

## TYPES OF FARMS ISSUES IN ROMANIA

E. BIANU<sup>1</sup>, NICOLETA MATEOC SÎRB<sup>2</sup>, D. CHIRILĂ<sup>1</sup>, MARIANA CHIRILĂ<sup>1</sup>

<sup>1</sup>*Polytechnic University Timisoara; diebianu@yahoo.com, chirila\_runner@yahoo.com*

<sup>2</sup>*Banat's University of Agricultural Sciences and Veterinary Medicine "King Michael I of România" from Timisoara, Faculty of Agricultural Management*

**Abstract:** *The current situation of Romanian agriculture is characterized by many social and economic problems through excessive fragmentation of land (more than 40 million parcels) and the existence of numerous farms economically viable. Structural changes that occurred in the Romanian agriculture after 1990, had resulted in the privatization of more than 96% of agricultural land and the formation of small and medium farms. Following the land reform appeared new types of farms: family farms (subsistence, which are prevalent), and commercial farms, crop breeding, training and ongoing consolidation. In our agriculture after the restoration and establishment of private ownership of land, have created various types of entities that are engaged in producing agricultural products and foodstuffs. To name these entities are used, the current concepts: family households, farms and large farms (agricultural enterprises often integrated holding companies). The European concept is the most common farm naming any entity in which agricultural produce.*

**Key words:** *farms, the agricultural sector, agricultural area, holdings*

### INTRODUCTION

Farm is the economic basis for survival village, rural in general, because of its small size the ability to invest is low, keep pace with, and thus harder revenues are reduced.

The share of agriculture increasingly reduced, particularly in the employment and source of income for the rural population, agricultural production policy making increasingly insufficient, taken singular, as a strategy to improve the situation of rural areas. Therefore finding alternative farm resource use may constitute an action.

In a market economy is the main form of subsistence holding, organization and functioning of agricultural production. This does not mean that land ownership is maintained with all rights there under. Technical and economic unit holding is to enhance the soil and may consist of land owned, leased or custody of the land (location) rental. The aim is to develop a production system that is kept private and achieving economical production conditions. Holding may be the property of the farmer or other owners.

The main types of farms were established and functioned once they have received legal conditions were: individual farms; family associations; agricultural societies; commercial agricultural companies (Law no. 31/1990).

Individual farms (peasant household) is the main result of reconstruction and building ownership of land based on Law no. 18/1991 and is the dominant form of organization of the farm in Romania . These structures are holding agricultural production and consumption, using their financial resources and manpower, production priority goods consumption (subsistence households) but can sell varying amounts of products to obtain additional income for the family.

### MATERIALS AND METHODS

Documenting the work consisted in using data from publications, statistics and some authors, in association with research that formed the basis of their analysis, ideas raised in the paper.

## RESULTS AND DISCUSSION

According to Table 1, of the 3.83 million of private-family farms, only 90 000 correspond to a minimum acceptable level in terms of the size of the area, the rest are 3.74 million farms of less than 10 ha.

Table 1

## Private-family farm structure by size class

Class-size (ha)	Farms		The utilized agricultural area	
	Number	%	Ha	%
< 1	1.684.078	43,92	648.938	7,24
1-2	799.143	20,84	1.156.768	12,90
2-5	963.453	25,13	3.014.849	33,62
5-10	297.638	7,76	2.002.600	22,34
<b>Total 0-10 ha</b>	<b>3.744.312</b>	<b>97,65</b>	<b>6.823.155</b>	<b>76,10</b>
10-20	68.897	1,80	908.632	10,13
20-30	9.156	0,24	220.629	2,46
30-50	5.988	0,16	228.861	2,55
50-100	3.587	0,09	243.877	2,72
>100	2.467	0,06	541.154	6,04
<b>Total &gt;10 ha</b>	<b>90.095</b>	<b>2,35</b>	<b>2.143.153</b>	<b>23,90</b>
<b>Total</b>	<b>3.834.407</b>	<b>100,00</b>	<b>8.966.308</b>	<b>100,00</b>

