors of agricultural production, more active relation of domestic producers to all lines of organic agriculture may affects on increase of Republic agriculture competitiveness, compared to close surroundings, as on more qualitative development of rural areas. Suitable climate and geographical conditions, unpolluted environment, expressed biodiversity and constant demand growth for organic produced products, definitely are on the side of this production organizers. In this paperwork, authors are trying to present all actualities within organic agriculture, particularly focused on the segment of wild plant and animal species collection, during the period 2005-2009.

INTRODUCTION

Agricultural production and industry related with agriculture are some of the most important branches of Serbian economy. Although in a crisis 2009 come to fall of total GDP for some 3.5% in compare to previous year (in 2009. is accomplished GDP in amount of 31 billions EUR), production results of primary agriculture were realized in desired frame. According official estimations it participated with around 12% in GDP creation (around 20% if in focus is complete agro-complex). Also, encourages growth of traditionally positive foreign trade surplus of agriculture and processing industry (in 2009 approximately 700 millions of USA dollars), accomplished primarily by the export on the EU countries market (preferential status) and market of Western Balkan countries (CEFTA), which together in export structure participate with over than 90%. Assigned status of development economic priority, effected on expected increase of Agrarian budget in current year (from 16 billions RSD during 2009, it jumps up to projected 25.6 billions RSD in 2010, what assumes around 3% of total Republic budget. Having in focus obvious natural advantages of Serbia, despite affection on usual lines of agricultural production, relevant Ministry should take more energetic actions in promotion and development of organic agriculture, what will affect, as on strengthening of competitiveness of national agriculture (compared to close surroundings), as well on more qualitative development of rural areas.

MATERIAL AND METHOD

Basic data were taken from Institute for nature conservation of Serbia, Belgrade, available documentation of IAE, Belgrade, as from other world and national published and electronic data resources. Research is based on available data. Method applied was *desktop study*. Researched period was 2005-2009.

RESULTS AND DISCUSSIONS

Natural potential of Serbian agriculture is reflected in: 5.1 million ha of agricultural land, from which approximately 4.2 million ha is arable; 2.8 million ha under forest complexes; still unpolluted environmental elements (soil, water, air); expressed diversity of flora and fauna[15] (4,182

15 Serbian flora is constituted from 4,182 vascular plant species, around 1,400 species of algae, 560 species of moss, 516 species of lichens and 650 species of fungi. All at all, with approximately 7,300 plant species in total, Serbia belongs to group of richest country by present

species of vascular plants, where around 700 plant spices are with proved medicinal characteristics); suitable physical, geographical and climate position, etc.

Also, it has to be noticed that rural areas settle more than 3.3 million inhabitants. From that number, 817,052 residents (according census from 2002.) is declared as agricultural (11% of total population). Inside shown labour contingent, 529,236 inhabitants are active, while exist more of them who are dealing with agriculture as a complementary activity, or those one who in transitional and crisis years, after companies leaving (quitting), over passed from industry to agriculture. Estimations are that momentarily Serbia has over than 750,000 agricultural husbandries (31% from total number of households), where only 418,000 of them are registered, or less than 80,000 had the right to receive subsidies during the 2009 (according the valid criterion, that at least one member per household pays all prescribed contributions - taxes).

Undoubtedly is fact that in industrially developed world parts, it could be felt, during last few decades, negative impacts of economic activities on state of environmental elements, indirectly on total agricultural production too (reaction of nature). This is particularly expressed through parameter of GHGs emission (Greenhouse gases), which level is primarily predetermined by: economic structure and production dynamics within dominant sectors of economy; valid legislation; level of ecological awareness; level of total expenditures in environmental protection and preservation; etc.

Leading by current and possible pollution consequences (at first place global climate changes), on world level starts more active relation toward solving of noticed problems. For example in EU, during 2007 are adopted E*nergy and climate change package* (with purpose to cut GHGs emissions by at least 20% by 2020, compared with 1990) and *Energy Policy for Europe* (in order to improve the use of energy and increase the share of renewable energy up to 20%) [5].

Second Report about state of environment in Republic of Serbia from 2007, somewhat confirmed findings of previous one from 2002., that Serbia still has many areas which are not burdened with heavy metals, pesticides, or mineral fertilizers, so they are suitable for all lines of agricultural production (especially organic production). Updated document registered main polluters, and gave possible directions for future better environment protection, balanced with contemporary legislation.

Observing economy effects on environment, it is underlined that energetic sector of national economy is major environment polluter, caused by dominant usage of lignite and technologically old-fashioned equipment (estimations are that 65.5% electric energy comes from power plants, which use low calories lignite). Those power plants make huge quantum of ash, which is laying away on dumps (around 170 million t of ash, which covered area of 1,800 ha). Also, big losses are accomplished during the energy transmission and distribution (system of heating plants makes losses from more than 20%, while losses in electric energy transmission are 3.2%, and in distribution around 7%). Like others polluters are mentioned coal and copper mining pits, industry concentrated in larger cities, agriculture, traffic (approximately 2.4 million mostly used vehicles), and others.

As is concluded in *Strategy of environment development in Republic of Serbia*, relation of economic activity and environment in Republic, from 50'-ties to end of XX century, did not deviate from general patterns, expressing all characteristics of these patterns, on the way peculiar to southeast European countries and countries in transition.[16]

Interesting observation is that state of environment in Serbia is very heterogeneous, so it is consist of many extremely green, or black regional points. As is underlined, with estimation created during 2003, it is accomplished emission of harmful gases in amount of around: 45.6 million t of carbon dioxide; 0.5 million t of sulphur oxides; 0.16 million t of nitrogen oxides; 0.09 million t of ammonia; 0.06 million t of powder substances; and 350 t of lead

flora. Number of vascular plants in Republic is around 1.7% of total world flora. Although, presented portion looks like small, it could be underlined that present territory is less than 0.035% of total world land surface, (http://www.nin.co.rs/2000-08/31/14258.html).

[16] Radmilo Pešić (2007.): *Ekonomska aktivnost i stanje životne sredine u Srbiji*, projekat: Strategija održivog razvoja Srbije.

(consequence of dominant usage of lead gasoline in traffic).

Number of laws, related to environment and human health protection, were bringing during 2009. In extensive legislation that covers all fields of agriculture and environment protection, shall be allocated next laws and documents, by which Republic government directly or indirectly joined management of sustainable development of society, economy and environment, with acceptance of relevant international standards: *Strategy of sustainable development of Republic of Serbia 2008-2017; Law of agriculture and rural development*[17]*; Law of agricultural land*[18]*; Law of environment protection*[19]; Law of *organic production and organic products*[20], (in procedure is proposal of new law, which will come into effect at beginning of 2011); *Law of agreement confirmation of donation from global fund for environment protection „Project of agricultural in transition reform" and Law of agreement confirmation about loan „Additional project financing – rehabilitation of systems for irrigation and drainage"*, between Serbia and IBRD[21]; *Law of live stock breeding, Law of public warehouse in agriculture and Law of food safety*[22]; *Green package* (set of 16 laws, which should significantly improve solving of environmental problems. Among them are standing out *Law of waste management, Law of packaging materials, Law of chemical maters and biocides products, Law of Rotterdam convention ratification*, *Law of air protection*, *Law of nature protection, etc); Law of Aarhus convention ratification*; *Law of Stockholm convention ratification*; *Strategy of clean production implementation*; draft of *EMAS Program* (*Eco Management and Audit Scheme*) in *Serbia; etc*.

Generally, natural conditions in Serbia serve to intensive agricultural production. Looking back on influence of agriculture, from the aspect of pollution, on soil resources condition, momentarily we have paradox that to its solid preservation mostly contributed bad economic situation in which were producers for last few years. Videlicet, high input price reduced usage of mineral fertilizers, pesticides and other chemical substances on minimum. Quantum of spread fertilizers is fallen down from 115 kg/ha in 1991, on 36 kg/ha in 2002, what significantly reduce problem of water flows eutrophication too. Current problems of soil pollution and eutrophication are mostly connecting to waste water from animal farms.

It is concluded that organic agriculture development, as intensive production line, would contributed to life quality improvement of local communities, additional engagement of unemployed working active population. Production of organic food will make for optimal use of natural resources and environment protection, as for improvement of rural population status. In favour of this comes fact, that according the estimations around one million ha of arable land in Serbia is uncultivated, suppose in certain level of conversion, what is ideal base for this production establishment. Their development will encourage local population to stay in less developed regions.

Despite high price of organic produced food, present trends bring to increase of its demand. People more and more take attitude that health is priceless. By utilization of appeared free space on world market, through organic production, Serbia would appreciably improve its foreign trade surplus from agriculture, as well as its competitive advantage in compare with neighbor countries.

In Serbia momentarily is 218 certified producers of organic products, with total production area of around 5,000 ha (Table 1). Most important organic products are berry fruit (strawberry, blackberry, raspberry, blueberry, plums, sour cherry, etc, in frozen, processed and dried condition) and fungi. Besides these products, in small portion is produced organic vegetable, while in cereals production is slightly better situation (wheat, maize, burley and oat).

Most of organic food producers are with small production surface (less than 1 ha). They usually sell their products on national market. Big producers (with larger land complex and huge quantum of organic output) are in minority. They usually lunched their products on foreign markets. Besides them, few companies are dealing with collection of medicinal and aromatic plants (mostly for export) from total surface of around 1 million ha.

[17] Official gazette of Republic of Serbia, no. 41/2009.
[18] Official gazette of Republic of Serbia, no. 62/2006.
[19] Official gazette of Republic of Serbia, no. 135/04.
[20] Official gazette of Republic of Serbia, no. 62/06.
[21] Official gazette of Republic of Serbia, no. 83/08.
[22] Official gazette of Republic of Serbia, no. 41/09.

The biggest part of organically produced food (more than 90%) is exporting on foreign markets (UK, USA, Germany, Belgium, Austria and Switzerland. Usually are exported raw products, while processed products are selling on national market. Although organic production represents a promising alternative for the future of European agriculture, but organic farming is in still infancy in Serbia.

According to invaluable natural potentials (biodiversity and unpolluted environment), seasonality in agriculture, material underdevelopment of rural areas, lack of suitable credits (organic production needs relatively high start investments), difficult influence on potential risks and towards present trends of duties diversification on farms, development of collecting activity (*organic* wild plants – medicinal and aromatic plants, forest fruits, fungi, etc) could be excellent solution for increase of husbandries income (estimations are that is better acceptance of production, collecting and processing of these products, as additional than as main resource of incomes).

Field of collecting activity is regulated by next legislation: *Law of environment protection, Law of nature protection*[23] and *Regulation on putting under control usage and trading of wild flora and fauna*[24] (revision of this Regulation is expected soon).

Institute for nature conservation of Serbia is authorized for issuing of licenses to legal entities, for collecting of approved quantum of wild flora, fauna and fungi. Companies' requests with required quantum are summoned until 31st January. After cumulative comparison of requested quantum and approved contingent for each specified wild species, individual collecting permissions are given for current year, with previously paid fee in amount of 10% of total approved quantum value. From year to year, depending of field situation (endanger level) collecting of some species could be limited or totally forbidden. Next table represents quantum of selected wild flora and fauna species, which collection were allowed during the period 2005/09 (Table 2).

Establishment and development of entrepreneurship in field of production, collecting, processing and trading of medicinal plants and forest fruits could be presented with next organizational forms:

1) small family plantations of medicinal and aromatic plants, which could establish their production programs in controlled space (green houses), or on fields;
2) small family companies for purchase and processing of medicinal and aromatic plants (they need good management skills);
3) collection of wild plant and animal species (for average husbandry in Serbia the most reliable form of activity, because it does not require huge start investments, could be done seasonally, parallel with other farm duties, and it could be done by all family members, from kids to pensioners;
4) export of medicinal and aromatic plants, forest fruits, fungi and wild animals.

CONCLUSIONS

Besides perfect natural conditions for organic production, still negligible number of farms is dealing with this production. Reason of this it could be seek in indifference or uninformed of producers about significance and advantages of organic food production, difficult and expensive certification, lack of investment funds, etc.

Having in mind all basic principles of multifunctional agriculture, production, collection and processing of medicinal and aromatic plants, and forest fruits (their demand on world market is still raising) could be important development basis as for husbandries, as well for specified micro regions and complete country, from the point of economic and ecologic effects. Establishment of offered organizational forms of this activity should be followed by modernization of existing regulative, with constant monitoring, financial, promotional and professional support of competent state institutions.

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[23] Official gazette of Republic of Serbia, no. 36/09
[24] Official gazette of Republic of Serbia, no. 31/05, 45/05, correction no. 22/07, 38/08

no. 149087 - *Multifunctional agriculture and rural development in the function of accession of Republic of Serbia into EU*, financed by the Ministry of Science and Environmental Protection of Republic of Serbia.

REFERENCES

[1] Bojana Bekić, Marko Jeločnik, Lana Ivanović, 2008, Production of organic food in Republic of Serbia on the principles of sustainable development, International conference: Dezvoltarea economica performanta si complexa a spatiului rural si regional, 19-20. September, Editura ASE, Bucharest, Romania;
[2] Imre Fertő, Csaba Forgács, 2009, The choice between conventional and organic farming – a Hungarian example, 113th Seminar of EAAE, December 2009, IAE, Belgrade, Serbia;
[3] MAP - Macroeconomic Analysis and Prognosis, Publication IEN, Belgrade, December 2009.;
[4] Marko Jeločnik, Lana Ivanović, Nada Mijajlović, 2006, Influence of medicinal plants and forest fruits on rural population income increas, International Seminar: Multifunctional agriculture and rural development (I), 7-8. December, Mali Zvornik, Serbia;
[5] Mirela Matei, Adrian Stancu, Predrag Vuković, 2009, The interdependence between agriculture and climate change - a European perspective, 113th Seminar of EAAE, December 2009, IAE, Belgrade, Serbia;
[6] Pregled stanja životne sredine – Republika Srbija, Ekonomska komisija za Evropu, Komisija za programsku politiku u oblasti zaštite životne sredine, UN, New York, Geneva, 2007.
[7] Quantum of wild flora, fauna and fungi collected in specified years, reports for 2005-2009, Institute for nature conservation of Serbia, Belgrade.
[8] Radmilo Pešić, 2007, Ekonomska aktivnost i stanje životne sredine u Srbiji, projekat: Strategija održivog razvoja Srbije, www.odrzivi-razvoj.sr.gov.yu/lat/dokumenta.php
[9]http://epp.eurostat.ec.europa.eu/portal/page/portal/agriculture/data/database
[10]http://gain.fas.usda.gov/Recent%20GAIN%20Publications/Organic%20Agriculture%20in%20Serbia_Belgrade_Serbia_6-8-2009.pdf
[11] http://www.nin.co.rs/2000-08/31/14258.html

APPENDIX

Table 1 – Areas under organic production (EU and Serbia) in 2008.

Countries	Areas under organic crops (ha)	Number of registered producers in organic production (provisional value)
Serbia	5,000[@] (provisional value)	218[@]
Belgium	27,376	1,662
Bulgaria	4,236	311
Czech Republic	232,939	2,435
Denmark	139,021	3,658
Deutschland	*	29,244
Estonia	71,848	1,292
Ireland	*	1,410
Greece	266,745	25,098
Spain	691,196 (provisional value)	23,372
France	502,234	20,880
Italy	812,139	49,654
Cyprus	*	*
Latvia	141,524	4,218
Lithuania	89,890	2,842
Luxemburg	*	*
Hungary	108,578	2,055

Source: http://epp.eurostat.ec.europa.eu/portal/page/portal/agriculture/data/database

[@]: data from Report on organic agriculture in Serbia - http://gain.fas.usda.gov/Recent%20GAIN%20Publications/Organic%20Agriculture%20in%20Serbia_Belgrade_Serbia_6-8-2009.pdf

Note: * unavailable data

Table 2 - Quantum of collected wild flora and fauna species in period 2005/09 (in t)

Species	Wild flora and fauna - collecting quantum according given licence				
	2005.	**2006.**	**2007.**	**2008.**	**2009.**
Ramsons *(herba),* *Allium ursinum L.*	25.3	224.6	300.1	238.7	220.2
Strawberry (fructus), *Fragaria vresca L*	50.0	*	*	*	105.7
Common Ivy (folium), *Hedera helix L*	10.0	88.3	112.5	176.1	266.9
St Jonh's wort (herba), *Hypericum perforatum L*	69.6	94.6	98.1	100.6	115.8
Common Juniper (fructus), *Juniperus communis L*	1,007.5	305.5	402.6	840.1	495.6
Dog Rose (fructus), *Rosa canina L*	1,007.0	1,117.1	1,695.1	1,494.2	678.3
Blackberry (fructus), *Rubus fructicosus L*	53.0	49.5	112.3	130.4	125.2
Elder (flos), *Sambucus nigra L*	501.5	391.3	376.0	*	199.2
Blueberry (fructus), *Vaccinium myrtillus L*	1,000.0	1,580.4	2,023.5	89.0	1,707.9
Porcini (fungi), *Boletus edulis Bull Fr*	*	2,471.0	3,211.4	2,466.8	4,843.8
Chanterelle (fungi), *Cantharellus cibarius L Fr*	*	1,130.7	1,201.0	906.9	1,078.9
Saffron milk cap (fungi), *Lactarius deliciosus L*	*	72.0	119.5	240.5	124.0
Garden snail (snail), *Helix aspersa*	*	175.0	195.6	180.0	175.0
Forest snail (snail), *Helix leucorum*	*	150.0	190.0	190.0	165.0
Burgundy snail (snail), *Helix pomatia*	*	725.0	786.0	790.0	725.0

Source: [7]

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RESTORATION OF THE FLOODPLAIN FOREST FRAGMENTS IN AGRICULTURE LANDSCAPE OF VÁH RIVER ALLUVIUM

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Key words: *restoration, floodplain forest, alluvium, controlled succession*

Abstract

Floodplain forest fragments represent non-forest plants vegetation in an agricultural landscape, where a number of important ecological, environmental and socio-economic functions are met. Restoration of these fragments to the lower lapse of Váh river is needed in consequence of intensive farming in the alluvium. This alluvium is located in the lowland area, which represents the most fertile area in Slovakia. We selected the floodplain forest fragments - Čalovec and Ďulov Dvor as the model areas. Disturbance processes in these areas are reflected in fluctuations in groundwater levels, the absence of hydrophilic populations of plants and expansion of invasive plant species. The most appropriate method for the restoration of these fragments is controlled succession.

INTRODUCTION

The floodplain communities of the alluvial plains are exceptional combination of the large species diversity and high productivity in the zone of temperate climate [8].
Alluvia of the Váh river in Slovak Republic are conspicuously changed by human activity and natural environment has trails of direct or indirect human interventions. In the sites around watercourse there were preserved several biotopes corresponding with the natural vegetation that was originally spread in larger area [2].
In the lowland country of Slovakia, we are identified only fragments of floodplain forests to the lower lapse of Váh river. In agricultural land, which is dominated by alluvial areas, floodplain forests perform a series of ecological and socio-economic (non-production) functions.
Thousands of hectares of floodplain forests in the alluvium of our major rivers have been destroyed due to the decline in groundwater levels [10]. The penetration of non-native, aggressive plant species are another threat, because they are competitively strong and prevent the growth of native species. As it is mention by [6], this environmentally plight led to the fact that today is the perceived need for restoration, increase the area where they may be renewed fluvial natural processes and the natural biota.
Ecological restoration returns an ecosystem to a prior state to the extent that the state can be ascertained and then approximated through restoration practice [4].
The goal of this paper is analysis of the state floodplain forest fragments in the alluvial landscape of lower lapse Váh river and suggest a way of ecological restoration in the context of conservation, protection and sustainable development.

MATERIAL AND METHOD

We selected sites with well-preserved fragments of native vegetation in the area of lower lapse Váh river – Čalovec and Ďulov Dvor. These sites are located in southern

Slovakia in the Komárno district. The exact definition of the monitoring sites was carried out using global positioning system – GPS60CS GARMIN. Selected characteristics of research stands are documented in Table 1.

Table 1. Selected characteristics of the research stands to the lower Váh river

Stand characteristics	Stand/locality	
	Ďulov Dvor	Čalovec
location	Near of town Komárno, part Ďulov Dvor – Zámocká pustatina, north part of the town, between points elevation 107,09 and 108,60 m a.s.l.	Near of village Čalovec, between points elevation 109,30 and 108, 30 m a.s.l. , south-eastward from village
average year air temperature / temperature in growing season	11.0 °C / 15.7 °C	11.0 °C / 15.7 °C
average annual sum of precipitation / in growing season	520.28 mm / 358.76 mm	520.28 mm / 358.76 mm
height of underground water level	2,20 m	1,82 m
soils	Calcaric Fluvisols	Calcaric Fluvisols
syntaxonomical structure	*Salici–Populetum fac.* Fraxinetosum	*Salici–Populetum* typicum

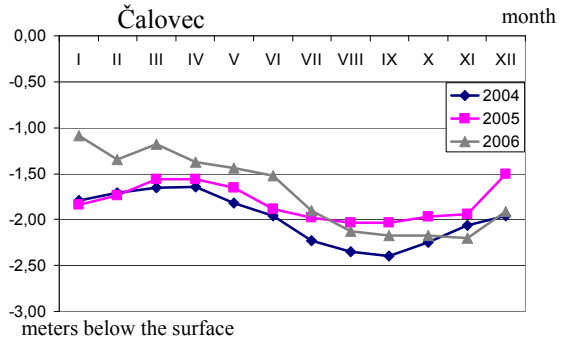
The height of groundwater level was analyzed based on data from the Slovak Hydrometeorological Institute in Bratislava for the years 2004 – 2006, the site Čalovec probe 2639 and the site Ďulov Dvor probe 2537. We determine the depth of groundwater level on vegetation available as habitat altitude difference and the height of groundwater level.
Diversity of vegetation on the stands we surveyed treated according [3]. The methodology of ecological restoration has been designed according to the principles of restoration [9].

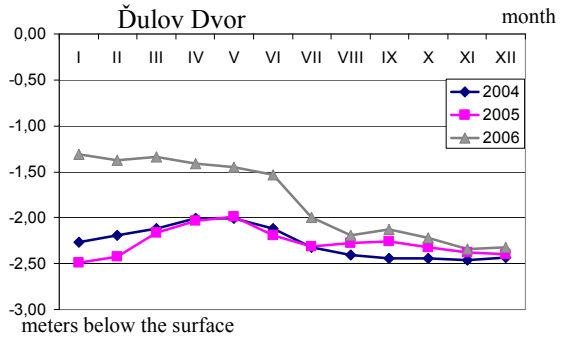
RESULTS AND DISCUSSION

In the area of influence is remnants communities' willow-poplar floodplain forests extended to holocene meadows rivers in the warm Pannonian region. They included therein phytocenose high-trunk willow-poplar forests (association *Salicion albae*). The central communities are association *Salice-Populetum* (Tx. 1931). The communities are characterized by diverse species composition, complex structures and specific physiognomic.
The dynamics of alluvial floodplain communities is considerably influenced by water regime. Their species structure is diversified by at least one factor of the floodplain dynamics – inundation or underground water.
The climate plays an important role in the distribution of living organisms. It is decisive for their stand which they are bound and on which they depend. Climate change is occurring in recent years have changes in the distribution of species [5] and subsequent changes in the type of vegetation. According to a study [7], the climate changes assume a frequency that can have serious consequences for biodiversity of terrestrial communities.
At sites of interest we have monitor dynamic changes in the depth of groundwater level at sites Čalovec and Ďulov Dvor in the years 2004 – 2006 (figure 1). The surveyed sites were the average groundwater level follows: Čalovec – 1.83 meters below the surface and Ďulov Dvor – 2.11 meters below the surface.
The analysis shows that the site Čalovec is the locality with a higher level of groundwater. This is a factor which affects on the soil moisture from the root system of plants can efficiently obtain water for their growth.
The analyses of groundwater level in the years 2004 – 2006 documented that most water resource as groundwater was available for floodplain forest vegetation in 2006 and especially at the beginning of the growing season.
On the basis of floristic and phytocenological survey of the studied territory, there was confirmed the occurrence of 64 species of vascular plants and elementary syntaxonomic structure of vegetation, which consists of

communities of the class *Phragmiteto–Magnocaricetea,* order *Alnetalia glutinosae* and association *Salici populetum* and *Carici elongatae–Alnetum*.

Fig. 1 Depth of groundwater level at sites Čalovec and Ďulov Dvor in 2004 – 2006





The impact of ruderal taxa starts in direct contact phytocenosis of the intensive cultivated fields (*Cirsium arvense, Solidago canadensis* (photo 1), *Galinsonga parviflora* – 12 species). The invasive species is *Negundo aceroides,* potentially invasive are species: *Cirsium arvense, Prunus cerassifera, Bryonia alba, Robinia pseudaccacia*, which may affect negatively the further development of vegetation on both studied localities.

Ecological restoration is urgently needed to help bridge the gaps and provide the necessary links between nature conservation and sustainable local economic development [1].

Ecological restoration of floodplain forest fragments should include natural regeneration. The area should be maintained natural succession evolution. The fragments of floodplain forests to explore the area are most at risk:

- fluctuations in groundwater levels,
- intensive farming in the surrounding landscape (photo 2),
- non-native invasive and potentially invasive species.

Photo 1 *Solidago canadensis* on Čalovec site

Photo 2 Intensive agriculture on Ďulov Dvor site

The natural succession evolution on these sites should be supported by methods that would eliminate these disturbance factors.

We propose the following recovery methods:

- Mechanical adjustment of terrain to care for the artificial waterways (irrigation channels) in the surrounding agriculture landscape, which would contribute to the reduction of fluctuations in groundwater levels in the floodplain forest fragments.
- Switching to organic farming in the vicinity of these sites, thus reduction possible contamination of soil and water from intensive forms of farming.
- Direct the removal of non-native, invasive plant species by mechanical and biological methods.

Results of our analysis of groundwater levels and species diversity of locations provide basic data for ecological forecasts development of the landscape Váh food plain valley and the needs

of ecological restoration. In terms of management proposals, we recommend:

- leaving the population of woody plants without the intervention, natural succession evolution,
- monitoring sites,
- monitoring of invasive and potentially invasive neophytes, their distribution and elimination,
- monitoring of environmental degradation factors (abiotic conditions),
- finding ways to influence the active sites of hydraulic and biotechnical modifications in their restoration.

The surveyed sites are advised between ecosystems with mild disturbance. Ecosystems that have suffered only minor degradation or disturbance sometimes can be restored quickly to their apparent former states, perhaps in only a few years [4].

CONCLUSION

In the lowland country of Slovakia, we are identified only fragments of floodplain forests to the lower lapse of Váh river. In agricultural land, which is dominated by alluvial areas, floodplain forests perform a series of ecological and socio-economic (non-production) functions. We selected sites with well-preserved fragments of native vegetation in the area of lower lapse Váh river – Čalovec and Ďulov Dvor.

The fragments of floodplain forests to explore the area are most at risk: fluctuations in groundwater levels, intensive farming in the surrounding landscape and non-native invasive and potentially invasive species.

The natural succession evolution on these sites should be supported by methods that would eliminate these disturbance factors. In the surrounding agriculture landscape implement the mechanical adjustment of terrain to care for the artificial waterways (irrigation channels). Intensive farming replace to organic farming in the vicinity of these sites. Direct the removal of non-native, invasive plant species by mechanical and biological methods.

The surveyed sites are advised between ecosystems with mild disturbance and therefore are likely to speed their restore.

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REFERENCES

[1] Aronson, J.J., Blignaut, S.J.M., Clewell, A.F. 2006. Natural capital: The limiting factor. Ecological Engineering 28: 1-5

[2] Barančok, P. 1996. Stav prírodného prostredia v záujmovom území projektu splavnenia dolného Váhu. In: Životné prostredie, Vol. 30, No. 6, p. 312-317

[3] Baranec, T., Eliáš, P. jun. 2007 In: Jureková Z., Baranec T., Paganová V., Kotrla M., Eliáš P. jun. 2008. Comparison of the ecological characteristic the willow-poplar floodplain forest fragments on the stands with different height of groundwater level. Ekológia (Bratislava), Vol. 27, No. 1, p. 31-40

[4] Clewell, A.F., Aronson, J. 2007. Ecological Restoration. Principles, Values and Structure of an Emerging Profession. Society for Ecological Restoration International, ISLANDPRESS, Washington D.C, 217 pp., ISBN 978-1-59726-169-2

[5] Davis, M.B. 1986. Climatic instability, time lags and community disequilibrium. In: Community ecology. Ed. By Diamond, J., Case, T. J., Harper and Row Publishers, New York, p. 269 – 284

[6] Dister, E. 1990. Water management and ecological perspectives of the Upper Rhine floodplains. Regulated Rivers: Research and Management, Vol. 5: 1-15

[7] Malcolm, J.R., Markham, A. 1996. Ecosystem resilience, biodiversity and climate change: setting limits. Parks 6, p. 38-49

[8] Penka, M., Vyskot, M., Klimo, E., Vašíček, F. 1991. Floodplain forest ecosystem 2. Academia, Praha, 629 pp.

[9] Perrow, M.R., Davy, A.J. 2002. Handbook of Ecological Restoration. Principles of Restoration. Cambridge University Press, UK, 444 pp., ISBN 0-521-04983-0

[10] Vološčuk, I., Šíbl, J. 2001. Lesné hospodárstvo a ochrana biodiverzity v lesných ekosystémoch. SPU, Nitra, Edícia: Ochrana biodiverzity, č. 91, 214 pp., ISBN 80-7137-860-7

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THE MICROREGIONAL PROGRAMME IN HARGHITA COUNTY, IN BEHALF OF LEADER

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Key words : *rural development, microregions, local actors, public-private partnerships, leader*

Abstract

There is no doubt that Harghita County has assured an advantage by establishing its system infrastructure throughout microregional programme. This microregions, plays an activate role in rural development especially in the perspective of LEADER. Promoting the microregions is one of the most important capacity building and local governance development initiatives. Institutional infrastructure refers to all the institutions and organisational initiatives that influence the regional and economic processes. It is an institutional network for the implementation of various approaches, fundamental principles and policies presented in the article. Concerning this matter, the county has a few years advantage compared to other regions, and the results of this advantage are shown by the financial support obtained and training of the actors as well as their preparation for a new way of thinking.

INTRODUCTION

Today we can rightfully state that the incorporation of the micro-regional organizations is one of the very accomplishments ever that have taken place within the most complex and important institutional building processes of the past ten years. Although the efficiency of the micro-regions differs from one place to the other, and some of them are fighting self-sustainability issues, the overall institutional building process can be regarded as successful. And it can be regarded as successful as there is a lot more at stake here than merely the setting up of 15 micro-regional organizations! However, this may also be an accomplishment in itself, since micro-regional organizations in Romania have been first set up in county Harghita – all of them being grounded on the local demands – with no support and/or initiative coming from the national planning authorities. Nonetheless, the building process has generated several outcomes, which – on a mid- and/or long term may be crucial to the entire future of the region.

First of all, we may note that the input of professional knowledge meant to ground the regional development in the area has proven to be successful. The knowledge of the Hungarian experts, as well as the Hungarian practice in regional development has generated a know-how that facilitates self-sustainability of the local processes. Quite obviously, this transfer of know-how covers a period that is a lot longer than five years.

MATERIAL AND METHOD

It all started in the mid '90s with the *Hálózat* (Network) Program, supported by the *Pro-Professione* Foundation from Budapest – the first attempt focusing on the young professionals engaged in local development. The organic continuation of the aforementioned was the regional development training program supported by the *Apáczai* Public Foundation that was a first in offering targeted professional training to the future micro-reginal managers, and which somewhat prepared the accreditation process of the regional development department with the *EMTE Sapientia* in Miercurea Ciuc

(the department operates today as the department for applied sociology, profiled in regional development and social politics). Another organic element of this know-how transfer was the cooperation program that gave the opportunity to the managers of the micro-region in county Harghita, Romania to gain personal experience in the micro-regions of county Zala, Hungary.

Nevertheless, this multi-actor and muti-level preaparatory work has launched irreversible processes in the region. However, it may be possible that one or another micro-region shall not operate for a more or less longer period of time but the ideology, as well as the methodology of regional development has already been settled, and, as such, it can no longer be disregarded. The principle, according to which development requires an accurate identification of the existing situation, as well local innitiatives and planning, has become widely known in the region. Less and less local self-government-related actors need to keep explaining that waiting in a stand-by position for the „central" money shall no longer be sufficing, and that learning and practicing access of resources has become an unavoidable must. And that all of the aforementioned shall not be possible without an efficient cooperation framework, as none of the localities is strong enough to manage on its own. Another result of the longlasting preparatory and grounding work is the fact that the sixth group of students studying regional development at the *Sapientia* University in Miercurea Ciuc shall graduate this year. If we add all of the previously mentioned accomplishments to the several organizations, associations and foundations involved in local and/or micro-regional development, and if we list their programs, as well as their activities, then we are entitled to say that the idea and also the practice of regional development in county Harghita has already become a rather outstanding feature.

RESULTS AND DISCUSSIONS

The most important element of the abovementioned multi-factor process is the existence of an efficient and operational micro-regional institutional structure. During the past ten years we have managed to create an institutional and human resource network that has been ready and capable to act as a efficient receiver of all the know-how targeted to our region.

If we are to make an inventory of our past five years, we should, by all means, mention the following accomplishments:

- The EU goals and programs, on regional development, as well as its terms and methods have been known and accepted in the region. The training programs facilitated the transfer of reference material to local experts and micro-regional managers.
- The network of micro-regional organizations has been created, reaching out into the neighbouring counties, as well. Certain micro-regional organizations operate with a full-time manager, and the micro-regional centers are endowed with the necessary technical and logistical equipment.
- The level of inter-self-governmental cooperation has significantly increased due to the micro-regional activity. The cooperation resulted in several joint projects, that triggered the infusion of financing into the region.
- The three-pillar institutional model facilitating efficiency in 1) planning and support; 2) training, professional consulting, dissemination of information; 3) sustained local activites and programs - has been successfully created.
- Micro-regions, along with the micro-regional managers have become independent actors of the regional development process. They are creating and maintaining domestic and foreign professional relationships, they are drafting regional strategic plans of development, they are successfully applying for financing, and they are largely involved organizing different kinds of events.
- Monitoring plays an important role in the regional development process.
- The process of micro-regional development has preserved its modular

flexibil and multi-directional features throughout its evolution.

Kászon, the smallest basin clipped into the Eastern Carpathians is situated in the south-eastern corner of county Harghita, covering five villages. Three of the villages, namely *Altíz*, *Feltíz* and *Impér* have merged, meanwhile *Újfalu* is 5 kms and *Jakabfalva* is 3 kms away from the administrative center, *Kászonaltíz*.

Being in a rather unique situation, the quoted rural area grabbed not more nor less than two opportunities in order to improve the quality of life, as well as the living standard of its population. Meanwhile the infrastructural problems (e.g. waste management, road building and development) of the region seemed to reach a solution within the vaster area of the *Alcsík* micro-region, the setting up of a micro-regional organization was triggered by a powerful local initiative, covering solely the five localities in the *Kászon* basin of county Harghita. The rightfulness of this double engagement had been long disputed but even ten years after, the militants of the long-term profit were unable to show any viable results. Although there had been some progress in terms of the waste management - formerly quoted as an argument – however, the decision-making competences switched from the micro-region to county level. Therefore, in order to proceed to the optimization of the available resources of development, it was high-time to have the place of the micro-region re-evaluated on the map of the county.

The shaping of the *Kászon* micro-region started in the summer of 1999 when – following the examples and success stories in Hungary – the local church leaders, intellectuals and entrepreneurs decided in favour of an institutional framework aimed to host their prior regional development-related endeavours. The issue of double appendage was solved in a rather simple manner: the Townhall paid its membership fee to both micro-regions – the *Kászon* micro-region thus receiving three times more than *Alcsík*.

And from that moment onward, we could have spoken about a success story as existence had been facilitated by both, the institutional framework, as well as the generous local support. But, due to the scatteredness of the early activities, joined with the efforts to create another institution, as well, the results somewhat failed to justify and meet the expectations. However, since the initial project-focused verve – lacking the necessary political support - was shattered subsequent to the preferential support of the boards of trustees, as well as due to the bureaucratic practices of the first national Romanian central development institutions, rigidly sticking to the rules and regulations, only the smaller local supports were available. The aforementioned situation could account for the fact that only 6.22% of the budget of the association in 2000 – at that time regarded as a good starting capital – resulted from projects, the rest of it coming from membership fees. The responsibilities undertaken by the founding members would also be worthwhile mentioning here: 44% of the annual budget came from the Council of County Harghita, over 30% was paid by the Townhall of *Kászonaltíz*, 19% was the contribution of the local founding members(natural and legal persons) - the sum total being rounded up by different interest rates.

As – according to their goals and activities, they could have easily been fit into the framework of a youth and/or a tradition preserving association, the small projects of the early days were only good to persuade the leadership of the association about the importance of further support. Such small projects were for example the dance camp organized for the children folk dance group, the financing of tour fees and/or financial support granted for their events and activities. Drafting of projects for other organizations, for the local self-government or for the church was already closer to the setting up of a micro-regional organization. Nonetheless, such a task could have been performed against payment by any consulting firm. However, we must also acknowledge the fact that in those years such services were not really at hand. As for the third activity – given a central position in the reports of the association, and regarded as an outstanding success – that would be the setting up of the ”tele-cottages”. This institution is really beneficial to community building, it facilitates the flow of information, and it offers

the opportunity of accessing funds. And thus the problem is right here, in front of us: the micro-regional association – making good use of its own intellectual capacities and relying on the support of its members – has raised its own competitors. Of course, it has not grown to be a real competitor – however, not directly – as the two institutions were managed by different boards, which is not a bad thing, after all, but the interdependence between the micro-regional office and the "tele-cottage" became much too obvious. Whenever asked to present the logistics and the activity of the micro-regional office, the manager always made reference to the "tele-cottage", saying that „the office operates jointly with the "tele-cottage", thus reducing certain operational costs. There are six computers, a copier, a scanner and a printer – all these in one single room. The room next-door is meant to be the „conference room". And the interview shortly revealed the accomplished priorities, as well: in order to see an older dream come true, they chose to make good use of the opportunity offered by the new regional development framework. „If I am to think about my first attempts, well, those were also directed to the setting up of a "tele-cottage" or some fairly similar centre." Therefore, the office failed to fulfill its initial task and, as such, in terms of its endowment, it also failed to create the six or even more job opportunities – it did not become the occupational channel of the ones thinking in terms of development. It was an acknowledged sucess story, rendering merely the possibility of entertainment (and, in a best-case scenario, that of learning) to the local young population. Of course, all of the aforementioned was never regarded as valid solely to the *Kászon* micro-region as many of the „ancient" organization showed lack of the experience required in the world of projects, and they adjusted their goals to the objectives of the newly launched projects. However, project-wise the activities were all successful, only that by failing to proceed to the conscious selection of the local actors, and by not ensuring them either the necessary group training or the occupational aspect, the quoted activities did not produced the desired impact. The activity itself was ticked out as a result, and the organization began to seek for new opportunities.

Nonetheless, due to certain inner and external factors, the micro-region could still register some smaller successes. Such an inner factor might be the significant presence of a local group of initiative which made an accurate assessment of the available opportunities and did not hesitate to grab them. This group witnessed the implementation of the twinning projects, as well as the launching of the local development projects (setting up of the telephone network, incorporation of civil organizations and cross-ownerships), and it also gave its hopeful blessing to the newly founded micro-regional associations. Furthermore, church leaders, physicians, teachers and engineers brought their contribution in terms of knowledge, contacts and energy to the creation of the new system, of which overall image, shape and activities could not be defined exactly at that point. Input of the aforementioned professionals is still ongoing and welcome since the micro-regional association still needs it.

The external factor was the drafting of the regional strategy, of which importance was recognized a lot later on the local level but once understanding its importance, they immediately claimed „copyright" of it. The story itself was a fairly simple one: a couple of students in sociology and agriculture were looking for a venue to perform their summer practice, and they decided on the *Kászon* basin. The initiative came entirely from the exteriour, the micro-region supplied only the letter of recommendation in order to support the project of the university, according to which a motivated group of students spent a longer time on the venue, they evaluated the situation, and together with a guiding professor, they drafted ideas, strategies, and then – adjusting the theoretical examples to the local possibilities, and dismantling them to sub-programs and measures - they offered the outcomes to the micro-region. Of course, the oppinion of the outer experts was defining to the micro-region, and they adopted the strategy without understanding the importance of their own participation. Although while drafting of the strategy was still ongoing, the micro-regional

office failed to give the it the deserved attention, however, in its reports a few years later, turned into a key-actor, it claimed full credit for both, products and success. Another external factor may just as well be listed here: the Council of County Harghita had then newly introduced the accomplishment-based support, according to which membership fee was paid only to those micro-regional associations which had already accomplished some tasks, such as the forwarding of a certain number of (micro)projects, the collection of the contributions coming from the local self-governments, and, last but not least, the drafting of the local development strategy, which – provided the existence of a successful cooperation -was nothing more nor less than a timely fulfilled task. Thus, the „letter of support" was proven to be a twice profitable gesture.

The third factor was the *Minimum Party*, also launched independently from the micro-regional organzation, initiated by a group of students who were looking for a venue to organize their alternative arts camp. Already regarded as a movement, the successful start has been since followed by a series of events, attended by at least two hundred participants. The local population has recognized the opportunities of such a camp, and it is actively involved in its organization, as well as in the hosting of the participants. Despite of its rather short duration, the *Minimum Party* – including the *Kászon* region – enjoys quite a vast amount of marketing thanks to its connections and inter-personal relationships; brochures, leaflets and other publications enhance the fame of both, organization and region.

If compared to the other organizations in county Harghita, the *Kászon* micro-region shows another element that makes the difference: eversince its begginings, it is the same person managing its activities, the same person who due to its public role became an authority figure first at local then on county level, and who has also been constantly promoted in the political hierarchy. Similar impediments (several months of inactiveness and constant re-starts) have never hindered the activity of other organizations. Despite of the disturbed continuity, other shortages may also be revealed, on the one hand questioning the quality level of the already accomplished tasks, and on the other hand casting a bad light over the marketing of the community. An example in point would be the website of the community, www.kaszon.ro, resulted from a project, and advertised as such *(Tibor Kristó: „Öntevékeny kászoni kisrégió"- Hargita Népe, July 16, 2002)*, which only a few years after manages to scare away the naive browser with its year-old „news", spelling errors and inactive links.

CONCLUSIONS

The *Kászon* micro-region is a very good example in point, showing where local initiaves may end up if lacking national support. As for the local level results, these do not go beyond the results of an average youth organization – meanwhile the defined areas of activity do not meet the requirements of any national and/or international project. However, we should not disregard the fact that the activities animating a smaller community may be a real advantage whenever active participation of the local population is foreseen as a must. ... And this happens to be one of the basic requirements of the LEADER – already knocking on our doors.

REFERENCES

[1] Zoltan A.Biro; Csaba J.Koszta; Maria Mateffy; *Videkfejlesztes Hargita Megyeben* (Rural development in Harghita County), ALUTUS, Regional Training Center Miercurea Ciuc, 2004

[2] Laszlo Kulscar, Harghita County Medium Development Plan 2002-2013, ALUTUS, Miercurea Ciuc 2002.

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RURAL AREA NATURAL RESOURCES ANALYSIS (TIMIŞ COUNTY)

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Key words : *milk production, evolution, NW Region , Romania*

Abstract

The paper aimed to present the evolution of Milk Production during the period 1990 -2007 in the North West Region of Romania, including Iasi, Botosani and Suceava counties. It is based on the statistical data provided by Ministry of Agriculture , Forests and Rural Development . The data have been processed into the following indicators : cattle livestock, number of dairy cows, milk yield, milk production . During the analyzed period , cattle livestock has continuously decreased, so that in the year 2007 there are just 1,440 thousand cows in Romania of which in the North Eastern part are raised about 25 %.. Milk yield has increased from 2,850 kg /cow in the year 1990 to 3,980 kg/cow/year in the year 2007 , but total milk production has decreased taking into account the reduced number of cows . As a conclusion, the North East region is traditionally suitable for cow rearing ,due to its pastures and meadows , the important number of cow stock and possibilities to produce ecological milk .

INTRODUCTION

The resources of the planet and, particularly, the environment and the renewable resources such as the soil, the water, the air, the wood, the biodiversity and the fish stocks, are under particular stress from the increasing population and from the present models of the economic development that ask for more and more such resources. The necessary resources are larger and larger, but this can overrun the environmental resources availabilities. The area of the Timiş County is a geographical area with a series of components: **natural** (units of relief, hydrographical network, bio climate system), **human** (origin and distribution of the population, the system of urban settlements), **economic** (natural resources, agricultural use, system of transportations, area distribution of the industrial branches and of industrial centres).

MATERIAL AND METHOD

The present paper presents the partial results of the research team during the period 2006-2008 within the research grant „Complex models and methods of research in the sustainable rural development of Romania". Research was carried out by undergraduate teams that went to rural localities all over the Timiş County. Data were collected with the help of questionnaires containing the main analysis indicators structured according to seven criteria: physical-geographical, demographical, economic, inhabiting, technical equipping, social, and economic.

RESULTS AND DISCUSSION

Some renewable raw materials are true vital richness for the economic and social development of the Romanian society. Among these materials, the most important are water, soil, fauna, flora, and forest resources.

Water resources represent the hydrological potential made up of the ground and surface waters, both natural and managed.

Waters represent a natural, renewable, vulnerable, and limited resource, an element indispensable for life and for society, a raw material for productive activities, a source of energy and a transportation route, a determining

factor in the maintenance of the ecological balance.

Land resources have also been studied because the supply information concerning the nature of soil, the use of soil, the most suitable crops, as well as their technology.

Natural and cultivated vegetation supply the opportunity to better know the main phyto-geographical units, of ecosystems, of the use of herbicides suited to each crop, the types of traditional crops adapted to the area.

Natural deposits existing in the area are of interest from the point of view of their exploitation (extraction, transportation) and of labour force occupancy.

Human resources have been analysed from the point of view of their number, evolution, and distribution.

Processing information on the population in the studied area pointed out some specific aspects, characteristic phenomena and trends concerning the population distribution in the area, the natural movement, positive and negative impacts of the movements on labour, life conditions, etc.

Economic resources. As for the area covered with forests, only ¼ of the rural area of the country is covered with genuine, *functional* forests, compared with the 40.00% of the optimal percentage of forests of natural and social conditions of the Romanian geographical area (Giurgiu, 1978, 2004). The gap between the present percentage of true forest-coverage of the country and the optimal level for the present conditions explains the ecological lack of balance characterising nowadays Romania and particularly the rural area – a lack of balance that is favourable to climate, hydrological, and geo-morphological hazards (droughts, floods, land glides, erosions, etc.).

One of the most efficient ways to prevent and control forest destruction is sustainable management of the existing forests and forestation of degraded lands.

As for the **tourism activity** in the studied rural areas, data analysis point out improper development of the tourism because of the improper infrastructure that does not allow easy tourists access as well as the absence in many rural areas of proper facilities (running water, sewerage). Tourism routes mentioned in some books or prospectuses do not correspond to the reality, which call for their rehabilitation, reediting, and completion.

The **Timiş County** is located in Western Romania. The extreme points of the county are 20º16' (Beba-Veche) and 22º33' (Poieni) Eastern longitude, and 45º11' (Lăţunaş) and 46º11' (Cenad) Northern latitude.

Natural resources. The Timiş County has a total area of 869,665 ha and it shares 3.65% of Romania, thus ranging first from the point of view of its area.

Plain shares over 50.00% of the Timiş County area, and it is a basic unit of Romania's relief. It ahs altitudes varying between 80 m and 200 m. The Western Hills share about 20.00% of the county's area.

The county is crossed from East to south-west by the rivers **Bega** and **Timiş** with their tributaries Timişana, Pogăniş and Bârzava. In the north, the rivers Mureş and Aranca follow their way from east to west. The lakes of the county have small areas and depths. Many of them are remains of the old marshes. In the neighbourhoods of the commune of Satchinez, one can meet a series of are bird species. There are also two ponds with warm water (over 20^0C) at Rădmăneşti and Forocici.

The mountain range of the Carpathians protects, in the east, the county from the continental cold air, and the opening to the west allows an easier penetration of the maritime temperate air.

Annual average temperature oscillates between -2°C and 21°C.

