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EVOLUTION AND STRUCTURE OF AGRICULTURAL FARMS DURING 2002-2013

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Abstract: *The agriculture's evolution and restructuring process was rather a slow one and the phenomenon of structural coexistence of the two types of agricultural farms, with or without juridical personality was maintained. The large number of agricultural farms shows how ample is their fragmentation phenomenon, having negative consequences upon economic performance, general state of evolution and development. The agricultural farms' structure as regards the utilized agricultural area is one of contrasts, from some hectares in the case of the subsistence households, to tens of thousands hectares in case of commercial farms.*

Key words: *agricultural farms, structure, agriculture.*

INTRODUCTION

The multifunctional role of agriculture is fully recognized, reason for which an overall knowledge of its structure and evolution has in view mainly the agricultural farm. The evolution of the agricultural farm was and is strictly linked to the transformations in the Romanian society.

In this context the main goals of the paper had in view the analysis and evolution of the agricultural farms in the period between the two General Agricultural Censuses (2002 and 2010) and of the final results of the farm structural survey in 2013². Also, it was realized an analysis of the evolution and structure of the agricultural farms in regional profile, in the attempt to evidence the mutations which took place at the level of the Romania's development regions.

In view of reaching the goals established there were used data supplied by: i) The General Agricultural Census, 2010); ii) statistical data/on line information NSI. The methodology comprised the statistical analysis of the primary data using as working instrument the Excel quantitative analysis program.

RESULTS AND DISCUSSIONS

The number of agricultural farms diminished in the year 2013 opposed to that registered in 2010 by 6%, and opposed to 2002 by 18% as result, mainly, of the concentration process.

The utilized agricultural area of the agricultural farms diminished in 2013 by 1.9% opposed to year 2010 and by 6.7% opposed to year 2002, as result of the fact that some agricultural areas remained un-farmed.

The agricultural area which came averagely per one farm registered a slight increase, from 3.24 ha in year 2002 to 3.60 ha in the year 2013.

The phenomenon of structural duality of the agricultural farms was characteristic for the whole analysed period, the farms without juridical personality representing over 99% of the total farms' number. With all this the number of the agricultural farms without juridical personality was continuously decreasing, in the year 2013 being by 15.8% smaller as opposed to the year 2002.

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² <http://www.insse.ro/cms/ro/content/farm-agricultural-survey-general-data-at-national-level->

Table 1

The number of agricultural farms by the juridical status and utilized agricultural area

Indicators	MU	Total agricultural farms			Of which:					
					Without juridical personality			With juridical personality		
		2002 ^{*)}	2010 ^{*)}	2013 ^{**)}	2002 ^{*)}	2010 ^{*)}	2013 ^{**)}	2002 ^{*)}	2010 ^{*)}	2013 ^{**)}
Number of farms	Thou.	4299	3859	3630	4277	3828	3602	22	31	28
Utilized agricultural area	Thou.ha	13931	13306	13056	7709	7450	7271	6222	5856	5785
- arable land	Thou.ha	8774	8306	8198	5437	4725	4558	3337	3581	3640
- pastures and hayfields	Thou.ha	4644	4506	4398	1878	2307	2315	2766	2199	2083
- permanent crops	Thou.ha	344	312	302	225	236	240	119	76	62
- family gardens	Thou.ha	169	182	158	169	182	158	-	-	-
The utilized agricultural area which comes averagely per one agricultural farm	ha	3.24	3.45	3.60	1.80	1.95	2.02	282.2	190.8	207.5

Source: ^{*)}GAC 2010, NSI;

^{**)} <http://www.insse.ro/cms/ro/content/structural-survey-in-agriculture-general-data-at-national-level->

The utilized agricultural area by the agricultural farms registered decreases, both in the case of the farms with juridical personality, and in the case of those without juridical personality. It is to be remarked the fact that in the period analysed the agricultural farms with juridical personality were utilizing over 44% of the agricultural area.

The utilized agricultural area which came averagely per one agricultural farm without juridical personality increased from 1.80 ha in year 2002, to 2.02 ha in year 2013.

The utilized agricultural area which came averagely per one agricultural area with juridical personality had a fluctuant evolution in the analysed years.

In the structure of the utilized agricultural area by agricultural farms it is predominating the arable land, followed by that with pastures and hayfields, both in the case of agricultural farms without juridical personality, and in the case of those with juridical personality.