Source: Calculated by the farm structure survey 2007, Vol. 1, NIS, 2008

Table 2

## Farm structure with legal personality

Class-size (ha)	Number of farms		The utilized agricultural area	
	Number	%	Ha	%
< 1	1.422	8,18	591	0,01
1-2	923	5,31	1.207	0,03
2-5	2.141	12,32	7.050	0,15
5-10	2.358	13,56	14.939	0,31
<b>Total 0-10 ha</b>	<b>6.844</b>	<b>39,37</b>	<b>23.787</b>	<b>0,50</b>
10-20	1.231	7,08	15.596	0,33
20-30	392	2,26	9.469	0,20
30-50	571	3,28	22.295	0,46
50-100	1.204	6,93	89.177	1,86
>100	7.141	41,08	4.626.414	96,65
<b>Total &gt;10 ha</b>	<b>10.539</b>	<b>60,63</b>	<b>4.762.951</b>	<b>99,50</b>
<b>Total</b>	<b>17.383</b>	<b>100,00</b>	<b>4.786.738</b>	<b>100,00</b>

Source: Calculated by the farm structure survey 2007, Vol 1, NIS, 2008

Romanian agriculture are dual organizational structure characterized by small farms (mostly peasants) to a pole and large and very large farms at the other pole (holdings larger than 100 ha, in 9608 the number of farms, holding 5,167,568 ha i.e. 37.57 % of the UAA).

Family associations as proposed Law. 36/1991 on agricultural associations, are simple forms of association, which is based on verbal or written agreement between two or more families or under contract by the company, in the associative structure that the shape and content of agricultural civil society. Both forms of economic association have the same function, but the degree of regulation is different. It is estimated that there are approximately 6,500 family associations in Romania, with an average of 120 ha and cultivating a total of 5 % of agricultural land.

Agricultural companies - like structures with legal personality - were established based on Law No. 36/1991, as a private limited liability, variable capital and unlimited, variable associates.

According to Law No. 36/1991 , agricultural societies have a proper commercial and land exploitation can be both commercial and non-commercial nature, depending on their legal form - company - the interpretation of Law No. 31/1990 , or agricultural society, the concept of agricultural societies law (Law 36/1991 ) .

Main place in the structure of agricultural holdings is owned by individual farms (99.5 %) in the use of agricultural land and reduced the average area (2.34 ha).

Of the 3.83 million individual farms, 90 % are very small holdings up to 5 hectares, which produce primarily for their own consumption and not enough investment opportunities. These holdings are likely to remain at subsistence level and gradually disappear, creating reserves of land needed to increase the size of commercial farms or family farm corporations and trade associations, provided that a significant part of the population who are currently working in these farms to give and agricultural occupation to earn a living in other types of activities . This natural process is maintained by withdrawing from farming to owners of old age.

Category size 5-10 ha farms represent 8% of all individual holdings. These holdings may be evolving toward the commercial side, the expansion or for subsistence.

A total of 90 095 farms (2.35 %) were larger than 10 ha. These are commercial family farms that could be the backbone of the Romanian commercial farm sector, similar to the EU model family farm.

**Table 3**

**Structure of agricultural holdings by size class, 2011**

Surface ha	Number of holdings (thousands)	(%)	Eligible area (thousand ha)	(%)
	1-2	367,5	32,8	534,1
2-5	529,4	47,3	1645,9	16,8
5-10	148,7	13,2	992	10,1
10-20	37,5	3,3	498,7	5,1
20-50	17,7	1,6	561,5	5,7
50-100	6,4	0,6	454	4,6
over 100	12	1,1	5101,8	52,1
<b>Total</b>	<b>1119,2</b>	<b>100</b>	<b>9788</b>	<b>100</b>

Source: Press Release after the March 6, 2012, INS.

