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Non-Agricultural Activities and Potential Sustainability of Farms in Romania

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Abstract. This paper aims to present a series of fundamental and applied aspects on farms in Romania, generally describes customizing and multifunctional farms (with diversified, both agricultural and non-agricultural activities) and their role in the transformation process of subsistence farms in profitable farms, with commercial activity. Issues related to multifunctional farms and the need to diversify economic activities in order to obtain alternative income and use local agricultural and food products in areas such as catering, tourism, rural tourism, etc., was and is extensively discussed and analyzed as in these conditions creates the potential local and regional sustainable development and increase local value added. Agricultural holdings (farms) is the main link of the Romanian and European agricultural structures, a double role in the countryside, the agricultural production centers and residential areas (habitat) for the family farmer. In developing this work were made many theoretical approaches, technique - using a set of methods, techniques, tools, bibliographic studies on defining terms and concepts, and to describe phenomena, etc. - and scientific (processing and interpretation of data, developing hypotheses and conclusions, arguments and factual nature study, etc.). In terms of level of study of economic processes and phenomena - social, in this paper reported data and analysis are found mainly at the micro level, the farm. Have recognized that sustainable development Romanian farms cannot be ensured only by agriculture. In this respect, the holdings can be developed, promoted and marketed a range of complementary non-agricultural activities, related and / or adjacent to agriculture, lucrative complementary holdings.

Keywords: agricultural holdings , farm, non-agricultural activities, sustainable development.

INTRODUCTION

Currently (2012), Romania is characterized by a very large number of farms, mostly as subsistence farms and subsistence, and an excessive level of fragmentation of agricultural land. In these conditions, we can talk about lack of productivity, inefficiency and rural poverty. Most agricultural activities is designed to ensure family subsistence, very little population is oriented industrial processing or marketing of the products obtained. Also in the non-agricultural activities, focused on practicing various trades including local or specific services are still underdeveloped.

To have a clear picture of agricultural production destination obtained in Romanian individual farms, processing briefly present the latest agricultural census data (2010), which shows the following: 76.7% of farms producing only for own consumption; 21.2% of farms producing for own consumption and for market; 2.1% of farm produce market only.

Of the approximately 4,462,221 of individual farms, which have a useful agricultural area of 7,710,000 hectares, 52.4% are less than 1 ha area and 42.1% in size from 1 - 5 ha representing semi subsistence farms. It also noted the low weight of only 7.02% associative

forms of the total agricultural area and the lack of associative forms for marketing agricultural products, such as producer groups (Chiritescu, 2011).

MATERIALS AND METHODS

Materials were the development of this work was composed of:

- databases, surveys and information obtained in CEEX Project "Modeling the response of agricultural farms to the integration of economic and environmental principles through sustainable management of land resources", 2006 - 2008 and CNCSIS Project "Potential for sustainable development of farms", 2007 - 2009, coordinated by Institute of Agricultural Economics;
- databases published on the websites of institutions such as Ministry of Agriculture and Rural Development (MARD), the Agency for Payments and Intervention in Agriculture (APIA), the National Statistics Institute (INS);
- EUROSTAT databases of the European Union;
- data and information collected from ground-based observations, questionnaires and interviews open, direct, structured and unstructured;
- bibliographic sources: the literature of national and international literature, dictionaries economic terms, articles, etc.

In developing this work were made many theoretical approaches, technique - using a set of methods, techniques, tools, bibliographic studies on defining terms and concepts, and to describe phenomena, etc. - and scientific (processing and interpretation of data, developing hypotheses and conclusions, arguments and factual nature study, etc.).

In terms of level of study of economic processes and phenomena - social, in this paper reported data and analysis are found mainly at the micro level, the farm.

