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FAMILY FARM: A MULTIDIMENSIONAL REALITY

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Abstract: *Family farming plays an important role in food security and sustainable rural development, in both developed and developing countries. If in recent history, Western Europe was based on a strong sector of family farming, for Romania and other former communist countries, it reappeared in the debate after the changes that occurred in the 1990s. (the collapse of the communist regimes). Due to the complexity and heterogeneity of farms all over the world, there is currently no consensus on the definition of family farming: how the family farm is defined varies by country and context. The objective of this paper is to identify family farms in Romania based on accessible parameters, easy to measure. The approached topic required the use of an appropriate methodology, which included both methods of documentary and statistical analysis. The emerged conclusion was that proposing a definition and selecting specific parameters has a significant importance in characterizing and evaluating the importance of family farms, an important step in proposing and implementing dedicated policies.*

Keywords: *farm, definitions of family farm, defining parameters, Romania*

JEL classification: Q12

INTRODUCTION

As the main institution of agricultural land operation, family farming is dominant in many countries of the world. Family farming has a significant role in food security, sustainable development, job creation, local development and social cohesion of rural areas (FAO, 2014; Belieres et al., 2013)). If in the last decades, Western Europe was based on a strong sector of family agriculture, Romania, along with other ex-communist countries, experienced a "revival" of family agriculture after the implementation of the land reforms of the 1990s (Lerman et al., 2004).

The role and place of family farming in socio-economic development is internationally recognized: the United Nations (UN) declared 2014 the "*International Year of Family Farming*", recommending to promote new development policies, both at the national and regional level, policies that help small farmers and family farmers to eliminate hunger, reduce rural poverty and continue to play an important role in global food security by achieving sustainable agricultural production; in 2017, a resolution that proclaimed the period 2019-2028 the "*UN Decade for Family Farming*" was adopted and aims to support family farms through a global action plan based on seven pillars (FAO and IFAD, 2019).

MATERIAL AND METHODS

The main objective of this paper is to analyze and characterize family farms based on accessible, easily measurable statistical parameters. The proposed objective required the use of an appropriate methodology, which included documentary and statistical analysis methods. To describe the specific model of the family farming system, mainly secondary data from formal sources were analyzed: statistical information provided by the National Institute of Statistics (NIS) – Farming Structural Survey (FSS).

RESULTS AND DISCUSSIONS

A clear and unequivocal definition of the family farm is not found either in academic works or in agricultural policy documents (Bosc et al., 2015). Nagayets (2005), claims that in the process of defining family farms, the only consensus would be that there is no unitary definition. Van der Ploeg proposes a multi-criteria definition of the family farm: (1) the family has effective control over the main employed resources in the farm; (2) family labor has an essential role in the activity of these farms. This stated criteria are widely accepted and relatively easy to identify in statistical databases and policy documents. Considering the socio-economic specific context, this author also proposes the introduction of additional criteria: (3) the production unit/farm must be a means, used by the involved actors to preserve and/or improve their standard of living; (4) family members must assign control of the production process; (5) family farms must contribute positively to local and regional economies; (6) these farms must conserve and enrich local ecosystems (van der Ploeg, 2016: 27-28).

The definition of family farm varies according to countries and socio-economic context. Garner and O Campos analyzed 36 definitions and utilization of term "family farm" by academia, governments, and civil society organizations. Thus, the authors identified fourteen different criteria/dimensions used to designate family farms: *labor* - family farms are based on the work of family members; *management* - the family is responsible for managing agricultural production; *size* – with reference to the physical and/or economic size of a farm; *source of livelihood* - refers to the subsistence or market orientation of farms; *residence* - the farm is the family's place of residence; *family ties and generational aspects* - the farm is considered a succession unit or a source of inheritance within the family; *community and social networks* – the connection between family farms and the community has social implications; *subsistence orientation* - the main objective of food production oriented towards family consumption; *heritage* - the family farm is seen as a family asset; *land ownership* – the family owns the cultivated land; *investments* - the family is the only/main investor in the farm; *efficiency* - difficulties in adopting new agricultural technologies are the responsibility of the family; *sustainability* - the family farm is seen as a source of ecological agriculture (Garner and O Campos, 2014: p.2-3).