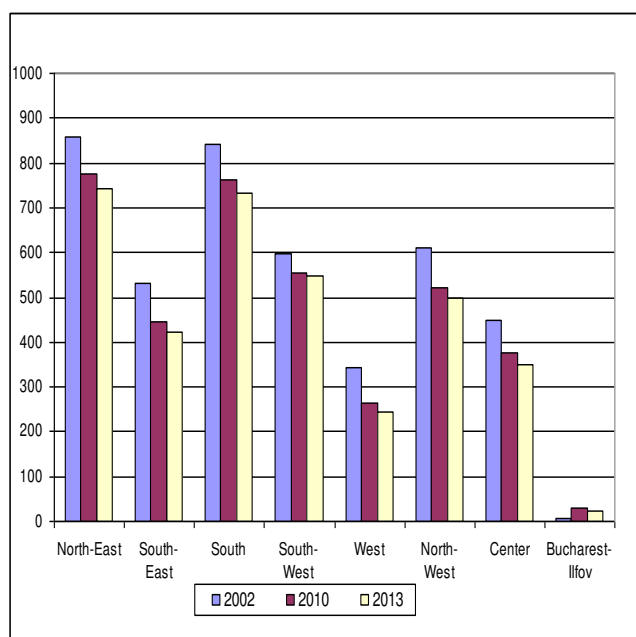
At regional level, both the number of the agricultural farms with utilized agricultural area, and the utilized agricultural area are distributed according to the zone's specific.

The biggest number of farms was to be found in the development regions North-East and South, both in year 2002, and in the years 2010 and 2013, and the biggest utilized agricultural areas by the agricultural farms were to be found in the development regions South and South-East.

Thus, the utilized agricultural area which came averagely per one agricultural area in the development region North-East was of 2.3 ha/farm in the year 2002 and 2.6 ha/farm in year 2013, and the South development region was of 2.7 ha/farm in 2002 and 3 ha/farm in the year 2013.

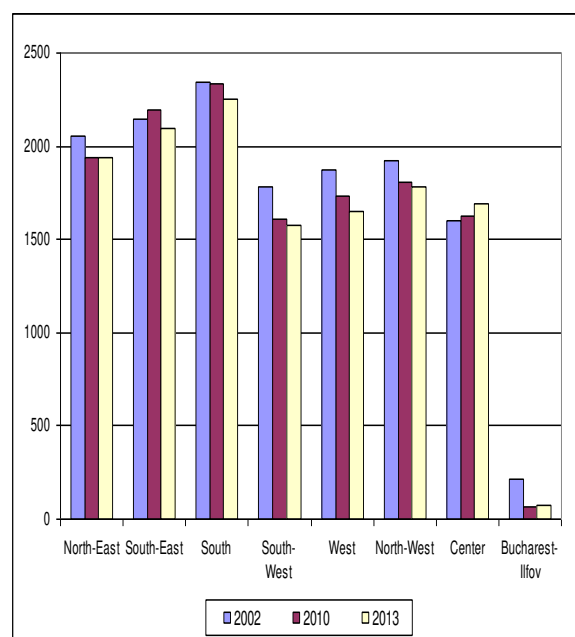
Graphic 1

The number of agricultural farms at regional level



Graphic 2

The utilized agricultural area by agricultural farms, at regional level



Source: *)GAC 2010, NSI;

**) <http://www.insse.ro/cms/ro/content/structural-farm-survey-in-agriculture-general-data-at-national-level>

Except the development region Bucharest -Ilfov, the smallest number of agricultural farms and the biggest utilized agricultural area was to be found in the West development region, folowed by the development region South-East. The utilized agricultural area which came averagely per one agricultural farm in the West development region was of 5.4 ha/farm in the year 2002 and it reached to 6.7 ha/farm in the year 2013, and the utilized agricultural area which came averagely per one agricultural farm in the development region South-East was of 4 ha/farm in the year anul 2002 and reached to 4.9 ha/farm in the year 2013.

Table 2

The livestock's numbers by main species, by the juridical status of agricultural farms

- thousands heads -

	Total agricultural farms			Of which:					
	2002 ^{*)}	2010 ^{*)}	2013 ^{**)}	Without juridical personality			With juridical personality		
	2002 ^{*)}	2010 ^{*)}	2013 ^{**)}	2002 ^{*)}	2010 ^{*)}	2013 ^{**)}	2002 ^{*)}	2010 ^{*)}	2013 ^{**)}
Bovines	2871	1990	1936	2737	1817	1778	134	173	158
Ovines	7238	8412	8944	7009	8172	8671	229	240	273
Goats	744	1241	1326	739	1212	1297	5	29	29
Porcines	8260	5345	4235	7000	3516	2385	1260	1829	1850

Source : *)GAC 2010, NSI;

**) <http://www.insse.ro/cms/ro/content/structural-farm-survey-general-data-at-national-level>

At the level of agricultural farms the numbers of bovines and porcines decreased by 32.5% și respectively 7% in the year 2013 as opposed to the year 2002, and the numbers of ovines and goats increased by 23.5% and respectively 78.2% in the same period.

At the level of the agricultural farms without juridical personality, the decrease of the livestock number at bovines and porcines was more stressed, while the agricultural farms with juridical personality registered increases of the livestock's numbers at these species..

Increases of the numbers of ovines and goats were registered, both within the agricultural farms without juridical personality, and within those with juridical personality in 2013, opposed to the year 2002.

In 2002, from the total of the utilized agricultural area, the area under ownership represented 90.5% the rest being farmed under other forms. In the following years, on the background of the decrease of the share of areas under ownership, the share of areas under lease registered significant increases. Thus, if in 2002 the share of leased in areas was representing 0.2% from the total of utilized agricultural areas, in the year 2013 this represented 27.4%.