Specific stages of design and preparation of the papers were:

- collection and systematization of data and information; data collection was based on the questionnaire at the farm;
- quantitative and qualitative studies on groups of related and complementary activities that can be practiced agriculture in Romanian farms;
- quantitative and qualitative evaluation of the competitiveness of farms with diversified (multi-activity);
- field studies (based on questionnaires) on categories of agricultural activities practiced in Romanian farms;
- gather and process information (electronic system, using Word, Excel and SPSS programs);
- data analysis and explanation of processes and phenomena studied;
- state the conclusions and proposals.

Statistical data processing was realized using Excel and SPSS (Statistical Package for the Social Sciences) programs. The study was conducted on a representative sample consisting of 784 farms in all 42 counties of Romania, in period 2006 - 2008.

Choosing the sample of farms has considered a number of indicators, such as location in area (median 18 farms / county), the holding area, production structure, non-agricultural activities practiced, marketing activity and potential for sustainable development. Sampling was the random, on a voluntary basis.

RESULTS AND DISCUSSIONS

Cottage on farm in Romania is characterized generally by the fact that owns land around the house and about 1 to 5 ha field at some distance from home. Production system is generally mixed (it is mainly field crops and granivorous - birds, pigs, and vegetables and fruit for family consumption). In general, lack the means of production and financial resources, making them vulnerable to market pressures means of production and have little chance of survival without capitalize and modernize. Usually, production, distribution and consumption goods is strictly against the family requirements, as these semi-subsistence farms producing mostly subsistence, sometimes exclusively, for self.

EUROSTAT classifies farms (farms) as units of economic size (ESU). The economic unit size is 1,200 Euro. Again, no limits are specified clearly distinguishable categories of farms (farms), each Member State grouping them as desired. Economic size unit (ESU) is unity expressing economic size of farms determined by standard gross margin farm according to European Commission Decision no. 85/377 / EEC.

In Romania, according to NRDP (National Rural Development Program) 2007 - 2013, using the European economic size (ESU) as a criterion for classification, farms are grouped in:

• subsistence farming: under 2 ESU;
• semi-subsistence farms: between 2 - 8 ESU;
• commercial farms: more than 8 ESU.

The records APIA (Agency for Payments and Intervention in Agriculture) farms are grouped by area (not considered farms with less than 1 ha area - they are ineligible for support under the CAP measures):

• semi-subsistence farms and support: from 1 to 10 ha;
• family farms: 10 - 100 ha;
• commercial farms: over 100 ha.

According to provisional results published by the National Institute of Statistics, following the completion of the General Agricultural Census of 2010, in Romania there are 3,856,000 holdings using agricultural area 13,391,000 ha, distributed as follows (Table 1):

- less than 0.1 ha = 12,56%;
- 0.1 – 1 ha = 37.89%;
- 1 – 5 ha = 43,03%;
- 5 – 10 ha = 5.09%;
- 10 – 50 ha = 1.1%;
- 50 – 100 ha = 0.09%,
- over 100 ha = 0,24%.

As you can see, the largest share (93.5%) is held by farms with UAA (Utilized Agricultural Area) under 5 ha, the holding national average standing at only 3.45 hectares, well below the EU average (over 15 ha). In such conditions, it is very hard to talk about modern agriculture and sustainable agricultural holdings.

Research conducted by specialists of the Institute of Agricultural Economics of the Romanian Academy, among them some of the authors of this paper, in the project CEEX named "Modeling the response of agricultural farms to the integration of economic and environmental principles through sustainable management of land resources", have identified many types of non-agricultural activities that can be carried out in Romanian farms, in the context that takes into account the sustainable development of these holdings, which can not always be ensured only in agriculture. The study was conducted on a representative sample consisting

of 784 farms in all 42 counties, taking / are in the following categories of non-agricultural activities:

- Meat processing;
- Processing of milk;
- Processing of fruits and vegetables;
- Processing grapes;
- Mixing of feed;
- Chopping fodder;
- Milling (flour and corn);
- Wood processing;
- Other processing;
- Agro-tourism;
- Trade with agricultural products;
- Provision of services (own equipment);
- Crafts (knitting, crafts, pottery, etc.).