In Romania, a country where the majority of the rural population is dependent on agriculture, capturing the diversity and characterization of agricultural farms is an important step, the basis for the preparation of appropriate programs. In Romania, the term "family farming" has often been used as a synonym for small-scale, subsistence and semi-subsistence agriculture with low resources and income, low use of inputs and outdated technologies (Boroka, 2015; Feher et al., 2017; Barjole et al., 2013). Starting from Garner and O Campos' approach, five parameters were taken into account to define family farms in Romania: legal status, physical size, farm management, work force and production destination.

Legal status of the farm is an easily accessible parameter (data are available in censuses and agricultural surveys) that can be corroborated with a number of other parameters to characterize farms. In Romania, out of the total of 3.42 million farms, 99.24% were classified as farms without legal personality (3.396 million) and 0.76% (0.03 million) as farms with legal status.

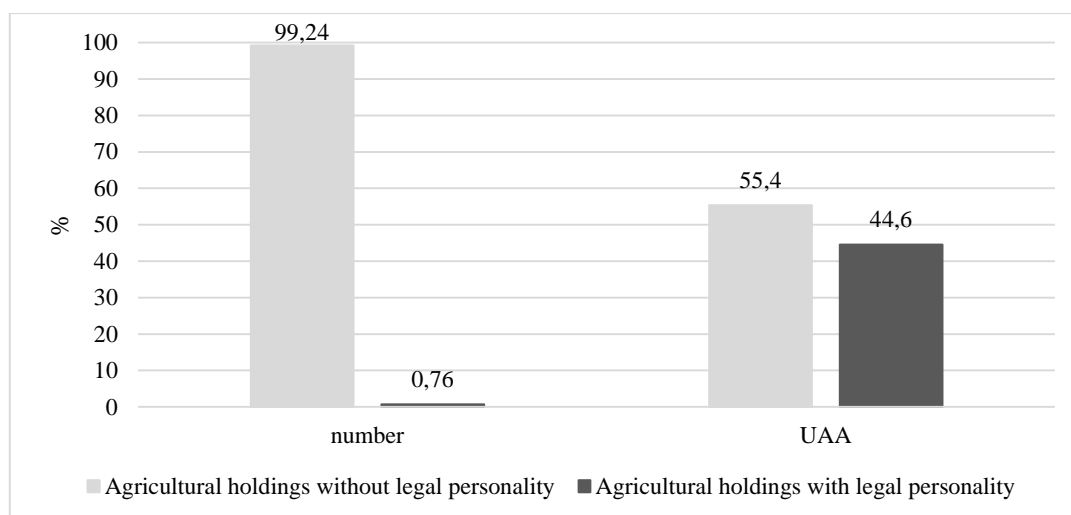


Figure 1. Distribution of agricultural holdings by legal status

(Source: own calculations based on NIS, FSS 2016)

Farms without legal personality managed 6.93 million hectares of the total utilized agricultural area (UAA) (55.40%) and farms with legal personality worked 5.58 million hectares (44.60% of the total UAA). Numerous researchers consider farms without legal personality as family farms (Gavrilescu & Florian, 2007; Rusu, 2002; Popescu, 2001). However, the classification according to legal status generates some confusion because a family farm can also acquire legal personality.