Table 3
The lands' farming modality in the year 2010 as opposed to the year 2002

Specification	2002 ^{*)}	2010 ^{*)}	2013 ^{**)}
Under ownership	90.5	60.0	61.4
Under lease	0.2	27.0	27.4
Under concession, share cropping and others	9.3	13.0	11.2

Source: ^{*)}GAC 2010, NIS;

^{**)} <http://www.insse.ro/cms/ro/content/structural-farm-survey-general-data-at-national-level>

The significant increase of the leased land areas' share shows that the leasing phenomenon was in full amplitude.

Romania's agrarian structure

Romania's agrarian structure is made of four categories of agricultural farms³:

- The family agricultural households with areas between 0.1-1 ha, which, due to the small agricultural areas and strongly fragmented are not eligible for the EU financing; their agricultural land is made greatly of gardens, pastures and natural hayfields and it is a weakly productive soil;
- Subsistence and semi-subsistence households (farms) with agricultural areas between 1-10 ha which are producing, greatly, for their own self-consumption needs;
- Commercial family farms with areas between 10-100 ha;
- The commercial companies with areas bigger than 100 ha, with agricultural areas made of arable land of best quality, placed in most favorable zones.

Table 4
Agricultural farms by the size class and the utilized area

	Number			Suprafața		
	2002 ^{*)}	2010 ^{*)}	2013 ^{**)}	2002 ^{*)}	2010 ^{*)}	2013 ^{**)}
0.1-1 ha	50.5	54.2	54.5	5.4	5.3	5.0
1-10 ha	48.1	43.6	43.0	40.4	33.5	33.4
10-100 ha	1.2	1.8	2.1	7.3	12.4	13.3
Over 100 ha	0.2	0.4	0.4	46.9	48.8	48.3
Total	100	100	100	100	100	100

Source: own calculations after ^{*)}GAC 2010, NSI;

^{**)} <http://www.insse.ro/cms/ro/content/structural-farm-survey-general-data-at-national-level>

In the year 2013 the share of the agricultural farms with areas comprised between 0.1-1 ha in total farms was of 54.5%, increasing as opposed to the year 2002. The share of the utilized agricultural area by this category of farms did not suffer significant changes.

The agricultural farms with areas between 1-10 ha, registered percentage decreases, both as numbers, and as utilized area in the year 2013 opposed to the years 2010 and 2002

The share of the farms with areas between 10-100 ha in total farms increased, both from number point of view, and of the utilized agricultural areas.

The smallest share was held by the agricultural farms with over 100 ha in total farms, while the share of the utilized by them areas was bigger. In other words, an extremely small number of agricultural farms are utilizing almost half of the country's agricultural area.

³ Otiman P.I., (2012), *Structura agrară actuală a României – o mare (și nerezolvată) problemă socială și economică a țării*, în Revista Română de Sociologie, anul XXIII, nr.5-6, București

CONCLUSIONS

In year 2013, opposed to the years 2010 and 2002 there decreased, both the total number of the agricultural farms, and their utilized agricultural area.

There did not intervened structural modifications in the evolution of the agriocultural farms in the analysed period, the agricultural farms without agricultural personality representing over 99% of total farms. So, the greatest part of the agricultural farms in Romania were individual subsistence farms (individual agricultural farms, authorised physical persons, individual or family enterprises), while, under 1% of the total were agricultural farms with juridical personality (autonomous regies, or farms associations, commercial companies, institutes or research stations, and educational units with agricultural profile, local councils and other public institutions, cooperative units and other types of units). These were farming but 44% of the agricultural area of Romania.

The agricultural area which came averagely per one farm registered a slight increase, from 3.24 ha in the year 2002 to 3.60 ha in the year 2013.

The agricultural area which came averagely per one agricultural farm with juridical personality had a fluctuant evolution, while the agricultural area which came averagely per one farm without juridical personality registered a slight increase, from 1.80 ha (2002) to 2.02 ha (2013).

At regional level, the agricultural area which came averagely per one agricultural farm was much under the average per country in the development regions West and South-East.

The leasing phenomenon was in full process of evolution having in view that the share of the areas under ownership decreased, while the share of areas under lease was in continuous increase.

Predominant in the Romanian agriculture were the farms with less than 1 ha agricultural land which were utilizing little over 5% of the country's agricultural area. Even if these ones do not contribute to the development of a performant agriculture, they have an important social role, as they ensure the food security of the inhabitants in the rural.

The agricultural farms with areas over 100 ha, that are the commercial farms, the commercial companies, were holding an extremely reduced percentage of the total farms' number, but were utilizing the biggest agricultural area of the total country's agricultural area. The territorial concentration of these agricultural farms is conferring them a areal competitive potential.

Such a distribution, accentuatedly bipolar, with the biggest part of the agricultural land-parted, on one hand, between extremely modest households as physical size, which are producing in majority for their own needs, and on the other hand, of a relatively small number of commercial agricultural farms which are producing under industrial system and are adopting modern technologies is constituting the main factor which is limiting the increase the Romanian agriculture's competitiveness and which is revealing its structural lack of equilibrium.

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