Share of small units up to 5 ha, 90% if the units are taken into account up to 1 ha (Table 3), and 82 % if the units are excluded and their share in agricultural land is 54 % in the first case and 47 % in the second.

This distinction is necessary given the fact that farms of less than 1 ha not registered at the Agency for Payments and Intervention in Agriculture for the benefit of direct payments under the payment scheme adopted by Romania since 2007.

The percentage of small to medium sized between 5 and 10 hectares, representing 14 % exploiting 24 % of the agricultural area. Medium-sized units, which hold between 10 and 50 ha, are almost nonexistent; their share is less than 4 % of the units and below 16% of the agricultural area. Large and very large units with an area of 50 ha and above only represent 0.3 % of the total, but operate nearly 10 % of agricultural land.

Legislation farm in our country was made in 2001, after years of expectations from investors in agriculture, the advent of the Government Emergency Ordinance No.108 of 27 June 2001, subsequently converted into Law no. 166/10.04.2002.

In other news, farms may actually be assets to not only land owned by farmers but also the leased land, lease or timeshare worked. Errors of law could continue as enumeration, but we stopped only two. Since we joined the European Union, this law should be repealed and implemented the definition of the Common Agricultural Policy. According to this established a single area payment scheme. For a firm to be eligible you must use an area of land greater than or equal to one hectare surface can not be formed in smaller plots of 0.3 ha. For a good record of payments and default beneficiary farms, they must be recorded in the Register of Agricultural Holdings.

A farm to be recorded in the electronic farm if definition meet farms and terms of reference for this, which are based on EC Regulation no. 1782/2003 and EC Regulation no. 1444/2002: is holding a technical and economic unit of agricultural production operating under single management, irrespective of the ownership and legal form and is administered by a farmer.

Techno-economic unit is characterized by the sharing of manpower and resources (equipment, buildings, land, etc.) and includes all animals throughout the area of land owned and used wholly or partly for agricultural production achievement.

Farms may consist of land, animals and means necessary for the agricultural production of one or more owners. The total land area of the farm may consist of one or more parcels, located in one or more areas of the village or one or more administrative-territorial division, managed jointly. Single management may be exercised by a person or several persons jointly. Agricultural products are those set out in the National Classification.

The farmer is a natural or legal person, or a group of natural or legal persons who have given legal status under national law, whose holding is within the country and exercising an agricultural activity.

Agricultural activity is the production, rearing or cultivation, including harvesting, growth and maintenance of animals or maintaining the land in good agricultural and environmental condition.

The holding may at the same time, provide agricultural and other products or services. Farms differ depending on: their legal form, according to the legal provisions in force; how land ownership; nature of the work they perform.

According farm structure survey in 2007, there were 17383 of legal units that used agricultural area, with an average size of 257.37 acres per farm, whose legal status can be classified into several *categories*:

- *Agricultural companies / associations organized the structure of agricultural cooperatives in the communist era, whose main activity is the production plant and totalling 1461 units with a size of 421.56 acres;*

- *Companies , mostly vegetable farms operating private or state lands leased or purchased or leased from the owners given land after 1991 , with a total of 4947 units with an average size of 394.40 acres;*

- *Government units, comprising mainly communal pastures managed by central or local government units and totalling 4135 units with an average size of 452.77 acres;*

- *Other holdings (NGOs, religious institutions, some cooperative units) in total 6840 units with an average size of 50.80 acres.*

Evolution of the year on the number, size and the average size of farms in Romania is shown in Table 5 where it can be seen in fewer farms from 4,484,893 in 2002 to 3,931,350 in 2007. Analyzing the average area them we can see that it has increased from 3.11 hectares in 2002 to 3.50 in 2007, over five years, which shows that the concentration reflected by reducing the number of farms and increase the surface area, our country is very slow .