Physical size is another parameter frequently used to characterize and/or classify farms, regardless of the analyzed country or area. Physical farm size is relatively easy to measure and is also commonly collected through censuses and surveys of the agricultural sector. The availability of this parameter explains its extensive use in farms classification and official typologies in countries based on a poorly developed national statistical system (FAO, 2013). Sauer et al. (2012) consider that land size can also be implicitly used as an approximation of the economic size of farms: land endowment is associated with the ability to generate surplus, accumulate and invest. In a dynamic perspective, the "physical farm size" parameter is suitable to capture agricultural transformations initiate in a certain territory, such as the concentration, fragmentation or redistribution of land.

The analysis of the physical size was done on four size classes, as can be seen in table 1. The examination of the number of farms distribution confirms idea built around Romania's agriculture - considered as an agriculture dominated by numerous small and very small farms: 91.59% are in the category of farms smaller than 5 hectares and 7.87% in the category of 5-50 hectares. As can be noted the share of large farms, in total number is almost "invisible".

Table 1. Distribution of agricultural holdings by size class

Specification	Very small farms (under 1ha)	Small farms (1-5 ha)	Medium farms (5-50 ha)	Large farms (over 50 ha)	Total
Number pf farms – no.	1770569	1290358	262935	18323	3342185
Number of farms -%	52.98	36.81	7.87	0.55	100.00
UAA - ha	639180	2949227	2522226	6391903	12502536
UAA - %	5.11	23.59	20.17	51.12	100.00

Source: calculation based on NIS, FSS 2016

The distribution of farms according to the UAA shows a high proportion of areas worked by large farms (over 50ha) – 51.12% of the total UAA, while very small, small and medium farms work smaller areas of the total UAA – 48.88% . This distribution of farms, with the preponderance of small and very small farms, is, among other, the result of the land reform implemented at the beginning of the 1990s. Although the main objective of the land reform aimed the development of an agricultural sector dominated by competitive family farms, in reality a strongly polarized agricultural structure was reached (Davidova & Thomson, 2014; Gavrilescu & Florian, 2007).

The main restriction of the "physical size" parameter is that it is contextual and thus difficult to compare. Another aspect that hinders comparisons is that, in many cases, a hectare of owned land is not equivalent to a hectare of leased/rented land, not to mention that a hectare of land can have very different values depending on its agro-pedo-ecological characteristics and sort of cultivated crops.

The farm management parameter reflects how decisions are made within farms. In SSA, there are no variables that directly reflect this parameter. To cover this dimension, the land tenure was used – in property, on lease, in share, common. Therefore, even if this variable does not directly respond to farm management, it can capture, to a certain extent, a number of specific features. Agricultural land is the most valuable asset among the total assets owned by most farmers. How much land they work and how it is acquired are two of the most important decisions for a farmer. If the farmer does not have enough agricultural land the efficiency of the other available resources can be limited and also the expansion of the business. If the farmer has too much agricultural land, the ability to manage it effectively is reduced and there may be cash flow problems that limit the ability to make productive investments.

From the data presented in Figure 2, it can be noted there is a direct relationship between the area cultivated on lease and the size of the farms, from which we can assume that small and medium-sized family farms mainly work the land in property.