Tab. 1

Farms by size class of agricultural area in use

Number of farms and utilized agricultural area	2002		2005		2007		2010
	Number	%	Number	%	Number	%	
Total	**4299361**	**100**	**4121247**	**100**	**3851790**	**100**	**3856000**
less than 0,1 ha	539893	12.56	414975	10.07	273544	7.1	-
0,1 - 0,3 ha	581365	13.52	474857	11.52	522538	13.57	-
0,3 - 0,5 ha	323452	7.52	283561	6.88	279419	7.25	-
0,5 - 1 ha	724547	16.85	678442	16.46	609999	15.84	-
1 - 2 ha	897891	20.88	869878	21.11	800066	20.77	-
2 - 5 ha	952395	22.15	1014105	24.61	965594	25.07	-
5 - 10 ha	218880	5.09	289575	7.03	299996	7.79	-
10 - 20 ha	37408	0.87	65905	1.61	70128	1.82	-
20 - 30 ha	5527	0.13	10130	0.24	9548	0.25	-
30 - 50 ha	3950	0.1	5989	0.14	6559	0.17	-
50 - 100 ha	3850	0.09	4939	0.12	4791	0.12	-
over 100 ha	10203	0.24	8891	0.21	9608	0.25	-
The average UAA / farm (ha)	**3.11**		**-**		**-**		**3.45**

The research was conducted during 2006 - 2008, based on questionnaires. Processing the data collected from field, were obtained synthetic results as follows: (Fig. 1)

- of the 784 farms surveyed, 589 respectively and 67.7%, conducts and non-agricultural activities (farms with NA activities);
- the food trade is practiced by many farms; from 589 farms with non-agricultural activity, 136 farms (23.0%) practice and trade with agricultural products and foodstuffs held in various forms: farm gate, contract to processors or chains, without a contract locally, by industry, catering units and agro tourism pensions in the area etc.;
- processing of agricultural products (milk, meat, fruit and vegetables) is performed in over 48% of the farms studied, as follows: 142 holdings (24.1%) processed milk, 65 farms (11.0%) meat processing, 52 farms (8.8%) processing grapes and 33 farms (5.6%) processed fruit and vegetables;
- in 41 holdings - 6.9% - the practice of chopping fodder and in 23 holdings - 3.9% - is achieved mixed feed;

- another frequent activity at the farm level is service to others with their own equipment, non-agricultural activity identified in 63 farms (10.6%);
- in 21 farms (3.5%) of the 589 activities practiced milling (flour and corn);
- in 6 farms studied (1%) were identified as the processing of wood and other processing;
- agro-tourism as an activity complementary to agriculture, was found only in 5 farms (0.8%) of our sample, but we tend to believe that this activity will develop in coming years continues, because of its advantages, namely: the creation of income alternative for farmers, agricultural products and food use in food tourists, using existing surplus accommodation at the peasant farming, the best use of all technical, material and human resources of the farm, which can be converted fairly easily on the farm or rural locations;
- in a number of 2 farms (0.3%) of our sample were identified and craft activities such as weaving, pottery, handicrafts, etc., which can be developed, promoted and used as local resources through the establishment of workshops or in the tourism and agro units in the area.

In terms of regional distribution according landforms may reveal a higher share of non-agricultural activities on agricultural holdings in the plains (20% of holdings), compared with other areas, namely: the lowland-hills (9%), the hill (6%), hill-mountain area (4%) and mountain (3%).

The future rural development programs in Romania should aim, among others:

- sustainable development of the countryside by strengthening economic and social role of agriculture;
- encouraging organic farming practices;
- improved quality of life in rural areas, to maintain the population in this area;
- conservation of natural resources, agricultural and forest and cultural heritage;
- use of all resources countryside, through efficient farming system and practice of non-agricultural activities in most agricultural holdings.