The natural resources of the soil contain important deposits of **lignite** (Sinersig), **basalt** (Lucareţ – Sanovița), **manganese** (Pietroasa), **clay** (Biled, Cărpiniş, Jimbolia, Lugoj, Sânnicolau Mare), **crude oil and gases** (in the western part of the county), **sand** (Sag), **glass sand** (Groşi – Făget, Tomeşti and Gladna).

Mineral water springs and geo-thermal waters can be found at Timişoara, Buziaş, Pişchia, Ivanda, Sacoşu Mare, Bogda, Calacea, Deta, Sânnicolau Mare, Jimbolia, Teremia Mare and Lovrin.

The soil supplies favourable conditions for the cultivation of crops, mainly cereals and technical plants and forage crops, and for fruit tree culture and grape culture.

With one of the smallest areas covered by forests in the Western Region, the Timiş County has a wide range of spontaneous flora and fauna species.

We need to also mention **natural reserves and monuments** in the county:

-the marshes at Satchinez located at about 25 km north-west from Timişoara, an interesting and picturesque bird reserve also called "the Banat Delta" covering vast marshes with dense bog reed and vast ponds that have the aspect of a small delta: visitors can admire bird colonies nesting in the area, many of which rare, endangered species (the purple heron, the squacco heron, the little egret);

-the Dendrologic Park at Bazoş, located at 15 km south-east from Timişoara, 8 km south from Remetea Mare, a forestry reserve, of great scientific importance: benefiting from a sub-Mediterranean climate, tress from five continents grow here;

-the fossil site at Rădămăneşti – a paleontological reserve located 10 km north from Lugoj;

-the salt lands at Diniaş is a floristic reserve located 25 km south-west from Timişoara;

-caves: the **Cave at Românești**, 13 km from Făget; the **Blue Cave near Pietrioasa**, 12 km from Făget; the **Rock of Florin Cave** near Tomeşti, 17 km from Făget.

1.1. Population and human resources

In 2008 the population of the Timiş County represented about 3.13% of the total population of Romania (Table 1).

Table 1.Population occupied between **1992 and 2007** (thousands of people)

Timiş County	Years							
	1992	1995	2000	2003	2004	2005	2006	2007
Total economy	**338.2**	**320.5**	**294.9**	**302.7**	**309.1**	**318.8**	**324.6**	**335.5**
Agriculture*	104.3	100.5	103.7	84.2	76.9	79.4	75.8	74.0
Fishing and fish culture	-	-	-	0.1	0.1	0.1	0.1	0.1

*hunting and forestry; Source: www.timis.insse.ro

As for the share of the population occupied in agriculture, we can see a descending trend. In 2007, it decreased to 22.05%. Agriculture is still a non-attractive economic sector, with low labour productivity and with limited financing opportunities unlike industry, where there are both many developing branches that attract labour force, and declining branches generating unemployment.

The situation, in itself, unfortunately generates small incomes in agriculture, incomes gained with much harder efforts than other economic activities.

Economic resources. The agricultural area of the Timiş County covers 80.70% of its total area.

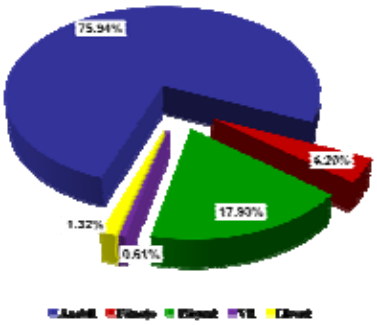

Fig. 1. Structure of agricultural area per use categories in 2007

In the Timiş County, the agricultural sector supplies real investment opportunities duet o its large areas of agricultural land, the good results in some crops and the important share of the occupied population. To all this we should add a series of important aspects such as the high demand of ecological products and their high added value, non-refundable finances for agriculture and the advantages of penetrating European Community markets.

Agriculture shares 22.05% of the population occupied in the county in 2007. This shows the importance of agriculture in the county's economy and, particularly, for the incomes of the inhabitants.

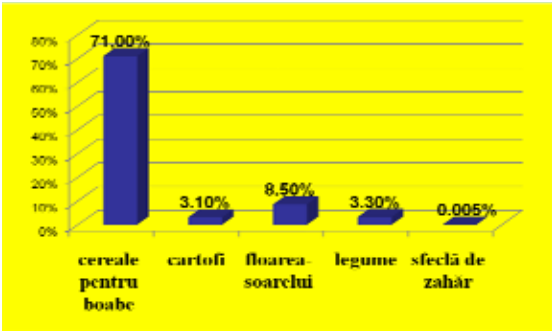

Fig. 2. Share of the main crops of the Timiş County

To note the area cultivated with grain cereals – 280,291 ha in 2007 – sharing the largest share of the total cultivated area (71.00%). Smaller areas are reserved to potato crops (12,268 ha), sunflower (33,539 ha), vegetables (12,926 ha)

and sugar beet (20 ha). The conclusion of the above figures is that cultivated areas are decreasing.

Areas cultivated with grapes can be found in most communes in the plain and hill area of the Timiş County. The cultivation of grapes is practiced in private households but also in the vineyards of **Recaş**, **Teremia**, **Buziaş**, and **Giarmata**.

Fruit tree culture has a smaller share of the agricultural economy of the county due to its geographical features. Areas covered by orchards predominate in the hill area (Surduc, Sacoşului and Lipovei) and in the plain area (particularly the Torontalului Plain). There are fruit tree plantations in the area of Tomnatic, Periam, Topolovăţu Mare, and Giarmata.

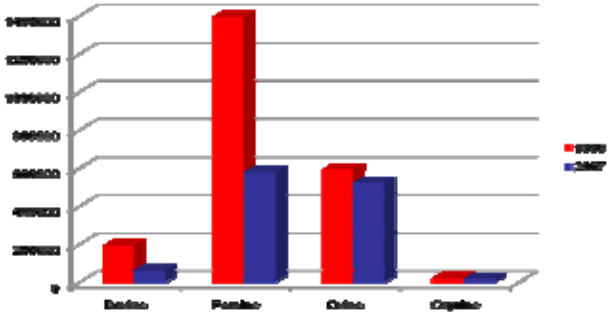

Fig. 4. Evolution of animal numbers in the Timiş County (1990-2007)

Analyzing data for the period between 1990 and 1007, we can note a general decreasing trend of the number of animals of all species, a decrease determined by both uncontrolled slaughtering after 1990, by population aging (who gave up growing animals), and by the decrease of the interest in practicing this activity because of the difficulties in valorising agricultural products.

Diversifying economic activities in the rural area aims at ensuring decent life conditions by equipping villages with facilities and by obtaining diverse incomes from non-agricultural activities.

We can, therefore, say that the entrepreneurial environment in the Timiş County villages is not developing at all, while economic activity is little diversified. This situation is also the result of improper infrastructure of all types as well as of the fact that great investors ignore the opportunities offered by the rural environment of the county.

Tourism in the Timiş County in 2007 was represented by 102 structures with accommodation functions, of which: 49 hotels and motels, 3 hostels, 1 tourist inn, 1 camping, 9 tourist villa, 31 urban boarding houses, 4 rural boarding houses, 4 school camps. In the rural environment, there were 4 rural boarding houses in 2007, which speaks of the low level of the investments in this field compared to the existing opportunities.

The rural environment of the Timiş County offers

investment and development opportunities for tourism activities. From this perspective, we could invest in the following:

- spa and leisure tourism that can be practiced in Deta, Calacea, Lovrin and Sânmihaiul Român, where there are thermal waters that could become points of attraction for both Romanian and foreign tourists;

- green tourism and agritourism, that could point out the charm of the traditional households in the rural area, monastic areas and hunting chalets;

- another point of attraction could be the Cave of Românești, the Blue Cave near Pietroasa, or the Rock of Florian near Tomeşti;

- other points of attraction are: the marshes at Satchinez, the Dendrologic Park at Bazoş, the fossil site at Rădămăneşti or the salt soils of Diniaş;

- cultural and historical tourism covers rich networks of historical and archaeological sites, historical and architectural monuments, churches and museums.

CONCLUSIONS

The strong points of the rural area of the Timiş and Caraş-Severin counties are:

- enough land and low-polluted lands allowing the development of agriculture and forestry;
- enough labour force to carry out activities specific to the area;
- an attractive and diversified environment, cultural traditions and heritage of international interest-allowing the development of all forms of tourism;
- opportunities of establishing SMEs specific to existing resources.

If in the past the main occupations of agriculturists in the Banat area were agriculture, fruit tree culture, and animal breeding – sectors from which people obtained important incomes – at present these activities are in permanent decline.

It is also necessary to increase competitiveness of the agricultural farms by implementing activities specific to their size and to the area in which they are.

For instance, in the Caraş-Severin County they need to develop mainly farms for animal breeding and, in the Timiş County, where there are fertile lands, they can consolidate commercial farms specialised in field crops and not only.

It is also very important to increase added value in agricultural production by processing and valorising in maximum efficiency conditions.

In the Timiş County, there is also a favourable natural potential – due to the geographical, climate, and relief (mountain and plain), to the cultural and historical values and other tourism attractions allowing tourism development as a source of alternative income for the people in the area.

Due to the numerous traditions and customs in the Banat area, they can carry out lots of traditional activities and crafts that allow the establishment of SMEs specific to the activities common in the area.

REFERENCES

[1] Mateoc Sîrb Nicoleta, 2002, Dezvoltare rurală şi regională în România, Editura Agroprint, Timişoara,

[2] Mateoc Sîrb Nicoleta, 2004, Dezvoltare rurală şi regională în România, Ediția a II-a revizuită şi adăugită, Editura Augusta, Timişoara,

[3] Man T.E., Mateoc Sîrb Nicoleta, 2008, Dezvoltare rurală şi regională durabilă a satului românesc, Editura Politehnica, Timişoara,

[4] Otiman şi colab., 2006, Dezvoltare rurală durabilă a României, Editura Academiei Române, Bucureşti,

[5] *** www.timis.insse. ro

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IDENTIFYING NATURAL TOURISM RESOURCES IN THE CARAŞ-SEVERIN COUNTY

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Key words : *tourism, resources, mountains, park*

Abstract

The location of the Caraş-Severin County in a particular natural landscape, in an area that is mainly mountainous, with a rich and varied forestry and hunting fund, with a representative hydro graphic network, with particular historical and cultural values favours the development of tourism under different forms; these elements are tourism destinations with a high degree of attractiveness.

INTRODUCTION

The tourism value of the natural landscape of the Caraş-Severin County supplied mainly by the features of the relief is multiplied by the features of other factors such as: hidrography, climate, vegetation, fauna which, in their turn, are extremely varied and original, granting the landscape a high degree of tourism attractiveness through: its natural resources (protected areas, ski areas, karstic relief, glacier relief, belvedere points, hunting funds, thermal and mineral waters, etc.), as well as man-made tourism resources.

MATERIAL AND METHOD

Collecting data was done through questionnaires applied at rural localities mayor's houses in the Caraş-Severin County.
The present paper presents partial results obtained within scientific report preparation by PhD students according to individual plan of training through the doctoral school.

RESULTS AND DISCUSSION

Identifying the natural tourism resources of the Caraş-Severin County and valorising them will allow diversification and development of activities in the area with positive impact on the economic development of local communities.

Fig. 1. The Map of Caraş-Severin county

1.Protected Areas

The Caraş-Severin County, due to its geographical position, of the climate conditions with strong Mediterranean influences (dry, mild summers, and mild winters rich in precipitations), favoured the occurrence and development of numerous plant and animal species as well a wide

diversity of natural habitats – all this making the county one of the areas with the highest biodiversity in the country. The most representative natural areas in the county are three national parks and a natural park:

The Semenic – Cheile Caraşului National Park is located in the central part of the Caraş-Severin County, covering an area of 36,364.8 ha including 10 already acknowledged reserves (14,420.8 ha) and 8 nominated reserves. Among the most representative tourism objectives within the park are the following: Buhui – Mărghitaş, the Caraşului Gorges, the Gîrliştei Gorges, the Caraşului Springs, the Nerei Springs, the Buhui Cave, and the Comarnic Cave.

Photo 1 Cheile Caraşului

The Cheile Nerei – Beuşniţa National Park covers an area of 37,100 ha and includes 6 nature reserves. The best known tourism objectives are: Cheile Nerei – Beuşniţa, Cheile Şuşara, Bigar, Ducin, and Valea Ciclovei – Ilidia.

Photo 2 The National Park Cheile Nerei

The Domogled – Valea Cernei National Park covers the area of three counties. Of the total area of the park (61,211 ha), 23,185 ha are in the Caraş-Severin County, and it contains the reserves: Domogled, Coronini – Bedina, Iauna – Craiova, Belareca, and Peştera lui Ion Bârzoni.

The Porţile de Fier Natural Park is one of the largest natural parks in Romania; it covers the area of two counties, of which 74,774 ha in the Caraş-Severin County, with 14 scientific reserves. Among the nature reserves in the county we can mention: Valea Mare, Balta Nera – Dunăre, Râpa cu Lăstuni in the Divici Valley, Baziaş, Peştera cu apă in the Polevii Valley, as well as special bird protected areas – the moist areas Ostrov, Calinovăţ and Divici – Pojejena.

Though the natural elements that determined these parks to be declared natural and protection regimes to be established are extremely valuable, these protected areas are not fully ready to enter the circuit of tourism values of Europe, since they still lack proper infrastructure (access, environment, and, particularly, tourism).

2. Ski Areas

The relief mainly mountainous allows the practice of some sports and recreational activities specific to mountain tourism. The main mountain ranges of the county that have been integrated in the tourism circuit, with accommodation, agreement, and sports facilities, are:

- The Semenic Mountains are located along the Mountains Ţarcu, Godeanu and, partially, Cernei, belonging to the Meridional Mountains. Their position has brought them the name of "Banat's roof", though it is not the highest mountain range in this part of the country. The peaks of the range make up a triangle: Semenic (1,445 m), Piatra Goznei (1,447 m) and Nedeia (1,439 m). The Semenic Mountain, though not high, is characterised by abundant snows.
- The Mic Mountain reaches 1,806 m. The resort is at 1,500-1,550 m altitude. Munţii Ţarcu, of which the Mic Mountain is part, covers the north-western area of the Meridional Carpathians.


Photo 3 The Mic Mountain

3.**Karstic Landscapes**

The mountainous relief has made it possible for the county to have a wide range of landscapes and tourism attractions related to the variety of the karstic and glacier formations, to the network of valleys, etc. The grandeur of the karstic landscapes is the result of the limey relief in the **Aninei Mountains,** in the **Cerna Valley**, in the **Danube Straits** and in the **Locvei Mountains**, represented by surface formations (**gorges**, **water falls**, **valleys**, etc.) and by underground formations (**caves**).
The most representative karstic surface formations that are valuable tourism objectives due to their savageness and picturesque are: the Caraşului Gorges, the Gârliştei Gorges, the Minişului Gorges, the Nerei Gorges, and the Cernei Valley.
The caves should not be seen as singular, isolated tourism objectives, but as merely a completion supplying a surplus of value and diversity to the beauty of the existing karstic landscape. Many of the caves have become high-interest tourism objectives, despite the fact that only two of them rely on some minimal tourism facilities (the Comarnic Cave and the Thieves' Cave) and only one of them has a guide (the Comarnic Cave). Other caves are: the Gaura Turcului Cave, the Vapour Grotto, the Popovăț Cave, the Buhui Cave, the Mărghitaş Cave, the Tolosu Cave, the Racoviță Cave, the Gălățiului Cave, the Liliecilor Cave, the Ponor Plopa Cave, the Voinicovăț Cave, the Gura Cornii Cave, the Gaura cu Muscă Cave, etc.
To also mention the following: the Pitch in the Poiana Gropii, in the Aninei Mountain, the deepest pitch in the country, 235 m deep; the Banat Sphynx, downstream the confluence of the Cerna with Belareca, and the Rock of Iorgovan, on the left side of the Cerna.

4. Glacier Relief
Glacier relief is represented in the **Țarcu Mountains**, by glacier circles with huge scree, glacial valleys whose origin is in the lakes Irezu, Țarcu, Pietrele Albe, etc., and also by the wide peaks of the **Mic Mountain**.

5. Belvedere Points
The distribution of the relief in terraces supplies numerous belvedere points such as those on the Cernei Valley, the Mic Mountain, the Țarcu Mountain, the Cuntu Peak or the Semenic, Aninei and Locvei Mountains; karstic plateaus – Iabalcea, Ravnişte a, Mărghitaş, Colonovăț, La Fânețe, Cărbunari, Sf. Elena, Moldovița, Coronini and Vf. Pietrele Albe, Ciorcini, Elisabeta, Piatra Baniței, and Crucea Albă.
Landscape areas, magnificent due to their natural beauty, are the result of the variety of the forms of relief, of the alternance between the mountain ranges and the series of valleys, of the colourful contrast between the hayfields and the mountain pastures, on one hand, and the rich coniferous forests, as well as by the spontaneous occurrence of some sub-Mediterranean vegetation elements.

6. The Fishing and Hunting Fund is an extremely valuable element that increases the tourism attractiveness of the county.

7. Thermal and Mineral Waters and Natural
Negative Air Ionisation are the elements that have turned the **Herculane Spas** into a distinct location on the map of spa and climate **resorts** of the country and of Europe.

Man-Made Tourism Attractions
Archaeological sites contain Dacian settlements, Roman castra, medieval castles, etc. Some of the most representative monuments of ancient and medieval history in the county are: the archaeological site "the Thieves' Cave" – Băile Herculane, villa rustica at Gornea, the commune of Sichevița, the medieval fortress of Ilidia (village of Socolari)

and the medieval complex at Ilidia, the medieval fortress at Turnu Ruieni, the medieval fortress at Mehadia, the medieval fortress at Moldova Nouă Pescari, the medieval ensemble at Reşiţa, the "Ogăşele" point, and the Moroasa side.

Historical and art monuments and architectural ensembles can be found in the towns of Oravița, Băile Herculane, Caransebeş, Reşiţa, Bocşa, Anina, etc.

Photo 3 The Băile Herculane resort - Hercules Statue

Photo 4 Reşiţa locomotive museum

Photo 5 "Mihai Eminescu" Theater of Oravița country

Ethnography and folklore: such objectives in the field of ethnography that define the Caraş-Severin County are peasant hydraulic installations (mills, water troughs, reciprocating saws). In the field of traditional architecture, we should mention the museum-villages such as Ilidia, with a large number of farmsteads and houses that have preserved their traditional local specificity.

Industrial and technical heritage: monuments representative for the industrial history of the county concern old mining equipments, steel-milling technical ensembles, old labour architecture ensembles, dam systems and other hydro technical buildings, electrical heating centrals, railway routes, etc.

Religious historical and art monuments: the best known are the monasteries of Călugăra, Sf. Ilie in Bocşa Vasiova, Almăj – Putna, Brebu, Piatra Scrisă, the hermitages on the Mic Mountain and on the Semenic Mountain, etc.

CONCLUSIONS

The location of the Caraş-Severin County in a special natural landscape, in an area that is mainly mountainous, with a rich and varied forestry and hunting fund, with a representative hydro graphic network, with special cultural and historical values favour the development of the tourism under different forms.

The goal of sustainable development is to find the ways to increase total richness together with the prudent use of common natural resources, so that renewable resources can be maintained and non-renewable ones can be used at a rate that takes into account the needs of the future generations. It is necessary to have a clear vision on the share of each of these factors. Sometimes, some negative effects on the environment are accepted a price paid to economic development but, on other occasions, an ecosystem or a certain aspect of the environment needs to be protected against excessive exploitation.

REFERENCES

[1] Mateoc Sîrb Nicoleta, 2002, Dezvoltare rurală şi regională în România, Editura Agroprint, Timişoara

[2] Mateoc Sîrb Nicoleta, 2004, Dezvoltare rurală şi regională în România, Ediția a II-a revizuită şi adăugită, Editura Augusta, Timişoara
[3] Man T.E., Mateoc Sîrb Nicoleta, 2008, Dezvoltare rurală şi regională durabilă a satului românesc, Editura Politehnica, Timişoara
[4] Otiman Păun Ion şi colaboratorii, 2006, Dezvoltare rurală durabilă a României, Editura Academiei Române, Bucureşti
[5] www.caras.insse.ro.

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MILKING COWS BREEDING – A PRIORITIZED ACTIVITY FOR THE REVITALIZATION OF THE ANIMAL HUSBANDRY SECTOR IN THE REPUBLIC OF MOLDOVA

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Key words: *milking cows, production costs, sales income, cost, profitability.*

Abstract

The article was focused on determining the economic efficiency and arguing the economic calculations connected with the economic efficiency of the milking cows breeding within the agricultural farms of the Republic of Moldova. In order to make an analysis, the authors proposed the idea of creating a model farm breeding 10 milking cows, the one that can be implemented and managed within a family farm. The economic calculations connected with milking cows breeding have been done taking into consideration the following aspects: assessment of the necessary investments, planning the annual revenues from sales, calculation of the annual consumptions and calculation of the final economic results. As a result of practicing the entrepreneurship activity within this farm designed for milking cows breeding, we determined that it is possible to obtain an annual sufficient profit for the further development of the mentioned business.

INTRODUCTION

Milking cows breeding represents one of the basic branches of the animal husbandry sector in the conditions of the Republic of Moldova. In the last years there was a reduction of the horned cattle livestock and of the obtained production because a number of factors such as: absence of the reproduction work, a poor genofond, incorrect and unbalanced animals' feeding, often breeding the animals in inappropriate conditions, low prices (under the cost price level) offered by milk collectors, belated payments (from processing producers) for the collected milk, as well as the sudden decrease of the acquisition price for beef. All that mentioned above generated economic difficulties within this branch.

During the period of 2004-2008 milking cows livestock reduced with about 90 thousand heads, and the most dramatic fall happened in 2007, when about 40 thousand productive animals have been slaughtered.

In order to solve this problem the Ministry of Agriculture of the Republic of Moldova established some measures regarding the product channel which were sustained by the Council. The regulation of the diary products import and the maintenance of decent acquisition prices during the period of 2007-2008, have established somehow the situation within the production sector, which registered a partial reestablishment of the milking cows livestock with about 12 thousand heads. Thus, at the end of 2008, cows livestock was about 180 thousand heads in comparison with 168 thousand registered at the end of 2007.

In these difficult climatic and economic conditions, milk production decreased insignificantly, maintaining the level of 600 thousand tones annually due to the increase of animal productivity till 2900 kg per cow.

But the modification of the game laws from within the national market of dairy products generated by their import's liberalization, created a dramatic instability in the activity of both primary producers and the processing ones.

The massive imports of dairy products, especially of cheese, butter and milk powder was like a deep shocking hit for the producing-processing complex, which resulted in a reduction of sales for these products and consequently the cease of the acquisition activity and collecting offices closing for an indefinite period of time.

MATERIAL AND METHOD

In the present article we will focus on the determination and argumentation of the economic calculations regarding the economic efficiency of breeding milking cows. The authors proposed the idea of creating a model farm with a livestock of 10 milking cows, the one that can be implemented and managed within a family farm. The necessary investments to set up this farm and to purchase the production means can be done using personal sources or the ones obtained from another financing source.

RESULTS AND DISCUSSIONS

Milking cows breeding is a profitable business which has the following advantages:

- ☞ Cows breeding permit to obtain: milk, dietetic meat, veal and heifers, different sub-products (blood, internal secretion glands etc.), leather and manure – an organic fertilizer to increase soil fertility.
- ☞ The business can be set up in small proportions and then to be extended as far as possible.
- ☞ The business can be managed by one family members.
- ☞ The increased demand for dairy products, meat and leather both on the local and foreign markets.

In the Republic of Moldova the morphological potential of many breeds of cows constitutes 5000-10000 l of milk per lactation. These quantities can be obtained only using a correct feeding that influences cows productivity by 60-65%. A cow that has the productivity of 6000 kg of milk per lactation eliminates along with milk the following products: 144-220 kg of albumins, 150-300 kg of fats, 200-300 kg of sugar, 6-9 kg of calcium, 4,5-7 kg of phosphorus.

Further, we present the main cow breeds that can be bred in our republic and their characteristics (tab. 1).

Table 1. Cow breeds existing in the Republic of Moldova and their characteristics

Breed name	Direction of production	Cows body weight, kg	Milk production, kg	Fat content in milk, %	Protein content in milk, %	Calves body weight at birth, kg
Black Spotted	milk	650-750	5000-7000	3,5-3,7	3,2-3,3	35-39
Simmental	milk-meat	600-800	3000-5500	3,9-4,2	3,4-3,5	40-43
Steppe Red	milk	450-550	3000-5000	3,7-3,9	3,3-3,5	28-35
Estonian Red	milk	500-550	3500-5000	3,8-4,2	3,2-3,5	34-38
Holstein	milk	650-750	6000-10000	3,3-3,6	3,0-3,1	40-45
Ayrshire	milk	400-500	4000-5000	3,9-4,5	3,5-3,6	30-33
Jersey	milk	300-350	3000-4000	5,0-6,5	3,7-4,5	20-25

When setting up the business of cows breeding, the entrepreneur should decide about his specialization – what kind of products will he obtain annually from this farm. In order to achieve a high level of efficiency in this branch one should also take into consideration the following factors: breed, feeding and living conditions. In the model farm presented and analyzed in this article, the basic activity is oriented towards the following two directions of production:

- ⇒ milk production and its commercialization directly to specialized factories;
- ⇒ breeding of reproduction animals. which will be commercialized on the agricultural markets and another part will be left within the farm to renew the livestock of milking cows.

The economic calculations for milking cows breeding must be done taking into consideration the following aspects: (1) necessary investments; (2) planning annual revenues from sales (annual revenues from sales will be calculated beginning with the second year of activity because the farm will get its full producing capacity); (3) calculation of annual consumptions; and (4) calculation of final economic results.

The economic calculations are usually accomplished for the entrepreneurs from rural spaces, those who want to set up a farm for milking cows breeding but don't have sufficient

agricultural lands to ensure the necessary quantity of fodder. If the entrepreneur ensures the necessary quantity of fodder on his own lands, this will permit to reduce considerably the consumptions.

The cows of Black Spotted breed are the most frequently met in our republic within the private sector. For the proposed model farm we selected the Black Spotted breed. The average possible productivity that can be obtained from a cow will attain 6000 l of milk with the average percentage of fats 3,6% (in the case of a balanced ration) and by a product each year (average weight at birth varies between 35-39 kg). The heifers will be bred for a period of 17-20 months, will be mounted and used to renew the livestock of milking cows within the farm or they will be commercialized (the body weight will constitute about 450 kg).

Planning annual revenues from sales. As a result of the operational activity within the farm it is possible to obtain the following kinds of products: (i) milk; (ii) calves commercialized as live weight at the age of one month; (iii) reproduction heifers to renew the basic livestock and commercialize reproduction animals and (iv) commercialization of scraped cows per live body weight. The livestock of 10 milking cows of Black Spotted breed will permit to receive annually a proportion of 5 to 5 between heifers and calves.

Table 2. Planning annual milk production within the farm

Specification	Number of animals	Productivity of a cow per lactation, l	Percentage of fats (on average), %	Adjusted productivity of a cow per lactation (the norm 3,5%), l	Milk annually - total, l
Milk	10	6 000	3,6	6 171,4	61 714,3

Table 3. Planning annual meat production within the farm

Specification	Number of animals, head	Weight 1 head, kg	Total – meat production, kg
Reproduction heifers	5	450	2 250
Calves (the age of 1 month)	5	50	250
Cattle slaughtering	2	575	1 150
TOTAL	**x**	**x**	**3 650**

Table 4. Planning annual revenues from sales within the farm

Specification	UM	Quantity	Unitary price, lei	Sales, lei
Milk	liters	61 714,3	3,5	216 000
Reproduction heifers (3 heads)	kg of live body weight	1 350,0	50,0	67 500
Calves (the age of 1 month)	heads	5,0	1000,0	5 000
Cattle slaughtering (2 heads)	kg	1 150,0	20,0	23 000
TOTAL	**x**	**x**	**x**	**311 500**

As a result of breeding a livestock of 10 milking cows within the model mini-farm and planned productivity of animals and farm's specialization, the entrepreneur will record annually 311,5 thousand lei revenues from sales.

Annual production consumptions. Annual fodders consumptions within the farm with a livestock of 10 milking cows and 10 reproduction heifers have been planned taking into consideration the necessary nutritive units needed to produce a production item.

Fodders for cattle. Cattle rations include a large variety of fodders: 1) green, 2) juicy, 3) fibrous and rough, 4) concentrated, 5) residua from the processing industry, 6) premixes and proteinic-vitamin-mineral concentrates.

Green fodder. Daily, a cow can use up to 60-80 kg of green fodder. The grass growing on pastures has a positive effect on animals productivity and their health, that's why it is recommended to use green fodder as long as possible.

Fibrous and rough fodder. – The most valuable is hay. In daily rations of the milking cows one can introduce up to 10-12 kg of hay.

Juicy fodder – It is considered to be dietetic for cattle. Juicy fodder is characterized by a high content of water (75-90%). Milking cows can eat daily till 30-40 kg of fodder beet; 12-15

kg of sugar beet; 15-20 kg of pumpkin; 10-15 kg of potatoes; 15-20 kg of fodder turnips.

Silage. The main crop used to prepare the silage is maize. The period for ensilage constitutes the end of the milk-wax stage and wax stage of grains when the moisture is about 65-68%. To store the silage it is necessary to have special drains or other capacities that guarantee the tightness of silage mass (1 m^3 of silage weights about 650-750 kg). The correctly prepared silage is good to be used in rations after 21-30 days. In daily rations of the milking cows one can administrate 40-45 kg/head/day.

Hay fodder – is a fodder that occupies an intermediary place between the silage and hay. In the rations of the milking cows it can be introduced up to 20-25 kg.

Concentrated fodders – are the fodders with a high content of nutritive substances, that can be digested by animal organisms up to 70-90%.

Residua from the processing industry – have a significant importance in animals alimentation and namely: *waste from mills* (husk, grouts and mill powder); *waste from oil production* (grist and grouts); forage dregs (is used in the composition of concentrated fodders in a proportion from 3-5 up to 10%); *waste from sugar production (*molasses, beet noodles) and *waste of animal origin* (i) waste from slaughter-houses – blood flour, meat flour, bone flour and bone-meat flour; (ii) from fish industry – flour, minced fish meat and (iii) waste from milk industry.

Premixes and proteinic-vitamin-mineral concentrates – are used with the purpose to satisfy animals requirements for macro- and microelements, vitamins and proteins in the composition of combined fodders (they both contribute to production increase by 35-45%).

In order to plan the necessary fodders and their cost it is necessary to know rations structure of fodders per categories of animals breeding, their production/purchase price and total necessary fodders evaluated in nutritive and natural units.

Further we planned total necessary fodders evaluated in nutritive and physical units on the basis of annually planned milk production and annually gain in weight as well as their afferent cost.

Table 5. Technical data regarding the planning of necessary fodders and their cost

Specification	UM	Concentrates	Hay	Hay fodder	Silage	Radiculaceae fodder	Green fodders
Ration structure of fodder for milking cows	%	34,0%	9,0%	5,0%	20,0%	9,0%	23,0%
Ration structure of fodder for reproduction heifers	%	24,0%	12,0%	4,0%	20,0%	5,0%	35,0%
Unitary price of fodder purchase	lei/kg	1,60	0,70	0,60	0,50	0,35	0,10
Content of nutritive units	coef.	1,00	0,45	0,32	0,26	0,12	0,18

Note: quantity of premixes in the ration will constitute about 2% from total quantity of concentrated fodders and the purchase cost is 15 lei/kg.

Watering. Water has exceptional chemical properties and is a fundamental component of the living organisms. Cattle organisms, depending on the age and physiological, contain from 55% up to 75% of water. Milk, the main product, which is synthesized daily by highly productive cows in a quantity of 30-50 kg, 87% is composed from water. The water is necessary for: maximum digestion of consumed fodders; maintenance of blood volume that circulates transporting the nutrients throughout the whole organism; accomplishment of metabolic processes; elimination from the organism of all residua and toxins; regulation of body temperature; milk synthesis; maintenance in a functioning state of all organs and tissues.

Daily water consumption depends on animal's age and size, the food it consumes, its daily productivity as well as environmental conditions. Depending on these indices the quantity of consumed water varies according to different animal categories: (i) cow 60-100 l; (ii) heifer 40-60 l; (iii) young animal 6-12 months 20-40 l and (iv) veal till 6 months 10-30 l.

Table 6. Planning necessary annual fodders evaluated in nutritive units for the farm

Specification	UM	Quantity	UN consumption for a unit of production	Annual necessary in UN, kg
Milk production (milking cows)	liter	61 714,3	1,2	74 057
Annual weight gain (reproduction heifers)	kg	2 050,0	11,0	22 550
TOTAL	**x**	**x**	**x**	**96 607**

Table 7. Planning the total necessary according to fodder type evaluated in nutritive and physical units for the farm

Specification	Concentrates		Hay		Hay fodder		Silage		Radiculaceae forage		Green fodder		Premix
	kg UN	kg	kg UN	kg	kg UN	Kg	kg UN	kg	kg UN	kg	kg UN	kg	kg
Milking cows – milk production	25 179	25 179	6 665	14 811	3 703	11 571	14 811	56 967	6 665	55 543	17 033	94 629	504
Reproduction heifers – annual weight gain	5 412	5 412	2 706	6 013	902	2 819	4 510	17 346	1 128	9 396	7 893	43 847	108
TOTAL	**30 591**	**30 591**	**9 371**	**20 825**	**4 605**	**14 390**	**19 321**	**74 313**	**7 793**	**64 939**	**24 926**	**138 476**	**612**

Table 8. Fodder cost according to its type and total quantity for the farm according to groups for animal breeding

Specification	Concentrates	Hay	Hay fodder	Silage	Radiculaceae	Green fodder	Premix	Other expenses (5%), lei	Total, lei
Milking cows – milk production	40 287	10 368	6 943	28 484	19 440	9 463	7 554	6 127	128 665
Reproduction heifers – annual weight gain	8 659	4 209	1 691	8 673	3 289	4 385	1 624	1 626	34 156
TOTAL	**48 946**	**14 577**	**8 634**	**37 157**	**22 729**	**13 848**	**9 177**	**7 753**	**162 821**

On the basis of the planned fodder volume of 96,6 t UN for breeding a livestock of 10 milking cows and 10 heifers, annual consumptions to supply the farm with fodders will constitute 162,8 thousand lei.

Annual economic results. When planning the economic results one should calculate such economic indices as: annual revenues from sales, gross profit and net profit.

Table 9. Planning annual economic results within the farm

Specification	Annual economic calculations, lei
I. Revenues from sales	**311 500,00**
Consumption for fodders	162 821,30
Consumption for total water	2 500,00
Transport expenses (700 lei/month)	8 400,00
Veterinary preparations (annually 500 lei/head)	10 000,00
Other expenses (5%)	9 186,07
II. Annual variable consumptions	**192 907,37**
III. Gross profit (I-II)	**118 592,64**
IV. Gross margin, % (III/II*100%)	**61,48**
Consumption for electrical energy (400 lei/month)	4 800,00
Calculated annual wearing	15 651,70
Other expenses (10%)	2 045,17
V. Annual fixed consumptions	**22 496,87**
VI. Net profit (III-V)	**96 095,77**

Note: the ear-marked sum for veterinary services will depend on animals health, and certain common procedures will be accomplished by the farmer.

Thus, as a result of practicing the entrepreneurship activity within the farm for milking cows breeding, it is possible to obtain an annual profit of about 96,1 thousand lei.

CONCLUSIONS

In the period of reform, except poultry breeding sector, all the branches of animal husbandry sector have suffered much. Thus, the livestock of cattle reduced by 3,4 times at the end of 80s, the one of porcine – by 5,1 times, the ones of sheep and goats – by 42%. At the same time the weight of the commercialization volume of animal products reduced too, that's why the Republic of Moldova has already become a big importer of live animals and animal products. From a qualitative point of view, most animal products from the private sector of production don't correspond to national standards and to those of the European Union. In order to cease the decline within the complex of milk production and processing and to develop it rapidly it is necessary to put into practice certain vital measures as:

1. developing new highly productive animal breeds, which would be competitive both on the national and foreign market;
2. the main link of the production field from animal husbandry sector must become the agricultural farm, based on private property, with a farm of milk and meat production-merchandise, supplied with 18-20 hectares of agricultural land and technology for agricultural and animal breeding practices;
3. subvention of cattle milk and meat production;
4. concluding milk delivery contracts with intermediary providers taking the acquisitions directly from producers;
5. revising cheese assortment and producing new types of pickled and fresh cheese in a volume of 40-50% in comparison with those produced nowadays;
6. applying special tax for cheese import in a volume of 500 euro/t by modifying the law regarding customs tariff nr. 1380 from 20.11.1997, with further modifications and completions;
7. to counteract the illicit import of dairy products and of their falsification by packing them in advance using national enterprises brands.

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REFERENCES

[1] Stratan Alexandru, Zbanca Andrei, Morei Virgiliu, Litvin Aurelia, Petcu Igor, 2010. Ghid privind argumentarea economica a activitatilor din agricultura Republicii Moldova (sectorul zootehnic). Casa editorial-poligrafica Bons Offices, Chisinau, 214 p.

[2] Stratan Alexandru, 2007. Evolutia economiei agriculturii Republicii Moldova: reflectii, probleme, mecanisme economice. Tipografia ASM, Chisinau, 380 p.

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RURAL DIVERSIFICATION

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Keywords*: rural tourism, environmental education, environmental protection.*

Abstract

The world is looking to diversify the forms of tourism that are intended for increasing the demand for this touristic but also for rural tourism to participate in environmental protection. In this regard appeared in a new rural tourism offer aimed at young people. This new tourism product is to respond to young people thirst for knowledge of their environment but also their education to environmental protection. In this respect are the results obtained in this area by some European countries including Spain where the authors have worked several years in this farms.

INTRODUCTION

Rural tourism includes tourism activity itself (accommodation, hostel, tourist service, develop programs, provision of basic services and additional) - economic activities (mainly agricultural but also the practice of traditional occupations), and how leisure, for those who require this type of tourism [1]. Tourism is growing in rural areas in close correlation to the local economy, leading to interdependence between these two sides.

MATERIALS AND METHODS

Diversity is perhaps the main feature of this form of tourism. This diversity is given by rural areas, the traditions and customs checks, economic and social conditions, the level of education, environmental care. Segment of tourism that targets young people is to first know the rural reality and secondly education for environmental care.

RESULTS AND DISSCUTIONS

Nature gives us with joy and simplicity, in full, unconditionally, all its assets. Human civilization is a very important role in the evolution of ecosystems on our planet, but, unfortunately, man does not seem to be aware of the huge role they have. It is well known that human society develops not only time but also in space. For these reasons, culture and level of development of any society not only confess our ethical values, aesthetic, moral, economic, etc.. But training style or personalities of each individual relationships with the natural environment. But these relationships are often reckless and alarming, which require initiating public discussion of the problem data. Educating the masses, especially the young generation, to properties of organic conception unit, has become more necessary today when there is an increased influence of man on nature, the technique is developing rapidly, when speaking of the mechanization of agriculture, the use pesticides, the development of tourism. Environmental education involves not only the formation of proper behavior towards the environment, but active involvement and thoughtful in the process of environmental decision-making. If we ask what chance has the education environment in a world driven by material interests and what effect would not have to be abandoned by optimism, to be sure that starting from the earliest age, environmental education is well.[4] The children must understand that on Earth there is interdependence between human population and countless species of plants and animals, between society and the biological cycles of nature. Then make them aware of the need for scientific and technical gains that must

not become enemies of nature, but in accordance with this, to keep the Earth's resources, judicious exploitation of forests, soil and subsoil wealth, to keep the natural beauties of mountains, clean water, air, so necessary plant, animal and human default.[3] Environmental education aims at training and problem solving abilities growing along with the application threads and post-industrial technologies industrial social scale, that have made numerous negative effects on the nature and human existence. Environmental education can be achieved by any type of activity: education, extra-school, scientific, literary, artistic, arts, sports etc.. The arrangements are varied: observations, experiments, science stories, drawings, practical activities, walks, hikes, excursions, watching slides, motion games, fun, tourist guidance, organic labyrinths, collections, exhibitions, entertainment, watching TV , expeditions, camps, plays ecological contests. [2]

A form of making environmental education as extracurricular activities is "farm school" (Granja Escuela)

Not long ago in Spain every family cultivates its own vegetables and keep animals. Now there are increasingly fewer children were fortunate to go to the grandparents' house to learn the routine of rural life, not so very far away.

1. What is a farm school (Granja Escuela)?

Granjas Escuela-farm School-the school is dedicated exclusively to children around the rural reality because, nowadays and urban living, very often do not know. These centers are specially equipped to receive visitors and enables relationship with the natural environment and environmental education appropriation. Have small gardens and stables where the child becomes familiar with the origin of food and increase farm animals, namely: rabbits, chickens, cows, horses, pigs, goats and sheep, etc. A "farm school" is defined as an educational center that uses as teaching material, study and analysis, those elements that are characteristic of holdings and also using resources and surroundings as teaching possibilities.

The objectives of such a center are:

Approximation of students and teachers in urban and rural nature-cohabitation teachers and students, establishing a positive relationship with all around us-the opportunity to observe environment-application of the learned with games-familiarity their holdings with the works of all these objectives and other similar things can be achieved through various activities-study and observation of landscape, forest and agricultural areas . trade-study soil and climate-observing and investigating its relations with rural-urban-botany laboratories working in greenhouses: cultivation techniques, game analysis-tours, visits, promenade-shops: food processing, nature, expression * (drama, puppet theater, music, dance), handicraft (pottery, textiles)

A farm-school installations and equipments are: gardens and greenhouses sheds and pens with animals (cows, pigs, horses, chickens, rabbits, etc..) Halls multipurpose workshop .

2. What will the child in school farm?

Besides spending a day or more with his friends car without the house, children can make various activities in these centers. They learn to plant and harvest vegetables, put together the eggs, will see how to milking a cow, will the food from animals and animal behavior will be witnessed with their chicken. Besides this, each firm offers a number of games , workshops and activities always in close contact with the environment .The children can learn to knead and to bake bread, make cheese, spin wool or make instruments that can be useful in a farm. In addition children will serve meals from the products obtained or harvested farm, which helps them determine their origin and preparation of food.

3 How long and how much it costs?

Depends on each farm. Prices vary depending on the duration and services. I farm school where the children spend a day trip. It may be in the group (organized by schools.) Forming a group or individual when it comes to farm. Other offers possibility of accommodation in this way the children can spend a weekend up to 15 days. Farms school can be public or private. works the same and have the same services, which differentiates them is the price, because the public school districts have agreements with the County or even the Ministry of Education.[5]

Decree, organized in five chapters, includes numerous provisions to ensure that services provided in environmental education centers, both in terms of educational and accommodation is provided with high quality and safety for users in a framework of sustainable development.[6]

CONCLUSIONS

1. Development of rural tourism has produced important changes in village life, especially those that have a diverse tourist offering, bringing new items on: achieving their specific resources (spas, hunting, cuisine, crafts, ethnographic and folklore); changes in urban plan and building facilities by the appearance of specific (Agro firm, pension), avoid the process of rural depopulation by the emergence of new solutions for filling the workforce, developing small rural industry recovery and revitalization of primary agricultural products specific trades rural area.
2. This paper aims to study the relationships between environment and education with environmental education as a result.
3. Education is an interpersonal transfer of ideas, approaches and data deemed relevant to a human life fundamentally harmonious, this information is presented and taken into a formal (school, college) or non-formal (personal discussion, etc.).
4. In terms of ecology, it is the science of ecosystem interrelations between living organisms and living environment, a synthetic science focused on understanding the processes of our environment integrated. Environmental education becomes an attempt to transfer some pragmatic ways of thinking with regard to ecosystems, species, including human populations, understood in the context of their evolutionary transformations occurring in space and time plan.
5. Environmental education is the recognition of values and understanding of the concepts in question formation and development of skills and attitudes necessary for correct understanding and appreciation of the interdependence between human culture and natural environment factors. Environmental education, as it is called, is the process that serves the environment and recognition of values to clarify the concepts of environment, and its goal is to promote skills training and attitudes necessary to understand the interrelations between people, culture and environment, for conscious and responsible development activities aimed at improving environmental quality.
6. Environmental education can be achieved by any type of activity: education, extra-school, scientific, literary, artistic, arts, sports etc.. The arrangements are varied: observations, experiments, science stories, drawings, practical activities, walks, hikes, excursions, watching slides, motion games, fun, tourist guidance, organic labyrinths, collections, exhibitions, entertainment, watching TV , expeditions, camps, plays ecological contests.

So, it is not about a day without School, but to bring School in the natural environment to observe, experiment, and reflection about what is creating our environment

REFERENCES

[1] Romeo Cretu, Agro Resources, DID, Ed Ceres, Bucharest 2008
[2] Environmental Education and Volunteering in the Environment", prepared by the Foundation for Culture and Environmental Education and National Center for Voluntary ECOTOP Pro Vobis, June, 2003,
[3] www.educatieecologica.ro
[4] www.referat-e
[5] viajes.practicopedia.com
[6] spanish law- the decree 179/2000

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THE IMPORTANCE OF AN APROPIATE NAME CHOOSING FOR INTERNET ADVERTISING FOR AGROTURISTICS PRODUCTS

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Abstract

Taking into account the faster growing methods of modern advertising and agroturistic industry can benefit and improve the advertising and the offer of agroturistic services and accommodation by choosing a representative and unique name for its products and services.

INTRODUCTION

The online advertising of products and services requires a very important marketing decision: the name choosing. In the classic advertising the product name is important, in online advertising the name choosing is critical.
The reason is: before internet age, a product had a visual component too, although the name was the most important, the visual component as a image, packaging, colors, fonts led to a full image of that brand which counts for the consumer.
In online advertising the things are a little different, because the internet removes the visual characteristic of the product. To enter on a website or to find a product or service you just type a word, without any need of images, colors, fonts.

MATERIAL AND METHOD

Some typical internet brands are: advertising.com, cooking.com, phone. com, gifts. com, garden.com, postcard.com, songs.com, none of those are small companies, but big corporations that invest a lot in advertising campaigns.
What is the problem with these brand names? All are common names.
A common noun is a word that desigantes any object or being belonging to a certain category.
A proper noun is a word that designates a certain object or being.

The most known world brands are proper nouns, not some common, generics, names. Some of them are some international brands: Coca-Cola, Microsoft, Nokia, Mercedes, Kodak, Sony, Malboro and much more. Do you think that in a couple of years we will find websites such as cipsuri.com, telefoanemobile.com, on the list of the most known brands?
For exemple, the best search engine on the web is not searchengine.com but Google and there are more exemples like this.
But still, the majority prefer to use common names for their webpages and not proper names. Why?
There are some reasons: at the begining of the internet there were just some web pages, a common name was an advantage, if you wanted to find a website with „doughnuts" you just typed doughnuts.com and you found what you needed; is the same thing as in a shop where the offer is not varied and you want to buy biscuits and you ask for biscuits. Ourdays, when the internet is everywhere, you can not go and ask for biscuits, you will have to tell the seller what kind of biscuits you want, what brand and so.
Another reason was that at the begining of the internet a common name was the most fast and direct way in which you could communicate your website. This advantage wasn't for long because the internet development brought thousands of web pages with common nouns in their names, so the advantages vanish in the crowd.
Ourdays, after so long time in which we are used with the internet, some companies don't

succeed to get over the old way of naming their sites. Actually, if they continue to name their pages with common names, the newcomers will think that this is the way the things should be nand they do the same, on the principle that if the neighbour does this, you should do the same (even if the neighbour could be wrong sometimes). Only because the majority of the webpages have common names, this doesn't mean it's the best strategy for your site. This means that most of the companies on the internet just want to be in line with the others, which leads to identity loosing.

RESULTS AND DISCUSSIONS

As an exemple, for auto industry, by a simple search on Google we will have the surprise to discover the mesage: „Results 1-10 of about 94.100.000 for automobiles"; for turism „Results 1-10 of about 14.400.000 for turism". Few of the brand names are generics names, most of the successfull brands have proper nouns or names. Thus, for automobiles we have: Mercedes-Benz, BMW, Ford, Volvo etc.; for mobile phones: Nokia, Motorola, Samsung etc.