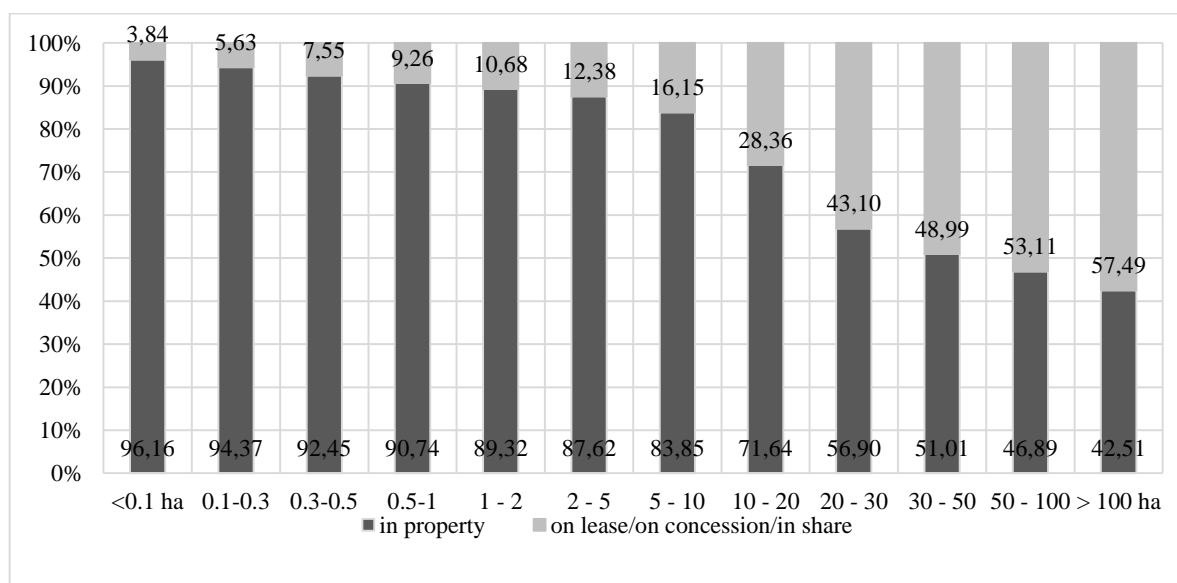


Figure 2. Agricultural holdings and the UAA by type of land tenure and by size class

(Source: own calculations based on NIS, FSS 2010)

In 2016, almost half (49.61%) of the total UAA was operated by the owners. Most of the small and medium-sized farmers, even if they own small areas of land in their ownership, work part

of it themselves (crops for their own consumption and even for sale), and lease on the remaining area to larger farmers.

Table 2. Agricultural holdings and the UAA by type of land tenure

Land tenure	UAA (ha)	Percentage -%
In property	6202752	49.61
On lease	3581999	28.65
In share and other types of tenure	0717785	21,74
Total	12502536	100.00

Source: own calculations based on NIS, FSS 2010

Labor force parameter is often used in the classification of farms. This is generally used in combination with other variables (such as the management types and integration of farms into markets). The type of labor force can be documented by binary indicators to differentiate farms that depend on family labor, from farms that depend exclusively on non-family / hired labor. Accurately quantify agricultural labor requires a great deal of details related to the schedule work, as the amount of agricultural labor fluctuates throughout the agricultural year. In addition, it requires information on the demographic characteristics of the workers involved in the agricultural sector (age, sex, education).

In this paper we will consider family labor and hired labor as the main variables in the process of categorizing farm types. The idea behind this classification is that the predominant use of family labor is generally carried out in family farms. From Table 3 it can be seen that farms using more than 50% family workers represent 99.2% of total farms and operate 54.9% of total UAA. It is noteworthy that 96% of farms have only family workers.

How labor is used can provide important information about the agricultural market, structural or managerial characteristics of farms, etc. For example, high intensities of family labor are found in small farms, because the use of labor is the main means of increasing agricultural production per hectare.

Table 3. Distribution of farms by family workers

	Annual Working Units (AWU)	Number of agricultural holdings	Utilized agricultural area (UAA)
Total	1487000	3422030	12502530
Family farms with only family workers (no.)	1427690	3395240	6848250
%	96	99.2	54.8
Family farms with more than 50% family workers (no.)	890	390	13140
%	0.1	0	0.1
Total family farms	1428580	3395630	6861390
%	96.1	99.2	54.9
Family farms with less than 50% family workers (no.)	890	300	64860
%	0.1	0	0.5
Farms without family workers	57530	26100	5576280
%	3.9	0.8	44.6
Total of non-family farms	58420	26400	5641140
%	4.0	0.8	45.1

Source: calculation based on Eurostat, FSS, 2016

The market orientation parameter - commercialization and self-consumption - captures the farms market insertion: it helps, first of all, to differentiate commercial farms from subsistence ones. This information helps to estimate the monetization degree and contribution of these farms to the market economy. FSS allows the classification of farms in two main categories: - subsistence or market-oriented.