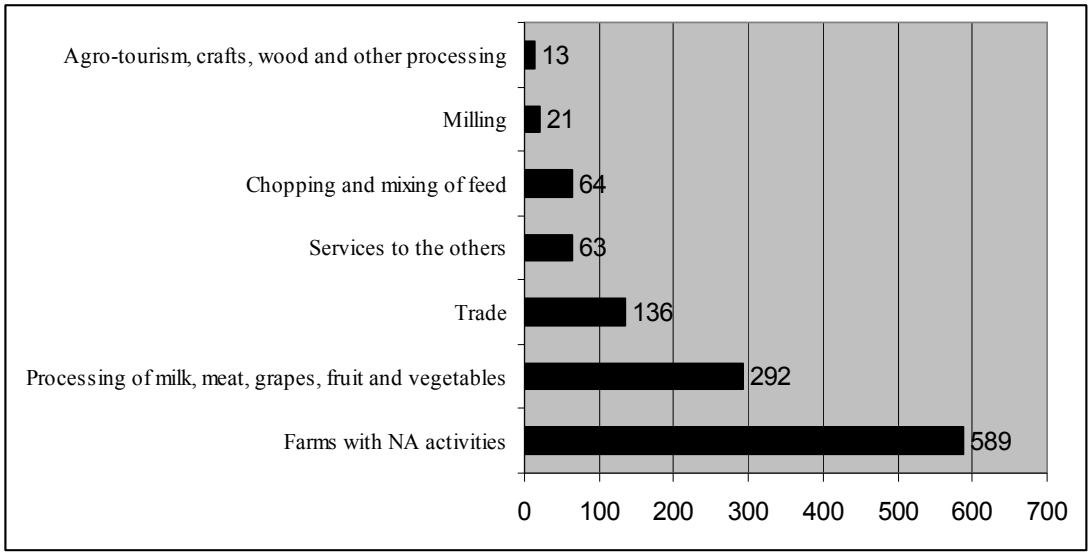

Fig. 1. Distribution of holdings by category of non-agricultural activities

Economic function is the synthetic expression of some constitutive elements, from among these the most important being:

- contribution of agriculture to the process of economic growth and sustainable economic development;

- direct expansion of economic flows between agriculture and non-farm sectors upstream and downstream of agriculture, its participation in development of industry and any other non-farm activities by transfer of income and labor force;
- source for currency incomes.

First aspect materializes in job creation for different farm activities, decreasing thus the social tensions that can appear in the national economy. By expansion of this kind of economic activities, agriculture provides important sources of income for the population engaged in farm and non-farm activities. In the rural area, agriculture provides turning of the local resources to account, constitution and expansion of some social activities.

Second aspect refers to expansion of economic flows between agriculture and non-farm sectors. Agriculture - as a bearer of demand for performance means of production, but also as a bearer of supply with vegetal and animal raw material - has a function of involvement of upstream and downstream sectors and activities in the economic area.

As a matter-of-fact, agriculture is the axle whose round many economic activities appear and grow, connected between with a complex system of technical - economical and economical - social relations, leading to production of goods, mostly of agro-food products, on the basis of farm raw materials.

CONCLUSIONS

Modern agriculture and non-agricultural activities are the main elements of a viable and real development model Romanian village. We need to turn traditional agricultural holdings (characterized by low productivity, high technology equipment improperly, etc.) in multifunctional farms, characterized by multi-activity.

The Romanian rural area, agriculture is still the main economic sector, although in some areas dominated activities such as forestry industries, rural tourism and agro-tourism, fishing etc. Employed persons in sectors other than agriculture largely involved with different intensity in agricultural activities or in their private households or helping their families in such activities.

Rural development in Romania must consider all agricultural and non-agricultural activities that are and can be carried out on farms (farms) agricultural. In the context of multifunctionality of rural areas, agriculture - related complementary activities and the provision of services should be the priorities of sustainable development programs.