Trends of increasing farm areas based rush obtain high revenues in the short term. In the absence of guidance to managers to increase yields and reduce costs at the expense of modernization and productivity, increase territorial dimensions to achieve expected revenue. There are few cases where, in a few years after the privatization of former state farms and land concession managers abandoned agricultural businesses. As a result of the privatization of resource depletion and natural fertility of soils, businesses are not profitable, especially on surfaces hectares due to lack of investment and difficulties in adapting to market requirements.

**Table 4**

**Evolution farm**

Farm status	Years					
	1993	1996	2002	2005	2007	2010
Individual farms	3419736	3625758	4462221	4237889	3913651	3823130
Family associations	13772	15107	-	-	-	-
Units with legal personality	-	-	22672	18263	17699	30698
Agricultural companies / associations companies	-	-	2261	1630	1475	1381
Companies	4265	3759	6138	4824	5147	16500
Government units	-	-	5698	4818	4177	3083
Cooperative units	-	-	87	108	71	68
Other	-	-	8488	6883	6829	9616
<b>Total farms</b>	<b>3437773</b>	<b>364624</b>	<b>4484893</b>	<b>4256152</b>	<b>3931350</b>	<b>3859043</b>

Source: National Commission for Statistics 1996 Romanian Statistical Yearbook 2012;

Equally dangerous, long-term trend is selling most fertile farmland areas of the country to foreign investors, at least at this stage. Some of these investors, who buy thousands of hectares surfaces (especially in the legislative framework created joint ventures) or growing wheat, maize and sunflower, raw materials for processing in countries of origin (which exploits the land) or they drop from exhaustion of soil fertility.

**Table 5**

**Farm developments by legal status in Romania**

Specification	Farm - total (no.)			The utilized agricultural area (ha)			Average area on a farm ha / farm		
	2005	2007	2010	2005	2007	2010	2005	2007	2010
Individual farms	4237889	3913651	3823130	9102018	8966308	7449621,54	2,15	2,29	1,87
Units with legal personality:	18263	17699	30698	4804683	4786737	5856506,79	263,08	270,45	1907
-Companies / associations agr	1630	1475	1381	742065	615896	550878,21	455,25	417,56	398,90
-Companies	4824	5147	16500	1780787	1951114	3171130,42	369,15	379,08	192,19
-Government units	4818	4177	3083	2124736	1872193	1604544,74	441,00	448,21	520,45
- Co-units	108	71	68	3246	15088	8176,22	30,06	212,5	120,2
- Other specification	6883	6840	9616	153846	332444	507997,76	22,35	50,80	53,04
<b>Total</b>	<b>4256152</b>	<b>3931350</b>	<b>3859043</b>	<b>13906701</b>	<b>13753046</b>	<b>13306128,33</b>	<b>3,27</b>	<b>3,57</b>	<b>3,45</b>

Source: Statistical Yearbook of Romania, 2006-2012

It is known that countries that have recently become members of the European Union have negotiated longer periods to limit the purchase of land at low prices and be used to produce raw materials for food industries in the countries of origin of foreign investors.

At least one time, these trends will have a negative impact on the environment as a result of land use without appropriate crop rotation, limit opportunities for diversification of agricultural production and rural development and stimulate complex exodus of rural population to the EU for to be employed in agricultural sectors performing diversified production systems and require skilled labour. In this way the Romanian agriculture is seriously injured.

Fostering viable farm sizes keep clarifying conceptual model of agriculture that can ensure Romania's economic performance levels high compatibility with "European agricultural model" and agricultural policy which should guide the structure in line with market developments. For this purpose, the necessary scientific studies based on a collaboration of specialists in agricultural administration and farmers.

Sizes of farms (Table 6), the horizons of 2010 to 2020 (of course that these dimensions refer to family farms, but the formation and organization requires time and funding to become dominant in numbers and economically viable) are shown in table 6.

Important is the farm family and unfamiliar, to approach the market and provide a competitive offer. Small subsistence farms (1-3 ha) should be drawn to activities that require much manual labour, stimulated to diversify or to associate to perform mechanical work. Agricultural households owning less than 1 hectare of land are excluded from the financial support because market can not produce for subsistence or a family (except in vegetable crops protected).