CONCLUSIONS

The internet is different, but consumer's mind remains the same. In order to have success, you have to place your brand in consumer's mind. By using a generic name, the consumer's mind will perceive it as a category name and he will never asociate it with a certain brand, loosing from the begining its place in his mind.
On short time, many potential consumers will use search engine to find the webpages they are interested in. So, it is possible that they find your page and to attract some visitors. But this will work only on short time.
The whole idea of branding, on internet or elsewhere, is about lingering its name in consumer's mind. If you succeed this, a potential client will not use a search engine but will type your webpage. The best exemple is Google: when you need a search engine you just type www.google.ro.
When you choose a brand name for your web page, the first question you should ask yourself is: what is the generic name for that category? That is exactly the name you shouldn't use for your website. Invariable, a singular proper name will prove to be a better name for your page than a generic one.
Besides the fact that you choose a proper name, your strategy will be more efficient if you take into consideration some simple rules: the name should be short, easy to pronounce, simple, unique, shoking, out of ordinary, singular.

REFERENCES

[1] Al RIES & Laura RIES – The 11 immutable laws of Internet branding
[2] Al RIES & Laura RIES - The Origin of Brands
[3] HERBERT M - BRANDING@THE DIGITAL AGE
[4] ******* Internet

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RURAL TOURISM IN OŠČADNICA VILLAGE WITH THE EXAMPLE OF TOURISM FACILITY – COTTAGES IN KYSUCE REGION OF SLOVAKIA

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Key words: *agritourism, rural tourism, accommodation facility, cottages, additional tourism services, Kysuce region, municipality Oščadnica*

Abstract

In the Kysuce region (Slovak Republic), there is an excellent example of a tourist-developed municipality – Oščadnica. At present Oščadnica relies heavily for its prosperity on the winter tourism trade. This reliance causes problems, which hinders the development of the municipality and results in reduced visitor rates in the other seasons. There are many hotels, restaurants and complementary tourist services within Oščadnica and the article quantifies the numbers of visitors and their breakdown by category. Reconstruction and improvement suggestion of accommodation facility in rural tourism – Cottages in Kysuce region is the complement of the work. The aim of this part of project is to provide constructive ideas to develop the levels of rural tourism in the Kysuce region and specifically to use agritourism to increase visitor numbers in the summer period and eliminate the overdependence on the ski resort in the winter season. In addition it aims to demonstrate the beauty and attractions of the region and its local folklore, culture and to discuss specific steps being taken to develop the tourist trade in the municipality.

INTRODUCTION

Rural tourism and agritourism offer many facilities for development of Slovak rural areas. The main aim is especially to preservation and prosperity from potential of countryside. Product of rural tourism and agritourism is very special, that is very positive. They do not offer just little pleasant moments in countryside, in nice surroundings and fresh air. The main idea is especially the development of economic activities suitable for countryside, protection of our environment and culture, as well as improving of life quality of country people. It is also good form of familiar, municipal or regional additional income. These forms of tourism trade are more successful in more tourist developed areas. Region of Kysuce as well as municipality Oščadnica are very good example of that. Region of Kysuce is specific in natural, cultural and historic treasures and it hides its dormant potential. In present the municipality Oščadnica is famous for winter ski resort Park Snow Veľká Rača. But the development of rural tourism is there under giant pressure of seasonality.

Following Otepka and Habán (2007) tourist trade in Slovakia is relatively poorly developed, especially in comparison with neighbouring countries as Hungary, Czech Republic, Austria and Poland. According to informal statistics total number of farms carrying business in rural tourism is approximately 62 (42 among them is carrying business in agritourism), while in Hungary it is 6800 farms and approximately 400 in the Czech Republic. In the Slovak republic there are many agricultural enterprises as well as many small family farms. Almost 45% of Slovak inhabitants live in rural areas. 60% of more than 2600 municipalities have less than 1000 inhabitants. They are called small rural settlements. In conditions of Slovakia there is very necessary to look for proper identity of rural settlements determined with local characteristics and traditions (Pichlerová, 2008).

The aim of the article is:

- to evaluate potential of Severopovažský tourist region briefly
- to introduce tourist developed municipality Oščadnica
- reconstruction and improvement suggestion for accommodation facility in rural tourism in municipality, project is based on additional agritourism services
- evaluate economic return and perspective for future

MATERIAL AND METHODS

To realize the purpose, we used following methods of work:

- study of literature focused on tourism, especially rural tourism and agritourism
- develop the characteristics of the locality using available literature and materials
- selection of suitable building for business plan and consulting with its owner
- develop the project itself and proposal of the activities in rural tourism and agritourism
- develop the strategy of marketing, SWOT and economic analysis, estimated costs and budget for project

RESULTS

The accommodation facility is located in village Oščadnica, locality Svancari, approximately 5 km far from the village centre. The locality is very attractive for rural tourism and agritourism. The visitors will find peace and privacy in the bosom of beautiful Kysuce region nature there. The accommodation is offered in two reconstructed wooden cottages that are rented the both at once as well as two separated objects.

The reconstruction was focused on preserving of the original elements of folk architecture in association with the comfort of modern technology. The first cottage is called Cottage under the lime and its reconstruction started in 2002. The second one is called Cottage "Žofka" Sophia and its reconstruction started in 2006. Cottages are standing side by side, but each has its own fenced land.

Cottages are ideal for family holidays, young but also elderly people who are looking for pleasant place far from noise in the cities. In winter season tourists are looking for accommodation especially because of skiing in the ski resort Park Snow Veľká Rača Oščadnica. Summer season is popular for hikers, cyclists, or good mushroom locality mostly. Although the accessibility is not ideal this is not a problem in today's motorized time. Best access is by car but there is the bus station 500 m far from the cottages and railway station is 8 km far away. In the winter time the main road is well and regular regulated in the village and access to facility is regulated by the cottages' owner.

Cottage No.1 – Cottage under the lime tree

The original cottage was built in 1902. In 1995, a fire damaged the roof, which was reconstructed in the same year. The complete reconstruction was realized after its purchasing in 2002. Since the beginning 2003 it has been possible to offer accommodation services. At first accommodation capacity was 4 persons, later 8 persons. Interior is very pleasant and comfortable. There is bedroom for 3 persons with cable TV downstairs, also kitchen with occasional bed, dinning corner, tiled stove and fully equipped kitchen corner.

Downstairs is also bathroom with toilet and shower as well as living room with fire place, cable TV and DVD. The attic is bedroom for 4 persons and there is also bathroom with toilet and shower. There is covered terrace by the entrance to the cottage. The building also includes garden, where visitors can play football, volleyball, tennis or badminton. There is also new wooden sitting with garden furniture, fireplace, table tennis, garage for one car, parking space for next 3 cars and small vegetable garden. There is hundred years old lime tree beside the cottage, that's where is the name "under the lime tree" from.

Cottage No. 2 – Cottage "Žofka" Sophia

This cottage was built much later than the previous one. Reconstruction began in 2006 and accommodation has been possible since

2007. Its capacity was 4 persons at first, but it is 6 persons at the present. This place is an ideal place for family holidays.

There is one bedroom for 4 persons with cable TV, living room with double bed, cable TV, DVD and sofa, fully equipped kitchen with sofa, tile stove and dinning corner and bathroom with toilet and shower. The cottage includes one special living room with separate entrance called "koliba" with fire place, sitting and billiards. There is also outdoor fire place in the garden and gas grill is possible too. There is parking place for 2 cars. From spring to autumn the greater part of garden is used for sheep couple, they are very popular especially for visitor's children.

Expected situation in the future

The main aim is to use agritourism to increase visitor numbers in the summer period and eliminate the overdependence on the ski resort in the winter season. The winter season will offer quality cross-country skiing tracks near the facility with the possibility of transit tour to Poland. The visit rate will also increase thanks to greater publicity. Accommodation capacity will be expended to 8 people in the both cottages. Parking place will enlarge by renting of neighbouring parcel to cottage No. 2. The best solution for shortage of water at a critical dry season not only for accommodation facility but also for local residents will be enlarging of drinking water source. Workshop construction could be great solution to shortage of souvenirs and local art products in the village

Contribution of the project

In the village there absent attractions and services focused on rural tourism and agritourism and services are mainly focused on accommodation services. The visitors demand of services such as production and sale of traditional products and meals but such services absent in the village. One of the aims of this project is construction of workshop for traditional products and souvenirs production, which will be available also for other visitors to the village. The aim is also to bring closer the life of rural population for visitors from cities through the realization of suitable areas for livestock so that visitors have opportunity to take care of animals in this facility. In the winter ski resort offers quality skiing pistes but they do not think about the cross-country skiers. This project would like to realize part of the track for cross country skiing, which will be combined with cross-country truck to Poland.

SWOT analysis

S: Strengths

- developed tourist village
- centre of winter and summer tourism
- overlapping of Slovakian, Goral and Wallachian folk culture
- great attributes of local history and traditions
- regional museum, gallery and open air museum with world rarity written in UNESCO
- profitable geographical position at the border of three states with good communication links
- reasonably priced
- activities for leisure time
- experience in subject and language knowledge

W: Weaknesses

- deficient marketing, poor image, the region is unknown for the most of potential visitors, lack of promotion
- lack of coordination between entrepreneurs at the regional level
- lack of additional services for leisure time in tourist resort
- isolated activities of private entrepreneurs
- low average salary levels in tourist services, poorly motivated staff, low level of orientation focused in customer
- seasonality of accommodation facility utilization

O: Opportunities

- tourist interested in region

- revival of customs, traditions and regional cultural institutions activities
- development of winter and summer tourism in view of the nature potential
- development of additional services in tourist trade centres
- possible orientation for eco-tourism
- development of projects for rural tourism promotion
- increasing interest in agritourism and holiday in the countryside

T: Threats

- lack of tourists interest in winter if snow condition are not suitable
- increasing competition in the tourism market in other regions
- financial problems
- expectation of services prices growth and loss of this competitive advantage
- slow growth of offer quality
- lack of finance for promotion

Project sustainability

After project realization and successfully fulfilled objectives the owner plans to buy neighbouring parcel and he wants to start horse breeding. If there are negative conditions in the ski resort Park Snow Veľká Rača Oščadnica, the owner would like to create and arrange cross-country skiing tracks around the facility as well as in the village. In the future owner wants to rent place for souvenir shop because of absence of such service in the village and new job opportunity is also an advantage. He also would like to preserve traditional activities such as traditional pig-sticking, lamb roasting, stew cooking, May building, snowmen building. In the case of visitors interest owner is prepare to provide also catering services.

Marketing Strategy

Currently 50% of customers are people who have visited the facility and some like to return more times per a year. In this case, the best advertisement is the customer's satisfaction. But it would be great mistake to relay on this promotion especially at present IT era. Facility wants to innovate its web page, cooperate with Slovak and Czech travel agencies. The web page is translated into English and German. The owners are trying to promote by wood souvenirs with motive of cottages, cut and decorated by owner himself. Other souvenirs will be available for tourist direct in this facility. Promotion materials (posters, postcards,…) are suitable for promotion and direction tables are suitable for better orientation in the village.

Christmas and New Years Eve period is certainly the most requested, they used to be sold out previous year. However it is necessary to focus on the other dates. The winter season is associated with skiing in the ski resort Park Snow Veľká Rača - Oščadnica. If snow conditions are suitable, accommodation facilities will be busy the whole winter season. Winter season starts on 1 December and ends on 15 April. Summer season begins on 1 July and ends on 31 August. Summer season is popular for modest tourists, mushroom-pickers, or simply for people who want to spend a few pleasant moments in the countryside. The off season is popular for weekend stays and because of lower booking rebate will be provided also for fewer accommodated people. The strengths of the facility are also reasonable price of accommodation.

Project return

This project is vital also because of its great position in tourist developed village Oščadnica. At present the facility is very popular and the owner has the honour to suppose the increase of reservations and income. At present total extent of accommodation is 160 days per a year. The greatest part in the summer and winter season and the rest is off-season. Supposed increase of booking is approximately 20%, what presents 190-200 days per year.

DISCUSSION

Rural tourism in Slovakia became a relatively new form of tourism. It is particularly suitable to the mountainous and semi mountainous areas, especially in view of the relatively

undistorted nature and possibilities of annual use, whether in the summer - hiking, biking or winter - skiing and other winter sports are possible. (Mach 1993). Papcúnová et al. (2007) argues that the development of rural tourism and agro-tourism provides an opportunity to use a large potential for the Slovak countryside offering tourism products to participants.

Beside accommodation facilities it will be stay at farmers court, preserving of the typical rural architecture, various recreational activities in farm work, harvesting or picking forest fruits, studying folklore and local customs, etc. The importance of rural tourism and agritourism for the stabilization of economic security of the rural population is not marginal. This form of business may have beneficial effect on the partial reduction of high unemployment in some regions of Slovakia (Otepka - Habán, 2007).

PROPOSAL OF KNOWLEDGE USE

The biggest deficiency of developing tourism in village Oščadnica is a lack of services in comparison to an excess of accommodation facilities. A visitor can choose accommodation from each category, but upon arrival is unpleasantly surprised when he must go shopping within 10 km to the city, he has no possibility to have fun or finds only broken ATM. The problem is probably effort to make money easily on accommodation services than bother with the operation of other services.

Accommodation facility Cottages in Kysuce region is an example of developing rural tourism in the village. It is located in the beautiful scene; guests will find here a perfect privacy. The owner is very willing and wants to contribute to the attractiveness of visitor's stay. The implementation of this project, he would like to help develop tourism in the village and perhaps draw the right direction to the other inhabitants. If visitors want to stay here longer than a weekend, we have offer a reason for him to stay there. Firstly, he should be interested in price offer, should feel at home, we should offer him enough activities for active holidays and relaxation.

CONCLUSION

In Slovakia we have incalculable number of attractions, natural, cultural and historical. Each village has its history, specialties and hence potential. At first, this should persuade local people of this potential and teach them how to use it correctly. It is this potential need for development of rural tourism and agritourism. Kysuce region has also suppositions for their development. Tourism in rural areas can help reduce unemployment in the countryside, preventing displacement of population, maintain the landscape with all the necessary functions for the environment, culture and secure income of population. We meet, however, the negative aspects of rural tourism, as a result of uncoordinated development. It is important to first consider the appropriateness of their application in the rural area.

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REFERENCES

1. Habán, M. – Otepka, P.: Agritourism. Nitra : SPU, 2004. 153 p. ISBN 80-8069-451-6.
2. Mach, F.: Entrepreneurs guide in rural tourism and agritourism. Bratislava: RÉKA 1993. 165 p. ISBN: 80-88731-03-8.
3. Otepka, P. – Habán, M.: Rural tourism and agritourism. Nitra: ÚVTIP Publishing NOI Bratislava, 2007. 117 p. ISBN 978-80-89088-52-2.
4. Papcúnová, V. – Balážová, E. – Jarábková, J.: Tourism trade and the autonomy. Nitra: Municipalia, 2007. 100 p. ISBN 978-80-8069-862-1.
5. Pichlerová, E. 2008. Vidiek mení svoju tvár. Opeknieva? In *Farmár*, roč. 1, 2008, č. 22, s. 9-11.

Picture 1: Proposal of propagation material for Cottage under the lime tree.

Picture 2: Proposal of propagation material for Cottage "Žofka" Sophia.

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REALIZATION OF TRADITIONAL SHEEPHERDING IN AGRITOURISM AND RURAL TOURISM IN CENTRAL SLOVAKIA

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Key words: *agritourism, rural tourism, services, sheepherding, tourists*

Abstract

An objective of this work is to offer the look at agritourism realization of sheep breeding in Slovak Republic and its description in midlands rural areas of Slovakia. These regions are birthplaces of traditional Slovak sheepherding, and these traditions are still alive. Our intention was to compare a particular accommodation and restaurant facilities in rural tourism and agritourism facilities, which are interested in sheep breeding. They make products from sheep milk and after that, they sell them as one of the products offer for tourists. The comparation was done by obtaining information such as criterions of accommodation equipment, offer of services and their quality, attendance and price policy. We have found out that people's interest about this type of accommodation is still increasing and that we can evaluate the quality of services offered as very good. The application of traditional and modern sheepherding in agritourism and rural tourism might bring positive economic results to the agricultural farms. It helps us to keep a cultural heritage and character of rural areas what is our goal in sustainable agriculture in rural areas.

INTRODUCTION

Liptov and Orava regions belong to the mountainous areas that are specific to a number of meadows and pastures. Particularly difficult access for agricultural machinery creates space for sheep breeding that are adapted to these conditions.

Traditional sheep breeding and sheepherding are linked to these regions for centuries. They significantly contributed to the lifestyle shaping of the people, its culture and history (Zuzkinová, 1999). Therefore it would detriment not to use it fully in farm and rural tourism. Currently Slovak sheep farmers are in difficult period of transformation and adaptation to new conditions (Lazarčík, 2006), although it is now perhaps the only advancing sector of animal production which is still insufficient, so we need to look for further opportunities for its development. One way to its development may constitute the agritourism and rural tourism. Sheep breeding and sheepherding offers for agritourism and rural tourism a wide range of possible uses either alone holding the traditional sheep farming or the products thereof. This combination ultimately could contribute to the development of Slovak rural areas in particular; improve the lives of its people, and also shape landscapes (Papcúnová et al., 2007).

The aim of this work is to evaluate and analyze the tradition of sheep farming in Slovakia with emphasis on Liptov and Orava regions and the current state of Slovak sheep breeding and sheepherding. Provide an overview of the current state of the use of sheep in relation to agritourism in selected agritourism facilities in the region Liptov and Orava. Compare these facilities based on the quantity and quality of services provided. Also discusses the possibility of its further development in this area.

MATERIAL AND METHODS

To achieve the main aim of work will facilitate the further partial objectives - choice of facilities and primary and secondary data collection. Choice of agritourism facilities is only affected by two factors. The first is the business of rural tourism and agritourism in conjunction with sheep farming. The second factor is the location of facilities in the northern part of Slovakia, particularly in regions Liptov

and Orava. Only one facility is located outside these two regions, but that facility is offering very interesting services, we have decided to integrate it into the analysis file. As the primary data collection method we used a controlled conversation. Secondary sources have been received from - literature library, promotional materials (leaflets, brochures, booklets), legislative regulations affecting business in tourism and internet.

We have obtained information from the owners of facilities, operators of various facilities for rural tourism and agritourism, which can not be obtained otherwise.

When processing the collected data following methods were used:

- Analytical - a synthetic method; the method we used in the analysis of characteristics of facilities.
- Comparation method; we use in comparing the observed criteria in terms of quality and variability of services, facilities provided.

Comparing of rural tourism and agritourism facilities, we have performed according to selected criteria. The first group consists of the criteria evaluated by the method of controlled conversation. The second group consists of criteria based on data from secondary sources.

Structure criteria:

- Basic characteristics of agritourism and rural tourism facilities:
  - localization, operation of business
- Equipment facilities:
  - accommodation capacity, room equipments
  - other rooms of facilities, infrastructure
- Quality of services and their variability:
  - the quantity of services and their structure
- Price policy:
  - price for services
- Visit rate:
  - visit rate over the last three years
- The share of income from farm and rural tourism to the total income:
  - share of income over the last three years.

RESULTS AND DISCUSSIONS

The oldest facility is Gazdovský dvor Peter Jurky, which was founded in 1991. All of the analyzed facilities are located in rural areas that are surrounded by many mountains. In terms of localization Salaš u Štefana, Rabčice and Gazdovský dvor Peter Jurky are located in the district Námestovo, Penzión Gejdák and Salaš Krajinka are in the district Ružomberok, Salas Žiar is in district Liptovský Mikuláš. All facilities are easily accessible by road and 20 km away from cities. Currently in the Orava and Liptov regions 8 facilities are doing business in the sphere agritourism and rural tourism in connection with sheep farming. For the analysis we selected only 6 facilities. Two facilities from the examined file are members of SZVTA (Slovak Association for Rural Tourism and Agritourism) - Agrotour Jurky Vasiľov and Penzión Gejdák, Ružomberok.

From the analyzed facilities are: 2 pensions, 3 cottages and 1 restaurant. Pensions are Penzión Gejdák and Penzión u Michala. Salaš Štefan Turác and Agrotour Jurky are cottages. Salaš Krajinka is restaurant facility.

Accommodation capacity of all the facilities is 107 permanent beds and 20 additional beds. The largest number of beds is in Penzión Gejdák with capacity of 53 permanent beds and 12 additional beds. It is also quite large number of rooms Penzión u Michala with a number of 24 permanent beds and 4 additional beds. Other facilities have had about the same accommodation capacity. Apartment accommodation only offers Penzión u Michala.

Each facility offers restaurant services in their own premises. Four of the six analyzed facilities offer restaurant services and Salaš Žiar, Penzión Gejdák, Salaš Krajinka, Penzión u Michala. Pensions have a restaurant, bar and cafe. Gear-type house but do not have restaurant facility are available to cottage or rustic kitchen. Everyone of the facilities offers full or half board, but also in Salaš Rabčice and

Agrotour Jurky there is also a possibility of separate food preparation.

Catering services in these facilities are specific to particular offering typical dishes and drinks for their guests. This we consider to be a very positive factor, because it helps to promote typical Slovak cuisine, and thus contributes to the attractiveness of these facilities to the public. In addition to hospitality establishments also offer additional and specific services. These services will undoubtedly make your stay in a facility, and no small extent, help our rural areas and history more attractive.

Figure 1: The number of services offered in each agritourism facilities.

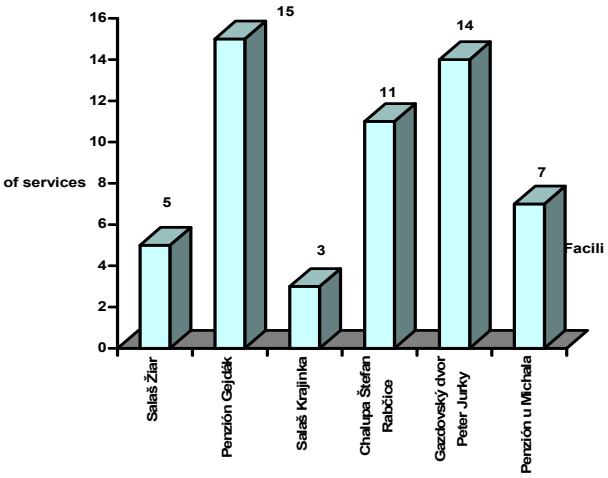

Figure 1 shows the highest number of services providing by agritourism facility Pension Gejdák, followed by Gazdovský dvor Peter Jurky, also cottage Štefan Rabčice, Penzión u Michala, Salaš Žiar and Krajinka. It can therefore be concluded that the facilities that operate in this area offer the most extensive long-range services for their guests, and contrary, often have a newly opened facility offering services closer. All facilities are offering regional specialties. All facilities with one exception offer the possibility of taking part in feeding and production of sheep milk. Also, these products are included in the offer letters to customers.

Facilities that have been the subject of comparison offer several additional and specific services. The best accommodation options are in Pension Gejdák. Favorable condition is that all the facilities have a growing trend of increased supply of complementary services.

Price is an important tool that provides entrepreneurs with so needed business efficiency while significantly affecting demand. It is therefore very important to develop price policy to be most favorable for both sides. The analyzed facilities will charge its prices on several factors that affect their formation. In particular, competition - the price of competitors for the services offered to customer requirements, there are willing to pay for the service and cost policy so that the prices brought operator expected profit (Otepka – Habán, 2007).

The analyzed facilities use a system of price differentiation. Two facility differentiate own prices on a variety of room equipment and room size. Three facilities differentiate own prices based on seasonality. Most facilities provide discounts for certain target groups, such as children under 3, 10 years. Interesting in chalupa Stefan Rabčice is offer of discounts for guests taking part in specific services such as production traditional clothing and so on. We would suggest that the facilities to provide cost-effective comprehensive programs for guests in which would be included more services at lower cost. Gazdovský dvor Peter Jurky offer discounts for long term accommodation (€ 3.33 / 99 € / day).

Another very important aspect in rural tourism is advertisement. At present entrepreneur use more ways for propagation their facilities. The most widespread form of advertising is personal contact, followed by a particular promotion for their own promotional material such as flyers, business cards, postcards, brochures, which give basic information to the customer. The posters are in several languages. Another popular form of promotion is advertising through websites. Several establishments are in our opinion, disregard of this form of promotion of sufficient importance. Often a website is "empty" - little information about the facility, a few photos.

All of the analyzed facilities use the opportunity of promotion through information tables set up by roads. Some of the facility but have not installed information boards at the right places with the best visibility, or are too small and thus may be that potential customers sometimes "wanders" and have to look for a

facility. Most effective form of advertising has become the Internet. Facilities such as Agrotour Jurky, pension Gejdák presented their offers to such exhibitions. "Agrokomplex Nitra", Slovakiatour Bratislava.

The most frequent guests are Slovak, Czech and Polish. Slovaks are in the majority of 2/3 of the total number of guests. Recently there was a significant decrease in guest traffic mainly Polish nationality, which entails a number of reasons.
Of the total clients represented are the most numerous family of children, the group tours and individual visitors are fewer. Guests staying in facilities from 4 to 5 days to one week.
Today can be seen in much of the facilities upward trend attendance. The highest growth in attendance for the past three years experienced in facilities pension Gejdák and Penzión u ichala. The downward trend in attendance is shown only in agritourism facility Gazdovský dvor Peter Jurky. Based on the synthesis of available data, it can be concluded that on attendance impact the most promotion of facility and communication with the public and also localization. The facilities near to touristic centers, which have propagation on the high level noted considerable growth of attendance. Vice versa, the facilities with bad location had attendance low.
Attendance of facility has a direct connection with the generation of revenue and profit (Otepka – Habán, 2007).
The largest share of revenue from activities in agritourism and rural tourism reported to Salaš Žiar. The reason is that the facility does not work in conjunction with agricultural activity but the owner of facility only providing accommodation and catering services. The share of income from sheep farming in this case is completely negligible because the facility owner is not the owner of any cattle or livestock. The second highest share of income from agritourism and rural tourism recorded in the Pension Gejdák, where rural tourism is an important source of revenue. In facilities Salaš u Štefana and Penzión u Michala income from agro and rural tourism are not now so very important source of income but still not negligible. Only facility Gazdovský dvor Peter Jurky has experienced in the previous period from 2006 to 2008 decline in income from agritourism. The facilities at Salaš u Štefana, Gazdovský dvor Peter Jurky and Penzión u Michala business owners in agriculture and other business forms is an important part of the revenue.

SWOT analysis (Liptov and Orava regions for the development of rural tourism and agritourism in conjunction with sheep breeding and sheepherding):

Strengths:
- favorable geographic position of the territory, region
- the interest of tourists from abroad in these tourist areas
- suitable natural conditions for intensive and less demanding tourists
- the possibility of annual use
- excellent in winter conditions for winter sports
- sheepherding tradition
- good conditions for hunters, fishermen, pickers forest fruits and medicinal plants
- cultural - aesthetic benefits for the country
- convergence of urban and rural populations
- dispersion of tourism land use
- currently operating facilities are in service at high level
- sheep breeding and sheepherding have increasingly greater coherence with tourism

Weaknesses:
- lack of promotion of the regions
- lack of promotion facilities
- low level of information
- inadequate complementary range of services in some facilities

Opportunities:
- upgrading works to the chalet
- guiding and interpretation services
- use of support funds
- increase employment
- self-realization of the local population
- use of natural historical and cultural heritage
- use of existing housing stock

- increased activity throughout the area
- sheep breeding and sheepherding as one of the biggest attractions Slovak countryside

Risks (threats):
- economic instability
- lack of public awareness
- high credit burden on businesses
- lack of business support from the state
- poor motivation

Outline of options for addressing the development of rural tourism and agritourism in the Orava and Liptov regions in conjunction with traditional sheep breeding and sheepherding:

- The most important step is to constantly pay attention to sheep breeding and sheepherding and its links to tourism.
- Activities leading refreshed, to return to traditional crafts, rural traditions, which were recently out of interest and preserve the traditions typical of these areas.
- In the near future will need to focus on the development strategy of education for rural residents and businesses in rural areas, in order to increase the level of quality services in agritourism facilities, but also very interested in increasing business in this area.
- Give attention to the promotion of sheep breeding, sheepherding issuing various promotional materials, maps, souvenirs, postcards, or traditional products, the Internet.
- Encourage the development of business, cultural, sporting projects through the submission of the grant preferences aimed at developing rural tourism and agritourism.
- It is necessary to promote the development of rural tourism and agritourism using local resources, especially in areas that are suitable for recreation, tourism and agritourism.

More vigorously and comprehensively address the problems outlined in agritourism and rural tourism can ensure the further development of agritourism and rural tourism in Liptov and Orava regions. Some possibilities solution will require a lot of time and work and not easy to implement (e.g. construction of new accommodation facilities, facilities for processing milk, etc.), but nevertheless we must seek the fastest and best quality development. A prerequisite of successful operation in this area is the perfect theoretical training of all stakeholders, but also the potential subjects, whether at government level but also individual entrepreneurs, which could help the results of this thesis.

Sheep breeding and sheepherding in Slovakia represent the manner of use of sheep farming and grassland represent one of the most specific form that are not in other countries, except Romania, Poland and the Czech Republic used in this specific way. Sheepherding represent complicated complex phenomena of folk culture. This includes working tools and techniques, building objects. A significant part makes social and legal elements of nature; they categorize the organizational forms of farming and grazing, Mountain and Cattle associations, modes of remuneration and contractual hiring shepherds, their social status in the village community, forms of ownership and payment of damages. This culture remained with us for centuries and remains almost unchanged. A lot of manifestations spiritual culture relate with sheepherding and sheep breeding, such as work habits and customs, ideas about nature pastors, medical practices, superstition imagination, magic acts, folk's sayings. Very important is also artistic and aesthetic feeling sheepherders - manifests itself in characteristic artistic expression in music, dance and literary folklore we have to kept it for future generations, to create conditions for their possible enhancement and promotion to the public (Zuzkinová, 1999). In connection with leisure moments, the possibility of implementing leisure activities is sheep breeding and sheepherding perfectly connected and predetermined for possible use in rural tourism and agritourism.

The presented analysis of individual plants can be seen that when the traditional culture associated with the business of tourism, this partnership creates a number of benefits not only for guest relations - a service provider but also for a range of non-production activities,

which is economically very difficult to quantify but nevertheless bring invaluable benefits in the form of enhancement of rural areas and culture.

CONCLUSION

Based on this analysis, agritourism opportunities in the Orava and Liptov region and together with the development traditional sheep breeding and sheephelding can deduce the following conclusions:

- Liptov and Orava regions over time are increasingly becoming a popular tourist area, not only for domestic but also foreign tourists.
- Liptov and Orava have a rich tradition of sheep breeding and sheephelding and they are associated with their territory for a long time, their cultural and historical value have contributed to the shaping of their history and tradition, and agritourism offers an excellent opportunity to promote them.
- More and more entrepreneurs are interested in starting this business, what suggests the fact the number of these facilities in the monitored regions.
- Sheep breeding and sheephelding undergoing several changes, so now is the evident desire of agricultural cooperatives and private farmers connect your business to the area of tourism and thus increase its economic profit.
- The connection sheep breeding and sheephelding with farm and rural tourism can achieve preservation of folk culture, sustainable rural development, and the benefits that today are becoming priorities for global world.
- Equipments of the facilities and quality of provided services are very good, but we have to improve it, because still growth demand for a wider range of services offered.
- Price policy can be viewed as a very good set with all facilities, rural tourism and agritourism is still offering cost-effective form of vacancy, which does not acquire meat character.
- This analysis clearly demonstrated an increasing impact of agro and rural tourism in the overall farm incomes, appropriately targeted investment in the agritourism nowadays farm and farms may help to some extent, the time many of them will appreciate.

ACKNOWLEDGEMENTS

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REFERENCES

[1] Lazarčík, J. 2006, Konkurencieschopnosť chovu oviec v EÚ. In: International Scientific days 2006, [online] 2006, [cit. 2009-02-12] pp.4. URL: http://www.fem.uniag.sk/mvd2006/zbornik/sekcia1/s1_lazarcik_juraj_378.pdf

[2] Otepka, P. – Habán, M. 2007. Vidiecky turizmus a agroturizmus, Bratislava: NOI. 2007, 120 p.

[3] Papcúnová, V. – Balážová, E. – Jarábková, J.: Tourism trade and the autonomy. Nitra: Municipalia, 2007. 100 p

[4] Zuzkinová, I. 1999. Ovčiarstvo a salašníctvo v Liptove. Liptovský Mikuláš: Občianske združenie Spoločnosť priateľov múzea Liptovskej dediny, 1999, 138 p.

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EVOLUTION OF AGRICULTURAL MACHINE STOCK IN REGION OF SUD VEST ROMANIA

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Key words : *mechanical, evolution, SW Region , Romania*

Abstract

The paper aimed to present the evolution of mechanical stock during the period 2004 -2006 in the Sud West Region of Romania, including Dolj, Gorj, Mehedinti, Olt and Vâlcea Counties. It is based on the statistical data provided by National Institute of Statistics, the Regional Directorate of Statistics Dolj. The data have been processed into the following indicators: Natural tractors, plows, seeders, combines. To adjust fleet of tractors and agricultural machinery should be considered and local peculiarities: natural conditions (climate, soil, topographical), socio-economic conditions (territorial planning, the existing workforce and its skill level) and the information on agricultural area, profile and specialization of production

INTRODUCTION

Mechanically fixed capital in farms has the largest share of total fixed capital, he having decisive role in economic transfer [of technology in crop production and livestock [1]. Growth and efficiency of agricultural production depends on the best equipment with tractors and agricultural machinery. To achieve this goal the acquisition of mechanical means to consider the following technical-economic indices: productivity, adaptability, mutual consistency, convenience, reliability, economy, maintainability, availability [2]. The South West Region of Romania contributes with more than 10 % to mechanical fleet [3] .

MATERIAL AND METHOD

In order to characterize the evolution of mechanical fleet, the following indicators were used: number of tractors, number of plows for tractors, number of mechanical drills, number of propelled combine and ground loads of equipment. The period analyzed in this study is 2004-2006. The data, collected from Regional Directorate of Statistics Dolj, have been statistically processed and interpreted, building the trend line and setting up the forecast based on simulation models for the period 2008-2015.

RESULTS AND DISCUSSIONS

Table 1 shows details of mechanical park southwest region, indicating also the weight of its national. In terms of the number of tractors at the regional level, there is an average of 22,087 pieces - 12.76% of the national indicator. This level resulted in sequential annual contributions, of the region, to achieve the total number of tractors of 12.67 and 12.80% for 2004 and respectively 2005 and 2006 - Fig.2 (21,777, 22,147 and 22,337 pieces - Fig. 1).

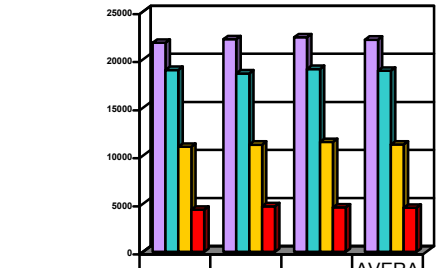
Table 1. Evolution of mechanical park in southwest region during 2004-2006 (pcs.)

Year		Natural Tractors	Plows	Seeders	Combines
2004	Pcs.	21777	18932	10930	4381
	%	12,67	13,91	16,72	17,14
2005	Pcs.	22147	18571	11153	4733
	%	12,80	13,55	16,71	12,36
2006	Pcs.	22337	19033	11427	4620
	%	12,80	13,73	16,86	17,96
Average	Pcs.	22087	18845	11170	4578
	%	12,76	13,73	16,77	17,82

The number of plows ranged from 18,571 units in 2005 to 19,033 units in the year 2006, with an average for the period of 18,845 pieces - fig.1. At the national level region recorded annual contributions sequential 13.91, 13.55

and 13.73% in 2004, 2005 and 2006, so that the average have a share of 13.73% - Fig.3.

Fig. 1. Park of mechanical means in the South West Region



	2004	2005	2006	AVERAGE
TRACTORS	21777	22147	22337	22087
PLOWS	18932	18571	19033	18845
SEEDERS	10930	11153	11427	11170
COMBINES	4381	4733	4620	4578

Fig. 2. Number of tractors - South West Region, national share

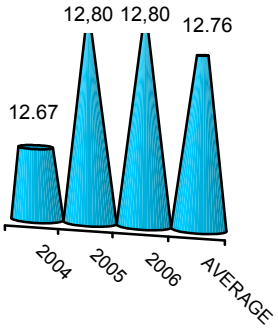
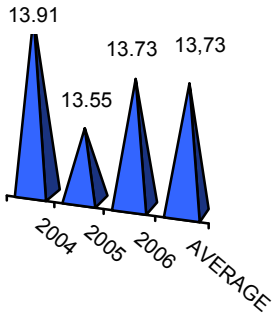


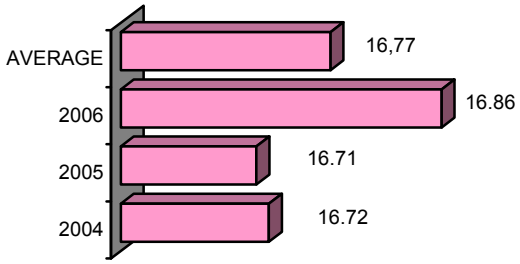
Fig. 3. The number of plows - South West Region, national share



Referring to the park of mechanical drills there is an average of the indicator, of 11,170 pieces, with annual levels of 10,930, 11,153 and 11,427 units in 2004, 2005 and respectively 2006 - Fig. 1.

Following this situation, the region contributing to the national park of drills with variable weights, as follows: 16.72% in 2004, 16.71% for 2005, 16.86% for 2006 and 16.77% for the average period - Fig. 4.

Fig. 4. Number of mechanical drills - South West Region, national share



Park of self-propelled combines varied from 4381 units in 2004 up to 4733 pieces in the year 2005, the average period of 4578 pieces - Fig. 1.

The share of the region in the national level of the indicator was 17.41% in 2004, 18.36% for the year 2005, 17.96% in the year 2006 and 17.82% for average period - Fig. 5.

Fig. 5. The number of combines - South West Region, national share

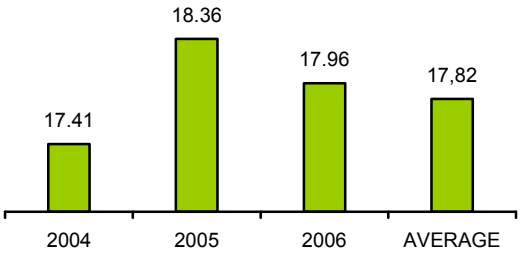


Table 2 shows the load of agricultural land on the truck at the regional level by types of equipment is the following one :

- for tractors, the region presents annual load of 83 ha in 2004, 82 hectares in the year 2005, 81 ha for 2006, while the average period was 82 ha (fig.6);
- The plows, the region presents annual load of 95 ha in 2004 and 2006, 97 ha for 2005 and 96 ha in the average period (Fig.7);

Table 2. Weight of ground equipment during 2004-2006 (ha)

Year	Physical Tractors	Plows	Seeders	Combines
2004	83	95	115	287
2005	82	97	113	265
2006	81	95	110	272
Average	82	96	112	274

Fig. 6. South West region – land weight on tractor

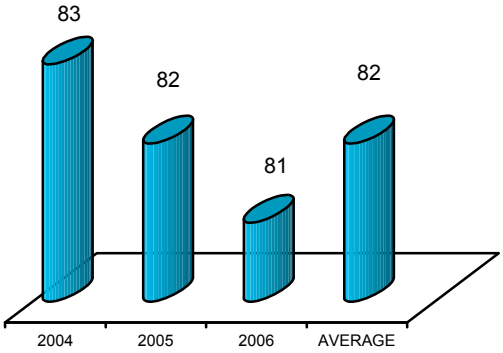
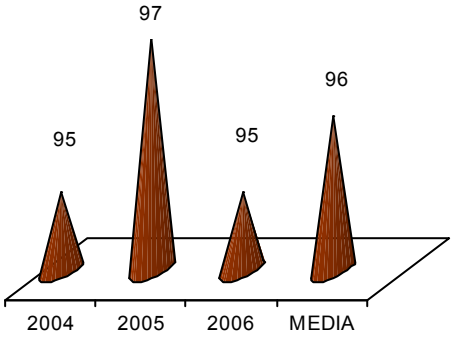


Fig. 7. South West Region - the load of ground on plow



- Region recorded annual loads seeder 115 ha in 2004, 113 hectares in the year 2005, 110 ha in 2006 and 112 ha for average period considered (Fig.8);
- At regional level, the load on the combine was 287 ha in 2004, 265 hectares in the year 2005, 272 ha in 2006, levels that have resulted in An average for period of 274 hectares (Fig.9).

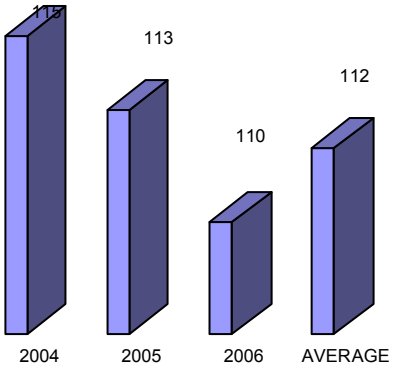


Fig. 8. South West Region - loads of land on mechanical seeder

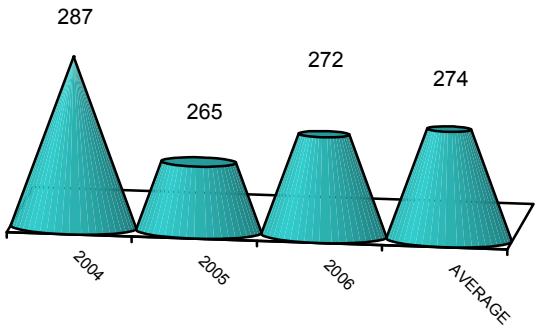


Fig. 9. South West Region - loads of land on combine

CONCLUSIONS

1. Dynamic components of mechanical technical capital, shows upward trend for tractors and seeders mechanical (increase of 0.9% for tractors up to 4.5% for sower), fluctuating trends for plows and combines - the final trend increase for first item and final trend of decrease for the second item.
2. Load on the tractor has an average of 82 ha (3 ha less than the national average), this level being found in the counties of Olt, Dolj and Mehedinti - 68, 76 and 84 meters. Other counties outruns the term of comparing with 16 and 36 meters - Gorj and Valcea. Notably, declining load on the tractor, during the period examined - excepting Mehedințiul and Valcea.
3. Average surface plug was 96 ha of agricultural land (-11 ha compared to national), regional level is exceeded in Gorj, Mehedinti and Valcea - 123, 102 and 128 ha.
For Dolj and Olt is a beneficial situation for the indicator, topping it with 18 and 5 ha below the

regional level. The indicator had a trend - in general - downward during the period analyzed at the county level, but rather uniform at regional level;

4. The load on seeder was 112 ha (about 39 ha less than the national level), under it being Mehedințiul and Dolj (107 and 109 ha), in Olt county the level has been echi-unitary beside the regional one, and for Gorj and Valcea was outruns with 2 and 41 ha. The indicator had a declining trend in Dolj, Gorj and Mehedinti, uniform development for Olt county and fluctuating upward trend for the Valcea county.

5. The land on combine was 274 hectares at regional level with 93 ha less than the national level. Under this average lies Dolj and Gorj - 245 and 240 ha. Other districts exceed this amount by 14, 28 and 199 ha - Olt, Mehedinti and that Valcea. At regional level, progress indicator is fluctuating, the specific trend of most administrative territorial units - except only for Dolj County.

6. The region lies consistently above national levels in terms of average load on equipment - regardless of its type, resulting in a more favorable situation than other regions of Romania. However, it noted the need for numerical growth driver of the park in terms of achieving agreed levels of indicator. In this direction, the European financed projects are needed, etc., for infrastructure improvements.

REFERENCES

[1] Barbu Constantin, Pânzaru Radu Lucian, 2000, Economie agrară, Editura Hyperion, Craiova, Capitolul 2, p. 25-45

[2] Ştefan Gavril, ş.a. 2007, Economia şi filiera produselor agroalimentare, Editura Alfa, Iaşi, Capitolul 5, p. 181-225.

[3] x x x – www.dolj.insse.ro

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SUSTAINABILITY IN THE ROMANIAN BEEKEEPING CHAIN: DIAGNOSIS AND PROSPECTS

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Key words**:** *beekeeping-chain, sustainability, environment, economic, social*

Abstract

The techno-economical analyse of the beekeeping chain in Romania is made in terms of sustainable development- an universal concept widely quoted and interpreted in terms of connotations that may results from its implementation. This concept is fully used when the analysed system is an agrifood one. The beekeeping chain is a vertically built system, including production, processing and distribution of the products. The methodology used is based on: identifying and assessing of the economic, social and environmental aspects of beekeeping system, sustainability analysis by selecting key issues, improvement of the issues identified above and providing sustainability indicators to consumers. Reported on the studies conducted until present on international level, the present study aims to consider all three elements of the triangle of sustainability: economic-social-environment fits in the direction of research based on the modernization of food production and the obtaining of appropriate products which respects the principles of sustainable development and food security.

INTRODUCTION

In Romania, beekeeping has developed in particularly favorable natural conditions that have contributed to the continuous development of this activity. In the context of food chains, the beekeeping chain is a very complex one, its analysis joining the European Union wishes to improve the conditions for production and marketing of bee products. Studying beekeeping sector has benefits not only in terms of updating the technical and economic data but also to identify solutions that highlight the development opportunities of the sector and promoting consumption.

Various international studies on the beekeeping chain demonstrate the dynamic of this sector, showing the possibilities of modelling and feedback mechanisms that allow analysis of the beekeeping sector in a given period of time. The researches conducted in Argentina allowed the development of quantitative forecasts and scenarios, taking into account certain variables: technological change, prices evolution, consumer behaviour, market position of major foreign competitors, and China's influence in international trade [1]. Studies made until present at international level are focused, in a classical way, only on the environmental impact of beekeeping chain. Reported to these, the present study aims to consider all the three elements of sustainability triangle, proposed by Fritz & Schiefer (2009) and applied by the Argentinean researchers: economic-social-environment [2].

MATERIAL AND METHOD

Research methods used in the study are structured accordingly to the specificity of every step.

To analyze the upstream chain, it is used the documentation technique by collecting bibliographic information in order to achieve a synthesis of the social, economic and technical studies available until now, watching that they have credibility as possible. At this stage, available databases are consulted, both

nationally, provided by The National Institute of Statistics, The Ministry of Agriculture and Rural Development, the advisory county offices, The Chamber of Commerce and Industry, the professional associations, internationally, provided EUROSTAT, FAOSTAT, and The European Commission. Thus, information collected from Statistical Yearbook and from various official reports allows obtaining some important references on the history and the evolution of bee chain. The techno-economic analysis of the Romanian beekeeping sector is made in terms of sustainable development - a universal concept widely quoted and interpreted in terms of connotations that may result from its implementation. This concept is fully used when the system is considered an agri-food one, because food production is essential for humanity. The agri-food chain is a system vertically built, from farm to fork, including production, processing and distribution of products. The impact of the agri-food system on the environment, on the economic and on the social life is the main focus in the research of the beekeeping chain in Romania.

RESULTS AND DISCUSSIONS

Romania is among countries with well developed beekeeping, this situation being a consequence of a meaningful number of bee families, of the big quantity of honey produced, of the diversification of beekeeping production and of the results of scientific research activities and training specialists. Thus, in the last decade, the bee numbers reached the annual average of 1,000,000 families and the honey production has registered a significant increase from 12,124 tones in 1989 to 20,037 tones in 2008 [3].Trends up to presents are to enlarge the number of bee families and the production of bee hive, because of the favourable climatic conditions that allow the economic exploitation of a big number of bee families.

This is possible due to progress registered at the administrative level and to the reorganization of Romanian Beekeepers Association, a territorial structure with 41 district branches. The production increasing was also determined by the organization of the pastoral beekeeping, by the actions against diseases and pests and by the improvement of the results in the scientific research field. Estimated Romanian honey production is a delicate exercise because it is highly variable from year to year, increasing or decreasing it depending on climatic conditions, on the measures taken by the Government, on the business strategies adopted and on the yields obtained by practicing transhumance. Taking into account these parameters, the production varies enormously from one year to another, generally between 10,000 and 20,000 tones per year (Fig. 1). The largest share is the poly honey 50%, followed by acacia honey 35% and lime honey 15% [4].

