

Rusu, Mărioara

Conference Paper

Family farm: A multidimensional reality

Provided in Cooperation with:

The Research Institute for Agriculture Economy and Rural Development (ICEADR), Bucharest

Suggested Citation: Rusu, Mărioara (2022) : Family farm: A multidimensional reality, In: Rodino, Steliana Dragomir, Vili (Ed.): Agrarian Economy and Rural Development - Trends and Challenges. International Symposium. 13th Edition, The Research Institute for Agricultural Economy and Rural Development (ICEADR), Bucharest, pp. 319-325

This Version is available at:

<https://hdl.handle.net/10419/301740>

Standard-Nutzungsbedingungen:

Die Dokumente auf EconStor dürfen zu eigenen wissenschaftlichen Zwecken und zum Privatgebrauch gespeichert und kopiert werden.

Sie dürfen die Dokumente nicht für öffentliche oder kommerzielle Zwecke vervielfältigen, öffentlich ausstellen, öffentlich zugänglich machen, vertreiben oder anderweitig nutzen.

Sofern die Verfasser die Dokumente unter Open-Content-Lizenzen (insbesondere CC-Lizenzen) zur Verfügung gestellt haben sollten, gelten abweichend von diesen Nutzungsbedingungen die in der dort genannten Lizenz gewährten Nutzungsrechte.

Terms of use:

Documents in EconStor may be saved and copied for your personal and scholarly purposes.

You are not to copy documents for public or commercial purposes, to exhibit the documents publicly, to make them publicly available on the internet, or to distribute or otherwise use the documents in public.

If the documents have been made available under an Open Content Licence (especially Creative Commons Licences), you may exercise further usage rights as specified in the indicated licence.

FAMILY FARM: A MULTIDIMENSIONAL REALITY

MARIOARA RUSU

INSTITUTE OF AGRICULTURAL ECONOMICS

E-mail: rusu.marioara@gmail.com

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 of 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; Gavrilesco & 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.

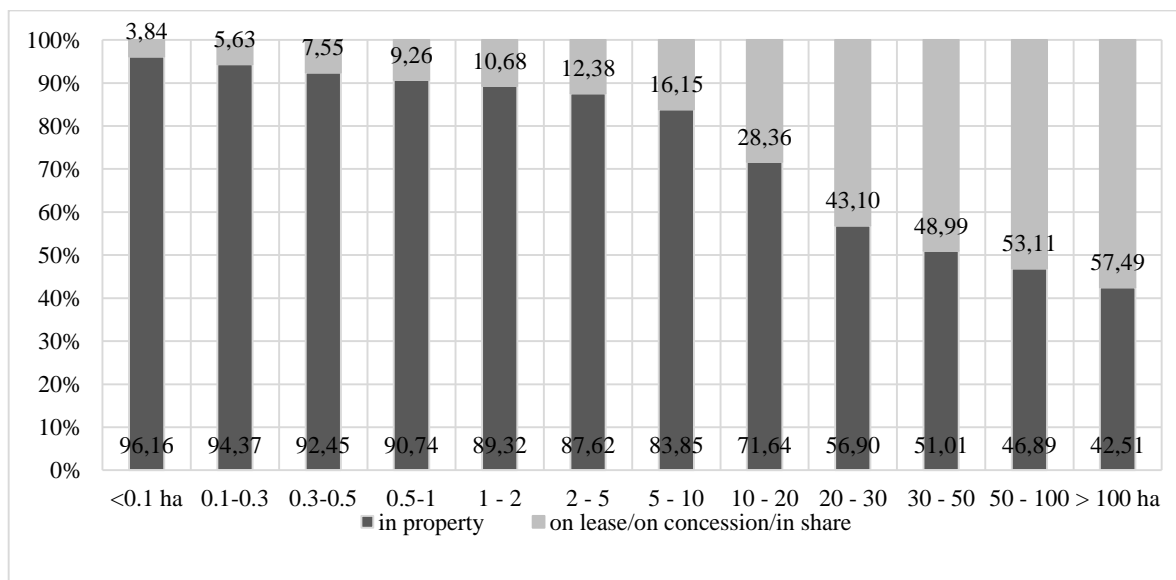


Figure 2. Agricultural holdings and the UAA by type of land tenure and by size class
(Source: own calculations based on NIS, FSS 2010)

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.