The importance of non-agricultural activities in the context of sustainable rural development progra*m* is revealed and the structure for funding rural development for the period 2007 to 2013. Thus, under Priority Axis 3 - Quality of life in rural areas and diversify the rural economy - financed a series of measures to diversify the rural economy, such as:

a) Diversification into non-agricultural;

b) Support for developing of micro-enterprises and promote entrepreneurship;

c) Encouragement of tourism activities in rural areas.

The study conducted by experts of the Institute of Agricultural Economics of the Romanian Academy, between 2006 - 2008, on a national sample of 784 agricultural holdings, all over the country, revealed that over 67% of holdings there are numerous non-agricultural activities, such as: processing of agricultural products (milk, meat, grapes, fruits and vegetables), trade with agricultural products, services provided by third parties with their own equipment, wood processing, milling, agro-tourism and crafts.

The main guidelines of sustainable development of agriculture and Romanian rural area, consistent with those promoted in the European Union, refers to:

- better management of natural resources and maintaining rural landscapes;

- increased environmental measures through support for disadvantaged areas and a more coherent rural policy;
- diversification of crops to ensure economic stability and ecological farms;
- the use of crop rotation and manure in combination with chemical fertilizers;
- limited development and expansion of industrial livestock type of green;
- diversification of income and create alternative jobs for farmers in rural areas;
- agricultural policy to the needs of family farming and to provide alternative sources of income from agricultural activities;
- programs to encourage rural youth to stabilize in rural areas, etc.

Together with agricultural, sustainable rural development, is the second pillar of long-term integrated development of Romanian rural area. Romanian agricultural recovery can not be achieved only by creating a sustainable rural development. This involves developing an overall program for national rural development program complete with detailed, specific areas: plains, hills and mountains, in a concept aimed at economic and social integration of the Romanian village.

Implementing the economic criteria of Romanian agriculture in order to access to E.U., respectively setting up a functional market able to cope with the competitive pressure and market forces within E.U., requires reduction of present gaps between Romanian agriculture and EU's agriculture, the productivity ones being our last concern (Balascuta, 1999).

On the top of the gaps between Romanian agriculture and Union European agriculture is the level of yields per hectare and per capita, continuing with the gaps between production costs, quality of farm products, labor productivity etc. Revitalizing the industry of factors of production for agriculture is one of the prerequisites to relaunch out the agriculture in Romania. Agriculture's needs for products of these up mentioned branches are huge if one allow for the fact that Romania is placed among the lasts in Europe as concerns their use, and covering these needs by imports is not a feasible solution.

A greater importance must be granted to the job creation (in the rural area inclusively) in order to engage the excess of population of agriculture. This objective can be accomplished step by step, together with the recovery of the economic growth, by reconversion of the labor force to other activities, by building up of modern infrastructures.

On a long-term perspective, sustention of agriculture growth will be decisive for raising of living standards in the rural area. Continuous growth of the rural population (the poor one inclusive) is accompanied with a tendency of localization and restriction of poor individuals in ecological sensitive areas. This phenomenon brings to forest clearings and destructive means of exploitation of the productive land capacity.

The sustentation issue and its relations' with the living standard in the rural area will also apply for the quality farmlands. Insofar as an intensive exploitation isn't cautiously managed, in time reduction of the productive land capacity or water sources can affect in the negative the sustention of favorable effects initially caused by the growth of agriculture.

Decrease of the gap regarding labor force imposes: on the one hand, actions and measures necessary to increase the yields per hectare and per capita, and on the other hand, actions and measures necessary to develop the general and professional training of farm producers; improvement of production and work methods and reduction of population engaged in agriculture in ratio with the requests of the production process.

It is noteworthy the fact that rural development, dominated by unfavorable factors, are characterized by lack of diversification of economic activities, leading to excessive dependence on agriculture. Also, in these areas, economic activities have a low efficiency due

to the small number of activities viable, low share of non-agricultural activity, deficiencies in agricultural technology and marketing agricultural products.

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