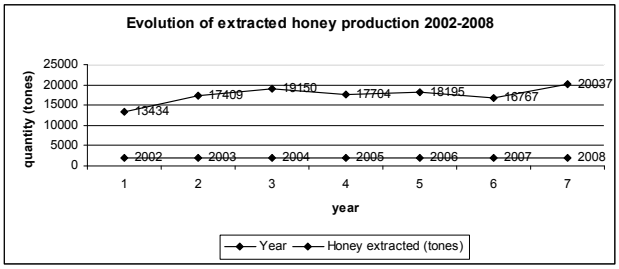

Fig. 1: Evolution of extracted honey production in the period 2002-2008

Source: own processing after data from the Statistical Yearbook of Romania 2008 and 2009 reports of MADR

The first point of the analysis of sustainable development relates to its *impact on the environment*: water and energy consumption in the production process, waste (packaging), carbon dioxide emissions due to production process and transport, biodiversity and soil quality. All production processes in the agri-food sector consume energy and fresh water. As the final product becomes more industrialized, these consumptions increase. According to FAO statistics, agriculture concentrates 70% of water used around the world, the rest being used for domestic and industrial purposes [2]. In the case of apicultural Romanian production, there is an indirect water consumption used to generate the plants biomass from which the bees extract the nectar. The direct consumption of water is insignificant, if it is compared with other intensive agricultural activities. The greatest volume of water is used during harvesting and extraction of honey, but as this is a seasonal volume of water used it is not very large.

Energy consumption is also low; it is realized when beekeepers use the equipments during the harvest and the processing. In terms of waste from packaging used for honey, it is to mention that a good part of the production is shipped in bulk; drums used are reusable and the other packaging doesn't produce a significant waste. Following the analysis of the carbon dioxide emissions from beekeeping activities, estimations can be made by comparison with those from the other activities, which have been measured by FAO. Compared with the most polluting activities (cattle breeding), beekeeping doesn't represent a significant problem in this regard. On the other hand, it can be also analysed the main way of transportation of beekeeping products. The main destination of Romanian exports is the EU countries, especially Germany; the main transport route used is the road, which, as we know, is a major pollutant. It can be also analyzed the important contribution of bee pollination services on fruit production by favouring the expansion of vegetation. This makes possible the fixation of significant quantities of carbon dioxide, reducing the amount of emissions of the system. All because of pollination services and of the important role of bees in the development of flora and fauna, beekeeping has a significant contribution to maintaining biodiversity.

The second point of the analysis focuses on *social issues*, reaching these points: nutrition and health, food safety, fair trade, food network, social and ethical conditions, welfare of bees. Bee products have a nutritional and curative value, being used directly for domestic consumption but also indirectly by many industries: food industry, pharmaceutical and cosmetics ones. Due to its characteristics, honey is often associated with a medicinal product, causing a seasonal consumption. The beekeeping system should respect the principles of traceability. In the case of exported products, these principles are respected; in the case of internal market, traceability is almost nonexistent, requiring improvements. About fair trade, in Romania there are no honey producers certified fair-trade; it is recommended to start some actions in this regard and to support producers that could obtain a fair price for their products on the markets of developed countries. The analysis of the beekeeping sector from a social point of view analyse the associative ability of beekeepers. The small and medium beekeepers are characterized by a strong individualism, being less open towards the association; the explanation for this fact is the weak vertical and horizontal coordination and the low standardization of production. However, beekeeping plays an important social role, being an income generator and a job creator; this occupation doesn't require a large capital and can be practiced not only full-time but part -time or as hobby. The definition of Beekeeper Entrepreneur is still very difficult to achieve in Romania, being in an early stage and requiring further improvements in terms of assuming economic and social responsibilities. Regarding the welfare of bees, honey extraction techniques are less aggressive in Romania and don't affect the hive ability to recover and produce again.

In the *third point* of the research are analyzed the *economic issues*: the affordability of bee products for consumers, the performance and the competitiveness of the bee chain and the quality of the products. As mentioned above, the consumption of bee products is extremely beneficial for the population health. For this reason, they must be accessible to consumers and the distribution channels have to be efficient. From previous researches made in the field of beekeeping, it has found that family income is the major factor that determines specific consumption in the household. As such, honey and the other bee products are perceived as not very cheap; they can be found in the consumption of high-income households. On the other hand, there is a pronounced ignorance about the attributes of honey and of other hive products. Educational level, as a determinant of a healthy lifestyle put its mark on food behaviour of individuals. Hence, the main consumers of bee products are found among the educated or medium-educated people; from this fact results the importance of the promotion campaigns in the favour to the consumption of bee products. The analysis of the performance and of the competitiveness of bee chain indicates that approximately 80% of

beekeepers practice this activity at small and medium scale. The average honey production obtained per one beehive is between 36 and 40 kg; this amount doesn't allow the development of efficient distribution channels; honey is often sold in bulk, by an intermediary. The processing and the packaging costs of bee products necessary to be made in order to access foreign markets are too high to be affordable for the segment of beekeeper that detain small and medium sized apiaries. On the other hand, the beekeepers access to credit with attractive interest rates is quite difficult. Although after 2000, the financial services have improved, most of which are heading toward large bee farms or towards processors and exporting companies. This creates a dependency for the small and medium-sized producers who collect and sell bee products, creating an asymmetrical negotiation power between parties, which finally disadvantage the producer, determining him to accept the market price. In terms of technology, the bee sector is one of the most productive sectors, but faced with enormous differences regarding the access to equipments and to professional training for beekeepers. There are few beekeepers who are informed on the latest technologies, or who wish to participate at specialized courses. The different access to information and technology put their mark on the competitiveness of beekeepers. To these we add the quality of bee products, the traceability being the main mechanism in order to respect the quality standards. This involves not only food safety but also the identification of the products origin. As mentioned above, the main destination of Romanian honey is the European Union. However, Romanian honey is mixed with lower quality honey from countries like China. For this reason, the final consumer loses the opportunity to identify the place of origin of the honey. Also, most of the Romanian honey is exported in bulk, another reason for lose its identity.

CONCLUSIONS

The beekeeping chain has enormous benefits on the environment, by the pollination services. The consumption of resources, in principal water is not significant. The emissions of carbon dioxide, due to the transportation of honey by road are compensated by the development of the flora due to the pollination. The main social impact of beekeeping is due to the nutritional value of honey; its content is rich in at least 435 nutritive substances. In this respect, honey is one of those food products that regulate human vital functions, being an excellent tonic for children and convalescents. Regarding honey consumption, it is still very low, comparing with other countries. The traceability system requires improvements, especially in the case of internal market. Beekeeping plays an important social role, being an income generator and a job creator. Economically, honey is not affordable for all Romanian consumers and it must be promoted among them as a healthy food. The distribution system has to be improved and the products have to contain information about their origin. The importance of bee products results from their economically value and also from the values of increased yield obtained as a consequence of intensive pollination which exceed 10-15 times the value of bee products obtained from bee families.

REFERENCES

[1]Mogni, F. & collab., 2007, Marketing strategy planning and Management for Argentine honey traceability, International Food and Agribusiness Management Association, 18th Annual World Forum and Symposium;
[2] Mogni, F. & collab., 2009, Sustainable development in food and agribusiness: application of the theoretical model to the Argentine beekeeping sector, VII International PENSA Conference, Sao Paulo, Brazil, p. 1-16;
[3] Institutul National de Statistica, 2008, Anuarul statistic al Romaniei;
[4] Ministerul Agriculturii si Dezvoltarii Rurale, 2009, Documentar de presa – Sectorul apicol;

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STRATEGIES AND NECESSARY ACTIONS FOR FAVORABLE CREATION OF AN INVESTMENT CLIMATE IN REPUBLIC OF MOLDOVA

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Key words: *investment, strategy, climate, enterprise, financial support*

Abstract

Investments represents the material support of the economical development and stayed on the basis of diversification or qualitative growing of the all production factors. Investment strategy, as a orderly multitude of information with an economical character or other nature, establishes, on the basis of some studies the main goals of the enterprise in investment domain, the actions which follow to proceed for achieving of the objects, the ways of reaching, the financial sources and the methods of resources allocation. Investment strategy, as a partial strategy, but which occupies an central place in the frame of the strategies and policies of the enterprise, must take into consideration and the others strategies of the enterprise (market ones, restructuration, information etc.), subscribing in the global strategy of one enterprise, in it economical policy, assuring financial support of materialization on enterprise' programs.

INTRODUCTION

Investment climate where economic agents unfold their activity has its particularities in national economy and, of course, distinctive features given with the economy of others states. In the case when potential investors take the decision of placing their capitals into the capital of one country it is important the factor of analysis of investments opportunities of which could enjoy in their antreprenorial activity.

The knowledge of investments opportunities constitutes the strong point for planning of economic activity and from the beginning allows the outline of some prognostication counterpart of potential business partners, about territorial extension possibilities through exploration of the new sale markets and the ways of fructification of planned profit through selection of attractive branch.

MATERIAL AND METHOD

In this scientifically paper are shown the results of the investigation of investment climate in the Republic of Moldova. The information which is presented in this article is based on the data about investments from the Statistics National Bureau of Republic of Moldova.

Nowadays this sector of activity needs modernization by using high technologies and scientifically researches, attracting Foreign Investments in agricultural sector will contribute to modernization of this sector; will create new possibilities to use high technologies; will bring us the possibility to use all the farm lands more efficient, in this way we will assure the economical growth of our country.

RESULTS AND DISCUSSIONS

Once establishing foreign investments for a receiver country, especially in a country on a development way this factor has negative influence than positive that's why it is important to emphazise what kind of strategies can be applied by the economy whih needs foreign investors support, with a view to attract international financial resources into the country.

Of course, in the substantiation of decisions of investors in other countries are based of an deep analysis of a lot of factors as:

- political, social and financial stability (macroeconomic durable stability);
- institutional and legislative frame in the domain of affaires, the absence of birocratical obstacles;
- the existance of the professional labour force at the low costs;
- the level of infrastructure development;
- the dimension of internal market;
- the potential profitability as well as the existence of some fiscal advantages.

A favorable investment climate includes: political stability, the supremacy of law, the independence of justice which will protect the rights of foreign investors; equal rules concerning the economical activity, the development of the business infrastructure including financial and justice services etc. [1]

Analyzing the investment rate in Moldavian Republic we may conclude that during 2001-2008 this rate increased 19% up to 45%. But in 2009 was registered a fall down of this rate from 45% down to 33% because of the political instability and because of the negative influence of the World Financial Crisis. In this way of things we can say that investment activity decreased very much (figure 1).

Analyzing the number of companies with FDI created in Moldavian Republic during 2001-2008 we can see that this indicator increased in this period from 295 up to 895 companies (figure 2). In 2009 the number of companies with FDI decreased because of the difficult situation in the political system of the country and also because of the financial crisis all over the World.

If we analyze the investments which came to our country in different sectors of our economy we will see that the agricultural sector is less attractive than other sectors. In this sector there are investments near 10%. The most of investors invested in energy sector (33%), in manufacturing industry (25%), wholesale and retail trade (17%) (Figure 2). [6]

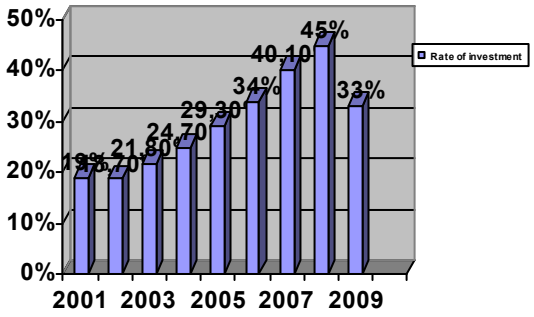

Figure 1. The evolution of the investment rate in Moldavian Republic

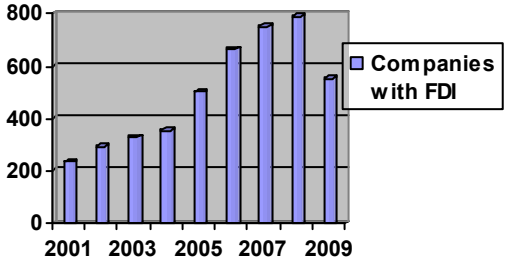

Figure 2. The number of companies with FDI created in Moldavian Republic during 2001-2009

Foreign investors are very sensitive about our investment and business climate. Everybody wants to be sure that the investment he made today will bring him profit tomorrow. But analyzing the last events which passed in our country: the events from April, the uncertainty of the political situation; all these make the foreign investors to think once more while investing in Moldavian Republic.

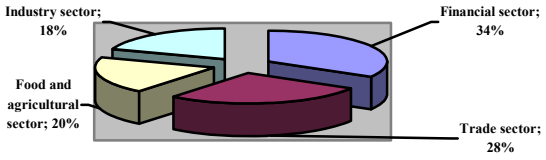

Figure 3. FDI inflows during 2006-2008

If we analyze the biggest companies which received FDI during 2006-2008 (figure 3), we can mention that most of them are from the financial sector (12 companies, 34%), especially from the bank system. Among them

we can mention Eximbank Gruppo Veneto Banca, Unibank, Mobiasbanca GSG.

Then FDI was received during 2006-2008 also by the trade sector (11 companies, 28%). Among them we can mention Metro Cash and Carry, Cviza-M, VK M Trade and Vistarcom. The last three of them are the owners of Greed Hills Market and Fourchette-M.

On the third place analyzing the FDI investment situation is situated the food and agricultural sector (10 companies, 20%). Among them are: Bostavan Winery, Acorex Wine Holding, Wine International Project etc.

How we can conclude food and agricultural sector received FDI but this is not sufficient for a competitive agricultural sector. Only the biggest companies from agro-food sector received FDI, in general the situation remains still difficult. Those who activate in this sector don't have machines, high technologies to use at a higher level the capacity of the soil, and of the other components which will increase the contribution of this sector in Gross National Product forming. There is registered still a lack of financial resources in this domain of activity.

There are also companies from industry in the top (6 companies, 18%). Among them are: Moldcarton, Lafarge, Topaz etc.

But in 2009 because of the incapacity of electing the president, the political instability, the difficult situation on Financial Global Markets we can conclude that investments registered a decrease, which influenced not in a good manner the economical and social situation from our republic.

Foreign investors when are asked what are their opinion about the investment climate in Moldavian Republic they answer that in Moldova there is a law which protect foreign investors, also that in Constitution is related about the rights of foreign investors but practically this laws doesn't function. In Moldova the cost of credit is to high, the corruption is a problem in conditions of poverty, there are high taxes for buying authorization to practice an activity, and these are some problems which affect foreign investors. All these reasons make the Republic of Moldova to be eliminated from the list of potential foreign investors.

CONCLUSIONS

Nowadays our country imports many products but it will be a serious problem if will not make efforts to try to exit from this situation of dependence of products from import. Republic of Moldova has special conditions of soil and climate to develop an intensive agricultural sector in this way we must make efforts to create conditions for developing this sector. To improve the investment situation in Republic of Moldova we suggest the following measures of solving the problem:

1.For attracting foreign investment in agricultural sector of Republic of Moldova, we need to create a specialized center which will protect foreign investors, which will provide corporative strategies, will make suggestions in the political situation especially in the laws concerning the investments.

2.Eliminating the discrimination measures from the laws of Republic of Moldova.

3.Creating different stimulus which will increase the attraction of our country in the eyes of foreign investors.

4. Defining the primary sectors from our national economy which need investments.

5. Evaluating the political problems of attracting investments in our country and trying to improve the investment situation of our country.

6. Increasing the innovational activity in our country.

7. Promoting our country all over the World in different symposiums, conferences.

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REFERENCES

[1] Legea privind investiţiile străine nr. 81-XV din 18.03.2004 //Monitorul Oficial, 64-66 din 23.04.2004.

[2] Legea cu privire la investiţii în activitatea de întreprinzător nr.81-XV din 18.03.2004//Monitorul Oficial nr.64-66 din 23 aprilie 2004.

[3] Strategia Investiţională a Republicii Moldova, aprobată prin Hotărîrea Guvernului Republicii Moldova

nr.234 din 27 februarie 2002// Monitorul oficial nr.33-35 din 07 martie 2002
[4] Strategia de atragere a investiţiilor şi promovare a exporturilor pentru anii 2006-2015, Ministerul Economiei şi Comerţului RM.
[5] World Investment Report 2007, Transnational Corporations, Extractive industries and development, United Nations Conference on Trade and Development.
[6] www.doingbusiness.com

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INVESTMENTS – A STEP TO MODERNIZATION THE MOLDAVIAN REPUBLIC

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Key words: *investment environment, financial resources, indicators, rating*

Abstract

Agricultural sector of Moldavian Republic has many problems. One of the biggest problem of this sector is the lack of financial resources. Investments are a very precious source of financing. To invest in the agricultural sectors means to develop thsi sector introducing new technologies and using scientifical researches. In this article the authors analyze the situation of investment environment of Moldavian Republic and make suggestions to increase the attractivity of foreign investors.

INTRODUCTION

Agriculture has played a key role in the development of human civilization. Until the Industrial Revolution, the vast majority of the human population labored in agriculture. In the Republic of Moldova agriculture also has a special place. More than half of the population of our country is involved in agricultural activities, but this sector has many problems.
The problem of finding financial resources is one of the most important one because if we want to have a competitive agricultural sector we must invest in this domain of activity, because an investment today is the active redirection of resources/assets to creating benefits in the future; the use of resources/assets to earn income or profit in the future.

MATERIAL AND METHOD

In this scientifically work are shown the results of the investigation of investment climate during the independence of the Republic of Moldova. The information which is presented in this article is based on information about investments from the Ministry of Economy of Moldavian Republic, different groups of national and international experts and also our own researches in this domain. We analyzed especially the FDI in agricultural sector of Republic of Moldova.

RESULTS AND DISCUSSIONS

The Republic of Moldova entered in transition period without foreign investments stocks. In 1992 was adopted the Law on Foreign Investments and this was a stimulus for foreign investors. But if we analyze the figure 1 we may conclude that till 1997 the investment flows was minimal, the Government of Moldavian Republic concentrated attention not on foreign investments but on foreign credits. Only in 1995, the Russian company – Lukoil made substantial investments in the Republic of Moldova, and this was the major factor which generated more FDI inflows. From 1997 till 2004 the FDI inflows increased but not very much, because of the lack of a strategy concerning FDI. [2, 3]
An investment involves the choice by an individual or an organization such as a pension fund, after some analysis or thought, to place or lend money in a vehicle, instrument or asset, such as property, commodity, stock, bond, financial derivatives (e.g. futures or options), or the foreign asset denominated in foreign currency, that has certain level of risk and

provides the possibility of generating returns over a period of time.

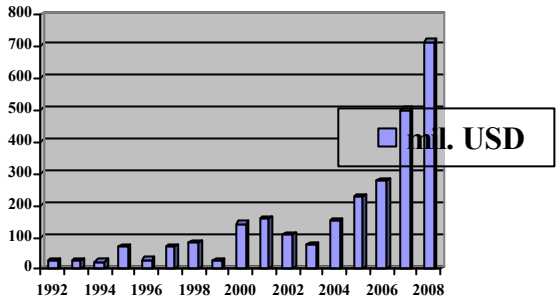

Figure 1. Net FDI inflows in Moldavian Republic (1992-2008)

Analysis of the dynamics of net FDI for the period 1992-2008 (figure 1) shows that FDI volume in Moldavian Republic increased 16 times (from 29,8 mil. U.S .Dollars up to 712,6 mil.U.S. Dollars). So, FDI inflows increased slowly till 1995, and reached 69,7 mil. U.S.Dollars, then, in 1996, FDI decreased down to 30,2 mil. U.S. Dollars. In 1997 the FDI inflows increased up to 71 mil. U.S. Dollars. In 1998-1999 FDI inflows decreased because of the financial crisis from Russia. In 2004 the FDI inflows increased up to 150 mil. U.S. dollars in comparison with the 2003 when the amount of FDI constituted 78,3 mil. U.S. Dollars. In 2004, the FDI inflows increased and constituted 150,8 mil. U.S. Dollars, havind an upward trend in the future. [1]

A central point in increasing FDI was adopting the Strategy for attracting investments and promoting exports for 2006-2015, where is stated that the Moldavian Republic is not so attractive in the eyes of foreign investors as her neighbors. According to the National Bank of Moldova, in 2005, FDI per capita constituted in POLAND-1502 USD, Hungary-3693 USD, Czech Republic-4080 USD; Slovakia-2128 USD, Romania-747 USD, Estonia-2995 USD, Latvia-1686 USD, Republic of Moldova – 330 USD.[4,5,6]

The Republic of Moldova attracted foreign direct investments from many countries of the World. The biggest investors in Moldavian Republic during 1994-2008 are: Russia – 20,6%, Spain- 11,3 %, USA-8,6%, Netherlands-8,3%, Germany-4,4%, France-4,3%, Romania-3,9%, Switzerland-2,4%, Great Britain-2,2%, Ireland- -2,1%, other countries-31,8% (Figure 2).

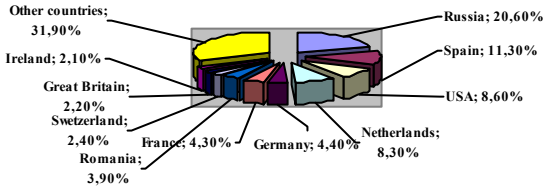

Figure 2. FDI in economy of Moldavian Republic of the biggest investment countries during 1994-2008 (%)

But if we analyze the investments which were attracted by Republic of Moldova in geographical context we see that the biggest foreign investor is EU, which invested 46% from the whole of investments attracted by Moldova; then CIS (22%); Central and Eastern Europe countries (3%) and other countries with 29% of investments (Figure 3).

The Republic of Moldova has many opportunities to have a competitive agriculture but the insufficiency of financial resources stop the development of this sector. In this way of thinking we must increase the attractively of this sector in the eyes of foreign investors

Investment is often modeled as a function of Income and Interest rates, given by the relation $I = f(Y, r)$.

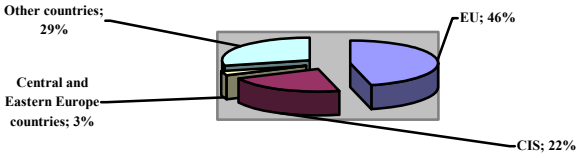

Figure 3. Geographical structure of FDI in Moldavian economy,2009

If we analyze the investments which came to our country in different sectors of our economy we will see that the agricultural sector is less attractive than other sectors. In this sector there are investments near 10%. The most of investors invested in energy sector (33%), in manufacturing industry (25%), wholesale and retail trade (17%) (Figure 4). [7]

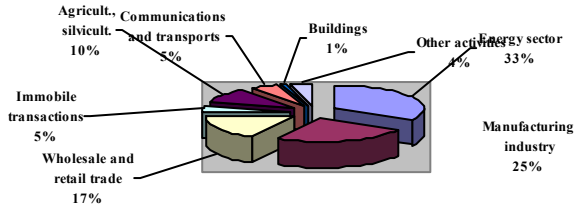

Figure 4. The distribution of Foreign Direct Investments in the sectors of Moldavian Republic economy, 2009

Analyzing the situation of the investment environment in the South Eastern Europe Region (Table 1, 2, 3) we may conclude that our country is not very attractive for foreign investors in comparison with our neighbours. The most favorable business environment from the Region is in Romania, which is on the 55 place from all countries of the World. It is in a small fall down in comparison with the previous year, when she was on the 45 place. Republic of Moldova is on the 94 place, which represents a growth in comparison with the previous year with 14 points.

Table 1.**Indicators which describe the business environment SE Europe**

Indicators	Rating in 2010			
	RM	U	R	RU
Doing Business	94	142	55,	120
Starting a business	77	134	42	106
Dealing with construction permits	161	181	91	182
Employing workers	141	83	113	109
Registering property	17	141	92	45
Getting credit	87	30	15	87
Protecting investors	109	109	41	93
Paying taxes	101	181	149	103
Trading across borders	140	139	46	162
Enforcing contracts	22	43	55	19
Closing a business	90	145	91	92

Table 2. **Indicators which describe the business environment SE Europe**

Indicators	Rating in 2009			
	RM	U	R	RU
Doing Business	108	146	45	118
Starting a business	90	126	30	88
Dealing with construction permits	159	181	87	182
Employing workers	140	90	110	104
Registering property	51	144	112	49
Getting credit	84	27	12	109
Protecting investors	105	143	38	88
Paying taxes	125	182	148	108
Trading across borders	140	139	43	160
Enforcing contracts	15	46	30	19
Closing a business	91	145	88	92

Table 3. **Indicators which describe the business environment SE Europe**

Indicators	Deviation +,-			
	RM	U	R	RU
Doing Business	+14	+4	-10	-2
Starting a business	+13	-8	-12	-18
Dealing with construction permits	-2	0	-4	0
Employing workers	-1	+7	-3	-5
Registering property	+34	+3	+20	+4
Getting credit	-3	-3	-3	+22
Protecting investors	-4	+34	-3	-5
Paying taxes	+24	+1	-1	+5
Trading across borders	0	0	-3	-2
Enforcing contracts	-7	+3	-25	0
Closing a business	+1	0	-3	0

Symbols:
RM- Republic of Moldova;
U – Ukraine;
R – Romania;
RU – Russia

Also we can mention that the Cost to export (US$ per container) is very expensive – 1815 US$ per container in Moldavian Republic, 1230 US$ per container in Ukraine and 1275 US$ per container in Romania. The Cost to import (US$ per container) in Republic of Moldova also is very expensive in comparison with the neighbors. If an investor would like to import different new technologies then he will pay for a container:- 1945 US$ per container in RM, -1430 US$ per container in Ukraine and 1175 US$ per container in Romania. [8]

CONCLUSIONS

In this way of things we may conclude that Republic of Moldova needs serious measures to improve the investment climate and to create a competitive state in an international context. To improve the investment situation in Republic of Moldova we suggest the following measures of solving the problem:

1. For attracting foreign investment in agricultural sector of Republic of Moldova, we need to create a specialized center which will protect foreign investors, which will provide corporative strategies, will make suggestions in the political situation especially in the laws concerning the investments;
2. Eliminating the discrimination measures from the laws of Republic of Moldova;
3. Creating different stimmulents which will increase the attraction of our country in the eyes of foreign investors;

4. Defining the primary sectors from our national economy which need investments;
5. Evaluating the political problems of attracting investments in our country and trying to improve the investment situation of our country;
6. Increasing the innovational activity in our country;
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REFERENCES

[1] Ghidul investiţional 2008, MIEPO.
[2] Legea privind investiţiile străine nr. 81-XV din 18.03.2004 //Monitorul Oficial, 64-66 din 23.04.2004.
[3] Legea cu privire la investiţii în activitatea de întreprinzător nr.81-XV din 18.03.2004//Monitorul Oficial nr.64-66 din 23 aprilie 2004.
[4] Proiectul Viziune şi Strategie privind Investiţiile Străine Directe şi Dezvoltarea Exportului pentru perioada 2006-2010, iunie 2006.
[5] Strategia Investiţională a Republicii Moldova, aprobată prin Hotărîrea Guvernului Republicii Moldova nr.234 din 27 februarie 2002// Monitorul oficial nr.33-35 din 07 martie 2002
[6] Strategia de atragere a investiţiilor şi promovare a exporturilor pentru anii 2006-2015, Ministerul Economiei şi Comerţului RM.
[7] World Investment Report 2007, Transnational Corporations, Extractive industries and development, United Nations Conference on Trade and Development.
[8] www.doingbusiness.com

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THE ANALYSIS OF THE MAIN EUROPEAN UNION MEMBER STATES' LEGISLATION PROVISIONS REGARDING RURAL TOURISM

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Key words: *rural tourism, legislation, European Union, agrotourism*

Abstract

In this paper we aim at analysing the main legislation provisions in the most important European Union countries, regarding rural tourism and agrotourism.The purpose of this analysis is o identify the best solutions for the development of agrotourism in our country.From the performed analysis, it results that in the most representative European countries, in terms of rural tourism, regulations are very clear, even if they are different from one country to another.This is practically the basis for the boom in the development of rural tourism and agrotourism in the past few decades.The main conclusion is that in Romania we must also promote clear, unitary regulations, without which the development of agrotourism in no possible.

INTRODUCTION

Regarding the accommodation inn the rural environment, we notice certain evolutions which can raise problems:

- the decrease in and ageing of the population, which risk reducing the local development;
- the peasant houses reconstruction and refurbishing programmes for receiving foreigners imply an optimum accommodation, modernisation, regrouping of houses and a collective offer for local services.
- the initiatives are taken by the central tourist organisations, which can further lead to a village standardisation from a tourist point of view;
- in certain EU countries, there is a multitude of strategies and labels for the rural tourist offer, each region wanting to customise their own products as compared to similar regional ones. These initiatives are justified by the search for a regional "tourist identity"[3].

MATERIAL AND METHOD

In this paper we aim at analysing the main legislation provisions in the most important European Union countries, regarding rural tourism and agrotourism.
The purpose of this analysis is o identify the best solutions for the development of agrotourism in our country [1].
In the EU space, the reception structures are diverse and differentiated according to the specificity of the offer: rural tourism, in general, or farm-based tourism (agrotourism).

- In addition to the small-holder's farm there may be other accommodation facilities belonging to a small-holders' association, other natural persons or local communities.
- Accommodation facilities generally bear a certain quality logo, which corresponds to the association promoting them.

RESULTS AND DISCUSSIONS

In Germany

The special offer for rural tourism is ***Holiday in the peasant establishment***, which reflects the features of the farm, in which the tourist wants to find small and draft animals, own products,

regional specialties, personal contact with the host, atmosphere typical of the peasant establishment. The Rural Tourism product defines all the offers in the rural environment, not strictly related to the peasant establishment. Holidays are offered in non-farming establishments, stays on holiday houses, private houses, holiday lodgings are offered. The most common type of accommodation in the rural environment is the tourist hose (5-6 rooms with 10-12 places) within the farm. In addition to the house, the farmer can also organise other types of accommodation within the farm: **equestrian farms, camping, inn-farms, etc** [2].

In **France** there are already the following types of accommodation in the rural environment:

- **The inn-type farm**
- **The stay-in farm**
- **The equestrian farm**
- **The reception farm**
- **Camping on the reception farm**
- **Stopovers (gîtes rurales)**

- the inn-type farm, which represents a establishment which has important areas of land and an adequate building. It can be managed by several farmers and he workforce is concentrated in family association;

- the stay-in farm, which includes three compulsory reception elements (accommodations, meals, leisure) and targets holidays or week-ends. The reception of tourists (in a small number) is made in a family atmosphere, and it does not affect the farming activity. Outside it must look agreeable, with plenty of flowers and vegetation, it must observe the local style; the maximum number of rooms is five, with an area of 10 m^2 per room, which must have at least one bathroom with a shower;

- the equestrian farm – is the rural establishment which can provide facilities for learning and practicing how to ride a horse, with accommodation and meals. It is managed and organised by several farmers who can become partners;

- **camping in the reception farm.** Under this title, the *Agriculture and Tourism* Association brings together *Camping on farm and in natural camping areas*. The farmers have the possibility to receive guests, friends and other people who do camping and caravan camping on their land. In addition to this accommodation, though the *Camping on the farm and in natural camping areas* Charter, camping sites are provided by village and town halls (6 locations) or prefectures (25 EUROGITES –Fédération Européene de Logement Rural, Report, 2009);

- **the reception farm** is an agricultural enterprise with family character, which provides an area of at least 300 m^2 for the stay, with easy access, floricultural and tree vegetation which supplies the shade, everything being located near the farm. The equipment (sanitation, cleaning, maintenance) must be of a high quality and provide good hygiene and an agreeable and attractive atmosphere.

- stopovers (gîtes) are lodgings organised in buildings which are not used for farming purposes. These are registered under the *Gîtes de France* brand, they group over 30,000 owners with about 50,000 places and target the holiday-makers who stay near a farm or village. There are various types: rural stopover (36,000 stopovers), camping on the farm (1000), refuge stopover (600), children stopover (460), fishing stopover (150), guest rooms (6600).

In Spain, accommodation in the rural environment is provided through **rural stopovers, equestrian farms, inn-farms, guest rooms** grouped in *Basque Agrotourism and Balearic Agrotourism* Associations [3].

In Great Britain, accommodation at citizens' places in the rural environment including breakfast (the so-called "Bed and Breakfast") has become an institution and there are over 400 accommodation facilities (houses, equestrian farms, farm camping sites, guest rooms).

In Belgium, the accommodation activity at citizens' places is considered a way of marketing the cultural heritage in the rural environment, in order to stop the rural exodus. As representative accommodation facilities, there are: farm houses, rural stopovers, farm camping sites, the inn-farm, guest rooms, children stopovers.

In Luxembourg, tourist accommodation at citizens' places represents the most useful activity in rural tourism development, because it targets the increase in the reception capacity

(especially in the poor areas in the hotels or where there is excess labour). Farm houses, rural houses (stopovers) and guest rooms are used.

In Greece, according to the *Greek National Tourism Office*, in the non-urbanised regions, the accommodation activity at citizens' places (citizens who work mainly in farming) brings a plus in revenues as a result of accommodating and selling craftsman and farm products (farm houses, guest rooms).

In Ireland, the accommodation at citizens' places is considered a way of marketing, from a tourist perspective, the rural houses (farms and peasant houses) and the village in general by means of farm camping sites, equestrian farms, guest rooms.

In Portugal, *Turihalle* brings together the owners of the old manor houses, providing a permanent contact with Portugal's history and old traditions. It also operates in order to preserve the country's architectural and cultural heritage.

The general camping regulation

In Germany, the general camping regulation does not provide a clarification thereof at national level. Yet, the sanitary conditions are checked by the administration.

Ireland is less resent, because accommodation in farm lodgings or in small hotels is preferred.

In Greece, camping is little encouraged for reasons related to environment and tourist areas protection. As a particular feature, almost all the camping sites are at the seaside.

In Great Britain, camping has a long tradition, beginning with farm camping and ending with veritable hotels located in the open. It is worth mentioning that caravaning is strongly developed.

In Italy, because the constitution confers autonomy to the regions, the classification of camping sites is made according to the various criteria, according to the respective region.

The holiday villages regulation

Holiday villages benefit from a partnership with the local communities and they are co-funded from public and social funds.

Types of tourist villages adopted by the French terminology (Gîtes Eurovillager):

- *Village de Gîtes ("stopover" villages)* – groups of communal lodgings organised as villages, completed with restaurants, parks for the children, meeting rooms, sports equipment, etc., most often made as a lessee promoter on the commune land;

- *Village de Vacances (holiday villages)* – represent the set of buildings which are the object of a global business with a commercial character or not, meant to provide holiday stays and loisirs;

Holiday villages without a lucrative purpose (for children). They must have a minimum of set of equipment and services, such as:

- hot water equipment, rest rooms;
- preparing the menu for children and the possibility to provide food services that are different form those for adults;
- playgrounds for children;

- Dispersed villages – they are the set of varied lodgings, collective services, loisir and entertainment equipment placed on an area of land covering several communes grouped in an organisation and management single feature.

Other regulations

In most countries the regulatory provisions are in favour of rural inns and hotels, considered "social life sites and local development cores"[1].

These may be:

- private
- grouped in chains, associations
- owned by local groups.

Hotels or inns can be set up in: old village mills, castles and manor houses, under the form of guest houses. The rural space becomes more and more a privileged environment for the high-class traditional hotel equipments: PARADORES in Spain, POUSADAS in Portugal, RELAIS ET CHATEAUX in France, HEALTtH FARMS in Great Britain. In order to avoid over-marketing and anarchic competition, it is required to set and observe certain technical norms for each rural hotel and inn formula.

Tourist demand analysis

Professional associations study the tourists' socio-professional structure, which actually illustrates the tourist market for rural tourism offers.

Germany

Summer tourists represent 85% of the total, of whom:

50% have a 10–15-day stay, 26% a 14 –20-day stay, resulting in an average 10-12-day stay/tourist.

We notice an increased seasonality, the preferred months being June-August. Regarding the clients, they represent the middle class, families with children (80%), intellectuals, workers and elderly persons. In terms of the age, 20% are below 30.

In France

The French represent 89% of the clients, preferring the off-season and accommodation with relatives, friends, a second residence. Foreigners arrive in July-September and stay in rural hotels and camping sites. The holiday in the countryside is not an ideal option for the French (11.4% compared to 40.7% for the seaside and 27.5% for the mountains). Nevertheless, an investigation performed by the National Federation of Tourist Offices and Initiative Unions (FNOTSI) indicated that "the holiday in the countryside" is preferred by more and more tourists. The clients motivated by this form of tourism are part of the middle and high social classes (management staff, teachers, freelancers) generally aged 25-45. Britons, Germans, Belgians arrive from abroad [2].

In Belgium, the "holidays in the countryside" clients come from the middle and high classes, they are of all ages, including families with children, from the country (60%), Holland (20%), Denmark (12%).

In Denmark, they have clients representing families with average incomes (50%) and with children (50%). The British (50%) with average incomes arrive in the off-season.

In Spain, in the Basque Country, tourists have average incomes and liberal professions. The tourists' age is of: 20–30 (50%), 30–40 (30%) and over 40 (20%).

In Great Britain, the clients are local people (90%), with average incomes and the age between 15–30.

In Ireland, there are tourists with higher incomes, freelancers, teachers, journalists of all ages from countries such as: The USA, Canada, Australia, New Zeeland, Europe).

In Italy, the tourist demand is dominantly local (75%), but also from other European countries; it results form families with average incomes.

CONCLUSIONS

From the performed analysis, it results that in the most representative European countries, in terms of rural tourism, regulations are very clear, even if they are different from one country to another.

This is practically the basis for the boom in the development of rural tourism and agrotourism in the past few decades.

The main conclusion is that in Romania we must also promote clear, unitary regulations, without which the development of agrotourism in no possible [4].

REFERENCES

[1] Creţu Romeo Cătălin, 2005, Legislaţie în alimentaţie publică şi agroturism, Editura Ceres, Bucuresti, Capitolul 3, p. 90-93

[2] Kotler,P./Bowen,J./Makens,J, 2002, Marketing for Hospitality and Tourism, (3rd ed.) Prentice Hall, p. 123-125

[3] Stabler, M, 2006, Tourism and Sustainability: Principles to Practice, Cabi Publishing, Wallingford, p. 234-236

[4] x x x –Ordinul ministrului pentru IMM, comerţ, turism şi profesii liberale nr. 636/2008 pentru aprobarea Normelor metodologice privind clasificarea structurilor de primire turistice, în "Monitorul Oficial al României", partea I, nr. 379 bis, 2008.

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THE IMPACT OF MOTIVATIONAL SYSTEM ON THE QUALITY OF THE LABOUR RESOURCES MANAGEMENT IN THE AGRICULTURE OF THE REPUBLIC OF MOLDOVA

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Key words: *labour resources, motivation, labour remuneration, labour conditions*

Abstract

The purpose of this paper consists in elucidating the present aspects of the motivational system in agriculture and the factors that diminish the motivation for agricultural work. In order to achieve this purpose, we had analyzed the statistics presenting the evolution of the agricultural workforce from a quantitative point of view, the evolution of the salary in agriculture and the average salary in economy, as well as the ratio between the salary in agriculture and the average salary in economy, taking into consideration the living minimum. Also, we had sistemyzed and interpreted the data obtained from 2 polls. As a result, the factors that diminish the motivation for agricultural work have been hierarchized according to their importance, the first place being represented by the unsatisfactory material stimulation. At the same time, the polls showed us that people are aware of the importance of the other aspects of labour, such as: specialization, continuity, the posibility to be promoted etc.

INTRODUCTION

It is well known that motivation is one of the most important performance factors in an activity, the engine of achievement in any field. The imperfect motivational system, which persists in the former socialist countries, including the Republic of Moldova, was identified by experts as one of the disturbing factors of efficiency in economic activities, one of the reasons of the large gaps between labour productivity in socialist and capitalist countries. With the reorganization of the administrative systems of command and the transition to market relations, high hopes have been put, in particular, on the stimulating force of motivation for a highly productive work in new conditions of activity. Practically, however, this aspiration is achieved more slowly than it was desirable, especially in agriculture. As a result, labour productivity in agriculture, even if it is increasing, is much lower than in developed industrial countries [1]. Also, a large proportion of people previously employed in agricultural activities moved away from this work [2].

MATERIAL AND METHOD

In order to achieve the purpose of this investigation, there was used statistical data that showed the quantitative evolution of labour in the agricultural sector, the average monthly wage in agriculture and the average salary in economy and their ratio with the living minimum. The examined period is 2001-2008. Also, the systemized data have been obtained from two polls of employees from the agricultural enterprises of the Republic of Moldova and people working abroad.

REZULTS AND DISCUSSIONS

The exodus of the population employed in agriculture is widespread throughout the world, being even more pronounced in highly developed countries. But if in developed industrial countries, the workforce passes to other sectors of the economy, in the Republic of Moldova, this phenomenon manifests itself in another form - a large proportion of persons layed off from agricultural enterprises is migrating to illegal work abroad. Even if there are no exact official statistics of persons that illegally left the country, about the extent of

this phenomenon can be judged from the following data: in the period 2002-2008 the employment rate of rural population has decreased by a total of 15.2%. Employment in agriculture decreased by 358 thousand people, or 48%. Thus, even assuming that some of those layed off from agricultural activities have gone into other spheres, we easily realize that a substantial proportion of these people are not performing a work activity on the territory where they are located. An the same time, the fact that, in the period under review, a stable proportion between the working population of rural and urban space has been mentained, allows us to exclude the hypothesis of mass emigration of the working population from village to city.

Insufficient motivation for farm work is supported by results of a survey, in which there were implicated over 200 employees from 25 agricultural enterprises of the Republic of Moldova. From the processed data, the ranking of the main motivation disturbance factors for agricultural work made possible, as follows: insufficient wage; seasonal nature of agricultural activities; difficult working conditions; high diversification of activities; few opportunities for promotion. A very low salary is the factor that was mentioned by all those surveyed as the most important and influential. In this context we refer to some statistics that show the dynamics of labour remuneration in the agricultural sector. Thus, we deduce that the average monthly wage in agriculture in the Republic of Moldova has undergone essential changes in recent years: while in 2001 it was 315.1 lei, in 2008 it reached 1484.4 lei. Quantitative evolution of farmers' wages cannot be estimated as a representative index of the welfare of this category of population, because its level is insufficient for a decent life, beyond the subsistence minimum of working age population with only 37.9 lei [2]. Motivational effects of wages in agriculture are being decreased by the following circumstances: between the average monthly salary in agriculture and the average one in the economy there is a gap of 1045.3 lei, and, compared with the salary of employees from the financial sphere, it is 3.66 times lower. The data that show the evolution of the average monthly wage in agriculture, the average salary in the economy and their relationship to the subsistence minimum, is presented in table 1.

The negative impact of the seasonal nature of agricultural activities, particularly crop production, is evident in the following aspects: involves discontinuity and instability of income; given that most people prefer a permanent service, they have to perform the work only periodically; lack of stable employment activities disrupts people, has a negative influence on their emotional level.

Along with the factors outlined above, of particular importance are the working conditions. The predominance of manual labour, the need to perform multiple outdoor activities, the influence of the weather conditions, etc., uundoubtedly make farm work more difficult compared with other industries, this being realized by the surveyed persons.

Table 1. Corresponding evolution of average monthly wage in agriculture and the economy and their relationship to the subsistence minimum.

Specification	2002	2003	2004	2005	2006	2007	2008
Average monthly wage in the economy, lei	692	891	1103	1319	1697	2065	2598
Average monthly wage in agriculture, lei	394	499	643	744	915	1099	1484
Ratio between the average wage in agriculture and the one in economy,%	57	56	58	56	54	53	57
Minimum of existence for people of working age (average monthly per person), lei	571	665	719	809	987	1159	1446
Ratio between the average salary in economy and subsistence minimum, %	121	134	153	163	172	178	180
Ratio between the average wage in agriculture and subsistence minimum, %	69	75	89	92	93	95	103

The large diversification of activities in the agricultural branches and sub-branches is highlighted by the employees of this branch as a factor that, on the one hand, involves knowledge and multiple skills, and on the other, is not allowing a narrow specialization. As a result, according to those surveyed, farm work being more difficult to do, is also less interesting. This statement is substantiated by the fact that it is more difficult to increase mastery there, where you meet a very wide range of employment processes.

It is particularly significant that today even the people employed in agriculture have aspirations in being promoted, which was not important for them a few decades ago. By its nature, however, farm work is mainly physical and requires more labour than specialists or managers.

Thus, we conclude that today's motivational system in the agriculture of the Republic of Moldova is unable to perform the roles assigned to it, the reason being a whole series of disturbing factors.

In order to determine whether motivational aspirations were accomplished by people who have emigrated to work abroad, a survey was conducted in which 125 people were interviewed coming from rural areas, being currently employed in various European countries. By processing the data we found that:

- 98.2% of the respondents cited, as the reason for going abroad, an sufficient salary and the lack of stable employment;
- approximately 85% of those polled are satisfied by the given wages, 25% of them indicated the level of culture in the country where they are situated and 15% - the attitude towards them at work. Accordingly, only 15% of the people who participated in the survey said that they do not like anything in the country where they are.

Thus, the data found once again confirms the primary role of the motivational system in the effective management of labour resources. Along with this, the investigation revealed another important issue: most respondents have confidence in terms of return in their home country and about 35% of them do not intend to ever return.

CONCLUSIONS

On the basis of the presented data, we can draw the following conclusions:

1. Economic transition to market relations, changing forms of ownership in agriculture have not generated a surge in agricultural labour productivity;
2. Ineffective motivational system caused a mass exodus of the population employed in agriculture, and most of those have left to work abroad;
3. From the motivational factors, the one that mostly reduces the desire to work in the agricultural sector is the low job stimulation;
4. Success and prestige in agricultural activities require state intervention in order to ensure the economic prosperity of the whole branch and the material and moral motivation of the agrarians for their work in that area.

REFERENCES

[1] Biroul Național de Statistică al Republicii Moldova, Forța de muncă în Republica Moldova. Ocupare și șomaj, 2009 , Editura „Statistica" , Chișinău, p. 32-34.
[2] Biroul Național de Statistică al Republicii Moldova, Anuarul statistic al Republicii Moldova, 2009, Editura „Statistica" , Chișinău, p. 104-105.

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QUANTITATIVE AND QUALITATIVE INDICES OF THE HUMAN RESOURCES MANAGEMENT FROM THE AGRARIAN SECTOR OF THE REPUBLIC OF MOLDOVA

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Key words: *employed population, evolution, gross agricultural production, productivity*

Abstract

The purpose of this paper consists in elucidating the evolutionary tendencies of the population working in agriculture and of the global agricultural production in the Republic of Moldova. Concomitantly, we examined the evolution of the working population from the agricultural sector as well as the global agricultural production in the developed countries. For a more detailed investigation of the examined subject, we analyzed the evolution of the quantitative and qualitative indices of the working personnel management from agricultural enterprises having the status of judicial person in the period of 2001-2008. Based on the research, we noticed that the indices of human resources management from the agricultural sector of the Republic of Moldova, during the post-privatization stage, had similar tendencies with those recorded in the developed countries during the last decades of the past century. At the same time, the growth of the global agricultural production recorded in the analyzed period in the Republic of Moldova, is more inferior than the growth of the global agricultural production in highly developed countries, and the present productivity level of the agricultural work is insufficient for a prosperous activity development.

INTRODUCTION

Given the specificity of the economy of the Republic of Moldova, the priority share of agriculture in the GDP, we conclude on the special significance of a more effective management of the human resources in those sectors. Subsequently, labour productivity growth as the basic indicator of efficiency of human resources is examined as one of the major objectives in the trend towards sustainable development of agriculture. Another argument for the significance of the subject investigated is the major share of population employed in the agricultural sector of the Republic of Moldova [1], which gives it a special role in economic growth and achieving other strategic and important objectives for our country. Meanwhile, by comparing indicators of human resource management in the agricultural sector of Moldova with those of the developed countries [2], we conclude on a large gap between them.

MATERIAL AND METHOD

In the analysis of evolutionary trends of human resources in the agricultural sector, the following indicators were used: employment in agriculture, overall agricultural production, achieving global production, total income and net profits per employee.

The period analyzed in this study is between 2001-2008. The data, collected from Statistical National Office and from other studies in this problem, have been analyzed and interpreted.