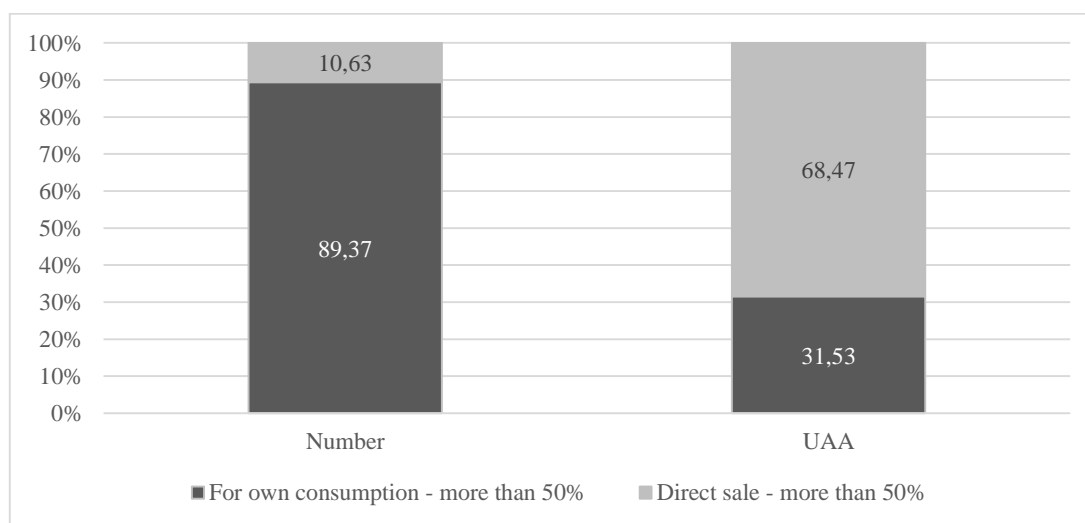


Figure 3. Agricultural holdings distribution by agricultural production destination
(Source: own calculations based on NIS, FSS 2016)

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.

BIBLIOGRAPHY

1. Barjole, D., Ghib, M.L., Larkham, K. (2013). Small family farms in Romania: How to valorise their goods and services? *Spanish Journal of Rural Development*, Vol. IV (4): 2013.
2. Bélières, J.-F., et al. (2013). Les agricultures familiales du monde, définitions, contributions et politiques publiques, rapport d'étude: https://www.researchgate.net/publication/269395524_Les_agricultures_familiales_du_monde_Definitions_contributions_et_politiques_publiques
3. Boroka, J-B. (2015). Locul și rolul fermelor mici în ruralul românesc și evoluția acestora sub impactul Politicii Agricole Comune, Ed. ASE, București.
4. Bosc, P-M, Marzin, J. , Bélières, J-F., Sourisseau, J-M. (2015), Defining, Characterizing and Measuring Family Farming Models: https://www.researchgate.net/publication/281737624_Defining_Characterizing_and_Measuring_Family_Farming_Models/link/570e2afa08ae2b772e46941a/download
5. Davidova., S și Thomson,K. (2014). Family farming in Europe: challenges and prospects, [https://www.europarl.europa.eu/RegData/etudes/note/join/2014/529047/IPOL-AGRI_NT\(2014\)529047_EN.pdf](https://www.europarl.europa.eu/RegData/etudes/note/join/2014/529047/IPOL-AGRI_NT(2014)529047_EN.pdf)
6. FAO și IFAD. (2019). United Nations Decade of Family Farming 2019-2028. Global Action Plan. Rome. <http://www.fao.org/3/ca4672en/ca4672en.pdf>
7. FAO. (2014).The State of Food and Agriculture. Innovation in family farming, Rome, FAO
8. FAO. (2013). Concept Note - http://www.fao.org/fileadmin/templates/nr/sustainability_pathways/docs/2014_IYFF_FAO_Concept_Note.pdf.
9. Gavrilescu, D., Florian V. (coord.). (2007). Economia rurală din România, Ed. Terra Nostra, Iași
10. Garner, E., O Campos, A-P. (2014). Identifying the “family farm”: an informal discussion of the concepts and definitions. ESA Working Paper No. 14-10. Rome, FAO. <http://www.fao.org/3/a-i4306e.pdf>
11. Feher, A. (2017). Convergence of Romanian and Europe Union agriculture – evolution and prospective assessment, *Land Use Policy* 67(2017), 670-678.
12. van der Ploeg, J-D. (2016). Family farming in Europe and Central Asia: history, characteristics, threats and potentials, International Policy Centre for Inclusive Growth (IPC-IG) Working Paper No. 153: <http://www.fao.org/3/a-i6536e.pdf>
13. Lerman,Z., Csaba,C., Feder, G. (2004). Evolving farm structures and land use patterns in former socialist countries *Quarterly Journal of International Agriculture*, 43 (4) (2004), pp. 309-335
14. Nagayet, O. (2005). Small Farms: Current Status and Key Trends. In: IFPRI, Ed., *The Future of Small Farms: Proceedings of a Research Workshop*, International Food Policy Research Institute, Washington DC, 355-367.
15. Popescu, M. (2001). Lecții ale tranziției. Agricultură 1990-2000. Editura Expert, București
16. Rusu, M.,(coord.). (2002). Impactul politicilor agricole asupra gospodăriei rurale, Centrul de informare și documentare economică: http://www.cide.ro/caiet_20.pdf
17. Sauer, J., Davidova, S. & Gorton, M. (2012). Land fragmentation, market integration and farm efficiency: empirical evidence from Kosovo. the 86th Annual Conference of the Agricultural Economics Society University of Warwick, United Kingdom.