

Aspects regarding the physical dimension and the structure of farms in Romania

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Abstract: *The distribution of the agricultural area of farms by size types varies from country to country, and a distinct situation is found in Romania. If in the countries of the Mediterranean area, such as Greece or Italy, small farms have the largest share, in the Western part of Europe, in countries such as France or Germany, the share is held by large farms with areas ranging from 20-50 ha while in Romania, most of the farms own areas up to 5 hectares, more than 90% of total farms. The present situation in Romania causes the creation of subsistence farms, the main form of farm being family type farm with an average area of 2.29 ha.*

Key words: *physical dimension, farm, agricultural unit, size type, agricultural surface.*

INTRODUCTION

At the EU level, more than half of the arable land is distributed in farms over 50 hectares (61.4%) and only a percent of 5.5% of the agricultural area was in farms between 0-5 ha. (Camelia MĂNESCU, et al.)

In Romania, the situation on the size of farms and their small dimension is much discussed. The many small family farms with small surface in use is determined by the characteristics of the Romanian agriculture, namely: strong fragmentation of land ownership more than 40 million parcels, and the existence of many farms viable economically, with aging population involved in this sector and with inadequate and obsolete agricultural equipment compared to EU agriculture strongly mechanized through mechanization, automation, chemical treatment, biotechnology, high skilled labour force (Ioan Paun Otiman). All these problems lead to a physical separation of small and medium farms in terms of dimensioning (less than 5ha).

MATERIAL AND METHOD

For presenting the farms situation in Romania, the comparative analysis of statistical data for the period 2003 – 2012 was used, which are found in the latest publications of EUROSTAT.

Surveys made by Eurostat provide harmonized data on the structure of agricultural farms in the European Union, particularly regarding the land use, livestock and labour force. Every ten years a survey is made in the form of basic agricultural census and three intermediate surveys among the two basic ones, with an interval of two to three years between them. The data were processed and interpreted in terms of quality and quantity.

In Romania, the statistical survey is based on a representative sample, formed of about 313,000 farms without legal status, which was extracted from a total of 3,828 thousand agricultural farms without legal status, registered in the General Agricultural Census 2012 and included in the Statistical Register of farms and all farms with legal status. (The National Institute of Statistics). These statistics have been made in order to properly design the implementation, monitoring and evaluation of the Community Agricultural Policy (CAP).

RESULTS AND DISCUSSIONS

Romania has an agricultural surface of 61.7% of total surface, being among the first places in the European Union.

In Romania the agricultural surface per capita/inhabitant is of 0.65 ha, from a total of 14,700,000 ha, ranging among the first 6 countries in Europe, and as arable surface it holds 5th place, with a surface of 0.45 ha per capita/inhabitant, being the second agricultural producer in the Central and Eastern Europe, after Poland. (Burcea M. et al.).

In Romania, over 4.2 million farmers own an average of 2.3 ha, and it is broken into parcels that can not make a competitive agriculture and about 3.5 million farms have land less than one hectare.

The Romanian farms or agricultural units are private family type farms, where all activities are supported by the family members and the production is rarely used outside the farm, only for own consumption.

C. Mănescu et al., considers **family farm** the basic unit in agriculture, the family is the main source of labour force. In some countries, restrictions were imposed of limiting the formation of large corporations in agriculture to stimulate the maintenance and development of family farms. Most small and medium farms in Western Europe have a diversified character practicing besides farming and tourism, services or products processing (camellia MĂNESCU et al.).

In Romania in 2007, there was the largest number of farms or agricultural units reported to the European Union (3.93 million), representing one third of total at the Community level, with an average area of 3.4 hectares, being one of the lowest. In the period 2003-2012, the number of farms in Romania decreased with 14% reaching 3.86 million, and in 2012 it reaches to 3.45 million, according to Eurostat data.

Table 1. Situation of the number of farms in EU and Romania in 2012, on size types

Size type (ha)	EU (27) 2009		Romania 2003		Romania 2012	
	Number of farms (thousand)	% of total number	Number of farms (thousand)	% of total number	Number of farms (thousand)	% of total number
0 - 5	9644,82	70,4	4205,1	93,8	3457,0	92,9
5,1 - 10	-	-	218,9	4,9	182,2	4,9
10,1 - 20	2553,16	18,6	37,4	0,8	43,5	1,2
20,1 - 50	804,31	5,9	9,5	0,2	17,9	0,5
≥ 50,1	698,11	5,1	14,1	0,3	21,1	0,6
Total	13700,4	100	4484,9	100	3721,8	100

Source: EUROSTAT 2012

Analyzing the situation reported by European statistics and Eurostat, we find that in Romania the number of farms with the area between 0-5 ha, occupies the highest percentage (92.9%), compared to the situation at European level that is smaller (70.4%). A percentage of 4.9% of farms have in use land with surfaces between 5.1 to 10 ha size that is not in the European level. In the European Union - 27, the farms with surfaces between 10.1 and 20 ha, have a percentage of 18.6% and in Romania are only in a percent of 1.2% of total farms (Table 1).