RESULTS AND DISCUSSIONS

In a foray into the evolution of the number of employed persons in agriculture in highly developed countries we found that: in the second half of the last century, thanks to technical, technological and managerial progress, there was a rapid reduction of active labour and unprecedented increase in productivity work. Exodus of labour from agriculture has been very strong in France and Germany. Thus, if in the fifties, in France, for example, there were about 5.5 million people activating

in agriculture, now France's labour force in agriculture is of approximately 1 million people. Reducing those active in the agricultural sector of France for about 4 times was accompanied by an increase in labour productivity by over 3 times.

In the last 3 decades of the past century, the average number of people employed in agricultural activities, in UE countries, decreased by about 95%, or almost twice. Simultaneously, there was an increase in the value of agricultural products with over 20%.

Currently the 5% of the population employed in agriculture in developed countries of the world population feed the rest of the population in these countries and a majority of the population in poor countries.

In less developed countries, including Moldova, the population exodus from the agricultural sector was more prominent in the early post-privatisation stage. Thus, if in 2001 in the agricultural activities there were assigned 764 thousand people (or 51% of the employed population of the Republic of Moldova), in the first five years that followed, the share of employed population decreased by almost 10 percentage points. After that, the decrease continued at a slower pace. As a result, the share of the agricultural population in 2008 was 31.1%.

Continuing reduction of the number of persons employed in the agricultural sector of Moldova has not been accompanied, however, by a substantial increase in the overall agricultural production (Table 1).

From the data in table 1 we find that the reduction by about 48% of the number of people employed in agriculture in the period under review was accompanied by an increase in global agricultural production by just 5.8%.

Agricultural labour productivity in this period increased by 103%, but this increase can not be estimated as representative as it has not contributed to the increase of global production at branch level and, thus, has not had an essential contribution to overall economic growth , solving the food problem or addressing other important strategic objectives of our country. Labour productivity growth in agriculture during the period under review was based, particularly, in the dismissal of a large number of people in industry. Their work was previously managed inefficiently.

Table 1. Evolution of the global agricultural production, of the number of people employed in agriculture and of the annual productivity of labour in the period 2002-2008

Indicators	2002	2003	2004	2005	2006	2007	2008
A	1	2	3	4	5	6	7
Gross agricultural output, mio. lei (in comparable prices of 2005)	11777	10180	12301	12402	12266	9432	12460
Number of persons employed in agriculture, thou. persons	747	583	533	537	422	409	389
Average labour productivity, mii lei	15,77	17,46	23,08	23,10	29,07	23,06	32,03

For a deeper investigation of the matter sought, we examined the effectiveness of productive personnel management in the agricultural enterprises with juridical person status, by following the indicators: global production, income and net profits per employee (Table 2).

From the data found in table 2, we notice that the number of employees from agricultural enterprises with juridical person status in the period 2003 to 2008 fell by about 47 %. The growth of global production and of the total income derived from agricultural enterprises with juridical person status, exceeds the growth rate of gross product by branch, but this is explained by the fact that, in table 1, in order to estimate the global production, the system of comparable prices was used and in table 2 there were used the current prices. The dynamic of the „net profit per employee" indicator, a more relevant indicator of the effectiveness of human resources management, allows us to conclude that, however, in the analyzed enterprises the effectiveness of personnel management is increasing. Also, the current level of labour productivity is much lower than the one achieved in developed countries and insufficient for the self-financing of agricultural enterprises.

Table 2 Development of personnel management efficiency indicators in the agricultural enterprises of the Republic of Moldova with a juridical person status during the period 2003-2008

Indicators	2003	2004	2005	2006	2007	2008
A	1	2	3	4	5	6
Average number of employees, thou. persons	139,4	125	115	95,7	82,1	74,2
Agricultural production, mio. lei (current prices)	2831	3491	3575	3454	3909	4927
Gross income, mil. lei (current prices)	613,1	856,8	779,4	781,6	1101	1593
Net profit (losses), mil. Lei	-43	87,5	24,2	99,8	425,2	704,1
Obtained global production per employee, thousand lei	20,31	27,93	31,09	36,09	47,61	66,40
Obtained total income per employee, thousand lei	4,40	6,85	6,78	8,17	13,41	21,48
A	1	2	3	4	5	6
Obtained net profit per employee, thousand lei	-0,31	0,70	0,21	1,04	5,18	9,49

CONCLUSIONS

As a result of this investigation, we conclude the following:

• the indicators of the human resources management in the agricultural sector of the Republic of Moldova at the post-privatisation stage had similar trends with those recorded worldwide in the last decades of the last century. Also, with the reduction of the population employed in the agricultural sector of the Republic of Moldova, there was an increase in the global agricultural production much lower than the global agricultural production increase, obtained in highly developed countries;

• even if agricultural labour productivity by branch and on average, in the enterprises with juridical person status, increased during the considered period, the attained level of labour productivity in the agriculture of the Republic of Moldova is much lower compared with the one recorded in the developed countries and insufficient to ensure the prosperity of businesses in market economy terms;

• one of the main directions of increasing the efficiency of human resource management in the agriculture of the Republic of Moldova is the streamlining of the investment system. The investment in agriculture is possible but only in terms of creating a favourable political and institutional framework.

REFERENCES

[1] Biroul Național de Statistică al Republicii Moldova, Anuarul statistic al Republicii Moldova, 2009, Editura „Statistica” , Chişinău, . p.73, 321.

[2] Berca M., 2003, Engineering and management of resources for rural development, Ceres publishing house, Bucharest, p.59.

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THE USE OF STOCHASTIC FRONTIER ANALYSIS IN THE CONTEXT OF AGRICULTURAL LANDS CONSOLIDATION AND RURAL DEVELOPMENT IN THE REPUBLIC OF MOLDOVA

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Key words: *economical efficiecy, stochastic frontier, Cobb-Douglas, regression analysis*

Abstract

Farm efficiency reveals the quality of economic processes in agriculture unities, creating positive financial effects with a minimum effort. In cereal production the efficiency is influenced by a number of factors, which act together and there is between them an interdependence. We have used the stochastic frontier analysis for calculating the economic efficiency of cereal production in the Republic of Moldova. Methodologically speaking, it is important to compare the traditional indicators used to evaluate the efficiency in agriculture (profitability, unitary cost of production) with the parameters that result from the stochastic frontier analysis. Considering the market economy, the main objective of the economic agents is to use with a maximum of efficiency the factors they have for raising income and profit. The suggested method of evaluation the efficiency of cereal cultures allows appreciating how much each of the analyzed factors influence the size of the output indicator and how much they are linked one to each other.

INTRODUCTION

The necessity to study the indicators that characterize economic efficiency of cereal crops in the agricultural enterprises from Republic of Moldova, including the reserves of agricultural production increase, requires identifying the causal links between exogenous factors which influence the final indicators in taking decisions and making future forecasts. Final indicator of cereal production efficiency must be a logical result of factors action and it has to be in correlative connection with the factors that influence it. An important role in this concern is assigned to the definition of production functions in agriculture on the basis of regression-correlative analysis in order to specify endogenous variables or final ones, exogenous variables or causal ones, and the functional type of relation between them.

MATERIAL AND METHOD

The first empirical analysis of the efficiency has been done by Farrel in 1957. He divided general economic efficiency in two components: technical efficiency (TE) and allocative efficiency. According to Farrel, technical efficiency indicates agricultural enterprise capacity to attain maximal volume of production consuming a given measure of the production factors [5].

Let's consider one simple production process, in which one single input (x) is used to produce one single output (y). In fig. 1 OF' curve represents the production frontier, which is applied to define the relation between input and output. It represents the maximal volume of output obtained at each input level. Thus the area under the production frontier is the technology feasible production set. The enterprises operate on frontier when they are technically efficient or under frontier when they are technically inefficient. Point A represents an inefficient enterprise, while the points B and C – efficient enterprises. The enterprise A is inefficient, because technically it can increase its output volume up to the enterprise B level without increasing somehow the input. In other words, enterprise A possesses reserves to increase its production volume without additional expenses for used means of production. If the agricultural enterprise is situated on the production frontier curve OF',

then the ratio between real and optimal productivity is equal to 1, and as a consequence such an enterprise if considered to be efficient. If the agricultural enterprise productivity becomes worse it leads to a removal from the production frontier and the ratio becomes lower than 1 (but higher than 0), fact that proves that the enterprise becomes inefficient.

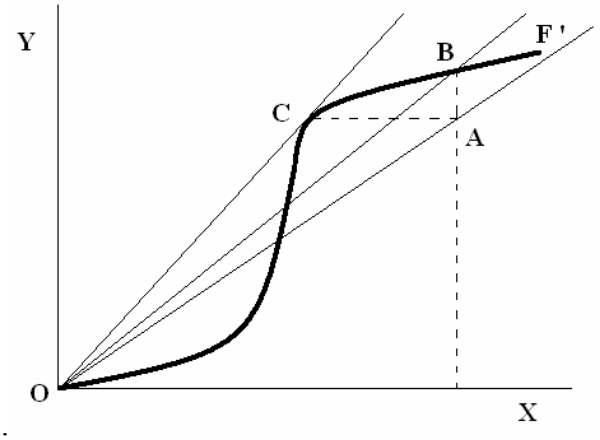

Fig 1. Technical efficiency and scale economy [2] .

General economic efficiency represents nothing else than the product between technical and allocative efficiency and it also expresses the difference between real and potential production.

The method of stochastic frontier supposes the use of exponential production function Cobb-Douglas [1]:

$$Y = A * \prod_{i=1}^{5} X_i^{\alpha_i} * e^{(v-u)} \quad (1)$$

where:

Y – total cereal production volume, thousand lei

X_1 – surface of agricultural land sown with cereal crops, ha

X_2 – expences for labor wages with contributions for social and medical insurance, thousand lei

X_3 – expenses for seeds and planting material, thousand lei

X_4 – expenses for chemical and natural fertilizers, thousand lei

X_5 – expenses for additional activities and indirect consumptions, thousand lei

A, α_i – constants

v – aleatory variable with normal repartition $N(0,\sigma_v^2)$ and it is independent of u. It represents the stochastic component of technical inefficiency limit.

u – non-negative aleatory variable which evaluates technical inefficiency of the agricultural farm productivity and which has a normal repartition $N(0,\sigma_u^2)$.

Parameters evaluation of production function for the given set of exogenous variables (input) has as a purpose to obtain the adequate conditions for final factor maximization (output) [6]. The stochastic frontier is a limit for the given economic agent i in fixed conditions of total consumptions $X_{2i}…X_{5i}$ and the surface of available agricultural land X_{1i}. Technical inefficiency of agricultural farm i can be calculated as follows:

$$TE_i = e^{-u_i} \quad (2)$$

where TE_i –represents technical inefficiency, and u_i is the proportion between the value of total cereal production volume and stochastic frontier Y_i.

RESULTS AND DISCUSSIONS

On the basis of 33 agricultural enterprises from Republic of Moldova in 2008 using the method of the least squares the production function Cobb-Douglas was evaluated resulting from the enumerated factors. Link intensity between the variables in the regression function, which expresses the relation between endogenous factor Y and exogenous factors $X_1…X_5$, was estimated with the help of correlation coefficients R_{yx_i} .

Regression equation parameters α_1... α_5 represent partial elasticity of exogenous factors and give the possibility to calculate how much will total cereal production volume increase if we raise the consumption by a unit. Total elasticity of factors can be estimated as the sum of elasticity partial coefficients

$$\varepsilon = \sum_{i=1}^{5} \varepsilon_i \quad (3)$$

and it requires the following restrictions:

1) if $\varepsilon_i > 1$, then the increase of production factor i leads to a bigger growing rate of total

production volume then the used production factor;

2) if ε_i = 1, then the growing rhytm of final factor and the one of factor use i are identical;

3) if ε_i < 1, this means that the increase of exogenous factor i leads to a smaller growing rate of total production volume.

Initial data processing with the help of applied programs "FRONTIER 4.1" [4] allowed to obtain the following regression equation :

$$Y = 1,373 * X_1^{0,879} * X_2^{0,029} * X_3^{-0,085} * X_4^{0,170} * X_5^{0,130} \quad (4)$$

On the basis of these elasticity coefficients we can calculate total cereal production increase depending on each exogenous factor:

- when modifying the agricultural land surface by 4,68 ha Y increases by 0,87%;
- when increasing consumptions for labor wages with contributions for social and medical insurance by 0,879 thousand lei the endogenous factor increases by 0,029%;
- if natural and chemical fertilizers use increases by 1,06 thousand lei cereal production volume increases by 0,17 %;
- when increasing the additional activities and indirect consumptions by 4,56 thousand lei Y increases by 0,13%.

The consumptions for seed tree material, according to the regression equation, is a factor that reduces the endogenous factor as follows: consumptions increase for seeds and planting material by 1,44 thousand lei imposes income decrease by 0,085%. This fact indicates the necessity of technological process optimization at the compartment of excessive consumptions of seeds and planting material.

The multiple determination coefficient R^2=0,807 proves that between the total cereal production volume and exogenous factors included in the model there is an important connection. The included factors explain 80,7% from final factor variation. X_1 factor contribution to the obtained result is of 23%. This fact indicates the major influence of the agricultural land surface on the endogenous factor.

TE value decreases with land surface increase sown with cereals. For example the agricultural enterprise SRL "Iapcaz-Agro" with a surface of only 59 ha of cereal crops has a technical inefficiency of 0,918, while the agricultural enterprise SRL "Accesoriu" where the cereals occupy 1786 ha has only a TE=0,305.

Table 1. Technical efficiency value of the farmers in Republic of Moldova

	Farm	Farm size, ha	Technical efficiency
1	IS "Chetrosu"	489	0.636
2	CAP "Gotesteanca"	765	1.000
3	SRL "Hotin"	490	0.969
4	SRL "Bozagro"	712	0.556
5	IS "Feteşti"	334	0.555
6	SRL "Ohrinceagro"	114	0.822
7	CAP "Placor-Agro"	72	0.099
8	SRL "PanClip"	1450	0.168
9	SRL "Agro-inedit"	277	0.691
10	SRL "Hambarul"	191	0.989
11	SRL "Triticalex"	206	0.339
12	SRL "Dulejeni"	198	0.757
13	SRL "Iapcaz-Agro"	59	0.918
14	SRL "Cucoara-Agro"	254	0.580
15	SRL "Plantagor"	209	0.661
16	SRL "Natcubi-Agro"	530	0.656
17	SRL "Accesoriu"	1786	0.305
18	SRL "Victotar-Agro"	467	0.640
19	CAP "Chiscagro"	423	0.389
20	SRL "Meriada"	815	0.833
21	CAP "Basarabia"	439	0.122
22	SRL "Pteron DC"	80	0.706
23	SRL "Taulcanul"	281	0.759
24	SRL "Terera-Veche"	255	0.523
25	SRL "Naturmec"	450	0.612
26	SRL "Coloicautanul"	325	0.540
27	SRL "Fortina Labis"	108	0.775
28	GT "Morari Vasile"	413	0.724
29	CAP "Glia"	1019	0.821
30	SRL "Sadac-Agro"	877	0.631
31	SRL "Rascaietenii"	449	0.990
32	SRL "Grivalsan"	269	0.988
33	SRL "Agrosfera-BM"	640	0.890
	mean	468	0.655

Another factor, which has an important weight in determination coefficient R^2 is X_4-consumptions for natural and chemical fertilizers. This factor contribution is of 37% and taking into consideration that the elasticity coefficient equals to 0,17, we can mention that economic forecasts for utilization of natural and chemical fertilizers has a decisive influence. Exogenous factor X_5 – additional activities and indirect consumptions has a weight of 22% in determination equation. This fact shows that there are still reserves to improve the technological process and to avoid some

consumptions that are not strictly necessary. Other exogenous factors included in the model have a minor influence (<10%) and there is no reason to evaluate them.

Technical efficiency average value of all 33 agricultural enterprises equals to 0,655, which indicates substantial dispersal of the economic agents according to the TE criterion of cereal production.

Within this analysis we can mention marginal enterprises with regard to agro-technical system adjustment to the market economy conditions. For example, in the agricultural enterprise SRL "PanClip" the technical inefficiency is insignificant TE=0,168 for a cereal crops surface of 1450 ha. Labor wages are with 24% smaller then the average value. In this enterprise the necessity to redress technological process, economic relations and decisional system is of a high importance.

Table 2. The values of correlation coefficients R_{yx_i} of the factors included in the regression model.

	X_1	X_2	X_3	X_4	X_5	Y
X_1	1.000	0.785	0.604	0.813	0.583	0.808
X_2	0.785	1.000	0.556	0.816	0.573	0.774
X_3	0.604	0.556	1.000	0.518	0.408	0.590
X_4	0.813	0.816	0.518	1.000	0.537	0.824
X_5	0.583	0.573	0.408	0.537	1.000	0.702
Y	0.808	0.774	0.590	0.824	0.702	1.000

An important role in link intensity estimation between exogenous factors and final factor Y is given to the calculation of even correlation coefficients [3]. The values of these coefficients represent an important argument to include exogenous factors in the econometrical model.

The positive and major value (higher than 60%) of the correlation between total cereal production volume and exogenous factors confirms the existence of a close link with the endogenous factor in the model. Calculation precision of regression equation parameters and correlation coefficients has been done at a probability level of p<0,05.

CONCLUSIONS

1. The study revealed that evidence of significant farm organization technical efficiencies in Moldova crop production. The results suggest that more labor-intensive and technologically complex productions provide a lager scope for managerial mistakes and transition costs in lager and complex organizations.

2. In conclusion we can mention that stochastic frontier analysis method is a relevant tool for economic efficiency evaluation in agriculture. The comparison between traditionally used indicators for economic efficiency evaluation in agriculture (profitability, unitary cost of production etc.) and technical efficiency TE has a methodological importance and may be useful in economic practice.

ACKNOWLEDGEMENTS

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REFERENCES

[1] Aigner, D.J., Lovell, C.A.K. and Schmidt, P., 1977, Formulation and estimation of stochastic frontier production function models. Journal of econometrics, no. 6, p. 21-37.

[2] Battese, G.E. and Coelli, T.J., 1995, A model of technical inefficiency effects in a stochastic frontier production function for panel data. Empirical economics, no. 20, p. 325-332

[3] Cimpoieş, D. and Lerman Z., 2008, Land policy and farm efficiency: the lessons of Moldova. Studies on the Agricultural and Food Sector in Central and Eastern Europe. Leibniz Institut für Agrarentwicklung in Mittel und Osteuropa (IAMO). Halle (Saale): IAMO, 2008, vol. 44, p. 603.

[4] Coelli T.J.,1994, A guide to FRONTIER version 4.1: A computer program for stochastic frontier production and cost function estimation. Departament of econometrics, University of New England , Armidale.

[5] Farrel M.J. 1957, The measurement of productive efficiency. Journal of the Royal Statistical Society, Series A, 120, p.253-281.

[6] Greene W.H. ,1999, Frontier production functions, in: Pesaran M.H. and Schmidt P. (eds.), Handbook of applied econometrics. Vol.2. Microeconomics, Blackwell, Oxford, UK, p.81-166.

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PRODUCTION PROFILES AND ECONOMIC POTENTIAL OF ROMANIAN FARMS BY SAMPLE-BASED ASSESSMENTS OF LAND UTILISATION

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Key words : *utilised agricultural area, farm economic potential, production profiles*

Abstract

The economic capacity of the production structures constitutes a fundamental factor for the appraisal of the agricultural development outlook. Assuming that the land use is a primary determinant of ecosystem vulnerability, affecting the soil regeneration, biodiversity, or landscape, the paper aims at investigating the land area utilisation in the Romanian farms and the economic potentials conferred. Research methods consist in quantitative and qualitative evaluations based on data from field survey upon sustainable land resources management, of which there are presented the main conclusions drawn from the analysis of the utilised agricultural area. Results include evaluations on relevant indicators of production profiles, correlations on the structure of ownership, land use categories and size classes of holdings, at national and regional levels.

INTRODUCTION

Evaluation of economic capacity of the production structures in agriculture is one of most fundamental elements in designing sustainable rural development strategies [2]. Under the circumstances that make land use a primary determinant of ecosystem vulnerability, with strong impacts on soil regeneration, biodiversity, or landscape [1, 3], the paper aims at investigating the agricultural area utilisation profile and the economic potentials conferred to the Romanian farms.

MATERIAL AND METHOD

The study was based on the researches upon management aspects of sustainable land utilisation, undertaken in the period 2007-2008 on a sample including 800 agricultural holdings selected from the eights statistical regions of Romania [4]. There were used data and information supplied by field surveys carried out through questionnaires applied by statistics specialists. The methods used quantitative and qualitative analysis concerning the economic farms' potential and the capacity and degree of sustainable use of land resources, from which the paper presents the main results of the study related to the utilised agricultural area (UAA). The assessments, at sample level and regional aggregation, used specific indicators and correlations by ownership operating structures, categories of land usage and size classes of the investigated agricultural holdings.

RESULTS AND DISCUSSIONS

Within the analysed sample of agricultural holdings, the UAA structure, by categories of usage, presents specific profiles related to the predominant geographic area, imprinting different degrees of natural favourability to the crops (Fig. 1). Accordingly, the farms economic potentials are reflected by the land usage pattern, underlining certain characteristics on the investigated farms.
The researches indicate the major share of arable crops area, of 91%, followed by meadows and pastures, sharing 6% and by permanent crops, below 4% in the sample UAA. The arable area distribution is relatively balanced, both, as a share in agricultural number of holdings, and in UAA. The meadows and pastures areas cover the largest percentages in South-West, while the permanent crops are owned in larger shares of the number of holdings from the counties in the regions South-West and North- West, while as

shares in areas, in Centre, North-West and South-East. The family gardens (<1500m), own the least shares in UAA and predominate in Regions North-West and North-East.

The structure of the arable area indicates that, on average, over half of the holdings, i.e. 64%, was cultivated with cereals – of which, 56% wheat, 30% maize, followed by 7% two-row barley, 4% barley, 2% oats and 1% other cereals –, and a significant share was covered by areas cultivated with oleaginous crops, i.e. 26%, followed by fodder crops, annual and perennial, with a 5% share.

The holdings having a legal person status have been cultivated over 90% of the arable land area. Among the farms with natural person status, the most significant crops were cereals, with a 49% share, and oleaginous crops, 38%, while other crops were less represented, - fodder crops (6%), potatoes (2%) and industrial crops as sugar beet, vegetable, melons and strawberries (1% each).

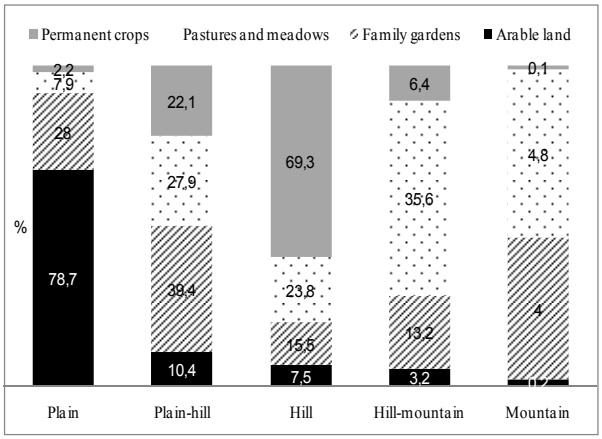

Fig. 1 Agricultural holdings (%), by relief units, by usage categories of UAA

Table 1 depicts the distribution of the UAA usage categories of the agricultural land by the legal status of holdings included in the sample.

The analysis indicates a relative similar structure of UAA, although the arable land held a larger share comparing to the other land categories. Holdings having legal person status cultivated over 90% from UAA with arable crops; the most significant shares, as well as holdings having natural person status, are covered by cereals (half of the farms) and oilseed crops (over one third of sample).

Table 1. Distribution of UAA usage categories, by the legal status of agricultural holdings (%)

Legal status	Arable land	Family gardens	Meadows and pastures	Permanente crops
Natural person	75,8	0,3	22,3	1,6
Legal person	92,3	0	4,3	3,4

The regional profile of farms land utilisation options corresponds to the geographic areas and relief features (Fig. 2). The survey reveals that arable crops land predominate in regions South, South-East and Centre, while pastures in Centre, South-West, North and North-West, and permanent crops areas in South-East and Centre.

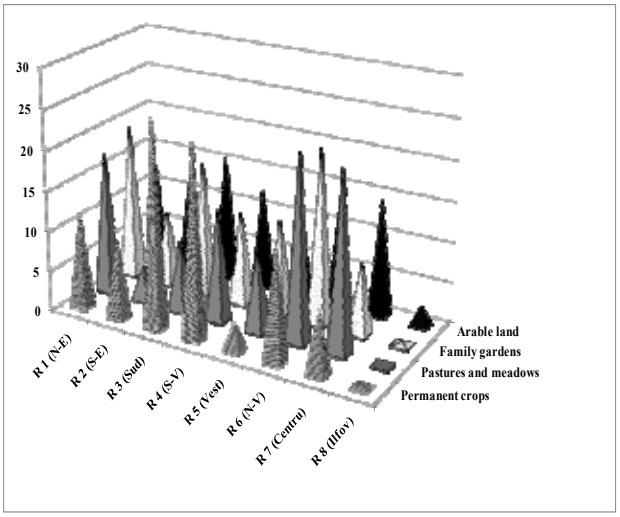

Fig. 2 Regional farms distribution (%), by usage categories of UAA

Family gardens areas cover the least share in UAA, their more accentuated presence is indicated in North-West, North-East and Centre.

While the majority of holdings owning permanent crops areas is grouped in South (26%), South-West (25%), the least represented are in regions West (4%) and Ilfov (0,4%). The most of holdings owning pastures and meadows are located in North-West (26%) and Centre (25%), while less spread in South-East (4%) and Ilfov (0%).

The distribution of farms by the permanent crops areas structure is indicated as in Fig. 3.

The widest areas covered by fruit trees are in regions West, South-West, Centre and Ilfov.

Farm specialization in fruit tree nursery was identified in region South, with a 12% share in the permanent crops sample area.

The most significant wine supply areas are represented by vineyard areas for noble wine covering 84% of the permanent crops and 14% for table grapes in regions South-East and in region North-East, 64% areas for noble wine and 14% for other wines.

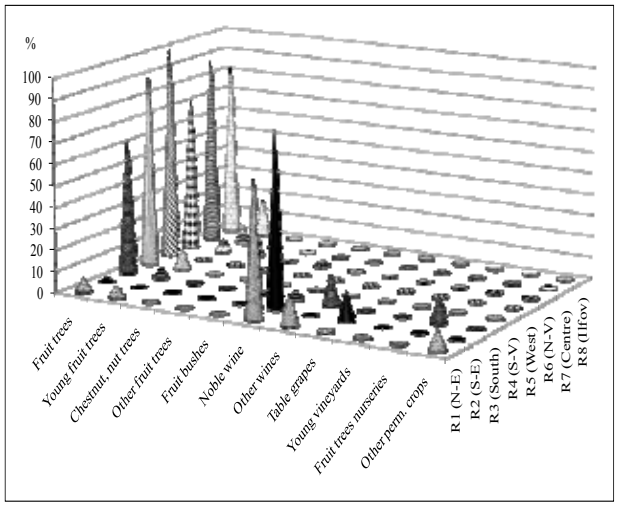

Fig. 3 Regional farms distribution (%), by usage categories of permanent crops area

The analysis of sample farms distribution by size classes and usage categories of UAA (Fig. 4) indicates the following results: the small farms intervals, owing UAA under 0.1 ha and 0.3-0.5 ha, are integral covered by arable land; the growing trend of the arable land of the holdings over 10 ha, with a major share of the large holdings over 100 ha; family gardens are grouped in the holdings included in 0.5-5 ha classes. Exempt for the interval 0.5-1 ha, were the holdings possessing pastures and meadows are predominant, sharing 62% in UAA, the rest of intervals are mostly covered with arable land.

A relative constant share is present, of 20% on average, consisting in farms owing natural pastures and meadows, included in the UAA intervals of over 2 ha and up to 100 ha. Permanent crops are grouped within the 0.1-03 ha interval, with a share of 36% of holdings. Within UAA size intervals of 0.5-10 ha are included 30% of the holdings surveyed which have declared areas covered with permanent crops.

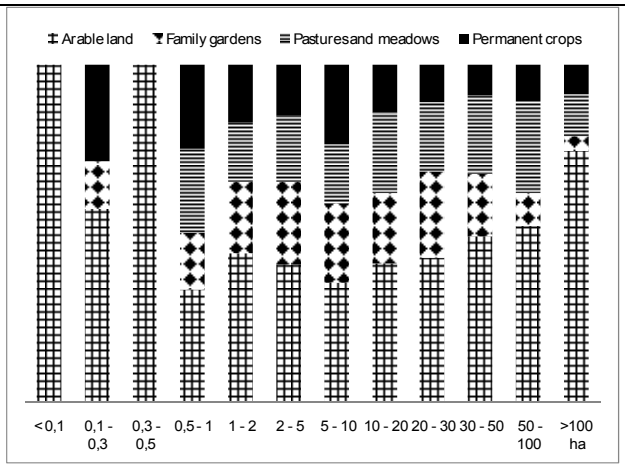

Fig. 4 Farms distribution, by size classes and usage categories of UAA

As presented in Fig. 5, the analysis of farms owning permanent crops areas distribution by size classes of UAA resulted: the major share, of 27% is covered by the holdings included in the 0.5-1 ha interval, while the minor share, by farms corresponding to the 2-5 ha size interval; within the 0.1-1 ha size intervals are grouped 74% of the sample holdings which own permanent crops areas. Within the structure of permanent crops areas, fruit trees and vineyards are most characteristic for the investigated farms, although a much reduced percentage of farms own young trees areas.

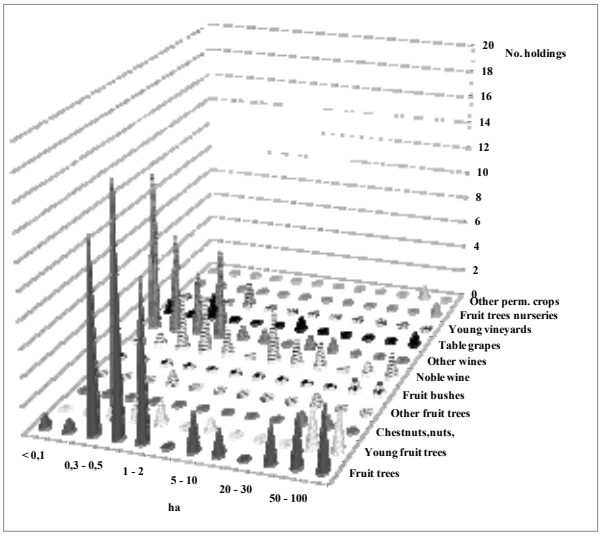

Fig. 5 Farms distribution, by size classes and category of permanent crops areas utilisation

Almost half of holdings owning fruit trees areas belongs to 0.3-2 ha classes.

A second representative option is vineyard; in interval of farms below 1 ha is to be found the greatest share of areas from the other wines category.

CONCLUSIONS

The analysis on farms sample studied in the agricultural year 2007, concerning the economic profiles and potentials of agricultural holdings reflected by the pattern of agricultural areas usage, emphasized the following concluding remarks [3, 4]:

1. The major share of farms UAA structure, 91%, is dominated by arable land, while much less coverage of pastures and meadows, sharing 6% and permanent crops areas, below 4%.
2. The arable land has a relative monotone distribution, in the sample and in regional profile; the bulk part of areas are cultivated with cereals, of which half are wheat crops, one third maize, and another significant share is covered by oilseed crops (below one third), while a 5% share of annual and perennial fodder crops. Exempt for the farms size interval of 0.5-1 ha, dominated by holdings possessing pastures and meadows, with a 62% share, rest of intervals are mostly occupied by arable land.
3. The intervals including farms owing less than 0.1 ha and 0.3-0.5 ha of UAA, integrally covered with arable land, stress the dependence of small farms on agriculture, calling attention to them as most disadvantaged and vulnerable rural economic entities.
4. Management options according to farm status, have differential environmental impact: arable crops specialization of holdings with legal person status, while a relative higher level of diversification of the production enterprises potential for both, animal and vegetable sectors, corresponds to the holdings with natural person status – these farms revealing, as well, an increased importance of meadows and pastures share in UAA, proving an environmental favourable options from sustainable development perspective.
5. The small share of permanent crops areas in the agricultural area usage highlights a reduced level of crops diversification and implicitly of the income sources. However, within the 0.1-1 ha size interval are grouped 74% of investigated sample holdings owning permanent crops areas, highlight a certain potential of small farms for sustainable rural development.

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REFERENCES

[1] Piorr, A et all, 2007, Developing further the multifunctionality concept and making it operational as a policy instrument, Project co-funded by the European Commission within the VI Framework Programme (2002-2006).
[2] Rusali Mirela, 2006, Integrarea dezvoltării durabile în politicile agricole şi rurale – elemente conceptuale şi analitice, în Dimensiuni ale dezvoltării durabile în România, Editura Universităţii A. I. Cuza, Iaşi.
[3] Rusali Mirela, 2009, Evaluări privind profilul economic al fermelor româneşti, prin studii de teren asupra utilizării durabile a suprafeţei agricole, în „Lucrări Ştiinţifice, Seria I, Vol.XI (1), Management agricol". Ed. Agroprint Timişoara.
[4] x x x –Proiect CEEX–56/2006-2008, Modelarea răspunsului exploataţiilor agricole la integrarea principiilor economice cu cele de mediu prin managementul durabil al resurselor de sol, Ministerul Educaţiei şi Cercetării, IEA, Bucureşti.

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ANALYSIS SERVICE ACTIVITIES OF THE FARM IN ARGES COUNTY, ROMANIA

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Key words: *rural areas, service activities, agriculture, farms, Romania*

Abstract

This paper aims to present briefly the present situation and prospects of development of service activities on the farm in Arges county, highlighting the dynamic service level of the annual value and volume of services compared to the total value of agricultural production. Working methods used to achieve this paper were composed of: direct on-site observation, field documentation, analysis of statistical data and consultation with specialized bibliography.
The Romanian rural economy diversification is a key-problem for a successful rural development policy, in the conditions when the rural area capacity to maintain or create jobs will have a main impact upon the unemployment rate and migration flows. Service activities, besides other positive effects, will lead to profitable farms and to increase the appeal of the rural area of economic, investment, social, tourism, etc. point of view.

INTRODUCTION

Currently, *the Romanian rural community seems eager to develop business services.* Education, specific training activities to enhance and improve specific services provided farm occupies an important role, but remains critical ability to provide the services for farms, with repercussions on the rural community. These activities can be viewed through a *systemic conception*, is related quantitatively and qualitatively from other production activities and services in rural areas. For this reason, diversity and seasonality of services, the typology of forms, categories of prices and rates involve using a system of indicators that can be addressed as a *cybernetic system.* The subsystems are interconnected, and their state officials are always popular. In this context, farm services can be considered a *subsystem of the national economic system*, but should be considered permanent agricultural production unit level as a component of rural communities. So, the approach to be made by the microteritorial at macroteritorial.

MATERIAL AND METHOD

In the paper the **methodology was working** over the system used to study cyber services from the farm to work "Agrotourism and marketing agrotouristic" - Alecu, N. I. and collaborators, Publishing Ceres, Bucharest, 2006. Structural and functional relationships of the provision of services in the farm belong to a certain **methodology** that can be seen from these points of view: the farm system perspective, professional identity and the rural economic and social relations in rural areas. In this context one can say that all material resources, human and financial, framed in natural conditions and local system for farms, should be thoroughly known, and equipment conditioning services and agricultural holding. These include regional infrastructure, land and human resources in rural areas, production structure, income and expenditure in the agricultural sector, as part of assessment of potential services, etc.
For these reasons the necessary supplies for domestic consumption and external services must be treated as a complex system whose

components are in a close interdependent.
In this context, are considered input variables (inputs) that can be: natural factors, cultural and spiritual values, raw materials, capital, labor, and indicators developed, exposed in the form of forecasts.
Output variables (out-put-s) may contain indicators of value realized and results following service. To formulate, substantiate and choosing the best decisions, policy makers need permanently to hold information about the system state, which is *achieved through information gathering, systematization, processing and presenting them in the form of indicators.*
Evolution of farm sizes can be characterized by the state of the system components that can be economic indicators (synthetic or analytic).
The material presented was developed primarily based on studying a number of Romanian and international literature (see references at the end of the paper), the observation of concrete situations on the ground in the documentation of visits - information taken from the county Arges and consultation of numerous articles and studies from internet.
They also consulted a number of official websites of institutions and central and local governing bodies in the area studied, namely: Ministry of Agriculture and Rural Development (MADR), National Association of Rural, Ecological and Cultural (ANTREC), National Institute of Statistics (INS) and others.
Research has been conducted in the period 2002 - 2006, in main rural settlements developed in terms of agriculture and agrotourist Arges county, respectively Rucar, Dragoslavele and Dambovicioara.

Research methodology services of the farm involves a wide range of methods, which really proved their validity in doing both types of benefits if carried on the farm. In contrast, in the case of the difficulty relates to the quality of information, difficulties caused by complexity, diversity and characteristics of services performed in agricultural holding. Depending on *how to approach and how to resolve*, the very *methods of service learning activities* can be grouped as follows:

- *Analytical methods* that are based on a mathematical tool, with which we obtain optimal solutions to the various objectives set, depending on parameter values under consideration. In the case of highly complex situations in the work practice of service learning activities are used simulation techniques, which can result in gaining more appropriate solution scenarios;
- *Statistical methods* that are used in the analysis of data series, which is characterized by the evolution of effective demand expressed by consumers of services in certain periods of time;
- *Regulatory methods*, which are based on the use of consumption "norms" usually determined statistically. These rules relate to the volume and structure of individual services and / or collectively for a range of services, usually in the public interest, such as touristic and agrotouristic services, transport, electricity supply, etc.

RESULTS AND DISCUSSIONS

Promoting a balanced development in the economic and social cohesion in rural areas requires special attention to farms development. Currently, farm economic functions are still largely dependent on the farm. Restructuring the agricultural sector a need to obtain additional income from non-agricultural activities and refocus labor resulting from restructuring the sector agricol. At present, agricultural holdings, which cover only partially non-agricultural activities in support of the rural population, thus totally local resources it isn't valorised. These are the reasons to be known and non-agricultural activities in the dynamics of their development, to be completed by understanding the impact of services on the viability of agricultural holdings.

1. VALUE OF AGRICULTURAL PRODUCTION IN ARGES COUNTY

In the area of Arges county can identify a series of territorial differentiation, printed by natural factors, geographic and socio-economic.

Thus, for sub comprising commons Dragoslavele, Rucar and Dambovicioara, notice a preponderance of oriented agricultural activities.
For this reason these three common to the year before 1989, there were present CAP and the predominant agricultural activities in individual agricultural holdings is quite pronounced (with special reference to the profile of animal husbandry).

The composition of agricultural production dynamics period 2002 - 2006, rendered in the *Table. 1* reveals the level of this indicator for Arges county.

By the year 2002 and delimitation of comparative private sector contributions can highlight these issues:

- the value of agricultural production in 2002 was 750.195 million RON, increases by 98,80% in 2006;
- the private sector is mainly through level of 92,26% in 2002 and 90,40% in 2006.

Table 1. Structure dynamics of agricultural production value in Arges county

Specification	2002	2003		2004	
	mil. lei	mil. lei	%	mil. lei	%
The total value of agricultural production	750195	1097985	164,35	1482629	198
The value of agricultural production achieved in the private sector	737656	1087472	147,42	1419627	192

As table 1

Specification	2005		2006	
	mil. lei	%	mil. lei	%
The total value of agricultural production	1305259	177	1491402	199
The value of agricultural production achieved in the private sector	1239728	168	1438274	195

2.VALUE OF AGRICULTURAL SERVICES IN ARGES COUNTY

Agricultural services include all questions related service activities of the farm. Services for holding falls into a system that includes all activities. Structure is differentiated into zone and types such as holdings at local level it is necessary in a delineation and analysis of their dynamics. In *Table. 2* values are given levels of agricultural services rendered in farms in Arges County, presented in dynamic period from 2002 to 2006. Analyzing data in this table may notice the following aspects: The overall value is in a continuous decrease. If in 2002 this value was 5.448 million lei, in 2006 the level reached 1.984 million lei, as compared to the reference year 2002 is 36,41%, the private sector in 2002 is compared to the total value of services of 54,86% and analyzed the rate of decrease in dynamic private sector is more pronounced, that the year 2006 is 20,40% compared to 2002. These differences in the level of agricultural services are still recorded as a reduction analyzed to face comparison of the total value of agricultural production. Compared to the same structure of the annual dynamics, Arges county territory remark following (see *Table. 3*):

- annual rate of decline of the overall level of the services is very pronounced (whether in 2002 services accounted for 0,72% of total production agicola, in 2006 they represent 0,13%);
- private sector services is much lower. Thus, in 2002 services in the private sector towards agricultural production in this sector accounted for 0,40% and in 2006 the level is only 0,04%.

Table 2. Structure dynamics of the value of agricultural services in Arges county

Specification	2002	2003		2004	
	mil. lei	mil. lei	%	mil. lei	%
The total value of agricultural services	5448	4068	74,66	4206	77,20
The value of agricultural services achieved in the private sector	2989	1506	50,38	1727	57,77

As table 2

Specification	2005		2006	
	mil. lei	%	mil. lei	%
The total value of agricultural services	2591	47,55	1984	36,41
The value of agricultural services achieved in the private sector	1396	46,70	610	20,40

Table 3. Structure volume of services in value compared to a total value of agricultural production in Arges county

Specification	2002		2003		2004	
	mil. lei	%	mil. lei	%	mil. lei	%
The total value of agricultural services	5448	0,72	4068	0,37	4206	0,28
The value of agricultural services achieved in the private sector	2989	0,40	1506	0,13	1727	0,12

As table 3

Specification	2005		2006	
	mil. lei	%	mil. lei	%
The total value of agricultural services	2591	0,19	1984	0,13
The value of agricultural services achieved in the private sector	1396	0,11	610	0,04

However it may be inferred from very low level of services and especially the rate of decrease in the total agriculture sector, with special reference to the private agricultural sector. Relief services can be removed by mechanization, chemicalization, pests, etc.. Which, after 1990, decreases were recorded mainly due to the double disruption: service units, but and units and agricultural
holdings receiving large farm.
At the present time might permit, all rural economic activity consists mainly of operations with certain share of services.

CONCLUSIONS

1. In the context presented, **the development and diversification of tertiary sector in Arges county** can provide a route for recovery of demographic changes by creating new jobs, leaving the final limit and even attract rural population. At territorial level analysis this problem is analyzed under a three-dimensional form, namely: the volume of agricultural production value, level and structure of agricultural services and the share of value of total agricultural production services. Reasons to be known and non-agricultural activities in Arges county are related to local economic restructuring imposed by the need to generate additional income from non-agricultural activities and refocusing the workforce.

2. **Analysis of the farm activities required** knowledge of demographic dependency ratio together with the report / ratio of economic dependency.

3. **Analysis of value of agricultural production in the Arges county** relief removed in the sub-regional differentiation.
In the commons studied (Dragoslavele, Rucar, Dambovicioara), there was a predominance of oriented agricultural activities, agriculture is tied to developer a zoning conditions favorable for most crops.

4. **The composition of agricultural** production dynamics period 2002 - 2006 highlights the following issues in the Arges county: the value of agricultural production inregisreaza a 98,80% increase in 2006, the level was only 88,44% in 2002. It is clear that the territorial level analysis, the structure is still disadvantaged by the large share of the small number of farms of all holdings.

5. **Structure of agricultural production in Arges county** is focused mainly on crops of potatoes, vegetables, field crops, fodder plants, vineyards and orchards, so the whole area and for each community.

6. **Analysis service activities of the farm in Arges county** study focused mainly on agricultural services, the value of such services rendered levels in the dynamic years 2002 to 2006. Of studies showed that in 2002 the private sector service provider is decreasing (compared to the total value of services). Analyzed the rate of decrease in dynamic private sector is more pronounced compared to the total. The differences recorded as decrease the level of agricultural services were analyzed and compared in terms of comparison of the total value of agricultural production. Showed very low level of services and especially the rate of decrease in the total agriculture sector, with special reference to the private sector of agriculture. Activities have been captured aspects of mechanization services, chemicalization, pests, etc. Which, after 1990, decreases were recorded mainly due to the double disruption: service units, but units / farms receiving large. Might allow that all rural economic activity now consists of operations with certain share of the service. Those services

that are below a certain level of performing was named as the actual production activities which fall into the actual production technology and equipment made by farmers. Another category of services that are known as service itself, which is performed in another sector and / or by another service unit. This may fall within agricultural services by a third unit, various other services / services provided outside the agricultural sector, etc.

7. **Impact of services from the farm on their viability** is determined by the attractiveness of services is largely generated by existing utilities. *For example, the agrotouristic services create multiple effects on the farm*, these being due to a variety of factors related to the framework for the activities themselves. Of these groups arise concerning the factors involved hosts (all the factors that correspond to the standard of living of the recipients of pensions actual and potential of farm development agrotouristic services) and visitors (including all the factors that define the level of life and their experience).

8. *The economic life of the communes of Arges county have reinvigorated and developed in all its areas*: agriculture, forestry, animal husbandry, industry, commerce, tourism, etc.. Local authorities will have to invest for economic vitalization of village life, it is a priority that makes the biggest impact. It needed an amplifier to increase the appeal of rural tourism villages and social comfort of the inhabitants to be improved.

9. **Structure of the land falling within the communes of Arges county** is dominated by private sector and are differentiated by use (pastures and hayfields holding the largest areas). Forest is represented by fairly small in the private sector. Agricultural area per inhabitant play significant amplitude, remaining at high level for categories of arable land, pastures hayfield. Agricultural area per farm in Arges county is an average of 1,75 ha, with maximum levels between 2,09 ha and 4,33 ha and minimum levels between 1,21 ha and 2,16 ha.

10. **The general conclusion**, *we can state that although the service activities of the farm is facing many problems,* it is expected that in the next period (2009 - 2025) these activities to know appreciable positive mutations, both in terms of quantity, as and quality option is included in the fundamental policy of integration into European and world economic circuit. Also a mutation involves, above all, orientation through appropriate policies and strategies of the whole activity of market integration services to rural services in the European single domestic market. These strategies can be adapted for all services provided on the farm which integrates rural community and assemble political, economic and social strategies, etc., and regional operational programs to implement services, agricultural technology / non-agricultural use labor force, etc. Hence a series of strategic objectives that follow, mainly to ensure consumer protection, competitive climate protection and guarantees against unfair competition, respect of service usage and alignment with European Union standards regulations.

REFERENCES

[1] Alecu N. I. and collaborators, 2006, Agrotourism and agrotouristic marketing, Ceres Publisher, Bucharest.
[2] Alexandri Cecilia, Davidovici I., Gavrilescu D., 2004, Treaty of agricultural economy, Expert Publisher, Bucharest.
[3] Bran Florina, Simon Tamara, Nistoreanu P., 2000, Ecotourism, Economica Publisher, Bucharest.
[4] Buianu Vergina, 2006, Agrotourism economy, Terra Nostra Publishing House, Iasi.
[5] Florian Violeta, Gavrilescu D., Giurca Daniela, Rusali Mirela, Serbanescu Camelia, 2002, Restructuring and transition of agrifood sector and rural areas in Romania, Expert Publisher, Bucharest.
[6] Gavrilescu D., Florian Violeta – coordinators, 2007, Rural economy in Romania, Terra Nostra Publishing House, Iasi.
[7] Glavan V., 2003, Rural tourism, Agrotourism, Durable tourism, Ecotourism, Economica Publisher, Bucharest.
[8] Ion (Sararu) Sia, 2010, Research on service activities within the farm. Study case from Rucar - Bran area, doctoral thesis, University of Agronomic Sciences and Veterinary Medicine.
[9] Moga T., Radulescu Carmen Valentina, 2004, Complex development of rural area, ASE Publishing House, Bucharest
[10] Moinet F., 1993, Le tourism rural, Editions France Agricole.
[11] Statistical Yearbook, Arges county statistics, The National Statistics Institute (INS), 2007.