**Table 6**

**Dimensions of private family farms**

<b>Commercial farms</b>	<b>Profile territorial dimensions (ha / livestock)</b>
Farms grain and industrial crops	30-50 ha
Vegetable farms	3-5 ha
Fruit and wine farms	5-10 ha
Dairy farms <ul style="list-style-type: none"> <li>• Plain</li> <li>• Hill</li> <li>• Mountain</li> </ul>	20-30 ha – 15 -20 heads 10-20 ha – 1-15 heads 3-5 ha – 2-5 heads
Pig farms	100 -500 heads
Farm chickens	5000 – 10000 heads
Sheep farms	500-2000 heads
Mixed farming <ul style="list-style-type: none"> <li>• Plain</li> <li>• Hill</li> <li>• Mountain</li> </ul>	20-30 ha 10-15 ha 3-5 ha

Sources: Ion Păun Otiman, Journal Agricultural Economics and Rural Development, 2012

Economic Size Unit (ESU) is used to express the economic size of a farm, corresponds to the "standard gross margin" and 1UDE = 1200 EURO. ESU aside land area size is an important indicator characterizing the economic size of farms.

Table 7

Size class ESU	Farms		Surface		Average size
	Number	%	Ha	%	Ha
<b>Romania</b>					
Total	3931350	100	13753050	100	3,49
0-5	3530720	89,8	4829400	35,11	1,36
5-10	300000	7,6	2017540	14,68	6,72
10-20	70130	1,8	924230	6,72	13,17
20-30	9550	0,2	230100	1,65	24,09
30-50	6560	0,2	251160	1,84	38,28
over 50	14400	0,4	5500620	40,00	318,98
<b>EU-27</b>					
Total	13700580	100	172485040	100	15,96
0-5	9748160	71,1	14380350	8,33	1,47
5-10	1561600	11,4	10696530	6,20	6,85
10-20	994220	7,3	13886860	8,05	13,99
20-30	400310	2,9	9735990	5,64	24,33
30-50	409500	3,0	15649390	9,07	38,27
over 50	698970	5,1	10789795	62,55	154,52
<b>Romania/ EU-27</b>					
Total		28,69		7,97	-
0-5		36,21		33,58	-
5-10		19,21		18,86	-
10-20		7,05		6,65	-
20-30		2,38		23,63	-
30-50		1,60		1,60	-
over 50		2,06		50,97	-

Source: Eurostat by

Table 8

Size class ESU	Farms		Surface		Average economic size
	Number	%	Ha	%	Ha
<b>Romania</b>					
Total	3931350	100	13753280	100	1,00
0-2	3694470	93,97	6735150	48,97	0,55
2-4	169560	4,31	1204530	8,75	2,66
4-8	43320	1,10	624620	4,54	5,3
8-16	12950	0,32	551430	4,00	10,68
16-40	6390	0,16	981710	7,13	24,60
40-100	2910	0,07	1329420	9,66	62,28
over100	1750	0,04	2326420	16,91	330,92
<b>EU-27</b>					
Total	13700580	100	172485150	100	48,74
0-2	8336450	60,84	19120450	11,08	0,63
2-4	1539190	11,23	8588600	4,97	2,85
4-8	1228590	8,96	11140050	6,45	6,08
8-16	906900	6,61	1474811	0,85	11,39
16-40	837190	6,11	27895161	16,17	25,40
40-100	544400	3,97	37743720	21,88	63,05
over 100	338780	2,47	53245230	30,86	194,76

Source: Eurostat after 1 ESU = 1200 Euro

Average economic size in 2007, in Romania, was 1.00 EDU per farm. Of the 3,931,350 farms, 93.97% have a size of less than 2 ESU, most of them (1 ESU represents

78% of total holdings) are considered by Eurostat subsistence farms. Holdings between 2-4 ESU is 4.31% and the size range 4-8 ESU is 1.10%.