Of the total farms, 89.37% use the production of 31.53% of the total UAA for their own consumption and only 10.63% sell more than 50% of their production on the market: these operate 68.47% of the total UAA. It can be noted that depending on the production destination, the smaller the farms, the greater their orientation towards self-consumption; the larger the farms, the greater the orientation towards commercialization of production. It can be concluded that most of the farms that can be considered family oriented are engaged in subsistence and semi-subsistence agricultural activities and aim primarily at their self-consumption.

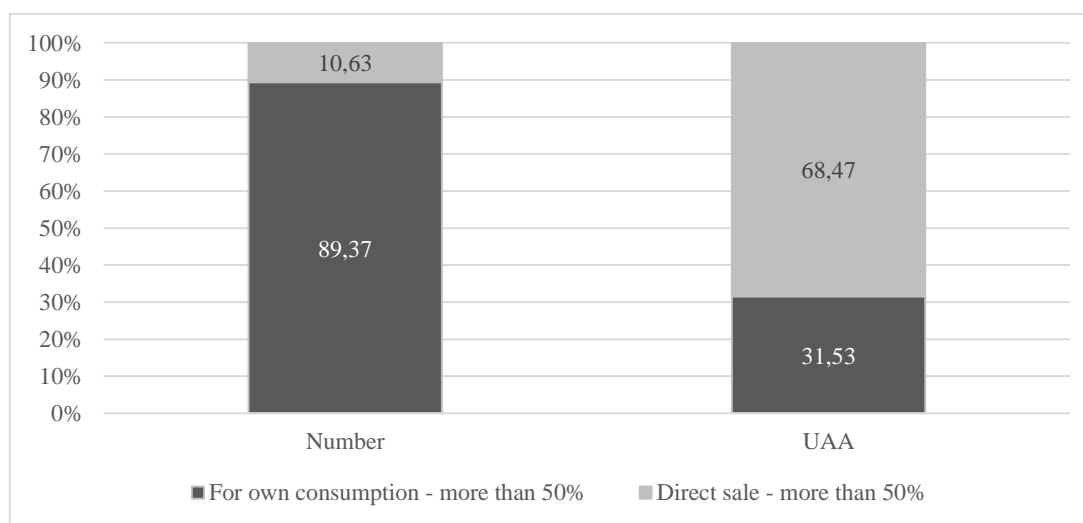


Figure 3. Agricultural holdings distribution by agricultural production destination
(Source: own calculations based on NIS, FSS 2016)

CONCLUSIONS

Due to the complexity and heterogeneity of farms, there is currently no consensus on the definition of family farming: how to define a family farm varies by country and socio-economic context. Each definition should capture the diversity of family farms, be stable and not dependent on the political and institutional context, and allow the evaluation and identification of family farms, comparison and aggregation of information that characterizes them.

As a means of organizing agricultural production, family farming is based on a close connection between the family and the farm, a connection that has evolved over time, combining economic, environmental and socio-cultural functions. In Romania, as in other EU countries, family farming is considered dominant, but not exclusive, as an institution for operating agricultural land. Classification of family farms, regardless of the parameter used, confirms the idea built around Romanian agriculture - considered as an agriculture dominated by family farms (numerous small and very small farms): a rough estimation shows that the share of family farms in the total number of farms is greater than 95% and that they work almost half of the total area.

This approach is part of the international trend that shows both the socio-economic context and the family farm are going through a transition process in which the previously established reality

is changing - due to both internal and external factors - and requires a rethinking of this concept (van der Ploeg, 2016). The choice/proposal and use of a family farm definition is of significant importance in assessing the importance of family farms, their specificities, the challenges they face, the prospects and the need for dedicated policy support.

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