[12] ANTREC – National Association of Rural, Ecological and Cultural Tourism, 2002, 2003, National Catalogue of Guesthouses and Farmhouses in Romania, Bucharest.
[13] www.antrec.ro
[14] www.antrec.ro
[15] www.madr.ro

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COMPARISON BETWEEN SYRIAN AND ROMANIAN AGRICULTURE (PRELIMINARY RESULTS)

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Key words : *Syria, Romania, agriculture, management*

Abstract

Agriculture still plays an important role in the economies of both countries Syria and Romania. Its importance is devoted to its contribution to GDP, food security, employment, foreign trade, and agro-food industry. Syria is still pursuing agriculture production subsidy policy for specific crops (wheat, barley, cotton, tobacco and sugar beet), while there is no agriculture production subsidy in Romania, instead the government started now to give farmers payment per ha (decoupled payment). In the last years, agriculture contribution in the national economy has started to decline in both countries due to different factors. In Syria, drought is the main factor followed by the competition of other sectors. In Romania, very high production cost is the main factor beside the competition of other sectors and imported agricultural products. Both countries has announced integrated management of natural resources, but unfortunately due to financial and administrative constraints, final targets were not achieved properly.

INTRODUCTION

Agriculture plays a major role in the ***Syrian*** national economy because of its multiple contributions to the economic and social development process of the country. In addition, it has and important role in generating employment, providing raw materials necessary for agro-industry and its participation of foreign trade. Since the sixties, agriculture sector was a target of Syrian government heavy intervention in terms of final product price subsidy (Market support Price) for specific crops. This group of crops includes wheat and barley, as food crops and tobacco, sugar beet and cotton as cash crops. Input subsidy has also been followed to help farmers in reducing production cost. This includes subsidizing fuel, water and electricity. In the nineties, the Syrian government has started economic reforms. These economic reforms have intended to improve competitiveness of the local products, to integrate the national economy in the world economy and to attain a balance between remarkable economic outcomes and social justice. ***Romania*** has a good natural resource base for agriculture, with fertile soils in the south and in the Moldavian provinces. Agriculture still plays an important role in terms of production and a source for agro-food industry and as a source of living for rural people despite its diminishing percentage in GDP. During the central planning era, economic policy emphasized industry over agriculture, but agriculture nevertheless continued to play a significant, though diminishing role in the economy. Agriculture was organized in large state and cooperative farms, and upstream and downstream sectors were dominated by state-owned enterprises. Much of the growth achieved in agriculture was due not to improvements in total factor productivity but to increasingly intensive use of purchased inputs, especially chemicals and fertilizers. The reform process implemented over the past decade has been difficult, moving in fits and starts. Results have been mixed and immense tasks in sectoral adjustment still lie ahead to cope with the challenge of accession to the European Union (EU).

AGRICULTURE IN THE SYRIAN AND ROMANIAN ECONOMY

AGRICULTURE CONTRIBUTION TO GDP

The agriculture contribution to GDP in Romania was 8.42% in 2005, while it was 20.41% in Syria. This means that Syrian

agriculture is participating with 41.29% more than of Romanian agriculture. The highest participation of the Romanian agriculture was in the year 2004 (22.46), while the highest participation of the Syrian agriculture was in the year 2001 (25.30%). The declining of agriculture participation in the GDP in both countries can be justified to the increase share of other sectors, especially service sector in more open and liberalized economy.

CONTRIBUTION OF AGRICULTURE TO EMPLOYMENT

Agriculture labor share from the total labor force was 40.9% in Romania in the year 2001, and then it declined to almost 30% in the year 2006. This happened because of the low income from agriculture in an open market economy and the increase of the service sector participation regarding absorbing the labor force (41%). In Syria, a notable decline also had happened between 2001 (27.9%) and 2006 (19.6%). This decline was due to weather conditions in the rain-fed agriculture, where several harsh droughts hit the country. The lowest participation of agricultural labor in Syria was in the year 2004 (17.1%) and it started to increase again after the government adoption of the tenth five year plan. This plan aimed at improving and investing more money in the eastern agricultural areas through implementing many irrigation and touristic projects.

CONTRIBUTION OF AGRICULTURE TO FOREIGN TRADE

The contribution of the agricultural trade from the total trade in Romania was going less and less due to the reduction in agricultural production through years (from 10.7% in 2001 to 9.3 in 2006), where the total imports exceeded the total exports in 2006 by 625258 tones. This can explained due to the changes happened in the farm ownership from large scale to small scale production and the lack of investments in agricultural sector. The same happened in Syria but for other reasons. The total agricultural trade from the total trade declined from 18.6% in 2001 to 13.8% in 2006 due to the instability of the weather conditions, especially rainfall rates, which affects the total level of production.

CONTRIBUTION OF AGRICULTURE TO AGRO-FOOD INDUSTRY

In Syria, the most important participation of agricultural sector was from the side of olive oil with 130,300 tones, followed by cotton seed oil (60,700 tones) and then by soybean oil (47,600 tones). The aforementioned crops participated around 93% of the total processed agricultural products. Indeed, these figures are for few agricultural raw materials because there is no available data regarding the participation of sugar beat, cotton, tomato wheat from official sources. In general, the participation of the seven products according to FAOSATAT was around 2% from the total agricultural production during 2000-2006. In Romania, also the information available is just from FAOSTST for seven important products. The average share of agricultural products to agro-industry sector was around 5.5% throughout 2000-2006. Among agricultural products, the biggest share was for beer of barley (4.43%) of the total agricultural production and 78% of the total processed products.

LAND USE

The total area of Romania (23,839.1 million ha) exceeds the total area of Syria (18.500 million ha) by 5,439 million ha. Agricultural area forms the biggest share of the Romanian territories (61.8%), while the biggest portion of the Syrian territories is uncultivable land (68.1%). In 2006, the arable land (cultivable) in Romania exceeds that of Syria by 7.7%. Beside the difference in land composition and the scale of each component in the general land constitution, there is also a difference in the quality. For example, all the pastures in Syria are falling in an annual rainfall of less than 200-350 mm/year, while the Romanian pastures are falling in annual rainfall of 500-2000 mm/year. Also, the forests share in the Syria land composition is up to 4.8%, while it arrives to 28.35 of the total lands in Romania in 2006. The cropping composition in 2006 in both Romania and Syria is close regarding the dominating of crops in the arable areas (86.1% and 78%) respectively. Also regarding the area cultivated with vegetables is very close (3.6% in Romania and 3% in Syria). The only clear difference is devoted to the area cropped with fruits, where it arrived in Syria to 18% and to 4.7% in Romania including the area of vineyards.

PLANT PRODUCTION

In 2006, 60.6% of the total agricultural production came from crops, while fruits produced 21.3% and 18.1% from vegetables in Syria. Likewise, the share of crop production from the total Romanian agricultural production was 53.9%, while green fodder from arable lands ranked second with 31.3% and the rest 5.5% came from grapes and fruits. During the period 2000-2006, irrigated wheat and cotton lead the irrigated crop production in Syria with an average of 50.5% and 14.8% respectively, while rain-fed wheat and rain-fed barley dominate rain-fed crop production by 54.6% and 32.9% in that order. On the other hand, Maize grain and wheat controlled the production of the cereal for grain in Romania by 57.28% and 35.23% correspondingly. It can be seen here some similarities regarding the composition of plant production where the leading group is crops in both countries, especially wheat, maize and barley. But the interesting point from the Syrian side that 3% of the total area cultivated with vegetables has contributed to 18% of the total agricultural production, while almost the same area in Romania (3.6%) has contributed to 9.4% of the total agricultural production.

ANIMAL PRODUCTION

In Syria, the composition of the animal herd in 2006 is mainly of sheep (89.38%), followed by goat (5.94%) and cattle (4.69%). Regarding meat production, red meat share from the total production was 68.8% and 31.2% from the white meat principally poultry meat. Sheep meat formed 73.3% of the red meat production followed by cattle meat (23.9%) and 2.7% from goat reflecting that consumer prefer to consume sheep meat because it is tastier. Cattle dominated milk production with 63.9% followed by sheep milk (32.5%) and then goat (3.6%). As a result, cattle are raised mainly for milk production beside little meat and sheep is mainly raised for meat consumption locally and for export, especially to the gulf region. Similar to the composition of the Syrian animal herd, sheep is dominating the structure of the Romanian animal herd by 40.5% followed by pigs (35.9%) and then cattle (15.5%). The large share of sheep in the animal number did not appear in terms of meat or milk; it appears in terms of wool production. Due to their high productivity and their ability to eat a wide range of vegetation, pigs dominated meat production in Romania during 2000-2006 with 44.1% leaving the second place for beef meat with 22.7%, while mutton and goat participated by 7.2 in 2006. Giving the fact that pastures presents 14% of the Romanian lands; this gives the opportunity to reduce the cost of meat and milk production. On the contrary, the pastures in Syria are suffering from instability of rainfall, overgrazing and deterioration.

WATER MANAGEMENT

The total water resources in both countries are a little bit close to each other with a difference of 13 billion m^3 for Romania. The permanent water resources in Romania are approximately four times the ones in Syria. The total available resource in Syria is more than 15 billion m^3, while it is more than 42 billion m^3 in Romania with a difference of 27 billion m^3. Syria is suffering from a water shortage of 3 billion m^3/year, while there is no water shortage in Romania except some southern parts of the country which suffer from insufficient rainfall from time to time. Both countries are emphasizing the rational and integrated water resource management, but due to administrative and financial constraints a delay in the implementation is occurring. In Syria, a plan to transform the total irrigated area from traditional irrigation method to modern one has started in the year 1999. The result was transforming just 17.5% despite the repeated announcements regarding the benefits of using the modern technology in reducing production cost. The absence of proper water mitering and pricing tool is giving farmers the excuse of using water as an everlasting resource. Romania doesn't have problem in water resources. On the contrary, it has a problem of managing the available resources. In Romania and after the redistribution of land after 1990, the old vast irrigation system became out of use. The irrigated area drooped from 770 thousand ha in the year 1994 to almost 96,000 ha in 2006. This was because of the high cost of drilling water for irrigation within the new pricing system.

CONCLUSIONS

Similarities

-Syria and Romania have stated to preserve natural resources and to guarantee its sustainability;
-The reduction in the share of agricultural GDP in the total GDP had happened in both countries.
-Both countries have observed a reduction in the share of agricultural labor force in the total labor force;
-The cropping pattern is almost identical in Syria and Romania which composed mainly of grain crops;
-Land fragmentation cadastral problems are a major problem that constrained the development of agricultural production.
-Both countries have witnessed a decline of the share of agricultural trade from the total trade.

Differences

-The main agricultural production is coming from irrigated agriculture in Syria, while agricultural production is principally coming from rain-fed agriculture in Romania;
-The Syrian government has what so called the category of strategic crops which is under price support of the final product including food crops like wheat, lentil and chickpeas and industrial crops such as cotton, sugar beet and tobacco. On the contrary, the Romanian government doesn't have any type of support for the final agricultural product, but it started now to implement the decoupling payments for agriculture;
-The Syrian government is providing water for irrigation through its vast irrigation system at annual fixed rate which is put centrally. In addition, illegal wells form the large portion to extract underground water. In contrast, the Romanian government is not providing this service. The water for irrigation in Romania is provided through the water user association, which is an NGO and for very small portion of the arable land reflecting the high prices of electricity and fuel;
-Syria is suffering from land degradation including wind and water erosion and salinity, while this problem is minor in Romania including some land erosion in the southern part or in the mountains where the forests were cut irregularly.

REFERENCES

[1] AASA, 2007, the Annual Agricultural Statistical Abstract, Directorate of Planning and Statistics, MAAR, Damascus, Syria.
[2] AASA, 2008, the Annual Agricultural Statistical Abstract, Directorate of Planning and Statistics, MAAR, Damascus, Syria.
[3] Bretorean, et al, 2009, Current situation regarding water resource management in Romania, www.inweb.gr/workshops/workshop/June/Romania_1.pps.
[4] Burja Vasile, 2007, Promoting the Associative Structures–Objective of Sustainable Agriculture in Romania,steconomice.uoradea.ro/anale/volume/2007/v1-economics-and-business-administration/23.pdf.
[5] CBS, 2007, the Annual Statistical Abstract, Central Bureau of Statistics, Damascus, Syria.
[6] Geir Ovensen and Pal Sletten, 2007, The Syrian Labor Market, Fafo-report, Oslo.
[7] NIS, 2007, National Institute of Statistics, Statistical Yearbook, 2007.
[8] Pamfil and Rusu, 2005, Agricultural Land Reform and Land Consolidation in Romania, Land Consolidation and Territorial Organization Prague, March 6-10, 2005.
[9] Pete Istvan et al, 2009, Assessment of the Competitiveness of the Dairy Food Chain in Romania, Enlargement Network for Agri-policy Analysis, (Babes Bolyai University Cluj Napoca).
[10] SAD, 2007, Syrian Agricultural Database, National Agricultural Policy Center, Damascus, Syria.
[11] SAT, 2006, Syrian Agricultural Trade, National Agricultural Policy Center, Damascus, Syria.

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SYRIAN STEPPE POLICIES IMPACT ON (AL-BADIAH) NATURAL RESOURCES SUSTAINABILTIY

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Key words : *Syria, steppe, natural resources, degradation, grazing*

Abstract

The pressure on the Syrian steppe resources (Al-Badiah) has increased severely during the last 50 years due to population high growth rate and the new steppe government policies. The Syrian population in 2008 is seven times the one in 1950 (3 million to >20 million). Moreover, sheep number has increased at the same rate. In addition, the wildlife of Al-Badiah is under severe pressure facing very high competition from sheep on the grazing sources. It is also suffering from past and current hunting practices which are unselective and unsustainable. Al-Badiah is exploited all around the year because of the free access to any location in it. By using trucks and tractors to transfer herds and to bring water, the already sensitive soil and vegetation is destroyed and degraded. The resulting degradation and destruction of habitats is another important cause of wildlife loss. The unorganized and illegal activities in Al-Badiah are considered the drivers for degradation and destruction of the ecosystems and habitats.

INTRODUCTION

The pressure on the Syrian steppe resources (Al-Badiah) has increased severely during the last 50 years due to population high growth rate and new government policies. The Syrian population in 2008 is seven times the one in 1950 (3 million to >20 million). Moreover, sheep number has increased at the same rate. Also, wildlife of Al-Badiah is under harsh pressure facing very high competition from sheep on the grazing sources. It is also suffering from past and current hunting practices which are unselective and unsustainable. Furthermore, Bedouin used to use poisoned carcasses to protect their herds from wolves and other predators. As a result, these carcasses which are totally unselective harmed other types of wild life that are harmless to human.

Al-Badiah is exploited all around the year because of the free access to any location in it. By using trucks and tractors to transfer herds and to bring water, the already sensitive soil and vegetation is destroyed and degraded. The resulting degradation and destruction of habitats is another important cause of wildlife loss.

AL-BADIAH DETERIORATION DRIVING FORCES

The unorganized and illegal activities in Al-Badiah are considered the drivers for degradation and destruction of the ecosystems and habitats and resulted from:

1. Crop cultivation, especially barley in the marginal areas (receive less than 200-350 mm/annum) leading to the elimination of annual and perennial plants and soil erosion. Fortunately, this activity is no longer permitted by the Syrian Government.
2. Livestock feed subsidy through cooperatives in Al-Badiah, especially the subsidized barley, beside the entrance of new investors from the cities transformed sheep production from family subsistence production to a large mechanized commercial production. This helped animal overstocking on the expense of the rangeland ability to handle more livestock leading to overgrazing and decreasing its carrying capacity.
3. Water source exploitation through digging large number of illegal wells for livestock and for cultivation resulted in water shortage and vegetation deterioration. In addition, the absence of rangeland management program through organized

distribution of wells permitted herders to spread over areas traditionally out of water and to use the available sources unsustainably.

4. Excessive hunting and using unselective poisoned carcasses destroyed a wide range of animals and birds, as well as atypical and in danger ones. Fifty years ago gazelles were plentiful everywhere of Al-Badiah.

EMPIRICAL EVIDENCES AND CURRENT SITUATION

Overstocking, overgrazing, and marginal areas cultivation

Overstocking by definition is to keep too many animals on land to graze an area more than it can support which leads to ***overgrazing***. ***Marginal area cultivation*** is to cultivate the areas that receive less than 200 mm/annum hoping to have more rainfall to grow crops. "This process increased dramatically since 1987 according to the changes in the land use laws, especially when the Government decided to rent 10 hectares for each family. Therefore, the area cultivated with barley has been doubled between 1987 and 1998 at the country level. The reason behind the expansion of barley cultivation is the coming of new investors, even that the good season is one out of seven to ten seasons; the low production cost will guarantee excellent profit at the end. In case of rainfall shortage, the investors will rent the failed crop to the herders" [2].

Because the cultivation of barley in Al-Badiah is risky and the production is variable and related highly to rainfall rate, the cultivated lands will be damaged by wind and water erosion in the absence of the vegetation cover. Even the barley cultivation is stopped; lands need at least ten years to recover and the natural plants to come back again. "The overstocking is mainly related to the change in livestock feeding pattern. This change happened at the end of the 1940s when mechanization was introduced to cultivate more lands, especially in Al-Jazirah planes in the north of Syria. At the end of the 1950s, most of the lands down to 200 mm isohyets had been brought into cultivation, changing the livestock feeding patterns as more cereal stubble became available for grazing in the summer months" [5]. After the sever drought between 1958 and 1961, the Syrian government introduced supplementary feeding which radically changed the flocks' feeding patterns. The recent and continuing extension of irrigation in the Aleppo and Al-Rakka areas of northern Syria has also encouraged greater use of irrigated crop residues as grazing.

"Syrian experience shows that judging the success of feed subsidies and other measures to alleviate droughts in low rainfall areas requires a long time horizon. Syria has made considerable progress since the 1980's, but still faces the challenge of a new two-to-three year drought. Syria, on the other hand, maintains its feed subsidy program, but has now banned the cultivation of barley in many of the steppe areas. This is a controversial decision because it appears that much of the barley planted there was used by local herders for grazing green as well as for grain and straw. Even if grain production in drought years was negligible, stubble and straw could still have been used for grazing" [7].

In 2006, ACSAD reported in a case study in Jabal Al-Bishri that some ***people*** in the area realize the negative changes occurred in the natural vegetation through the invasion of the thorny plants and the encroachment of sand dunes as a new phenomenon. They believed that rain scarcity is the main reason behind these changes and they are convinced that after a good rainy season, more palatable plants will emerge again. On the other hand, other people of the same area explain that the factors behind natural resource degradation are population growth, livestock overstocking, overgrazing, machinery, the availability of water resources in far distance locations and the expansion of the rain-fed cultivation. The majority believe that sheep can't harm natural rangelands because plant will appear again when rain comes, while minority considers that overgrazing may cause some damage. Notably, when people are speaking about the rangelands and its ability to feed the mentioned numbers of sheep, they are stating the good rainy years, even these years are remarkably less. In real, it is hard to discover if they are convinced or they are frightened form the government intervention in the management of their flocks.

Regarding ***grazing laws and rangeland management***, people said that despite the

dividing of the land between tribes and sub-tribes and the existence of the boundaries of the cooperatives, it is preferable to have open access to the grazing areas without any obstacles. All people in the area were against establishing the protected areas even they were convinced with its importance role in protecting vegetation from being harmed, but they don't like to have protected areas in their own land. People stated that they just know government protected areas and it is very difficult to manage such protected areas by local communities even they are willing to do this. They said that just the government is able to manage these areas, because they don't own the needed power and instruments, and it is preferable to surround these areas with fences and guards.

Concerning ***banning cultivation***, the majority of the people of the area declared that banning cultivation affected their economical situation negatively and harmed their herds, and they will respect this if the government will distribute more subsidized fodder. The minority (landless) assured that banning cultivation is a good decision and it contributes to the protection of the natural resources in the long run. Consequently, and even cultivation has good economic return in the short run, there is another reason behind refusing banning cultivation. Cultivation guarantees land rights, where tribal conflicts are closely connected to land rights through cultivation. Some people hope to forbid cultivation permanently to be able to use rangelands freely as it was previously, while others contradict prohibiting cultivation because they will not be able to prevent other herders form utilizing their lands and their loss will be doubled; they will not be able to produce the necessary fodder for their animals and they will loose land property rights.

Table 1 illustrates the evolution of sheep and goat flocks during the period of 1960 up to 2006. It is obvious that the size of the sheep herd became four times in 2000-2005 as it was in 1960-1965 reflecting the importance of sheep production system in the Bedouins' life. But, the increase in the goat herd size was almost one and a half during the same period, because Bedouins depend on goat production mainly for self consumption and partially for trading.

Table 1: Livestock population 1960 – 2005
(000 head)

Year	Sheep	Goat	Camels
1960-1965	4035	668	11
1970-1975	5899	803	10
1980-1985	7645	1011	8
1990-1995	12928	1022	5
2000-2005	15313	1068	16

Source: Elaborated from [6]

FAO project GCP/SYR/009/ITA reported in 1996 that Al-Badiah was providing 20 - 40% of sheep feed requirement, reflecting sharp decline in contribution from earlier figures (1993) of 60 - 70% [4]. In addition, the contribution of Al-Badiah in feeding the growing animal number is shrinking more in 1998 and 2006 down to almost 10% of the total requirements.

According to [3], the total requirements of national livestock is estimated to be 14046 thousand tones in 2006, while the total available fodder from different sources including the imported feed is 11290 thousand tones, with a gap of 2765 thousand tones despite the quantity of the imported feed have been tripled between 1998 and 2006.

Consequently, and because sheep and goat herd forms 95% of the total livestock herd and mainly found in Al-Badiah, the pressure will increase on the natural resources, especially in the dry seasons and the shortage of the fodder arrival, leading to more harm to the vegetation cover and deterioration of the soil in the long run, facing the fact that the majority of the Bedouins are poor and don't have the proper strategy to struggle the opposite climate conditions, just to exploit the available resources to its limits.

Unsustainable water use and salinity

Under the pressure of population growth, rainfall uncertainty, self reliance from staple food staff and import substitute concept, the Syrian government started to expand the irrigated agriculture through building dams on the main rivers. The most important river is Euphrates River which crosses Al-Badiah for more than 400 km.

On the other hand, the government was issuing licenses for digging wells. The number of licensed wells increased slightly during 2000-2006 from 73,834 to 88,408. The Market Price

Support policy encouraged farmers to dig more unlicensed wells augmented from 64168 in 2000 to 124716 in 2006 and 213335 in 2007. Consequently, the over exploitation of under ground water can be noticed through declining water tables. Also, the decline in water tables is increasing the cost of water mobilization and increasing the risk of water quality deterioration.

The canals and the drainage system were established to irrigate new areas that historically have never been irrigated. Ignoring the relation between the evolution of the soil sector and the average annual rainfall had led to provide crops with more than they need from water (because water is almost free of charge, and ten years ago the government issued a $100 per hectare). " We were opening the water pipes in the field and go to our work in Aleppo, and when we came back, the whole field was full of water" (farmers testifying, Deir-Ezzor in 1990).

Experts discovered later that the drainage system was not efficient enough to release the extra water and salinity started to increase in the soil gradually. It is estimated that 532.000 hectares or about 40 percent of the present total irrigated areas are salt-affected soil by varying degrees. At present, 60.000 hectares of previously fertile soils have been excluded from production and 100 000 hectares have only 50 percent of their potential production. Examples of salt-affected soils are 125 000 hectares salt-affected soils in the Euphrates Valley extending as a strip from Al-Rakka in the west, down to the Iraqi border in the east; 150 000 hectares salt-affected strip along the Khabour river from Al-Hassakeh city in the north till Deir-Ezzor city in the south and 21 000 hectares in the Jabboul area, 25 km south of Aleppo city.

There is a strong relation between the secondary salinity and gypsum availability in the soil surface and subsurface. The Gypsic lands are estimated to reach 20 percent of the total country area. Random pumping of groundwater for irrigation in marginal land resulted in salinity increment that has led to land salinity. Over-irrigation without measures being taken to control salinity and proper soil and water management and insufficient drainage systems are the main causes of salinity. The dominance of gypsiferous soils along the water resources in the Euphrates, Balikh and Khabour rivers cause pollution and salinity of fresh waters. The scarcity of water resources in some areas calls also for the use of available drainage, saline water or treated wastewater for irrigation without proper soil and water management practices causing expansion of salt-affected soils. The other problem emerged when the Syrian government started to provide drinking water for the animals through a net of wells. The distance between each two wells is almost 16 km without any organized road system. In this regard, herders were bringing there flocks with trucks from long distance for drinking water. This helps for a large percentage also in deteriorating the vegetation of Al-Badiah and then to the degradation of the soil.

Land degradation

The degradation of soil, vegetation and biodiversity accompanied with harsh climatic conditions, human interference and sand encroachment are leading to land degradation and later to desertification resulting in decreasing agricultural productivity.

Land degradation in the Syrian Arab Republic is linked to agricultural activities and to the severity of the climate and the unsustainable exploitation of natural resources.

The major causes of land degradation are, in addition to the climate: improper agro-practices such as improper irrigation methods, salinity, water and wind erosion, wood cutting and overgrazing; inappropriate land use and urbanization.

Soil salinity is gaining an importance and is quite serious in several areas. In fact, salinity is the main cause of land degradation in several irrigated areas as a result of inappropriate practices.

The Arab Center for the Studies of Arid zones and Dry areas (ACSAD) conducted a study in Al-Badiah titled "Survey of the Natural Resources in the Syrian Al-Badiah". This study covered 3.524 million hectares (almost 35% of the total area of Al-Badiah), representing the major sites in Al-Badiah and analyzing its situation between two periods 2001-2004 [1].

The study covered the land of Al-Badiah in 8 Governorates as follows:

- Al-Badiah of Homs, Hama, Aleppo, Al-Rakka and Deir-Ezzor (the middle of Al-Badiah): with an area of 2,843.788 hectares, the land is mainly affected by wind erosion (53%). Medium and sever land degradation represent 5.2% 39% respectively, while very sever land degradation exemplify 6.8%.

This phenomenon concentrates in the west parts of Deir-Ezzor, east part of Homs and the south part of Al-Rakka Governorates. Sand encroachment demonstrate 8.7% and can be found principally in Al-Badiah of Deir-Ezzor and Al-Rakka, while the affected areas of both wind erosion and sand encroachment show 26.5% mostly in Al-Badiah of Deir-Ezzor rarely in Al-Badiah of Al-Rakka.

Water erosion in this group is less important comparing to wind erosion and shows 2.3% and takes place in the areas of small mountains like in the North Mountains of Palmyra. Table 2 illustrates the different levels of land degradation in the middle of Al-Badiah.

Table 2: Land degradation levels in the middle of Al-Badiah

Degradation level	Stable	Light degradation	Medium degradation	Sever degradation	Very sever degradation
Area (000 ha)	43.9	617	540	1425	219
Area %	1.5	21.7	19.0	50.1	7.7
Type of degradation	Water erosion	Wind erosion	Water/wind erosion	Sand encroachment	Wind erosion and sand
Area (000ha)	66	1508	755	246	226
Area %	2.3	53	26.5	8.7	7.9

Source: Elaborated from [1]

- Al-Badiah of Al-Hassakeh: with an area of 457306 hectares, water erosion in this area is the dominant factor leading to land degradation forming almost 39%. Wind erosion accompanied with sand encroachment ranks second showing 21.1%, while water/wind erosion presents 12.6%. Areas considered stable are the cultivated ones. Indeed, theses lands could not be considered stable permanently due to the danger of wind erosion currently or in the future. Table 3 presents levels of land degradation in Al-Badiah of Al-Hassakeh.

Table 3: Land degradation levels in Al-Badiah of Al-Hassakeh

Degradation level	Stable	Light degradation	Medium degradation	Sever degradation	Very sever degradation
Area (000ha)	98	136	78	101	40
Area %	21.5	29.7	17.1	22.0	8.7
Type of degradation	Water erosion	Wind erosion	Water/wind erosion	Sand encroachment	Wind erosion and sand
Area (000ha)	178	178	58	27	97
Area %	39	0	12.6	5.8	21.1

Source: Elaborated from [1]

- Al-Badiah of Dar'a and Sweida: with an area of 234,412 (224,412 hectares in Sweida and 10000 hectares in Dar'a). The majority of this area (54.9%) is stabilized naturally due to the existence of the basaltic stones on the surface of the soil. Wind erosion show important figure (21%) of the area and concentrate mainly in Al-Badiah of Dar'a and consider as the source of dust tornados in the summer time. 5.6% of the area is subject to water erosion. Table 4 shows levels of land degradation in Al-Badiah of Dar'a and Sweida**.**

Table 4: Land degradation levels in Al-Badiah of Dar'a and Sweida

Degradation level	Stable	Light degradation	Medium degradation	Sever degradation	Very sever degradation
Area (000ha)	129	38	16	22	0
Area %	54.9	16.1	6.8	9.3	0
Type of degradation	Water erosion	Wind erosion	Water/wind erosion	Sand encroachment	Wind erosion and sand
Area (000ha)	13	49	13	0	0
Area %	5.6	21.0	5.7	0	0

Source: Elaborated from [1]

The aforementioned results illustrate that the majority of the soils have been deteriorated. It is believed that this can be the same all around Al-Badiah. By summing up the past results, it can be concluded that sever land degradation is dominant (46%). Light degradation ranks secondly with 22.8%, while the very sever land degradation does not exceed 8%. The knowledge of land degradation levels and its percentage help for future planning and determine the priorities to take the proper actions to defend this phenomenon.

REFERENCES

[1] ACSAD, 2004, Survey of the Natural Resources in the Syrian Al-Badiah, Damascus, Syria.
[2] ACSAD, 2006, Monitoring and controlling desertification in Syrian Al-Badiah (Jabal Al-Bishri), Damascus, Syria.
[3] Dakhouri, 2007, Improving Poor Farmers Livelihood through Promoting the Use of Fodder (Arabic), Damascus, Syria
[4] FAO, 1996, GCP/SYR/009/ITA, Range Rehabilitation and Establishment of a Wildlife Reserve in the Syrian Steppe (Consolidation Phase II), Rome, Italy.
[5] Leybourne m, et al, 1993, changes in migration and feeding patterns among semi-nomadic pastoralists in northern Syria, paper 34a, Overseas Development Institute (ODI).
[6] MAAR, 2007, Annual Agricultural Statistical Abstract, different years, Damascus, Syria.
[7] Peter H. et al, 2001, Managing droughts in the low-rainfall areas of the Middle East and North Africa, International Food Policy Research Institute, Washington, D.C. 20006 U.S.A.

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THE PROFILE OF THE AGRICULTURAL COUNSELORS IN TELEORMAN COUNTY

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Key words : *the profile, agricultural counselors, Teleorman county*

Abstract

The paper presents the profile of the agricultural counselors in Teleorman county realized according to the questionnaire they were applied. This questionnaire was after counselors data (profession, working place, age, responsibilities), the activity of the counselors, the effect of counseling on the agricultural producers, difficulties in counseling activity, but also improvement proposals for the counseling activity. The profile of the agricultural counselor in Teleorman county is as follows: mainly feminine, graduate of the Faculty of Agriculture and Zootechny, with an average age of 50, with a background of 8 years in counseling, with an average of 4 villages to advise, more than 5000 agricultural exploitations and 2000-3000 specialized consultations to give annually (to half of the exploitations). They use as counseling methods the individual counseling, group counseling, mass counseling. They approach, when required by the agricultural producers, a large range of counseling topics (vegetable culture, breading, plant protection, input acquiring, project making, etc), although their basic training doesn't cover these areas.

INTRODUCTION

The term consultant is generic and can be used for any person or organization that provides recommendations to decision makers. Consultant in the occupation of agriculture in modern design which is perceived and recognized, is relatively new. Many agricultural experts are unbeaten in their profession, some have even a very narrow specialization performance, recognized by others, but do not have the qualities that make them effective in their advice on agriculture. Consultant, unlike the old hierarchical forums, but not command and recommended because it is paid directly for its services, has everything to offer solutions interest quality to be accepted by beneficiaries.

MATERIAL AND METHOD

So as to achieve the profile of the agricultural counselors in Teleorman county, they were addressed a questionnaire, the answers being processed with the SPSS program, a program used for the whole quantitative analysis of the field data. The processing of the data based on the SPSS program was done through the variable frequency and correlation method. The respondents were 17, that is the agricultural counselors of the Local Agricultural Advisory Centers. The purpose of the questionnaire was to obtain information concerning the following: counselors data (profession, working place, age, responsibilities), the activity of the counselors, the effect of counseling on the agricultural producers, difficulties in counseling activity, improvement proposals for the counseling activity.

RESULTS AND DISCUSSIONS

Following research undertaken, it is notable female predominance in the number Total Local Centers Consultants of Agricultural Consulting Teleorman (17), 65% - female gender, and 35% - male. In terms of professional consultants structure is as follows - the number of those who finished the Faculty of Agriculture is equal to the number of those who attended the Faculty of Zootehnie representing

a rate of 35% each of total, 17% are represented by consultants who graduate courses, Faculty of Horticulture, and only 11.8% (2 agricultural consultants) followed by other faculty profile different from the agricultural sector (Economics). It finds that most agricultural consultants operating in the Centers Local Teleorman Agricultural Consultants have training in agriculture (88.2%), and the difference is the consultants to prepare economic agricultural (11.85%). Regarding the age of consultants, is observed that the majority fall within the age group between 41-50 years (52.9%), followed by age group between 51-60 years (23.5%) and age group between 31 -40 years (11.8%). Staff with young age and by 30 years is poorly represented, with a share of 5.9%, while staff aged over 60 years experience a situation similar (5.9%). Find that most consultants were aged 41-60 years (76.4%), which shows, on the one hand, an advanced experience in this field, and on the other hand, we can say that the staff has a CLCA Teleorman structure of mature age - is a refreshing needed employment in this county by attracting young consultants who need to supplement existing county. Lack of employment of young specialists in recent years whose training consultancy requires a period of time, must be an alarm signal that leads to avoiding the situation where the shortage of specialist consultants to stress, thus affecting the achievement of development objectives a rural environment. Regarding the age they have in their advice, it is notable that this indicator is between 3 and 10 years, the largest share reprezantând a consultant with 9 years old (47.1%), followed those with 8 years old (17.6%) and those with 6 years old (11.8%). Most consultants (70.6%) have a length in the consultation between 8-10 years, 29.4% being represented by consultants whose age is between 3-7 years. From previous analysis it is found that most consultants were adapt, becoming more than 10 years of consultants.

The improvement of the counselors within the Agricultural Advisory County Office in Teleorman, was done through classes offered to them and which brought on a theoretical basis in the developed agricultural counseling activity. Thus, the classes of the Program MAKIS "Modernization of the Agricultural Knowledge and Information System" were taken by all the agricultural counselors in the Local Agricultural Advisory Centers Teleorman (100%), the classes meant for the initiation in making projects for the agricultural producers non-refundable funds followed by 58,8%, and those for the preparation of trainers in agricultural counseling given in collaboration with the Romanian - Austrian foundation "Semanatorul", were taken by 41,2% of the CLCA Teleorman specialists. There were smaller percentages for the frequency in classes concerning milk ratio methodology (23,5%), the National Plan for the Rural Development (17,6%), life annuity, agricultural counseling and agricultural expert management with 11,8% for each.Other classes taken by counselors in a percentage of 5,9%, they were each destined to ecological agriculture, agricultural counseling expert and methodology meant for the support given to producers on agricultural area. It is to be noticed that only 7 counselors of 17 have taken the classes concerning counseling ability formation, indicating deficiency in this area as it is known that a specialist needs to have not only a deep professional knowledge in order to be a good counselor but also the ability to be persuasive in transmitting them to those who need them. As a result of the analysis made to the indicator the number of villages for one counselor, it is noticed that most counselors (47,1%) have 4 villages, but there are also counselors with 5, 6 or even 7 villages. The medium level of this indicator is of 4,47 villages for one counselor, which means very big load, the counselors managing to cover only a small part of the existing problems. The counseling activity reaches its goals through the direct contact established between the counselor and the beneficiary, the former trying to offer information and solutions to the issues raised by the latter. This is not possible when a counselor has an average of 4,47 villages to advise. The solution is the increase in number of the specialists to offer counseling to agricultural producers more easily.

By analyzing the indicator number of agricultural exploitations (including rural inhabited households) for one counselor, it is

noticed that there are counselors who have between 900 – 3.000 exploitations within the advised villages (41,18%), between 3.001 – 6.000 exploitations for 32,29% of the counselors, but there are also counselors who have between 6.001 – 10.000 agricultural producers (23,53%) that is those who have within the counseling center 5 – 6 – 7 villages. According to a MADR study, the ratio between the number of ANCA counselors and beneficiaries is of 1:3636 (in case the inhabited farms are considered) or 1:1363 (considering only the farms registered in the Farms Registry). For an efficient activity to support the viable and economically efficient family farms, it is considered that a counselor should advise 80 farms. If multi-disciplinarian teams operate then a 6 counselors team could assist approximately 500 family farms. At present, at world level, the ratio between counselors and assisted farms is: in Europe 1:325, in North America 1:431, in Latin America 1:2940, in Middle East 1:3499. It thus results that the number of agricultural counselors in Teleorman county is insufficient for them to have an efficient activity for all the agricultural producers, given the fact that 3.000 exploitations are meant for one counselor.

Analyzing the indicator agricultural exploitations according to size, in the villages assisted by the agricultural counselors there are mostly small agricultural exploitations (0 – 10 ha) up to 80% in some villages. Middle exploitations (10 – 50 ha) go up to 40%, the big agricultural exploitations having over 50 ha are only up to 10%.

The indicator *domain of issues approached* by the agricultural producers during the counseling actions reached the following fields: vegetables culture, breading, plant protection, input acquiring, project making and others. Out of the total issues raised, the problems solved by the agricultural counselors were of more than 80% in 2007 an over 70% in 2008, except for the project making field where 24 Sapard projects were applied and won (22%), and in 2008, 17 FEADR projects were applied (17,8%). Most issues were raised concerning plant culture and breading as well as plant protection representing 38%, 33% and 13% of the total issues in 2007 and 46%, 23% and 14% of the issues in 2008. As a counseling method, following the processing of the CLCA Teleorman counselors answers, it is noticed that they use the three counseling methods. The individual counseling was given in 2007 for 3600 agricultural producers, and in 2008 to 1990 persons. *Meetings with producers groups* were 75 in 2007 and 54 in 2008. Within the group meetings, visits were organized to the demonstrative plots (20 in 2007 and 10 in 2008), as well as seminars, debates (80 in 2007 and 35 in 2008). *Mass counseling campaigns* were 5 in 2007 and 2 in 2008). From the presented data it appears that the counseling activity takes place first of all through eye to eye meetings between the counselor and the producer, after which there is the group counseling within meetings organized on previously established topics.

The counseling service can use different approaches to help the agricultural producers reach their goals by: *periodical guidance to make them aware of the problems they are against, multiple choice solutions, information on the possible consequences to each alternative, support in the decision-making for reaching the established goal, support in learning from self experience and experiments, stimulation in sharing information with other farmers.*

For the issue concerning the making of proposals for the improvement of the counseling efficiency, 88,2% of the respondents considered that the solution could be the existence of 1 counselor for each village in Teleorman, 76,5% answered that a raise in the counselors income would entail a raise in the interest of getting a higher efficiency of their activity, and 64,7% answered that the specialized logistic development would increase the efficiency of the counseling in the county. In such cases, the advice is felt not only at a small segment of farmers. If you consider the material and poor motivation of consultants, a clear picture of the development of poor advice, inadequate agricultural production dezoltării objectives.

CONCLUSIONS

1. The profile of the agricultural counselors in Teleorman are the following:
2. The agricultural counselor in Teleorman county is predominantly female gender;
3. Graduate of the Faculty of Agriculture and Zootechny;
4. Does the average age of 50 years;
5. A background of 8 years in counseling;
6. Has experience in agriculture before 1990 and held in CAP activities or shifting to IAS in their consultant;
7. An average of 4 villages to advise;
8. More than 5000 agricultural exploitations;
9. Give annual consultations between the specialized 2000-3000 (to half of the exploitations);
10. They use as counseling methods the individual counseling, group counseling, mass counseling.
11. They approach, when required by the agricultural producers, a large range of counseling topics (vegetable culture, breading, plant protection, input acquiring, project making, etc), although their basic training doesn't cover these areas.

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REFERENCES

[1] Petrică P., Tudor V., Burcea A. – Agriculture-on-going developing factor of rural environment in Teleorman country, Lucrări Ştiinţifice, seria A, LI, Agronomie, 2008.
[2] Petrică P., Sin Gh. – Activitatea de consultanţă în agricultura judeţului Teleorman, Ed. Sitech, Craiova, 2008.
[3] Petrică P., Tudor V. – Necessary and the future of agricultural extension in Romanian Country, Lucrări Ştiinţifice, Seria Management, Inginerie Economică în Agricultură şi Dezvoltare Rurală, vol 8/2008, Ed. DO-MINOR, Bucureşti, 2008.
[4] Sin Gh. – Asistenţă şi consultanţă agricolă, Ed. Agris-Redacţia Revistelor Agricole, 1998.
[5] *** Project CNCSIS TD 157/2007.

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THE GOVERNMENTAL REGULATION OF THE AGRICULTURAL SECTOR AS COMPONENT PART OF THE SOCIAL-ECONOMICAL STATE POLICY

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Key words: *governmental regulation, economic mechanism, agricultural sector*

Abstract

The governmental regulation of the agricultural sector represents state's influence on producing, processing and distribution of products and raw materials, as well as funding, insurance with material resources, technical and technological potential. The governmental regulation is one of the most important conditions of the agri-food complex stability and development, as welfare factor and insurer of country's food security. Nowadays, the relevance of these issues can be explained as a result of changes in economic basis and mechanisms of functioning not only of the agri-food complex, but of the whole national economy. The possible answers to the difficulties from the agri-food sector could be found in the existence of a long term, consecutive and carefully weighted state policy.

INTRODUCTION

The governmental regulation of the agricultural sector as part of the social-economic country's policy must include the accomplishment of the following tasks: to insure the country's food security, to establish basic and equal relations between the agricultural sector and industry, to support farmers' incomes, to create conditions for the implementation of scientific and technical progress, increase of production efficiency, creation of an economic environment within the country, as well as exporting on the global market.
Moldovan agricultural science should be directed toward the successful experience of other countries in the area of economic, ecological and social regulation for agricultural products.

MATERIAL AND METHOD

As main source for this research was used contemporary literature of national and foreign authors. In this paper were utilized economics and logistics research methods, graphical method, as well as authors' research.

RESULTS AND DISCUSSIONS

Nowadays, in the development countries the government not only realizes many production programs for different type of products, creating not less than 20% of national product, but also controls the repartition of income in society, regulates the financial, extra-economic activity and taxation, undertakes many supply and social insurance programs.
In this way the government is involved basically in all the spheres of economic activity. From the above mentioned the main is: the elaboration of the legislative framework, the protection of a competitive environment, the redistribution of incomes in society, the stabilization of economy and stimulation of economic growth.
The experience of EU countries presents the solution for country's food security in the increase of efficiency for agricultural products. Governmental regulation of the agricultural sector has a great influence on country's

production, processing and distribution of products and row materials, as well as on funding, insuring with material resources, technical and production potential.

The agricultural sector is subject to governmental regulation in the developed, as well as in developing countries.

Governmental regulation of agricultural markets in EU countries is directed towards the increase of living standards of rural population and the development of competition for agricultural products. The regulation of agricultural markets for EU countries is based on the following principles: the abolition of any restrictions in trade between EU countries; the establishment of unique prices for products and agro-industrial mechanisms which contribute to their stabilization; the protection of internal market against third countries products; the farmers funding from the unique fund made from the participating countries contributions.

Is necessary to mention, that prices are one of the most important instruments of regulation for EU producers, utilized in market regulation.

Towards its price policy EU increased the level of food security and its own insurance with the main categories of agricultural products, to the reduction of imports, to the increase of exports and as a result to the improvement of its balance of payments.

The regulation of agricultural production and agricultural markets mainly suppose the establishment of a price interval according to the main types of agricultural products, prices at a higher level for producers and in the same time affordable for consumers. In this way is allowed prices variation, but only in the established levels without leading to negative consequences. In the same way for supporting the activity of agricultural farms are necessary large subsidies. The creation of such an interval needed the introduction of prices supporting system in the EU countries.

Prices regulation in the EU requires the creation of a complicated mechanism which will administrate the prices changes on the agricultural market (figure 1). Its main elements are support prices. The support prices include three types of prices: target price, threshold price and intervention price.

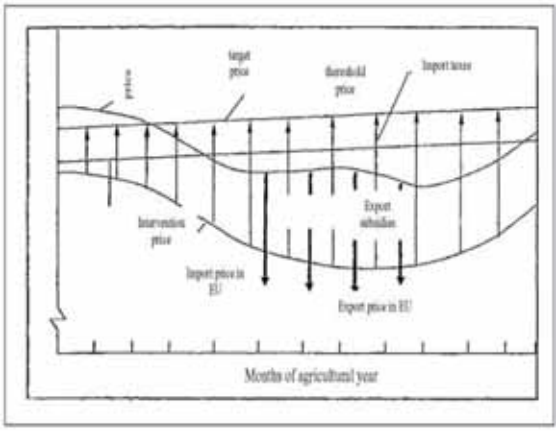

Figure 1. The price mechanism on the agricultural markets from EU (main model) [3]

The main factor of EU agricultural policy is the permanent control on the markets and prices. One of the main directions in the regulation of EU markets is the purchasing of agricultural products and their storage.

In Moldova credits and taxes should be used as efficient instruments in the development of farms.

Their rates should be stable and affordable for enterprises, and credits the main source of investments in the agro-industrial complex. Credits are needed for the development of the agricultural sector particularly taking into consideration the natural conditions in this sector, but because of high interest rates for credits farmers cannot afford them.

Nowadays agricultural credits are a priority issues for the development of agriculture and national economy. The revitalization, modernization and adaptation of local agricultural sector to market mechanisms and conditions require attracting foreign creditors. In this way, the company "Floarea Soarelui" had approved contracting a loan of 20 mil US dollars from "Wjgrain Trand" LTD (Cyprus) for a period until 1st of February 2009 for building a new manufacture for rapeseed and soybean oils.

In the area of external economic relations should be realized more protectionist policies for local producers. Custom policy subject to production import, export must be adequate to the existing situation on global, as well as local market by taking into account the seasonality of agricultural production. Beside this, must be undertaken more severe actions related to

customs control for preventing low quality imports and exports of products.

As main funding sources for agriculture may be used custom duties from the imported food products, excise duty on vodka, wines and tobacco. In this context we should remind the currency fund used for importing food products. It is a large amount and would be more rational to use it for funding the national agriculture instead of funding other countries, as it happens. In the same time is necessary to give up purchasing food products which can be produced inside the country. Therefore, is necessary to manage the agri-food market by taking into account its requirements and the creation of necessary reserves. The given situation requires monitoring and control from the government of country's food security, in order to straighten it and to give expansion possibilities for Moldova's agricultural production.

Nowadays agricultural insurances in Moldova are related to different problems: visible inflation, the limited demand for insurance services in the agricultural sector, high risks related to investments in production.

Risks insurance is a compulsory condition in insuring the stability of Moldova's agricultural sector development. Nowadays, the majority of insurance companies are sceptical concerning risks insurance in this sector since lately, basically every year farmers have suffered from different natural risks factors as: drought, frosts, floods etc.

According to provisions of Moldova's law of subsidized insurance on production risks in agriculture nr. 243-XV from 8th of July 2004 [1], can be provided subsidized risks due to the following factors: excessive drought, hail, floods, torrential rains, dust storms and low temperatures below the biological limit of plants resistance.

At the beginning, according to this law, for the insurance of agricultural crops harvest the government should pay 40% of the total amount and the rest paid by the farmer. Nevertheless, in 2005 only 6 contracts were signed, and from the subsidizing fund of 15 millions lei forecasted for this year were utilized only 91 thousands lei.

In 2006 for supporting farmers to ensure the crops and plantations needed the above mentioned law was modified in order to subsidize 50% from the total amount of the insurances from the governmental fund and 60% for ensuring strategic crops (vineyards, orchards, sugar beet and vegetables). Therefore, in 2006 the insurance companies had signed already 127 contracts, and from the subsidizing fund were utilized already 6 mil lei. In 2001 the number on signed contracts doubled and insurers' liability was about 500 millions lei.