Romania has a very low number of farms with large use surface (≥ 50 ha), only a percent of 0.6%, which is reflected by the lack of agricultural machinery and equipment and an agricultural consultancy system, needed to make performing agriculture.

The used agricultural surface, which has the average on agricultural farm is 1.73 ha in 2003 and 1.95 ha in 2012, although in 2009 it was 2.29 ha: (Agricultural Census 2010).

According to the General Agricultural Census 2012 dominant arms in Romania (92.9%) have surface between 0 and 5 hectares, and the surfaces are distributed in much smaller size types (Table 2).

From the analysis of the below mentioned data, it can be seen that in Romania, there are farms that use surfaces smaller than 0.1 - 0.5 ha, farms that occupy a percent of 4.6%, then a percent of 11.2% have in use surfaces contained between 0.5 – 1 ha, being followed by a percent of 26.3 % of farms with land in use with surfaces contained between 1-2 ha. The rest of 57.9 % have in use surfaces larger than 2 ha.

Table 2. Agricultural surface of farms with size between 0.1 – 5 ha, used on categories of use (thousand ha), 2012

Size type (ha)	Agricultural surface used on categories of use (thousand ha)					% of total surface
	Arable	Family gardens	Pasture and meadows	Permanent crops	Total	
sub 0,1	2,73	12,63	1,98	2,12	19,47	0,5
0,1 – 0,3	48,12	35,95	19,25	17,05	120,39	3,1
0,3 – 0,5	76,66	1,74	28,96	12,93	38,66	1,0
0,5 - 1	268,62	27,02	109,23	26,57	431,45	11,2
1 - 2	643,36	33,92	287,18	46,05	1010,52	26,3
2 - 5	1397,93	39,57	717,66	73,86	2229,03	57,9
Total	2437,42	150,83	1164,26	178,58	3849,52	100

Source: General Agricultural Census, 2012

The number of these subsistence farms, reduces the performance of agriculture and maintain the general agricultural efficiency at a low level. Currently the approximately 3.5 million farms with less than one hectare of land in use, prevents them from accessing EU funds. Thus, the problems that appear and develop are due to the fragmentation of the farms as regards funding.

The structure and size of farms in Romania are not yet compatible with those of the member countries of the European Union and therefore urgent measures for structural adjustment are required. (Ana-Mariana DINCU et al.).

The viable solution for the Romanian agriculture recovery can be represented by the promotion of the agricultural cooperatives, which can contribute to the socio-economic development of the country by supporting the semi-subsistence farms, the potential of small agricultural units and the possibility of modernizing the technical and material base;

Losing more than half of the Romanian agriculture, represented by small and medium-sized farms and the rural depopulation are consistent elements for the justification of such an initiative.

CONCLUSIONS AND FUTURE WORK

In the analyzed period 2003 - 2012, there were not major changes in the evolution of the size and structure of the agricultural farms in Romania, and almost half (48%) of small farms in the EU-27 are subsistence farms and were identified in Romania;

In Romania small farms dominate with less than 5 ha having a share of over 90% of total farms.

The average area of farms in the EU - 27, is four times higher (12.6 ha) than in Romania (2.29 ha).

After 1989, Romania has become one of the countries with the smallest physical size of farms, in 2012 the physical size of farms is 3.5 ha, our country being on the lowest place in EU-27.

One of the main objectives of the rural development policy for a country with agricultural potential that wants to influence the EU market, is to reduce the large number of subsistence farms.

The multitude of small and medium farms at the limit of the technical economic level, in Romania the farms can be more efficient only by the association and cooperation between farmers, being the only viable alternative to the current state of the Romanian agricultural sector.

Once established, the agricultural cooperatives can be solvable beneficiaries of EU programs, by creating the possibility of accessing grants, taking with their evolution a part of the problems of the Romanian rural area and would have a beneficial impact for the improvement and development of the agricultural sector and from social and economic point of view.

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