### CONCLUSIONS

Agriculture is characterized over the world, so in our country through a wide range of activities related to either type of production - goods or services, plant or animal products - either legal regime of property financial or technical organization economic. Therefore, it is natural that in agriculture there is one type of farm, but many.

In farm labour joins the means of production and organized activities. Relationships created by this activity are essential to other legal relationships, ideological, cultural, holding that characterize and define the link technical -productive and economic - social development of agriculture. Average economic size in 2007, in Romania, was 1.00 EDU per farm. Of the 3,931,350 farms, 93.97 % have a size of less than 2 ESU; most of them (1 ESU represents 78% of total holdings) are considered by Eurostat subsistence farms. Holdings between 2-4 ESU is 4.31% and the size range 4-8 ESU represents 1.10%.

Farms in Romania recorded the trend, a process of concentration of agricultural land and livestock, to the optimal size of operational land use and livestock.

Concern of policy makers in national agricultural policy must be geared towards stimulation by legislative levers and various facilities, the process of concentration of agricultural land and livestock, to achieve the progressive transformation of subsistence in commercial farms, the farms that produce for the market, with benefits for the farmer, but also for society.

### REFERENCES

1. **DINCU, ANA MARIANA, SÂMBOTIN, L. GAVRUTĂ, A., BIROVESCU, ALINA, PEDA, LIGIA, MATIAȘ, C., MĂNESCU, CAMELIA**, 2008, *The Romanian agrarian structures analysis*, International scientific conference „Multifunctional Agriculture - 24”, aprilie 2008 Hódmezovásárhely Hungary, pg. 68;
2. **DINCU, ANA-MARIANA, BRAD, I., GOJE, GHE., RUJESCU, C., CIOLAC, RAMONA, SÎRBULESCU, CLAUDIA, RĂDAC, BIANCA**, 2013, *The optimization of agricultural holdings size, using their size classes*, *Lucrări științifice Management Agricol, Seria 1, vol. XIV (2) „Dezvoltarea rurală durabilă”*, Facultatea de Management Agricol, Timișoara, mai 2013, pg. 47;
3. **MATEOC-SÎRB, NICOLETA, MĂNESCU, CAMELIA**, 2012, *Dezvoltarea rurală și organizarea teritoriului*, Editura Mirton, Timișoara;
4. **OTIMAN P.I., MATEOC-SÎRB, NICOLETA, MĂNESCU, CAMELIA**, 2013, *Economie rurală*, Editura Mirton, Timișoara;
5. **SÎRBULESCU, A., SÎRBULESCU, CLAUDIA**, 2011, *Study on the structure of the Romanian agricultural holdings*, *Lucrări Științifice, Management Agricol, seria I, volumul XIII*, Timișoara;
6. **SÎRBULESCU, CLAUDIA, PÎRVULESCU, LUMINIȚA, RUJESCU, C., ALDA, S.**, 2013, *Studiu privind modul de organizare al exploatațiilor agricole*, *Agrobuletin AGIR, anul V, nr. 2 (16)*, Editat de Societatea de Inginerii Agricole Timiș;
7. **SÎRBULESCU, ELENA CLAUDIA**, 2008, *Impactul managementului resurselor umane asupra creșterii economice în spațiul rural*, Editura Eurobit, Timișoara;
8. \*\*\*, INS, *Ancheta Structurală în Agricultură*, 2007, 2008;
9. \*\*\*, *Anuarul Statistic al României (colecție) 1990-2012*
10. \*\*\*, *Comunicat de presă din 6 martie 2012*, INS;
11. \*\*\*, *Legea 36/1991 privind societățile agricole și alte forme de asociere în agricultură*;
12. \*\*\*, *Legea nr. 31/1990 privind societățile comerciale republicată*;
13. \*\*\*, [www.eurostat.eu](http://www.eurostat.eu).