According to the data of the international insurance company "Moldasig" the larges areas with agricultural crops insured were in the district Aneni Noi (5233 ha) and Drochia (3428 ha). In other districts as Cahul, Rîşcani, Soroca, Edineț and Sîngerei the insured area was between 2097ha and 2537 ha.

Autumn crops are often insured against the following risks factors (table 1).

Table 1. Areas under winter wheat and winter rape insured against risks factors

Insured risks	**Insured area of agricultural crops, ha**			
	Winter wheat		Winter rape	
	2006	2007	2006	2007
Hail	858	13282	325	2261
Excessive drought	275	7594	0	1401
Winter frost	3250	15245	628	18641
Spring frost	0	0	0	862
Total insured areas	**4383**	**36121**	**953**	**23165**

In 2007 was noticeable an increase in the insured areas against natural risks factors compared with 2006. The main cause is due to the subsidizing of the agricultural sector and the farmers' awareness of the insurance necessity in the conditions of influence from different risks factors.

CONCLUSIONS

1. The experience of the EU countries demonstrates that in the conditions of market economy farmers' activity, the efficiency of the agri-food complex, the improvement of economical and ecological sphere are subjects of governmental regulation of agricultural products.
2. In Moldova is necessary to improve and strengthen the system of governmental

regulation for agricultural products, based on the experience of other developed countries in order to protect national agricultural sector and increase its efficiency.

3. For achieving these objectives is necessary to propose to governmental institutions responsible for regulation, development and control of agricultural sector the following actions:

- To implement the system of compensation payments and exports subsidies which demonstrated their high efficiency in protecting EU local producers and to increase exports of agri-food products;
- To undertake actions for government intervention on agricultural markets for purchasing agricultural products on guarantee prices according to the model of mechanisms implemented in EU countries.

REFERENCES

1. Legea Republicii Moldova privind asigurarea subvenționată a riscurilor de producție în agricultură nr. 243-XV din 8 iulie 2004.
2. Hotărârea Guvernului Republicii Moldova cu privire la perfecționarea mecanismului de acordare a subvențiilor în agricultură nr. 1043 din 8 septembrie 2006. Monitorul Oficial al Republicii Moldova. 2006, nr. 146-149, p. 49.
3. СЕРОВА Е.В. Специфика аграрных реформ в странах с различным типом экономики (Никоновские чтения, 1997, РАСХН, Москва).

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ECONOMIC EFFICIENCY OF THE INTENSIFICATION OF USING AGRICULTURAL LAND IN THE AGRARIAN ENTERPRISES OF REPUBLIC MOLDOVA

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Key words: *intensification, the agricultural land, the effectiveness of investments, the return*

Abstract

The intensification of land resources, in essence, represents the main side of the whole agricultural intensification, because the land represents the base of material production not only for cultivation of plants but as well for animal breeding. The economic efficiency of intensification agricultural production expresses as priority grow of high – quality and cheap production from one hectare of land surface in comparison with dimensions of agricultural expenditures.

THE INTRODUCTION

The intensification of the utilization of agricultural land is the social and economic process of an increase in volume, in efficiency and quality of the production of agriculture on the basis of the increasing application of new equipment, intensive technologies, more advanced forms of the organization of labor, production and control. Intensification is the form of the expanded reproduction in the agriculture.

By intensification of using the land is understood the economic process, which is evinced by an increase in the expenditures for the unit of area for the purpose of an increase in the productivity of the land, carrying out of agricultural production and increase in its quality. Intensification leads to the growth of the economic fertility of soil, it contributes to concentration of production. In this case it makes it possible to increase production even with the reduction in area of the workable land, which under the contemporary conditions of buying and selling the land or its lease is especially important.

MATERIAL AND METHOD

The purpose of this investigation is the study of the intensity level and economic effectiveness of the intensification of production in the agrarian enterprises for the regions of the Republic of Moldova. For the achievement of the objective were used the following methods of study: the method of observation, the method of group, tabular method, average and relative values and other.

RESULTS AND DISCUTIONS

The following groups of resources are required for the carrying out of any production of agriculture: land, working, material and financial.

The intensive way of development contributes to a continuous increase in the productivity of agricultural crops. This way makes it possible to use more effectively the existing resources, land potential.

Intensity reflects the concrete planned and achieved level of the development of the very process of the expanded reproduction, shows the degree of the saturation of agricultural production by material and cash resources, by

labor resources. By other words, by the intensity level it is possible to judge the potential possibilities of one or another production.

For determining the intensity level of production is used the system of the cost and natural indices, the main things from which is cost of applied basic industrial means and cost of industrial expenses counting on hectare of the earth, which for 2004-2008 yr. on the average on republic reached 4718,47 lei and 3060,7 lei respectively (tab. 1).

Table 1. Intensity level of manufacture of agricultural production in the agrarian enterprises of the Republic of Moldova in 2004 - 2008 yr.

Indices	Regions of the development			On the average in the republic
	Mun. Kishineu	North	Center	
It is necessary on 1 hectare of farmland, lei: · the average annual cost of the basic production means of the agricultural designation	14447	3227,8	5769,6	4718,5
· production expenses in the plant growing and the stock raising	10441	2791,3	4161,9	3060,7
· the labor remuneration fund	1592,0	713,4	800,8	755,0
It is necessary on 1 hectare of of plowed land and long-standing cultivation: · the cost of fertilizers, lei	224,3	293,1	218,4	231,38
· energy power, hp.	2,80	2,25	2,59	2,37
· Presence of tractors on 100 ha of agricultural lands, physics. un.	1,78	1,25	1,47	1,34
Specific weight of plowed land and long-standing cultivations in the total area of agricultural lands, %	80,3	94	89,9	91,0

On the intensity level as a whole it is possible to judge also by the expenditures of live labor for the unit of land area. Because of the absence in the specialized forms of accounting of the activity of the enterprises of data, which reflect labor inputs in the man - hours, for calculating this index we used a fund for the labor remuneration, which taking into account 1 ha of agricultural lands composes 755 lei.

Given data in Table 1 prove, that depending on the region of development the intensity level production strongly differs, since in mun. Kishineu and in the central region insurance with funds is higher than average by regions 3 times and 22,2% respectively, and production expenses and fund for the remuneration for labor for 1 ha of agricultural lands are higher 3,4 times and 2 times respectively.

The cost of the acquired fertilizers on 1 ha is located on a very low level and is approximately 231,4 lei; however, on the regions of the country this index vary from 142,9 lei to 293,1 lei in the northern region, in this case not due to an increase of their volume in the natural expression, but due to the increase the price of acquisition 1 kg.

The natural indices occupy important place in the determination of the intensity level of agriculture: energy-extent of outfitting on the average in 2004-2006 yr. compared with the average data in 2001-2003 yr. grows 2,5 times, the quantity of tractors on 100 ha of agricultural lands increased by 33% higher than on the average in the region. This is connected with the fact that in last years together with the organization of 177 technological stations in the republic were acquired about 7000 units of electric motors, automobiles, tractors and other installations, whose specific weight is more in mun. Kishineu.

The specific weight of the land workable in the republic is sufficiently high and comprises more than 91%; however, in last year this index was reduced by 1,3 percent points as a result of strengthening the erosion of soils and isolation the part of the plowed land under the fine adjustments.

Also, the process of the intensification of production cannot be reduced only to an increase in the additional investments per unit of land area. Not only the volumes of the means, inserted in the development of production, but also the effectiveness of their use, are important for the agriculture. By other words, it is necessary to constantly be commensurate additional expenditures with the obtained results so that each inserted leu would ensure maximum return.

For the characteristic of the intensification of production great significance has its economic effectiveness, which shows, what price obtained the production and which is the return in the inserted means in the process of intensification.

Table 2. Economic effectiveness of the intensification of production in the agricultural enterprises of the Republic of Moldova in 2004-2008 yr.

Indices	Regions of the development			On the average in the republic
	mun. Kishineu	North	Center	
1. It is necessary on 1 hectare of farmland, lei: · gross production of plants and animals raising	10691	4083,3	4655,6	4209,22
· the gross income	4012,3	1211,1	1168,8	1241,1
· income from sale of the agricultural production	8590,7	4023,5	4041,1	3846,5
· profit from sale of the agricultural production	1915,2	668,5	664,7	666,2
2. Productivity of labor, lei (cost of the gross of production to one average annual worker)	71586,8	39472,4	40366,2	40807,3
3. Level of the profitability of agricultural production, %	28,7	19,9	19,7	20,9
4. Profitability of the basic production means of agriculture, %	11,4	10,3	2,92	5,97

It is evident from the data of table 2 that all indices, which characterize the effectiveness of intensification in mun. Kishineu it is higher than on the average on all enterprises in 2004-2008 yr., for comparison with 2001-2003 yr.
Rates of increase of return of agricultural lands are higher than the rates of increase of the resources having on 1 hectare.
However, the level of these indices is very low in comparison with the data on the enterprises - leaders. The level of the profitability of production of about 21% shows that in each inserted leu of enterprise they obtain only 21 bani of profit, while enterprises - leaders obtain on 80 baths even more.
Material basis of development of process of intensification, growth of its economic efficiency is increase of economic fertility of the land.

The most important direction of intensification - strengthening the technical potential of branch; therefore now in the practice of agriculture are more widely applied intensive technologies of production of plant growing, i.e. the technologies necessary for achievement of high planned efficiency of cultures.

Table 3. Specific weight of the agrarian enterprises of the Republic of Moldova, which do not achieve expenditure for chemical and organic fertilizers and their planted areas under the cultures (on the average in 2004 -2008 yr.)

Indices	Cultures and the regions of the development of the republic Of [moldova]				
	Winter wheat (in all regions)	Sugar beet:		Vineyards:	
		Region:		Region:	
		Center	North	Center	South
1.Nr. of investigated enterprises*: · in total	865	87	314	130	140
.including in which expenses for fertilizers for 1 hectare is absent	68	19	51	95	82
· % to the total number	7,9	21,9	16,3	73,0	58,6
2. Sowing (fructified) the area, hectare · in total	207	3230	22352	11978	20662
·Including in which expenses for fertilizers is absent	5202	252	1227	7091	12573
· in % to in total	2,5	7,8	5,5	59,2	60,9
3.Productivity with 1 hectare, Q: · without the fertilizer	19,6	190	208	27,0	34,8
· on the average on all investigated enterprises	27,9	315	326	32,9	37,6
· reserve, (+,)	+8,3	+125	+118	+5,9	+2,8

*researches and calculations of the authors

Among the directions of intensification basic remain the chemicalixation and the land reclamation, the wide application of biostimulators and other means of increase of productivity of cultures. In the Republic of Moldova were reduced the areas of the watered land from 308 thousand hectares in 1990 to 37 thousand in 2007 because of the obsolete

irrigational systems. In the agriculture the greatest effect is achieved at the complex use together of the mineral fertilizers also of organic fertilizers, the means of protection of plants and others. Studies of the agrarian enterprises of republic, which specialize in the cultivation of winter wheat, sugar beet and grapes, showed that for lack of financial means from 7,9 to 73% of total number of enterprises they do not use fertilizer and do not spend means on their acquisition (tab. 3).

Data of (tab. 3) show the direct dependence of productivity on expenses for fertilizers. Stronger dependence is observed in the sugar beet and the winter wheat. If all investigated economy have reached at least average productivity about 1 hectare the Republic Moldova could receive in addition 43,2 thousand centners of grain, 176,3 thousand centners of a sugar beet and 77,0 thousand centners of grapes.

CONCLUSIONS

1.The analysis of economic efficiency of an intensification of use of the land allows to draw a conclusion that the Republic Moldova agriculture is characterised by low efficiency.

2.The agriculture has not been prepared for transition to new economic conditions, the material base of the enterprises has been destroyed, because of the lack of financial assets there is a process of deintensification of using agricultural lands.

3.Intensification - the complex problem of the development of agriculture, and the methods of its solution are varied. An intensification basis there is an active introduction in manufacture of achievements of science and technology.

REFERENCES

[1]Decision № 282 from 11.03.2008 About the statement of National strategy of a sustainable development of agriculture of Republic Moldova (2008-20015)? (The Official monitor of Republic Moldova, 2008? 57-60, page 362

[2]Statistical the annual Republic of Moldova - mun. Kishineu: Statistics, 2006, page.5

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THE METHOD OF RATING APPLICATION IN THE COMPLEX STUDY OF INTEGRAL ESTIMATION OF ECONOMICAL EFFICIENCY OF PRODUCTION IN COMPETITIONAL ECONOMY CONDITIONS

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Key words: *efficiency, competition, rating, method, production*

Abstract

In conditions of competitional economy one of the method which can be applied in the complex study of integral estimation of economical efficiency of agricultural production it is adaptation of the rating method appreciation used for the financial analysis of enterprises. This method has on the basis multicriterial complex approachement of the integral system of indicators of economical efficiency of production.

INTRODUCTION

Currently, under intensifying competitive environment and adapt agricultural units to it, is the need to use a system of specific indicators of each branch of activity, leading to innovative ideas to promote positive efficiency of the whole activities of agricultural units.
Quality indicators system and its ability to provide useful information in making decisions at the microeconomic level is a prerequisite in obtaining a comprehensive and effective diagnosis.

MATERIAL AND METHOD

The purpose of this study is to apply the rating assessment method in estimating the full economic efficiency of agricultural production under competitive economy.
For the objective method statistical indicators were used, method table, medium, and investigations relating to the authors.

RESULTS AND DISCUSSIONS

In order to characterize the activity carried out by a system of indicators, in accordance with national and international standards, before its use in advance, must make a feasibility study, that whether the system of indicators justified in terms of effort and results expected.
The diversity of agricultural, technological processes that occur within them, and the existence of links between sub-sectors of the units and resulted in the need assessment of activity of any unit by a set of indicators that is calculated usually defined periods in accordance with the organization of information system.
Results which show features of qualitative and quantitative socio-economic phenomena and processes, in terms of volume, structure, strength, interdependence and their change over time and space are expressed through the synthetic and analytical indicators. In business, production movement and use of information is a conscious process, held that, in general, is structured as a system of economic and social indicators which is characterized by complex quantitative and qualitative phenomena such processes. The indicators are complex, they are characteristic of agricultural situation, the proper management of it through: the amount of profit received the volume of the stock of goods, sales volume, the volume of supply of goods and materials, etc.

Necessity to use a system of indicators is required and increasingly complex nature of the concept of economic efficiency, because each indicator reflects only a criterion of efficiency.

The contents and forms that take the indicators require their classification can be expressed by the functions they fulfill the function of comparison, analysis, synthesis, estimation, testing hypotheses and test the significance, economic and financial leverage, control, measurement, reflection and knowledge.

In assessing the economic efficiency of agricultural production are needed concrete indicators that characterize the action of different factors on production processes. Only natural and value indicators system enable us to achieve a comprehensive analysis and to obtain clear results on the new directions of development and improvement of economic efficiency of production.

Complex analysis of the economic efficiency of production is fully established principles, methods and procedures on a detailed study of agricultural activity in this field and obtain useful results. The main difference is the complex analysis of its special features in the study of agricultural activity.

Complex analysis is not a mere sum of parts made separate analysis of production and general indicators. Complete analysis in its all parts is one of the conditions that lead to complexity.

Another necessary condition is used to analyze results and indicators for the single purpose of production factors in a single system. The single purpose appears to be a top organizational coordination of economic results of the analysis firm entirely the result of the analysis of separate components.

The integrity of the analysis and well determined purpose characterize the complex analysis as a system. Collate them express themselves in a well-defined logical research consecutiveness indicators of economic activity.

Increasing the efficiency of agricultural production is impossible without economic objective evaluation of different phenomena that occur in agriculture. On the basis of a criterion can only be assessed the effectiveness of agricultural production. Only a system of indicators would allow to achieve a more complex and drawn conclusions on the directions of the basic objectives of improving efficiency of agricultural production.

Estimating the economic efficiency of global production in agricultural enterprises in Moldova in the dynamic development in the regions where the legal forms of organization shows that some indicators increase diminishes others, some resources are used effectively, others less effective, and an estimate of efficiency taking into account only the level of profitability would be incomplete.

To determine the full economic efficiency of production is necessary to calculate, along with traditional indicators, such as an indicator of the final ranking, then it may assess the classification of agricultural enterprises by rating the economic efficiency of production (final ranking).

In assessing the final ranking of estimating the economic efficiency of production in market economy has adapted the method of assessing the rating, as the relationship used for financial analysis of enterprises by Russian economists of international stature – A. Şeremet, M. Bacanov, G. Savițcaia [1, 2, 3].

$$R_j = \sqrt{\left(1 - x_{1j}\right)^2} + \left(1 - x_{2j}\right)^2 + ... + \left(1 - x_{ij}\right)^2 \quad (1)$$

where - R_j - rating firm j;

$x_{ij}, x_{2j,}...x_{ij}$ - standard indicators of firm j.

The analysis was conducted following consecutiveness:

- Appreciation of the best result (taken as standard) in dynamic (districts, regions, shapes - the legal organization, business) on each indicator separately.
- Levels of each indicator is standardized in relation to standard indicator (which is denoted by 1), standardized coefficients for maximized indicators are determined as:

$$x_{ij} = N_{ij} / N_{\max_{ij}}, \quad (2)$$

• and for minimized :

$$x_{ij} = N_{\max_{ij}} / N_{ij}, \quad (3),$$

where

x_{ij} – standardized rate for j per year (firm, district, region, etc..)

$N_{\max_{ij}}$ - maximum level of the indicator studied for j per year (firm, district, region, etc..)

N_{ij} - the indicator for j per year (firm, district, region, etc..).

• Standardized coefficients are listed in the table as a matrix.

• For each year (business, district, region, etc…) Rating is assessed by the relationship (1).

The data show that the dynamics of the years 2001-2006 the economic efficiency of production in agricultural enterprises ranked by final rank as follows:

• 2004 and 2005 – respectively the first two places with a higher efficiency,

• 2006 and 2002 - respectively on the third and fourth with an average economic efficiency;

• 2001 and 2003 - are finishing in last place with a low efficiency.

Comparing the results with estimates of economic efficiency as traditional indicators noticed some key differences.

For example, in 2003 the yield from the 1 leu consumption and the production yield was maximum and it could be considered, the efficiency is high, but only after these two indicators can not be generalized conclusions.

Standardized coefficients of efficiency of agricultural land, consumption of production of fixed assets and of labor productivity, indicate a much higher relative difference compared to standard on other years. So, the method of assessing the rating takes into account all the major indicators select for analysis in accordance with changes in dynamic levels.

CONCLUSIONS

1. This method is based on multi comprehensive approach to assessing the complex system of economic efficiency of production.
2. Assessment based on the rating is a method of comparison and consider the real nature of the achievements of all competitors (the dynamic, districts, regions, etc..).
3. applying a flexible algorithm to obtain the rating, which carries out the possibilities of comparative assessment module mathematically complex economic efficiency of production.
4. It is a method of quantitative assessment of the reliability of business partner.
5. The practical application of this algorithm is not restricted on the number of indicators and number of years (firms, regions, districts) taken in research to compare.
6. To determine the rating, as a basis are the highest results in terms of real competitive economy by all subjects studied crowd taking in comparison
7. Such an approach corresponds to existing practice of competitive economy, where each producer and aims to exceed its competitors on all items (indicators) that characterize the economic efficiency of production.
8. The estimate is made based on public data of specialized forms of enterprises surveyed that are used in the traditional practice of determining the economic efficiency.
9. Such a method of assessment is a reliable method of measuring the economic efficiency and increased competitiveness of production.

REFERENCES

[1] BACANOV M.I., SHEREMET A.D. Theory of the economic analysis. - The finance and Statistics, 2002, page 413.

[2] SAVITSKY G.V. The analysis of economic activities:. 4 edition., corr. and completed.- M. INFRA.M, 2007- PAGE 503.

[3] SHEREMET, A.D. Theory of the economic analysis - M. INFRA - M, 2002, page 331 .

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PRIORITY DIRECTIONS AND THE FIELDS FROM AGRICULTURE OF REPUBLIC OF MOLDOVA SUBJECT TO SUBSIDY POLICY

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Key words: *subsidies, agriculture, financial support, agricultural producers*

Abstract

The subvention system of agricultural producers is oriented to the established priorities in the documents of governmental agricultural policies connected to the necessities of different groups of farmers from rural space. Settlement and foundation of the main directions and fields from agriculture, financial supported by the state, through distribution of financial resources from the subsidizing fund of agricultural producers, yearly approved by the state budget law, will be done in accordance with foresights of the concept of subsidizing system of agricultural producers from Republic of Moldova planned up to 2015 .

INTRODUCTION

This depends mainly on the government's agricultural policy. Moldova's government is aware of the importance of the development of support infrastructure for agricultural producers, and according to its possibilities gives to this issue a higher priority.

MATERIAL AND METHOD

The aim of this study is to underline and analyze the main directions and agricultural sectors of Moldova which are beneficiating from the governmental subsidizing policy, based on the data of agricultural enterprises. For this goal were used economic and statistics methods as: grouping method, table method, average and relative sizes and authors' investigations.

RESULTS AND DISCUSSIONS

By approving the National Strategy of Sustainable Development of the Agro-Industrial Complex (2008-2015), on 11 of March 2008 [1], assumes that the system of subsidizing for agricultural producers applied during the period of its implementation will be coupled to the established priorities in the documents of the agricultural policies of the government connected to the needs of various groups of farmers from rural environment.

Table 1. The dynamic of the level and structure of subsidies from the budget to agricultural enterprises from Republic of Moldova

Indicators	Years					
	2003	2004	2005	2006	2007	2008
Total, thousands lei	**2213**	**73879**	**76740**	**72022**	**357532**	**328623**
Total, %	**100**	**100**	**100**	**100**	**100**	**100**
including: Subsidies for agricultural production and costs compensation, thousands lei	40	18	254	3214	24888	30733
Share, %	1,8	0,002	0,3	4,5	7,0	9,4
Subsidies for livestock breeding, thousands lei	-	-	3134	782	-	-
Share, %	-	-	4,1	1,1	-	-
Subsidies for buying fodder, thousands lei	-	-	15	513	-	-
Share, %	-	-	0,01	0,7	-	-
Subsidies for agricultural producers	-	-	-	-	188287	200158
Share, %	-	-	-	-	52,7	60,9
Compensation of costs for planting perennial plantations, thousands lei	141	69104	42588	24076	-	-
Share, %	6,4	93,5	55,5	33,4	-	-
Compensations for losses of agricultural enterprises as a result of natural diseases, thousands lei	2032	4757	30749	43437	41536	7465

Share, %	92,0	6,4	40,1	60,3	11,6	2,3
Other subsidies, thousands lei	-	-	-	-	102683	90267
Share, %	-	-	-	-	28,7	27,5

Source: Calculus made by authors based on the specialized forms of agricultural enterprises from Republic of Moldova.

The establishment of main directions and sectors in agriculture, financially supported by the government through the repartition of financial resources from the fund for subsidizing the agricultural producers, yearly approved through the law of governmental budget, will be made according to the provisions of the Conception of the Subsidizing System for the agricultural producers planned up to 2015.

The resources of the subsidizing fund for farmers are aimed to stimulate various types of activities necessary for the national economy. The allocation of resources is aimed to stimulate the agricultural producers in order to extend the cultivated areas, increase the agricultural output and productivity, and increase the efficiency of fruit sector, livestock sector as well as the modernization of their material and technical basis.

The forms of financial aid of the agricultural sector used were not oriented directly to support reforms and the private producer. As consequence were not efficient the activity of the majority of agricultural enterprises.

By contrary, the subsidies being unpractical, nominal in the absence of accountability and control mechanism were transformed in unprofitable subsidies generating debts to the budget, to social fund and other creditors.

From the data given in the table 1 we can conclude that during 2004-2006 budget subsidies for the big agricultural enterprises had increased comparing to 2003 by 30 times and had reached the level of 72022 thousands lei, and during 2007-2008 with about 150 times, their amount being of 357532 and 328623 thousands lei. Until 2007 the highest share belongs to the compensation of costs for planting perennial plantations, which in 2004 reached 93,5%, followed by the compensations for losses of agricultural enterprises as a result of natural diseases, which share in 2003 was of about 92% from the entire amount. From 2007 the structure of subsidies was modified. For example, for compensating the costs of agricultural production from the entire amount of subsidies were allocated 2,8%-3,8%, more than a half of this amount being designed for agricultural producers, compensations for risk factors being reduced to 2,3%.

Table 2. The level and structure of subsidies from the governmental budget in the agricultural enterprises by the development regions in Republic of Moldova, in average for 2004-2008

Development regions	Number of enterprises	Subsidies from the governmental budget: Total		The level of subsidies calculated to:	
				1 enterprise	1 ha agricultural land
		Thousands lei	%	Thousands lei	Lei
Republic of Moldova	1521	181758	100	119,5	222,0
Including the regions North	570	59455	32,7	104,3	175,7
Center	465	35444	19,5	76,2	206,3
South	302	55996	30,8	185,4	268,2
Mun. Chişinău	88	16036	8,8	182,2	812,4
U.T.A. Găgăuzia	96	14827	8,2	154,4	184,6

Source: Calculus made by authors based on the specialized forms of enterprises activity at country level.

In the enterprises from the development regions (table 2) the share of subsidies is higher and more than 30% belongs to the regions of North and South, which suffered the most from the natural diseases. In calculus to 1 enterprise and 1 ha of agricultural land, the subsidies from Chisinau constitutes about 182,2 lei and 812,4 lei, which is much more with 55,4% and of 3,6 times comparing with the average data from agricultural enterprises from Moldova.

The research of 949 agricultural enterprises shows that 59% from them do not beneficiate of subsidies, but the results of the economic efficiency of the gross agricultural output is not much different than the results of the enterprises where the amount of subsidies to 1 ha of agricultural land in average is until 100 lei and the share of subsidies in the material costs to 1 ha of agricultural land is until 4%. Is necessary to mention that better results are obtained in the enterprises from the group where subsidies to 1 ha is equal to 1544 lei.

The main directions and sectors from agriculture subject to the subsidizing policy will be the following:

Modernization of the agricultural sector. For this purpose will be subsidized investments activities related to the creation of units for processing the agricultural products, equipped with the needed equipment and farm machinery, supplied with agricultural inputs, production of planting material, development of services sphere in agriculture, as well as the reconstruction and construction of irrigation and draining systems;

Advanced agricultural activities in the vegetal and animal sector. For increasing the productivity and competitiveness in agriculture, the development of ecological agri-food products, market stabilization, providing sufficient food supply and fair incomes for farmers will be given direct payments.

A specific direction for investments in agriculture should be the development of organic or pure ecological agriculture. Its main aim is to develop the internal market on the local level and for export to promote the ecological products through mass-media, web, informative seminars across the country, scientific conferences, farmers schooling and improvement of personnel from the agricultural sector.

The resources of the subsidizing fund of agricultural producers in Moldova for the next years include costs for investments aspects that will be distributed:

- for the modernization of the agricultural sector and investments activities related to the production of planting material and foundation of fruits and nuts plantations, purchasing of equipment and machines for the endowment of small and average enterprises specialized in processing, drying and freezing fruits and vegetables, located in the rural areas, as well as for the packaging houses and freezers, endowment with equipment and machines and revitalizing the livestock sector;
- for supplying the agricultural sector with agricultural inputs through subsidizing the users of plant protection products (pesticides) and fertilizers (organic fertilizers), promoting the insurance services for agricultural products, supplying the internal market with high quality agri-food products by subsidizing the agricultural producers on the delivering of the own production through the whole country etc.

CONCLUSIONS

The implementation of the agricultural producers subsidizing system provisions in the future will contribute to:

1. the increase of competitiveness and productivity of rural economy and the market orientation of the production;
2. the orientation of investments to profitable sectors and developing a business environment able to generate revenues to the government;
3. the stimulation of productivity growth as well as the quality of agricultural products by introducing new compulsory productivity and quality standards with the government support;
4. the creation of a new institutional system aimed at monitoring and managing financial resources for subsidizing farmers, in progress;
5. the creation of new working places for rural population.

REFERENCES

[1] Hotărârea Guvernului Republicii Moldova cu privire la aprobarea Strategiei naţionale de dezvoltare durabilă a complexului agroindustrial al Republicii Moldova (2008-2015): nr. 282 din 11 martie 2008. Monitorul Oficial al Republicii Moldova. 2008, nr. 57-60, p. 20-41.

[2] Bajura F. Agricultura autohtonă în comparaţie cu cea mondială. IEMI, Chişinău, 2004, p.18-21.

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FARM EFFICIENCY ANALYSIS IN ROMANIA USING FADN METHODOLOGY

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Key words : *farm, net value added, gross profit margin, output value*

Abstract

The aim of this study is to present the main economical result indicators of Romanian farms in the first year after the enlargement. The paper is based on the statistical data provided by European Commission Farm Accountancy Data Network. FADN (RICA in Romanian language) is an instrument for evaluating the income of agricultural holdings and the impacts of the Common Agricultural Policy by taking in consideration important indicators like net value added, output value, net profit margin, net income, etc. In 2007, the farms less than 4 ESU have a proportion of 94.4% in the sample structure, a medium size of 4.9 ha UAA/farm and a level of labor productivity (expressed trough the net value added on annual work unit, NVA/AWU) over 10 time less that the farms from 100 ESU class. In the vegetal farms less than 4 ESU, fertilizers and crop protection represent 44.8% of the specific costs. In animal farms, 47.9% of the specific costs are represented by feed. The analyze reveals that the economic results of the vegetal farms over 16 ESU were affected profoundly by drought and they needed subsidies to resist on the market.

INTRODUCTION

European Commission created the Farm Accountancy Data Network (FADN) because was needed an instrument capable to harmonize accounting information from different European countries and to support Common Agricultural Policy decisions. FADN is a statistic instrument for subscribing technical and financial data with the special purpose to raise correct information regarding the economical situation of agriculture. In 2007, the number of farms represented by Romanian FADN was 833980 and the sample database was formed by 959 farms.
The aim of this study is to present the main economical result indicators of Romanian farms in the first year after the enlargement based on FADN methodology.

MATERIAL AND METHOD

In order to characterize the efficiency of Romanian farms we utilized the FADN indicators and methodology. The available data at this time are only for the year 2007. The data for 2008, collected by RICA Department from Ministry of Agriculture and Rural Development, are in course of validation at European Commission. The fact that the FADN data base contains over 130 indicators permitted us to create a viable imagine over the Romanian agricultural sector.

FADN is an instrument based on an annual survey of incomes and results evaluation, make by a specific methodology on a sample of farms.

RESULTS AND DISCUSSIONS

Analyzing the Farm Accountancy Data Network (FADN), we observe that the parallel between the outputs and inputs of Romanian farms and the farms from other European countries isn't eloquent, because in our country:

- the farmers obtain low productivities on hectare;
- agricultural production of the year 2007 was affected severely by drought;
- over 94% of farms have less than 4 ESU (similar with Bulgaria);
- the farm sample isn't complete (Romanian data base has only a sample formed by 1000 farms when the proper number it's over 6000).

We observe that the economical efficiency indicators (like profit, net income, gross and value added) are synthetic expressions of farm profitability. Also some indicators from FADN data base (like specific costs) don't contain a series of elements and some indicators (like labor costs) are only estimated.

In Romanian FADN data base over 94% of the farms have less that 4 ESU (European size unit) and only 1.08% over 100 ESU. The medium utilized agricultural area per farm is 10.17 hectares.

Table 1. Sample farms characteristics in Romania

ESU Classes	Farm structure (%)	UAA (ha)/ farm
0 <4	94.43	4.89
4 <8	2.82	15.16
8<16	1.66	66.66
16 <40	0.59	115.42
40<100	0.31	391.18
>= 100	0.18	1141.53

Sursa: http://ec.europa.eu/agriculture/rica/database/database.cfm

The biggest agricultural output values on hectare (UAA) are registered by the farms with 4-8 ESU (1372.2 euro) and with 0-4 ESU (179.1 euro). If we are taking into account the output value structure, this situation can be explained trough the fact that the farms from the classes over 40 ESU are in proportion of almost 70% specialized in vegetal production and theirs results were very affected by the drought from 2007.

Table 2. Agricultural output value in 2007

ESU Classes	Output euro/ farm	Output euro/UAA
0 <4	6255	1279.1
4 <8	20802	1372.2
8<16	52508	787.7
16 <40	98068	849.7
40<100	226606	579.3
>= 100	982915	861.1

Sursa: http://ec.europa.eu/agriculture/rica/database/database.cfm

In the 0-4 ESU class farm, seeds and plants costs represent 42,2% from the specific costs and fertilizers and crop protection costs 44.8%. In the farms over 100 ESU the seeds and plants costs represent only 32.2%. This difference in structure of costs it's due to the fact that the medium and big vegetal farms respect the technologies and use production factors in a rational manner.

The farms specialized in animal production have the following characteristics:

- the feed costs represent 84-88% of total specific costs in the farms till 8 ESU;
- in the 16-40 ESU class, other specific costs represent 64%;
- in the farms with over 100 ESU the costs with feed for pigs and poultry outgrow 59% of specific costs.

Table 3. Specific costs structure for vegetal farms **in 2007 (%)**

ESU Classes	Seed	Fertilizers	Crop protection	Other specific costs
0 - <4	42.2	27.5	17.3	13
4 - <8	33.5	38.2	17.5	10.8
8 - <16	35.4	28.7	20.3	15.6
16 - <40	39.7	35	16.2	9.2
40 - <100	36.5	31.5	18.4	13.6
>= 100	32.2	31.1	20	16.7
Total	38.4	29.9	18.1	13.6

Sursa: http://ec.europa.eu/agriculture/rica/database/database.cfm

Table 4. Specific costs structure for animal farms in 2007 (%)

ESU Classes	Feed for grazing livestock	Feed for Pigs and poultry	Other livestock specific costs
0 - <4	60.3	24.2	15.5
4 - <8	72.4	16	11.5
8 - <16	55.6	10.1	34.2
16 - <40	31.7	4.3	64
40 - <100	61.1	4.7	34.2
>= 100	15.6	59.1	25.4
Total	47.9	26.9	25.2

Sursa: http://ec.europa.eu/agriculture/rica/database/database.cfm

Compare with the farms with less than 16 ESU, the farms with an economical size over 16 ESU have a smaller net value added and superior labor productivity. This is a consequence of a high level of mechanization and rational using of production factors in the bigger farms.

Table 5. Main income indicators in 2007 (euro/ha UAA)

ESU Classes	Gross farm income	Farm net income	Net value added	Subsidies	Labor productivity*
0 <4	744	460.3	598.2	131.1	1598.4
4 <8	825.7	437.5	682.8	179.1	2627.2
8<16	406.2	180	361.3	127.8	4277.8
16 <40	313.5	42.1	227.7	198.6	4380.5
40<100	345.1	142.9	287.2	198.9	9644.9
>= 100	488	206.7	410.1	248.7	11975.3
Total	580.5	309.8	474.5	169.7	2331.4

** VAN(euro)/AWU
Sursa: http://ec.europa.eu/agriculture/rica/database/database.cfm

Net profit margin (Farm net income on agricultural output value) was higher in the first three classes of economical size (over 30%).
In 2007, farms over 16 ESU, majority specialized in vegetal production, were affected by the weather conditions. Even if income rate (Farm net income, inclusive subsidies, on total costs) is positive, our analyze shows that without subsidies all the farm registered losses. However, with the help of the subsidies for disasters or extraordinary subsidies received, income rate reach 22.51% in the farms with 40-100 ESU and 22.94% in those over 100 ESU.

Table 6. Main result indicators in 2007 (%)

ESU Classes	Net profit margin	Net income Rate	Net income Rate (without subsidies)	Subsidies/ Net Income
0 <4	35.99	49.87	35.67	28.5
4 <8	31.89	40.59	23.98	40.9
8<16	22.85	24.87	7.21	71.0
16 <40	4.95	4.24	-15.78	471.7
40<100	24.67	22.51	-8.81	139.2
>= 100	24	22.94	-4.66	120.3
Total	30.1	35.5	16.05	54.8

Sursa: http://ec.europa.eu/agriculture/rica/database/database.cfm

Analyze of subsidies reflects that:
- the farms from the classes with 0-4 and 8-16 ESU received the lowest subsidies (around 130 euro/ha UAA); 48-49% of them are represented by decoupled payments;
- the farms from the classes with 0-4 and 8-16 ESU received the biggest subsidies; this subsidies are represented by sums offer like compensation for calamities or like support for intermediary consumption (56.4% for 16-40 ESU, 57.9% for 40-100 ESU and 54.2% for farms over 100 ESU);

Table 7. Total subsidies (excluding on investments) in 2007 (euro/ha UAA, %)

Specification	0<4 ESU	4<8 ESU	8<16 ESU	16<40 ESU	40<100 ESU	>100 ESU	Total
Total subsidies	**131.1**	**179.1**	**127.8**	**198.6**	**198.9**	**248.7**	**169.7**
	100	**100**	**100**	**100**	**100**	**100**	**100**
Total subsidies on crops	4.1	17.4	0.9	14.5	9	5.9	6
	3.1	9.7	0.7	7.3	4.5	2.4	3.5
Total subsidies on livestock	33.3	64.4	26.4	23.2	25.6	59.3	37.6
	25.4	36	20.7	11.7	12.9	23.8	22.1
Other subsidies	29.4	22.6	36	62.4	73.3	81.3	48.1
	22.5	12.6	28.1	31.4	36.8	32.7	28.3
Subsidies on intermediate onsumption	15.3	26.8	15.1	49.6	42	53.5	29.2
	11.7	15	11.8	25	21.1	21.5	17.2
Decoupled payments (SAP)	48.9	47.8	49.5	49	49	48.6	48.9
	37.3	26.7	38.7	24.7	24.6	19.5	28.8

Sursa: http://ec.europa.eu/agriculture/rica/database/database.cfm

If we take in consideration the classification of farms depending on production specialization, we observe that:
- farms specialized in horticulture, viticulture, orchards-fruits, granivores (pig and poultry) have the highest gross incomes per hectare UAA, due to the intensified character of production in this sectors;
- farms specialized in horticulture, orchards-fruits, milk, granivores (pig and poultry) have the highest net incomes per hectare UAA, especially due to the reduce cost of human resources;
- farms specialized in field crops have the lowest economical performance due to the extensive character of this cultures and low productivities on hectare:
-farms specialized in mixed livestock have the lowest labor productivity, six times low then fruits sector.

Table 8. Main income indicators in 2007, (TF14 classification) (Euro/ ha UAA)

	Gross farm income	Farm net income	Net value added	Subsidies
Specialist COP	265.1	103.6	212.1	163.4
Specialist other fieldcrops	782.5	282	652.2	257.2
Specialist horticulture	3293.3	1215.2	2808.4	386.5
Specialist wine	2655	613.6	2179.6	150.7
Specialist orchards - fruits	1981.6	1185.6	1668.1	122.1
Specialist milk	1174.7	941.3	1048.7	295.7
Specialist sheep and goats	572.3	394.7	497.1	117.1
Specialist granivores	3317.2	1779.4	2671.9	1129.7
Mixed crops	766.5	267.5	585.7	105.6
Mixed livestock	643.9	421.7	458.1	126.1
Mixed crops and livestock	587.7	377.1	470.7	114.7

Sursa: http://ec.europa.eu/agriculture/rica/database/database.cfm

Subsidies system for agricultural producers has an important role in raising the economical efficiency of Romanian farms. Due to the low productivities and chain organizational problems, the vegetal and animal farms are very dependent of this system. The degree of dependence is point out by the share of subsidies in net income, the share of subsidies in net value added (NVA) and the share of direct payments in net value added (NVA):

Table 9. The impact of subsidies on farms performance (TF14 classification) (%)

	Subsidies/Net Income	Subsidies/ NVA	Direct payment/NVA
Specialist COP	157.7	77	23.1
Specialist other fieldcrops	91.2	39.4	7.4
Specialist horticulture	31.8	13.8	1.7
Specialist wine	24.6	6.9	2.3
Specialist orchards - fruits	10.3	7.3	3
Specialist milk	31.4	28.2	4.6
Specialist sheep and goats	29.7	23.6	10.1
Specialist granivores	63.5	42.3	1.9
Mixed crops	39.5	18	8.1
Mixed livestock	29.9	27.5	10.9
Mixed crops and livestock	30.4	24.4	10.3

Sursa: http://ec.europa.eu/agriculture/rica/database/database.cfm

The farms specialized in cereals, oilseed, protein crops, other crops and in growth of granivores are the first that are affected by the changes in the level of subsidies because over 63% of the net income and 39% of NVA derive from them. The other farms from horticulture, viticulture or mixed didn't have so much influence of subsidies on the economical performance.

CONCLUSIONS

1. In total sample farms over 94% are less than 4 ESU; even this selection its made base on the national farm structure we have to point out that many countries from FADN system don't have this class in their evidence. In Netherland and Belgium over 80% of the farms has more than 40 ESU.
2.In the 0-4 ESU and 8-16 ESU class 37% are crops farms, 15% milk farms and the others are mixed; in the 4-8 ESU class 47% are cattle farms, 27% crop farms and the others are mixed; in the classes over 16 ESU, 65-71% are crops farms and around 15 % animal farms.
3.The farms with big economical size and specialized obtain higher incomes and gross value added on hectare UAA.
4. The drought conditions have more effect on the economical results of farms specialized in fieldcrops.
5. Subsidies value on hectare UAA situates Romania on the last places in EU; with almost 170 euro/ha, Romania it's in front only of Bulgaria, Estonia and Lithuania; but we have to understand that 2007 was not a good agricultural year; many countries were affected by drought (Denmark, Sweden, Hungary, Slovenia and Czech) and the subsidies had a major role in results indicators.
6. In 2007 the subsidies were formed in proportion of 25.6% from crop and animal subsidies, 28.3% from compensation for calamities, 17.2% from production credit subsidies and 28.8% from direct payments; subsidies for rural development (Second Pillar) were not paid in 2007 in Romania and Bulgaria.
7. Farm performance analyze reveal that:
   - the farms with big economical sizes are orientated in special to vegetal production that were the first affected by drought in 2007; the high costs of inputs, the low incomes and the subsidies in form of compensation distorted the financial results in this farms;
   - direct payments represent around 30% of total subsidies;
   - over 60% of farms (big and specialized farm with COP, crops and granivores) have a direct economical dependence of subsidies.
8. Direct payments for 2007 were paid only in the next year; this fact that was repeated in 2008 causes distortion in collected data.

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REFERENCES

[1] x x x – http://ec.europa.eu/agriculture/rica/index.cfm
[2] x x x –Project no. 612/2006 Sectorial Program MADR.

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GUIDELINE OF THE ROMANIAN VILLAGE TOWARDS TOURISM

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Key words: *village, heritage, tourism, rural space, values, criteria*

Abstract

Through its cultural, historical, ethnographic, natural and socio-economic values, the Romanian village is an essential part of the countryside and through the certified touristic value can become a "touristic product" of great originality and brand for the Romanian tourism. To gibe the real image of the Romanian rural area with its ancestral spirituality, rural tourism and agro-tourism can't be promoted as touristic offers than in the context "touristic village" and of the "ethnographic area" to which integrates. The used method is based on the complex analysis of the natural, economic and cultural-historical (with emphasis on the potential of folk) heritage, but also of other elements that shape or complete the resource of the rural settlements or mediates their assessment. The results of the analysis are concluded in establishing some identification criteria of the rural settlements as touristic villages.

INTRODUCTION

Recently there were imposed, as formula of holiday, the vacation villages, but especially "touristic villages" with stays at agro-touristic farms, both as necessity and as "touristic fashion". Between the minimal conditions that must meet a settlement to become touristic village, we remember:

- placing within a naturally attractive environment, without sources of pollution;
- easy accessibility by road, rail, river and air.
- the presence of representative ethno-folkloric traditions (folk architecture, arts and crafts, folklore and popular costumes, ethnographic museum, folk festivals, traditions and popular customs, etc.)
- existence of some rich touristic resources and may to be recovered by carrying out as varied as possible holiday activities: recreation, walking outdoors, air cleaning, swimming and water sports, small trips, mountain climbing, mountaineering and speotourism, cultural activities or participation to cultural actions that are taking place in the village, integration in the traditional economical activities etc;
- a level of comfort, ensured with the local means, simple or more complex (sanitary installations and bath, current water)[2].

MATERIAL AND METHOD

The repeated observations and the experience that has accumulated in the qualitative assessment of the psycho-social phenomena related to tourism, it is crystallized into a general conception on the motivation related in this case, to the tourism in rural areas. Starting from the characteristics of the urban environment joined to obligations and specific social conventions, there can be detected a range of needs, which the citizen, the engaged citizen in the urban environment, express then growing steadily and tend to turn them into action.

The research methodology of rural settlements with special rural potential – "touristic villages" can be achieved only under a complex multidisciplinary analysis of the whole natural, economic and cultural-historical heritage (with accent on the potential ethno-folkloric), but also of other elements that shape or complete the resources of the rural environments or mediate their capitalization.

RESULTS AND DISCUSSIONS

Natural context

- Unit of relief – hill, mountain, depression, valley, altitude, specific and interesting landforms (caves, rocks, keys);
- Mirrors of water – rivers, lakes, swamps;
- Mineral waters – carbonated, sulfur, chlor-alkali, etc; a-thermal and thermal; probe, natural springs, wells;
- Therapeutic sludge – peat, mud, mineral;
- Therapeutic gases – CO_2 sulfate; accommodation pits;
- Climate – temperature, precipitations, snow (average thickness, duration of days); ski areas; other phenomena;
- Vegetation-forest-essences, meadows, reserves, natural monuments;
- Fauna- fishing and hunting species; species of scientific interest;
- Natural reservations – type; areas of care

Posititon and accessibility

- Administrative affiliation – village, commune, county, the position twoards the administrative centers ;
- The position toward: European roads, national, county, airport, railways, forest roads;
- Position beside the ethnographic area; important touristic objectives, touristic resorts, hut, cities, etc;
- Condition of the roads – modernized, asphalt surface, paved

Economic Context

- Economical functions – agriculture (including livestock), orchards, vineyard;
  - forestry;
  - local industry
  - touristic, etc.
- Share of the economic functions in the local activity and in the habitants revenues
- Subsoil resources – construction rocks, coal, salt, etc;
- Technical and utilities facilities – alimentation with electric energy and water, type of heating, drainage, type of road reinforcement, parks, lawns, car stations and train;
- Commercial facilities – stores by types;
- Touristic facilities – accommodation – types, capacities and comfort, balneary (rest homes, pavilions, treatment bases); alimentation (restaurant, bar, pension, capacities and comfort, property);
- Sanitary facilities – dispensaries, hospitals, clinics, etc;
- Sportive facilities and for recreation – sport fields, swimming pools, bowling alley, sky alley, cycling, other forms of entertainment;
- Services for population – barbers, hairdressers, tailors, radio and TV repair, post, telephone, broadcasting, TV relay, car service, gas stations

Social and cultural Context

- Population – number of habitants, national structure and by age; type of settlement;
- Cultural and historical attractions
  - historical monuments and secular art and religious, archaeological sites, ruins of fortresses, castles, mansions and museums;
  - ethnographic-folklore: folk architecture, popular installations and techniques, popular wear, choreographic musical folklore and literary, folklore celebrations, festivals, ethnographic museums;
- Cultural facilities – community centers, theaters, houses of culture, libraries, etc;
- Peasant households – number of houses, access, detached guests rooms, touristic and agro-touristic boarding houses etc., heating, water supply, sanitation, sewerage, construction material, roof, yard, stable position, garden, fruit trees, grassland, number of rooms for renting – in annex or in the main house, pension or semi-pension (approval requirements for 1,2,3 stars – flowers); presence of small animals, for traction, for milk, etc

Legislation

From the previous presentations it was highlighted the importance of the "touristic village" in promoting the rural tourism. Although since 1973 it was tried to institutionalize the "touristic village" and promotin the accommodation in the rural houses, until now there isn't any legislation to govern the assimilation, organization and functioning of some rural settlements as "touristic villages". The existing laws concerns only the functioning of the touristic and agro-touristic pensions, but as local entities disconnected from the rural settlement and the ethno-folklore area circumscribed to those.

Criteria of identification of the rural settlements as touristic villages

A rural settlement to have a touristic function must fulfill certain requirements, primarly related to the assesment of folk traditions, but also the quality of the environment, by the eventual toruistic resources, as good as of their accessibility and geographic positions. Are imposed thus, the establishment of some criteria for determining the rural touristic potential. Are taked into account the following criteria: ethno-folklore, touristic assesment, the endowment of the peasant fouseholds, environmental quality, technical and urbanistic and commercial facility, accessibility and the geographic position.

Ethnographic and folkloric assessment criterion

Considers the ethnographic traditions and folkloric (crafts, popular wear, character of the settlement, musical folklore, choreographic, literary), traditional occupations specific to the village and unchanged over time,, the popular architecture (of the houses and settlement, wooden churches), folkloric manifestations specific to the Romanian ethnographic areas and slightly altered over years, museum institutions pavilion or outdoor, etc. All these elements and phenomena are constituted in most of the specific heritage, which gives the "brand" to the rural settlement.

Criterion of touristic assesment

It is about those elements of the natural environment as well as landscape aspects, resources of mineral water, and other touristic resources (hunting, fishing background, ski area, snow layer, etc.) but and of the socio-economic and cultural-historic framework which allow the realization of diversified offers of programs within a stay (cultural, sportive programs, hiking and mountain climbing etc.) Here the volume, variety and the assessment for tourism of the resources give the appreciation on the toruistic function of the rural settlement. It is about the toruistic resources of the locality, but also by their surrounding, following the isochrones of 15-30 km depending on the mobility degree of the tourist.

The criterion of existence and of the peasant household quality (touristic and agro-touristic pensions)

The criterion refers to the existence of the pensions or boarding houses which to provide accommodation and meal in the base of some comfort, hygiene and sanitary standards. These standards were developed by the Ministry of Tourism in conjunction with the international ones.

Environmental quality criterion

Has in view the environmental quality from the respective settlement and of the bordering natural framework (sources of pollution and degradation, conflicts between the development of the settlement and its economy with the tourism and environment, but and between tourism- environment. The general aspect of the settlement (urbanization, cleaning, specific architecture, the technical-urbanistic) contributes enhancing of these ecological qualities as well as and the way of managing the conflicts arising between economy-tourism and environment or tourism and environment.

The criterion of technical-municipal, commercial and sanitary equipping

The technical and urbanistic facility (water supply, energy, sewerage, street network, commercial establishments, sanitary, etc) is an important criterion in assessing the opportunity of introducing the rural settlement within the touristic circuit. Also at technical facilities we must include and the sportive or recreation ones or existing touristic structures of reception, some of these aren't mandatory, An important place are having the technical arrangement of the rivers, forests, and grassland nearby.

The criterion of accessibility

The accessibility of the rural settlement, within it, but also to the approved households or at the touristic objectives plays an important role. It is about national roads, railway lines, airports, roads and rail hub, communal roads, alleys, sidewalks, etc.

The criterion of geographical location

It has an important role in assessing the settlement of the rural locality, as touristic destination, in relation to the main issuing centers of tourism and touristic objectives of great value, border points, highways and railroads, which can lead to the hierarchy of value, in this effect.

We note that these criteria are used for identification and determination of the rural

settlements with specific rural heritage and we say, with touristic value of "brand", which is equivalent with the identification of a new "touristic product" – "Romanian touristic village" which by organization and promotion can lead to the diversification of the Romanian touristic offer for the foreign market.

Promoting "touristic villages"

So far, in Romania, the touristic villages were only partial subject of promoting and touristic advertising on the foreign markets, because they didn't made a toruistic priority offer. Exception made the touristic villages Sibiel (Sibiu county) and Leresti (Arges county), which were promoted abroad by the ONT Carpathians S.A. both through their advertising and by international catalogs, the first remaining further, a selling touristic product. The revival of the Romanian "toruistic village" as touristic product, in the condition of the market economy and when all the action is resumed from the beginning, the promotion and implicitly the advertising on the internal and external market acquires new dimensions and involve many steps and stages. The "touristic village" restores the local spiritual specificity and originality or from an area of the country (ethnographic) and therefore it must be promoted as global "touristic product". It is composed of several "toruistic sub-products" respective , the agro-touristic farms and boarding houses, which customizes the local touristic offer (zonal), it diversifies in relation with the professionalism, traditions and hospitality of the householder (see the touristic villages Bran, Moeciu, Vama, Dorna, Candreni – Bucovina, Vadu Izei – Maramures, Sibiel, etc., which is the zonal ethnographic specificity an in which is marketed a number of households as agro-touristic farms ad toruistic pensions). Therefore, we consider, that is fair to be included in catalogs the "touristic village" and the ethnographic area beside the agro-touristic farm and not the county, which, as administrative entity, can disappear, bu the ethnographic reality will endure long time and gives the image of brand. The signalization of toruistic assessment will be achieved through an icon "touristic village" installed at the entrances in the village and in town halls.

CONCLUSIONS

To increase the value of a touristic village can contribute the following:

1.the existence of a tradition in what concerns the touristic activity;

2.the consideration of possible balneo-climatic (mineral and thermal waters, therapeutic gases and mud, salt lakes s, sea beach, etc);

3.the existence of a valuable archaeological remains, historic monuments, of art and architecture;

4.the presence of health facilities, social-cultural, sportive, commercial, etc;

5.adequate technical-utilities endowments (roads, alleys, sewer)

Determined, in what concerns the capitalization of the touristic potential from the rural area, it can be said that the development of agro-tourism involves four components:

- The village territory (estate) with its natural environment and built and the touristic resources related to it, which is the support and "raw material" for agro-tourism;
- People as responsible and as provide of agro-touristic services;
- The touristic products (agro-touristic offer), which must be as personalized, authentic and of quality;
- Partnership in organizing and developing the rural tourism

6. The village as important element of the administrative structure is a specific result of the social and historical evolution

7. The rural architecture has at it turn, inevitable problems with which is facing.. The rural settlements are, equally, the work of different communities of time. They must be preserved as cultural heritage of the humanity.

8. The economical support of the farmers is a major problem within the economical and political environments

Particularly in the case of isolated rural settlements, which aren't having the availability to ensure and sustain numerous services, the rural tourism can help to maintain their viability. Obviously, it is assumed that the respective settlements must have particular elements of touristic attraction, and the phenomena of touristic circulation to be

stimulated and amplified by adequate marketing of the touristic offer.

Numerous studies conducted in countries with tradition within the rural tourism have shown that the average incomes of the farmers can be increased by providing various forms of accommodation, by promoting the visits in the agricultural farms that have various attractive features (riding, wine preparation, gardening, beekeeping, etc), by selling the specific products of the household of the village.

Following this research it can be shaped the criteria and methodology of research for declaring some rural settlement as "toruistic villages". The study concerning the research of agro-touristic potential from the rural space it isn't an exhaustive approach of it at the country level, but a selective one, on one side, on stages (units) of terrain with a varied natural environment, but which to capture the characteristics of the entire territory of the country and on the other side, on the representative ethno-folkloric areas. This selective research could create a model of study applicable to the level of the country.

REFERENCES

[1] Brezuleanu S., 2004, Management agricol-teorie si practica. Ed. Performantica Iaşi

[2] Ciurea I.V. si colab., 2005, Management., Ed. Ion Ionescu de la Brad, Iaşi

[3] Iordache Gh., 1996, Ocupatii traditionale pe teritoriul Romaniei, Ed. Scrisul Romanesc, Craiova

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AGRICULTURAL POLICIES CURENTLY RUN BY ROMANIA IN THIS CRISIS CONDITIONS

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Key words: *vulnerability, agriculture, crisis programs, EU*

Abstract

Romania has a strong agricultural potential, this article wants to analyze the currently agro-food policy and Romania has undertaken a comprehensive financial program with funding mostly from the EU exactly 80% with the remaining 20% are to be funded from the state budget. The rural area is characterized by the existence of significant segments of the population economically and socially in difficulties in meeting the new requirements set by the EU-27, advanced agriculture. Also the international financial crisis is not too good of news for the internal agriculture .So were established several programs to help this important sector of economy, programs that enjoy EU support. The method used to research these policies agro-technical is technical analysis also the principles and political strategies involved in carrying out these programs, eventually we will highlight the results of this material, results that wish to provide a bridge between the countryman and the state.

INTRODUCTION

In this article we want to analyze agriculture as a whole and the projects that want to help the rural population, projects such as Measure 112- "Setting up of young farmers", Measure 121- "Modernization of agricultural holdings", Measure 312-"Support for the creation and development of micro-enterprises", Measures 313 – "Encouragement for tourist, Stimulating SME - sites that processes agricultural products", Measure 142 - "Setting up producer groups" Measure 125 - "Improving and developing infrastructure related to developing and adapting agriculture and forestry ", we listed only some of them, mainly all projects are good news both for the Romanian village and the agriculture of this country, this article discusses these measures as a whole in order to make us an overall picture and trying to emphasize points and the weaknesses and how we address these weaknesses to improve and eliminate them along with the various discrepancies between the legislature and the methodology.[4]

MATERIAL AND METHOD

To assist us in achieving this article we used statistics from the EU and Romania such as INSSE, APIA, EUROSTAT, APDRP, and that in order to have a more accurate and overall picture. This significant potential of the Romanian agriculture and increase food price worldwide would maintain a high interest for foreign investors on the sector.

RESULTS AND DISCUSSIONS

The Romania has the highest level of use of unpaid family workers in agriculture in EU-27. Moreover, low investment rates have increased vulnerability to the Romanian agriculture and climate conditions have induced to this sector a very volatile behavior.
Limiting factor (which stands in the way of efficient agriculture) would be:
1. Highly fragmented structure of the agricultural area is an obstacle in attracting new investment, while affecting labor productivity;

2. Rural area is characterized by the existence of significant segments of the population vulnerable to economic and social difficulties in meeting the new complex agriculture requirements set by EU;
3. External funding is crucial because government support for agriculture will be modest in coming years, along with increased pressure on budgetary spending an important social component. Banks have mainly targeted to large customers and to a lesser extent than the smaller ones that should be the main beneficiaries of the national programs. This approach is closely related to the level of availability in terms of risk taking;
4. The international financial crisis is not too good news for domestic agriculture;

Contributing factor:

The Rising prices represent an opportunity for the countries with strong agricultural sectors. Why say that rising prices are an opportunity for countries with strong agricultural sectors? Simply because:

1. Prices have increased significantly in the international markets in recent years because of specific changes: such as increasing demand for food from people and the increasingly high living standards in Asia;
2. Increase in demand for bio fuels, especially in the U.S. and EU;
3. Severe weather conditions in many countries are reducing cyclically drastically the agricultural production. Profound changes in the global economy, including accelerated economic growth of China and India were faithfully reflected in developments on the stock exchange goods - food, energy, metals, etc. [1];
4. The international price of the wheat has advanced by almost 200% between 2001 and 2008. Upward trend could continue in the coming years, albeit with a more modest pace as agricultural supplies are adjusting slower in relation whit the evolution of demand.

Also Romania has a privileged position in terms of agricultural resources. Arable land represents 39.5% of the total territory and only five other countries in the world are having more comfortable position than Romania in this regard. Domestic agricultural sector is often regarded as a main beneficiary of Romania's EU accession.

In theory, Romania can become the third European agricultural power after France and Germany, in terms of better absorption of EU funds until 2013, a significant direct foreign investment and a certain government support.

Practically, however the situation is less good and it shows in the following tables:

Table 1: Production de cereal in UE (1000ha)

Production of cereals in the EU					
Country	Area cultivated with cereals (1000 ha)				
	2004	2005	2006	2007	2008
France	9.349	9.175	9.048	9.089	9.678
Poland	8.377	8.328	8.381	8.352	8.598
Germany	6.946	6.839	6.702	6.571	7.038
Spain	6.602	6.598	6.304	6.244	6.705
Romania	6.230	5.828	5.078	5.108	5.184
Italy	4.278	3.999	3.801	3.933	4.018
U. Kingdom	3.129	2.920	2.857	2.860	3.273
Hungary	3.001	2.933	2.838	2.765	2.917

Table 2: Production de cereal in UE

Production of cereals in the EU					
Country	Cereal production (1000 t)				
	2004	2005	2006	2007	2008
France	70.381	63.977	61.613	59.382	70.377
Poland	29.635	26.927	21.775	27.142	27.664
Germany	51.097	45.980	43.474	40.632	50.104
Spain	23.965	13.486	18.367	23.820	23.269
Romania	24.389	19.331	15.740	7.788	16.750
Italy	21.770	20.092	18.787	18.810	20.201
U. Kingdom	22.074	21.024	20.805	19.354	24.282
Hungary	22.074	21.024	20.805	19.354	24.282

Table 3: Share of agriculture in GDP (%)

Share of agriculture in GDP (%)	
Year	Contribution to GDP
2000	10.83%
2001	13.26%
2002	11.37%
2003	11.57%
2004	12.57%
2005	8.40%
2006	7.79%
2007	6.15%
2008	6.46%

As mentioned above Romania has created a series of programs in agriculture that are developed in partnership with the EU. These programs aim at increasing the dynamic activity of villages and agricultural yield

through the formation of new farms, attracting young people, even non-agricultural development activities and that because there is a fairly large proportion of people in agriculture that are unpaid.

Specifically such programs are[6]:

1. Measure 112 "Setting up of young farmers" to fit in Axis I – "Improving the competitiveness of agriculture and forestry " and wants to improve the competitiveness of the agricultural sector through the setting up of young farmers and supporting the modernization process in accordance but with demands for environmental protection, hygiene, welfare and safety at work. Also wants a revenue growth led by young farmer's holdings. Public input is 20% remaining 80% coming from EU. Financial support for Measure 112 is non-refundable and is worth a total of 337,221,484 euro's.
2. Measure 121 - "Modernization of agricultural holdings" to fit in Axis I – "Improving the competitiveness of agriculture and forestry sector " and aims to increase the competitiveness of the agricultural sector through a better use of human resources and factors of production and fulfillment of national and international standards community. This program wants the introduction and development of new technologies and processes, diversification, adjusting the profile and quality level market requirement. Also wants to use renewable energy. It stimulates the growth of animals, establishment of plantations, purchase of equipment and new machinery, completion of construction / modernization construction. The public input is 20% remaining 80% coming from EU. The total is 1,840,962,042 euro's.
3. Measure 123 - "Adding value to agricultural and forestry " is an aid scheme to boost SMEs - sites that processes agricultural products in view of food products other than those stipulated in Annex 1 of the EC Treaty as well as those who operate and process agricultural products in order to obtain and use renewable energy and biofuels - XS 13/123A/2008. The objectives of the scheme are drawn from the national strategy of the SME sector and to increase competitiveness of the companies processing and marketing of agricultural products diversification of manufactured products and by obtaining renewable energy and biofuels. Also wants to increase the standards of companies , community's and the adaptation in the production and distribution in order to obtain aid value .The value of state aid is 20% and the rest of the 80% is supported by EU , total value is 118,125,000 Euro.
4. MEASURE 125 - "Improving and developing infrastructure related to development and adaptation of agriculture and forestry sector" has the overall objective of agricultural and forestry infrastructure adapt to the new ownership structure that result from the process of restitution of property to increase competitiveness of agriculture and forestry by: reducing risk and uncertainty in agriculture by reducing the incidence of natural phenomena (drought, floods, soil erosion, etc..) improve environmental quality and reduce pollution sources, construction and / or upgrading agricultural infrastructure (access roads and agricultural roads for farm work correction of torrents), located in agricultural land fund, modernization and / or upgrading of irrigation systems and other land reclamation works (drainage, flood defense works, etc.).. Total cost 604,058,520 euro's, of which the public costs is 20% and the remaining 80% from the EU.
5. MEASURE 142 - "Setting up producer groups and aims to increase the competitiveness of primary agricultural and forestry sectors", through the balanced and the development of relations between producers and processing and marketing sectors, adapting the production of a qualitatively and quantitatively to consumer demands. It also wants to encourage the establishment of producer groups in agriculture and forestry to obtain quality products that meet EU standards by applying unit production technologies and market access support to its members. Measure 142 corresponding public contribution, is 138,855,905 euro's in total, of which 20% - 80% contribution and the Romanian Government – and the EU .
6. Measure 312 - "Support for the creation and development of micro enterprises" aims at a sustainable development of rural economy by

encouraging non-agricultural activities, in order to increase the number of jobs and additional income by: create and maintain jobs in rural areas, adding value in non-agricultural activities, the creation and diversification of services for rural population provided by the micro-enterprises, encouragement for handicraft and other traditional activities. Total costs are of 383,429,681 euro's, of which 20% of the state budget the remaining 80% coming from EU.

7. Measure 313 – "encouragement for tourist "to fit the axis III – "Improving quality of life in rural areas and diversification of rural economy" and aims to develop tourism activities in rural areas to contribute to increasing the number of jobs and alternative income, and to increase the appeal of space is desired rural. So value added growth in the travel industry, creating and maintaining employment through tourism activities, particularly youth and women, increasing the number of tourists and the duration of visits, creating recreational facilities to provide access to natural areas of touristic interest, etc.. Public input associated to Measure 313: 544,222,774 euro's, of which 20% of the Romanian State and the remaining 80% of the EU.

These programs come as it could not be better considering the current social and economic environment dominated by the current economic crisis. Yet the crisis has not only brought bad things she has helped the business by breaking and resetting speculative bubble in land prices especially had a tendency to triple the cost of acquisition and from quarter to quarter not to mention from year to year. This package of measures proposed by the Romanian Government wants to reach all the major branches of agriculture and to support them at medium-term time window 2007-2013.

Apart from European funds, local opportunities may arise in applying a regulatory framework more stable and predictable as a result of implementation of CAP, with positive effects in terms of price stabilization. Harnessing the benefits of full integration of Romania into the European Union could open new opportunities for Romanian farmers that can supply a market with a population exceeding 500 million inhabitants.

While agricultural policies and official institutions formally fulfilled all criteria for membership of the EU agricultural sector itself is not yet ready to use effectively the opportunities raised and to respond appropriately to new challenges ahead in the current political climate and economically.

It is noted that Romania has a huge potential in terms of agriculture and perhaps that is the main reason why the EU has agreed to receive us within it. But our agriculture is not ready to compete with that of the union and that as we face in most cases we practice subsistence agriculture and not a performance one which bring added revenue and create value[2].Above mentioned programs are meant to revive Romanian villages and to highlight the attributes, the EU needs food when in shortage is being felt both in price and in the psyche of the population who become dissatisfied. It can be seen easily from the above tables that although Romania agricultural have areas with a superior potential to other countries such as Spain and Poland are still behind them and that's because the cultivated area is continuously decreasing, the share in GDP is declining and take so that agriculture he took increasingly more and more a shape of hazard agriculture, because it all is a lottery and the national system of irrigation of its remaining is only archaeological evidence of being in ruin in much of the country .So Romania's problems are both administrative as an ideological complacency and that's because in many cases there is no desire to implement a project and carry out to the end the government at the advice of EU has created these programs with the related application frameworks and supervisory authorities necessary to support mainly those wishing to become involved in agriculture and want to do performance ex. masure 112 –" Setting up young farmers " even the name "112" we realize that it is an emergency call, which is expected to answer especially from young people and the main reason is that all the above mentioned programs are not reimbursable.

CONCLUSIONS

Romanian agriculture can be said that due to inadequate structure of the sector which is dominated by the large number of small subsistence farms, with a low orientation to market requirements without eligibility for funding, resulted in a relatively low rate of recovery of well-known agricultural potential many current problems must be solved such as :decreased levels of unpaid family working in agriculture;increasing investments to reduce vulnerability of the Romanian agriculture to the weather conditions that have induced highly volatile sector behavior;creating strong competitive performance to produce added value;the decreasing of structural fragmented agricultural area which represents an obstacle in attracting new investment, while affecting labor productivity;support the awareness campaigns conducted by government programs in agriculture;educate villagers about the possibilities that are offered by government programs designed for agriculture;increase of cultivated land that currently is in decline;modernization and upgrading of national irrigation systems;

As final conclusion we can say that having potential is not everything it should and enhanced especially now that prices have increased significantly in international markets in recent years because of specific changes such as increased demand for food from the increase population and living standards. In addition we add the severe weather conditions in cyclically in recent years have drastically reduced agricultural production in many countries.

REFERENCES

[1]Borde I., 2006, Project Management, Fundatua Danubius, Galati
[2]Tureac C., 2007, Management, Ed. Fndatia Danubius, Galati,
[3] www.insse.ro
[4] www.apia.ro
[5] www.eurostat.com
[6] www.apdrp.ro

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THE CREATION AND DEVELOPMENT OF SMEs IN RURAL AREAS

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Key words: *agriculture, development, government programs, competition*

Abstract

This article aims to discuss how Romania is trying to revitalize rural life. The overall objective is sustainable development of rural economy by encouraging non-agricultural activities, in order to increase the number of jobs and additional income. We will present and discuss Measure 312 - "Support for the creation and development of micro-enterprises" we will examine this program in terms of methodology and implementing rules and sorting the various plans for approval, financing, and then we will highlight the results, results that will show both the ups and downs of the financial instrument and what we can do to benefiting fully from them.

INTRODUCTION

The measure 312 is fit on AXIS 3 - "Improving quality of life in rural areas and diversification of rural economy" and its overall objectives are the sustainable development of rural economy by encouraging non-agricultural activities, in order to increase the number of jobs and additional income. To create and develop micro-enterprises are available over 383 million euros, which grants access from 2008 until 2013 to everyone who wish. [5]

The need for this article is due to lack of information of the population that although he wants to start an economic activity is discouraged by the lack of information and the terrifying bureaucracy.

The main source of information was Law. 346/2004 on stimulating the creation and the growth of small and medium enterprises, with the subsequent amendments and the supplements. Emergency Ordinance no. 44 of 16 April 2008 on economic activities by authorized individuals, individual enterprises and family businesses, to access the Applicant Guide MEASURE 312 - "Support for the creation and development of micro-enterprises" Version 03 of September 2009 [6].

MATERIAL AND METHOD

The research methods used is addressing the major features of the program but first to familiarize ourselves we will do a brief review of it like this:

The public input afferent measure 312 by the EAFRD is 383,429,681 EUR (9,910,000 Euro allocated represent the associated financial guarantee for scheme SMEs) of which [1]:

- Romanian Government contribution from the central state budget - 20%;
- EU contribution - 80%;

The total cost, consisting of public input and private contribution is: 589,891,817 Euro.

The main specific objectives of the measure 312 are [1]:

1.Creating and maintaining jobs in rural areas;

2.Growth of added value in non-agricultural activities [2];

3.Creating and diversifying rural population provides by micro-enterprises.

As operational objectives we have:

1.The creation and development of Micro-enterprise on non-agricultural existing sector in rural areas [1];

2.Encouraging business initiatives promoted, especially by young women;

3.Craft activities and encouraging other traditional activit*i*es;
4.Reducing dependence on agriculture.
The main beneficiaries which are eligible for grant funds are:
1.micro-enterprises;
2.individuals (not registered as economic entities) – they will assumed a date of signing the financing contract to authorize themselves with a minimum of individual and authorized status to function as micro firm [3],
Financing a project submitted under the measure 312carried by PNDR is restricted to these categories of beneficiaries:

- Beneficiaries registered in the list of debtors for APDRP SAPARD program and the EAFRD, until the full payment of the debts towards APDRP, including the increase of delay;
- Beneficiaries of financing agreements which are terminated by the APDRP initiative, the EAFRD failure to comply with contract terms and termination is less than a year old;
- Beneficiaries who are in , APDRP pending situations towards dispute litigation.

We will also continue to present the minimum conditions for granting support such as the list of eligible and ineligible costs, the maximum amount of funds, and project selection criteria.
Minimum conditions [1]:
a) Micro-enterprises, both existing and newly founded (start-up) must be registered and to conduct activities proposed by the project in rural areas [4];
b) The beneficiary must demonstrate the viability of the investment;
c) Micro-enterprise should not be in difficulty;
d) The beneficiary must prove ownership of land that is to implement the investment or right of use over a period of at least 10 years;
Under the measure 312 can be achieved these types of investments [1]:
a) Investments in non-agricultural productive activities;
b) Investment for development activities handicraft, handicraft and other non-traditional agricultural activity-specific;
c) Services for rural population.
Types of eligible investments and expenses:
A. By measure 312 are not eligible activities such as:

- Production of alcoholic beverages and beer;
- Tobacco products;
- Manufacture of weapons and ammunition;
- Minting coins;
- Tourism and recreational activities related to tourism activity;
- Research and development;
- Financial intermediation;
- Real estate;
- Gambling and betting and leisure related activities;
- Public administration and defense;
- Social security insurance;
- Fisheries and / or aquaculture;Investments related to primary wood processing stage until the timber;
- Production of energy from renewable sources as their main activity, with the purpose of sale;

B. By 312 measure are not eligible expenses such as [1]:

- Taxes and tax charges;
- Operational costs, including maintenance and rent costs;
- Bank charges, costs of guarantees and similar charges;
- Expenditure for purchase of second-hand equipment;
- Acquisition of land / buildings;
- The purchase of vehicles for road goods transport services on behalf of third parties or as means of transport for people, as their main activity, provided by the project for which support is requested;
- The purchase of vehicles for personal use;
- VAT, except deductible VAT if it is genuinely and definitively supported by beneficiaries other than those taxable under Article 71 (3), lit. a) of Regulation (EC) 1698/2005;

C. The maximum amount of funds (the intensity of support),312 measure from public support grant will be up to 70% [4] of the total eligible costs and will not exceed:

- 50,000 Euro / project if the beneficiaries are individuals authorized;
- 100.000 Euro / project for micro-enterprises operating business in the road transport sector;
- 200.000 Euro / project for other micro-enterprises;

- The minimum value of a project to be eligible is 5000 Euro.

D. Criteria for selection of projects:

- The applicant has not received funds for similar activities in the last 3 years;
- Projects proposed by the activity creates more than one place of work /25.000 euro's invested;
- Projects that promote craft activities, craft;
- Projects undertaken by women / young age until 40 years with sole individual projects associate under the age of 40 years from date of application for project financing;
- Start-up's.

WARNING: If the company annual financial statements no longer fall within the limits laid down, it will lose the quality of small, medium or micro enterprise only if exceeding these ceilings will occur in two consecutive financial years'' art. 6 (2) of Law no. 346/2004 [3]

If start-ups, whose financial statements were not approved on annual data, in law, data on average annual number of employees annual net turnover and total assets are determined during the financial year and declared it's specified by the representative firm. Art. 6 (3) of Law no. 346/2004, [3]

There is no minimum score.

Selection is made in descending order of score selection, in the amount allocated per session. The outs of eligible projects, selected with equal score are eligible according to the value of the project in ascending order.

RESULTS AND DISCUSSIONS

The basic principle of the grant is reimbursement of previously incurred by the beneficiary. A beneficiary may apply for one or more projects throughout the programming period (2007-2013) under measure 312, but the submission of another project EAFRD investment is conditional upon completion of previously started and overlapping public aid grant given to a beneficiary will not be

CONCLUSIONS

The Romanian Government is trying to revitalize with these programs the villages in Romania by "improving quality of life in rural areas and diversification of rural economy" aimed mainly at sustainable development of rural economy by encouraging non-agricultural activities, in order to increase the number of jobs and the additional revenue.

We can say that this program measures 312 looked to aimed especially at:

1.young farmer until 40 years are in rural areas it;

2.also a favored class and driven to start a business is female sex;

3.prompts to start-ups;

4.refurbishment;

5. non-agricultural activities in particular.

What this program not succeeds is to simplify procedures, a decrease of the surrounding bureaucracy, the lack of an aggressive media campaign to highlight the strengths of Measure 312, and especially not eventually lack of related programs to help countryman whit all the acts necessary to prepare because it is known that in villages there is a great lack of information.

We propose therefore to those listed above the following:

1.Creating public information campaigns in each community who have the responsibility as advertising activities, sharing of flyers, organizing periodic meetings that will be promoted, explained and supported in front of countryman of the entire program;

2.It can be also created special offices near the mayors whit the main activity those to gather and prepare the villagers for the program files and beyond;

3.Fewer offices and counters dealing with the issue of various instruments needed to the program;

4.Centralizing these counters as much as possible so that a counter to become multi-role specifically to serve as many functions it's possibly;

5.Reducing bureaucracy;

6.Along with reducing bureaucracy and necessary documents it's significantly reducing the analysis time per file, which in turn reduces the total time to approval or rejection of the pending files that help first clerk and villager who knows in advance what is wrong and what does not and what can It do to be eligible;

7.Not all villages have internet network so cannot have access to all relevant information so that it why looms the existing of office near City Hall;

We have however initiatives that worth mentioning such as:

1.Creating a mail address through which citizens can bring to the knowledge the irregularities in question and what problems encountered in getting information on the measure 312;

2.Also the creation of a forum for discussion and complaints;

3.Existents of a program with the public;

4.An existing site that are all related information material and not only measure 312;

5.The site also offers different acts which can be downloaded and printed for each villager in part from the comfort of his home;

REFERENCES

[1] Guidelines for Applicants for Measure 312 - October 2009, p.5-20,

[2] (Community Guidelines on State Aid for Rescuing And Restructuring Firms in Difficulty) published in OJ C244, 1.10.2004, p.2

[3] Law. 346/2004 on stimulating the creation and growth of small and medium enterprises, as amended and supplemented, p.5

[4] Emergency Ordinance no. 44 of 16 April 2008 on economic activities by authorized individuals, individual enterprises and family businesses.

[5] www.apia.org.ro

[6] www.apdrp.ro

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BREEDING SWINE FOR MEAT – MAIN DIRECTION OF RE-LAUNCHING OF THE LIVESTOCK SECTOR IN THE REPUBLIC OF MOLDOVA

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Abstract

The article was focused on determining the economic efficiency and arguing the economic calculations connected with the economic efficiency of breeding swine for meat within the agricultural farms of the Republic of Moldova. In order to make an analysis, the authors proposed the idea of creating a model farm breeding 30 sows. This example represents an estimation of the entrepreneurs' possibilities who want to set up such a farm that would include the whole reproduction cycle till the sale of the fattened swine for slaughter. The economic calculations for swine breeding and fattening have been done taking into consideration the following aspects: assessment of the necessary investments, calculation of the annual consumptions, planning annual revenues from sales and calculation of the final economic results. As a result of practicing the entrepreneurship activity within this farm designed for swine breeding and fattening, we determined that it is possible to obtain a sufficient profit for the further development of the mentioned business.

INTRODUCTION

Swine breeding has a longstanding tradition in the Republic of Moldova and it is considered one of the most important preoccupations of the population from the ancient times. Swine breeding and fattening don't represent such a complicated activity and in order to achieve the desired production and benefits it is necessary to have minimum professional knowledge. The success in swine breeding and fattening can be ensured by the desire, decision, skillfulness, ability and experience of the breeder, but most of all by the appropriate created conditions for animals breeding, their exploitation and valorization.

The pork occupies about 50% from the total meat produced in our country. Thus, for further development of the animal husbandry sector, it is necessary to pay a special attention to the development of suina breeding branch.

In the period of 2001-2006, the Ministry of Agriculture and Food Industry of the Republic of Moldova proposed and undertook a set of prospects measures with an immediate effect and which were oriented towards the improvement of the institutional management of suina breeding branch, the consolidation of the technical and material base of the institutions providing services and protection of the national market and consumer's rights.

MATERIAL AND METHOD

The present article primarily focuses on determining and arguing the economic calculations regarding the economic efficiency of swine breeding and fattening. In order to make the analysis, the authors proposed the idea of creating a model farm breeding a livestock of 30 sows. The necessary investments to set up this farm and purchase the production means can be done using personal sources or those obtained from another financing source.

RESULTS AND DISCUSSIONS

Swine breeding is a profitable business which has the following advantages:

- It is one of the basic branches of the animal husbandry sector and it is a traditional one in rural areas.
- The demand of pork and pork products is still increased.
- Advantageous marketing price which keeps growing.

- ☞ The business can be set up in small proportions (with minimum investments), and then extended as far as possible.
- ☞ Suina can easily adapt to different breeding, exploiting and climatic technologies.
- ☞ The business can be managed by family members.

There are more than 100 breeds of suina worldwide, which have a practical importance, but totally, taking into consideration all aboriginal, local and extinction breeds – they are more than 400.

In the last years, farmers are interested in breeding suina of the following breeds: Pietrain, Duroc, Hampshire. This is due to the fact that suina breeding for meat attained vast proportions. In the Republic of Moldova, local breeds had lower carcasses quality, reproduction and growing performances although they were more resistant to local weather conditions and presented interest for the creation of new suina types and breeds. Consequently, in different periods different production units used important improved breeds. Nowadays, the local used breeds are: Landrace, Duroc, Yorkshire, Hampshire, Pietrain, Big white and Moldovan type for meat, which have superior reproduction and production qualities. They are classified according to their production direction and place they occupy in crossing and hybridization schemes in maternal and paternal breeds.

Table 1. General information about the suina breeds existing in the Republic of Moldova

Breed name	Adult boars weight, kg	Sows weight, kg	Sows prolificity per one farrowing, piglets	Daily average growth, g	Meat ration, %	Thickness of fat layer, mm	The weight of 100 kg, days
Maternal breeds							
Yorkshire	320-340	245-260	10-11	650-700	58-60	20-21	175-180
Landrace	300-320	230-250	230-250	680-700	58-60	18-20	170-185
Big white	300-350	220-260	10-12	650-700	57-58	30-32	180-190
Paternal Breeds							
Hampshire	230-280	200-230	9-10	680-720	65-70	16,2-16,5	180-185
Duroc	270-300	230-250	8-9	750-780	65-70	17-18	180-185
Pietrain	250-290	215-240	9-10	500-550	70-72	16-16,2	180-185
Moldovan for meat	200-320	200-245	9-10	750	58-61	26-30	180-182

The choice of a special breed is very important as it must be done according to the established purpose, but also according to the existing possibilities to feed and breed animals. Regardless of breed or hybrid, one should ensure all the elements necessary for a good growth and fattening, i.e.: proper shelter, sufficient and good quality feeding, adequate care etc. Only the breed can not ensure the desired success, it can be achieved along with adequate feeding rations and breeding conditions.

The process of suina breeding is a relatively simple one and such a business, the one that doesn't exceed the number of 500 porcines, can be managed by one family members. The breeding process includes the following stages:

Sows insemination. When the sows are on heat they manifest interest for boars. It would be better to use a boar of noble race (Landrace, Duroc, Hampshire), fact that will contribute to the use of heterosis phenomenon and to obtain a supplementary profit of 15-20%. Sows are on heat approximately after each 18-22 days and this process lasts about 24-28 hours. Especially during these hours it is recommended to mount sows and a repeated mount is also suggested after 10-15 hours. The mount can be done at the age of 9-10 months (weight of 100-130 kg). The gestation period lasts on the average about 114 days. A breeding sow can be used for a period of about 3-5 years.

Sows feeding and farrowing. Farrowing lasts about 2-3 hours. During the milking period, the sows need about 3,5 nutritive units per 100 kg of live body weight, adding 0,33-0,38 nutritive units per each piglet.

Feeding suckling piglets. When the suckling piglets are 4-5 days they can get pure water that is changed 5-6 times per day and the breeders give them mineral supplements in the tub, such

as: chalk, clay and woody coal. At the age of one week, mother's milk is insufficient and besides roast barley they are given dry milk. At the age of two weeks the breeders add hay flour, beet, carrot and pumpkin. At the age of 5-6 weeks the piglets digestive apparatus works worse that's why they get raw concentrates. In the first 10-15 days, the feeding is done 7-8 times per day and by the day of their weaning – 4 times per day. Young boars castration is done at the age of 18-20 days.

Pigs fattening. Necessary fodders for pigs breeding and fattening can be purchased from the specialized enterprises producing this kind of feeding or can be produced within the same enterprise. There are three types of fattening: for meat, for bacon and till fat conditions.

Fattening for meat. For this purpose breeders choose well developed pigs of about 2,5-3 months, with the body weight of 38-40 kg and they are bred about 6-8 months until their body weight attain 90-120 kg.

Fattening for bacon For this purpose breeders choose well developed pigs of precocious breeds at the age of 2,5 months, body weight - 20-25 kg, breeding period – 5-7 months, until their body weight attain 80-100 kg.

Fattening till fat conditions For this purpose breeders choose adult sows and boars. Fattening period lasts 2-3 months.

After presenting the general information regarding suina breeding branch, the article includes also an example of a model farm breeding a livestock of 30 sows, and presents the economic calculations of managing the pigs farm business. This example represents an estimation of entrepreneurs' possibilities intending to set such a model farm, which will include the whole cycle from the reproduction stage till fattened porcines marketing for slaughter.

The model farm for pigs breeding and fattening for meat took into consideration the possibility to make cheap and functioning constructions according to the requirements for animals breeding and sanitary-veterinary requirements too.

The economic estimations calculated for the model farm for pigs (30 sows) have been done taking into consideration the following facts:

1. Capital investments to construct and equip the farm having a maxima producing capacity to breed and fatten 500 pigs (the estimated calculations are based on 2 farrowings per year, average prolificity was about 10 viable piglets and annually the number of viable suckling piglets should be 600);
2. Investments regarding circulating materials – the purchase of advanced genetic material;
3. The sows will be inseminated artificially;
3. Expenses regarding animals breeding – the production of personal concentrated fodders and the purchase of certain fodders at the market price;
4. Planning of annual revenues from sales: (i) pork marketing (about 450 animals, each one having the average body weight of 120 kg, will be slaughtered in a specialized slaughter-house paying for the rendered service); (ii) marketing 140 breeding pigs and (iii) scraping 10 sows annually with the purpose of reforming sows livestock (the sows will be used for a period of 3 years);
5. The calculation of annual consumptions and revenues from farm sales from the point of view of annual economic results from the operational economic activity of the entrepreneur.

In addition there will be organized special rooms in order to ensure completely the technological process. They should include: veterinary filter, department for fodder preparation, rooms for staff, etc.

In order to plan the necessary quantity of fodders and their cost one should know the structure of fodders rations according to categories of animals breeding, their purchasing price and total necessary fodder estimated in natural units. Further we planned the necessary fodder per groups of animals breeding and they are totally estimated in physical units on the basis of the planned annual production at the pig's farm, as well as their afferent cost.

Table 2. Planning of the annual feeding ration of a sow

Period	Days	Concentrates		Juicy fodders		Animal origin fodders		Premixes		Other expenses 5%, lei	Total, lei
		norm, kg/day	totally over the period, lei	norm, kg/day	totally over the period, lei	norm, kg/day	totally over the period, lei	norm, kg/day	totally over the period, lei		
Period of rest	135	1,50	405,0	1,20	40,5	0,10	270,0	0,030	60,8	38,8	815,1
Gestation	160	2,00	640,0	1,60	64,0	0,15	480,0	0,040	96,0	64,0	1344,0
Before farrowing	70	2,50	350,0	2,50	43,8	0,15	210,0	0,050	52,5	32,8	689,1
Total, lei	**365**	**X**	**1395,0**	**X**	**148,3**	**X**	**960,0**	**X**	**209,3**	**135,6**	**2848,1**

Table 3. Planning the feeding ration of a suckling piglet

Age (days)	Dry milk		Concentrates		Juicy fodders		Animal origin fodders		Premixes		Other expenses 5%, lei	Total, lei
	norm, kg/day	totally over the period, lei	norm, kg/day	totally over the period, lei	norm, kg/day	totally over the period, lei	norm, kg/day	totally over the period, lei	norm, kg/day	totally over the period, lei		
Till 10	0,05	12,50		0,00		0,00		0,00	0,0000	0,00	0,63	13,13
Till 20	0,10	25,00	0,03	0,90	0,03	0,08	0,01	2,00	0,0006	0,09	1,40	29,47
Till 30	0,20	50,00	0,10	3,00	0,05	0,13	0,02	4,00	0,0020	0,30	2,87	60,30
Till 40	0,30	75,00	0,25	7,50	0,10	0,25	0,04	8,00	0,0050	0,75	4,58	96,08
Till 50	0,40	100,00	0,40	12,00	0,20	0,50	0,06	12,00	0,0080	1,20	6,29	131,99
Till 60	0,50	125,00	0,60	18,00	0,50	1,25	0,10	20,00	0,0120	1,80	8,30	174,35
Total, lei	**X**	**387,50**	**X**	**41,40**	**X**	**2,20**	**X**	**46,00**	**X**	**4,14**	**24,06**	**505,30**

Table 4. Planning the feeding ration of a piglet for fattening

Category of weight, kg	Days	Concentrates		Juicy fodders		Animal origin fodders		Premixes		Salt		Chalk		Other expenses 5%, lei	Total, lei
		norm, kg/day	totally over the period, lei	norm, kg/day	totally over the period, lei	norm, kg/day	totally over the period, lei	norm, kg/day	totally over the period, lei	norm, kg/day	totally over the period, lei	norm, kg/day	totally over the period, lei		
20-30	22	0,60	26,67	1,00	5,56	0,15	66,67	0,002	0,67	0,01	0,47	0,01	0,89	5,05	105,96
30-40	22	0,70	30,20	1,50	8,09	0,15	64,72	0,003	0,97	0,02	0,49	0,01	1,04	5,28	110,79
40-50	21	0,80	33,51	2,00	10,47	0,20	83,79	0,004	1,26	0,02	0,63	0,01	1,34	6,55	137,55
50-60	20	0,90	36,61	2,50	12,71	0,20	81,35	0,005	1,53	0,02	0,67	0,01	1,46	6,72	141,04
60-70	20	1,00	39,49	3,00	14,81	0,25	98,72	0,006	1,78	0,03	0,74	0,01	1,58	7,86	164,97
70-80	19	1,10	42,17	3,50	16,77	0,25	95,85	0,007	2,01	0,03	0,92	0,01	1,84	7,98	167,54
80-90	19	1,20	44,67	4,00	18,61	0,30	111,66	0,008	2,23	0,03	0,89	0,02	2,98	9,05	190,10
90-100	18	1,30	46,98	4,50	20,33	0,30	108,41	0,009	2,44	0,04	0,95	0,02	3,18	9,11	191,40
100-110	18	1,40	49,12	5,00	21,93	0,35	122,80	0,010	2,63	0,04	0,92	0,03	3,51	10,05	210,95
110-120	16	1,50	48,00	5,50	22,00	0,35	112,00	0,011	2,64	0,04	0,96	0,03	3,84	9,47	198,91
Total, lei	**194**	**X**	**397,42**	**X**	**151,28**	**X**	**945,96**	**X**	**18,15**	**X**	**7,64**	**X**	**21,66**	**77,10**	**1619,20**

Table 5. Planning annual consumptions of fodders within the model farm for pigs

Specification	Concentrates	Juicy fodders	Animal origin fodders	Premixes	Dry milk	Salt	Chalk	Other expenses 5%, lei	Total, lei
Fodder expenses for one animal, lei									
Sows	1 395,00	148,25	960,00	209,25				135,63	2 848,13
Suckling piglets	41,40	2,20	46,00	4,14	387,50			24,06	505,30
Pigs for fattening	397,42	151,28	945,96	18,15		7,64	21,66	77,10	1 619,20
Annual fodder costs for the maintenance of pig groups, lei									
Sows	41 850,0	4 447,5	28 800,0	6 277,5	0,0	0,0	0,0	4 068,8	85 443,8
Suckling piglets	24 840,0	1 320,0	27600,0	2 484,0	232 500,0	0,0	0,0	14 437,2	303 181,2
Pigs for fattening	178 836,9	68 074,6	425683,7	8 169,0	0,0	3 435,8	9 744,9	34 697,2	728 642,1
Total annual expenses	245 526,9	73 842,1	482 083,7	16 930,5	232 500,0	3 435,8	9 744,9	53 203,2	1 117 267,0

On the basis of the necessary planned fodders to breed and fatten a livestock of 30 sows and 450 pigs, annual consumptions of fodders within the farm will constitute about 1117,3 thousand lei.

Table 6. Planning the average cost to produce and purchase fodders according to the type of model farm for pigs

Specification	Sum, lei	Quantity, kg	Average price, lei/kg
Concentrates	245 526,9	118 623,5	2,070
Juicy fodders	73 842,1	295 368,4	0,250
Animal origin fodders	482 083,7	24 104,2	20,000
Premixes	16 930,5	1 128,7	15,000
Dry milk	232 500,0	9 300,0	25,000
Salt	3 435,8	2 290,5	1,500
Chalk	9 744,9	1 218,1	8,000
Other expenses	53 203,2	X	X
Total	**1 117 267,0**	**X**	**X**

Table 7. Planning annual production of meat within the model farm for pigs

Specification	Total number of pigs, head/annually	Live body weight 1 head, kg	Total meat, live body weight annually, kg	Meat ratio after slaughtering, kg		
				Meat on carcass (65% from live body weight)	Head (6% from live body weight)	Pluck (15% from live body weight)
Pigs for fattening	450	120	54 000	35 100,0	3 240	8 100
Meat of reformed animals	10	250	2 500	1 625,0	150	375
Total sales	**X**	**X**	**56 500**	**36 725**	**3 390**	**8 475**

Table 8. Planning annual revenues from sales within the model farm for pigs

Specification	UM	Quantity	Commercial average price, lei	Revenues from sales, lei
Breeding pigs	cap	140	800	112 000
Carcass meat	kg	36 725	45	1 652 625
Pigs' heads	kg	3 390	32	108 480
Pigs pluck	kg	8 475	25	211 875
Total	**X**	**X**	**X**	**2 084 980**

When planning the economic results one should calculate such economic indices as: annual revenues from sales, sales cost, gross profit and net profit.

Table 9. Planning annual economic results within the model farm for pigs

Specification	Annual economic calculations, lei
I. Revenues from sales	**2 084 980,0**
Consumption for fodders	1 117 267,0
Consumption for total water	15 000,0
Transport expenses (1000 lei/month)	12 000,0
Veterinary services and consultations (500 lei/month)	12 000,0
Services of artificial insemination (100 lei/sow)	7 500,0
Veterinary preparations	30 000,0
Slaughter services (200 lei/slaughtered head)	92 000,0
Other expenses (5%)	58 713,4
II. Variable annual consumption	**1 344 480,4**
III. Gross profit (I-II)	**740 499,6**
Consumption for electrical energy (800 lei/month)	9 600,0
Calculated annual wearing	22 925,0
Other expenses (10%)	3 252,5
IV. Fixed annual consumption	**35 777,5**
V. Net profit (III-IV)	**704 722,1**

Note: the ear-market sum for veterinary services depends on animals health situation, and certain common procedures will be accomplished by the entrepreneur.

Thus, as a result of practicing the entrepreneurship activity within the model farm for breeding pigs, we concluded that it is possible to obtain an annual profit of about 704,7 thousand lei.

CONCLUSIONS

Finally, we'll point out some important aspects which should be taken into consideration when enterprising such an activity:

1. Besides the desire to set up a sector or a farm for porcines fattening, it is also necessary a minimum technical knowledge in this field. Thus, it is recommended to be generally informed regarding: feeding, hygiene, breeding and taking care, main breeds of suina and their characteristics, fattening systems, valorization systems, etc.
2. If the advantages of porcines breeding and fattening are insufficiently attractive after reading the information presented in this article, then one don't have to forget that porcines breeding should be done according to the existing requirements and not at random;
3. Due to anatomic and physiological aspects of the digestive system, the porcines during the growing/fattening period should be fed with rations containing maxima quantities of concentrate fodders and minimum of juicy fodders;
4. Due to the structure of fodders ration and to the rapid way of getting weight, pigs are extremely susceptible to insufficient and unbalanced rations as well as to inadequate care;
5. Pigs are susceptible to some diseases and parasites, especially in inadequate breeding conditions, that's why in such a case it is necessary to accomplish a series of sanitary-veterinary measures to prevent and control diseases;
6. Shelters' quality and capacity and their interior design contribute to insure the adequate microclimate and consequently good results in breeding/fattening;
7. Because of pigs habit to rout and gnaw, the shelters should be provided with adequate flooring and furniture.

The tendencies in alimentary hygiene, economic competition and environment protection require new competitive products, at suitable prices, ensuring at the same time animals well-being and environmental protection.

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REFERENCES

[1] Stratan Alexandru, Zbanca Andrei, Morei Virgiliu, Litvin Aurelia, Petcu Igor, 2010. Ghid privind argumentarea economica a activitatilor din agricultura Republicii Moldova (sectorul zootehnic). Casa editorial-poligrafica Bons Offices, Chisinau, 214 p.

[2] Stratan Alexandru, 2007. Evolutia economiei agriculturii Republicii Moldova: reflectii, probleme, mecanisme economice. Tipografia ASM, Chisinau, 380 p.