Trakia Journal of Sciences, Vol. 11, Suppl. 1, pp 499-515, 2013

Available online at:
http://www.uni-sz.bg

ISSN 1313-7069 (print)
ISSN 1313-3551 (online)

SEMI-SUBSISTENCE FARMS IN EUROPE – CHALLENGE TO THE EU AND THE NATIONAL AGRARIAN POLICIES

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Abstract

The purpose of the study is to present a comparative analysis on the condition of semi-market agricultures in different countries, members of the EU, and also to point the perspectives for their restructure and development based on data for the impact of the steps of The Common Agricultural Policy (CAP).

The expansions from 2004 and 2007 raised the significance of this debate as they led to notable increase of the amount of the agricultures, predominant part of which are small. Natural and semi-market agricultures have great significance in the new members but general part of agricultures, in some countries from EU-15, are also small. The role and the future viability of these small agricultures remain an important issue for the rural regions in Europe.

Key words: Common Agricultural Policy of the EU (CAP); natural farms; semi-market farms

INTRODUCTION

The future of small agricultural farms in socio-economic aspect has always been a significant issue for the countries of the European Union (EU). After the last two enlargements in 2004 and 2007 millions of small farms, which have serious social impact on the development of rural communities, appeared in the EU. Characteristic of these is that they are usually located in the most vulnerable and disadvantaged regions. These holdings are poorly integrated with the market and this causes discussions for their competitiveness. On the other hand, they supply environmental goods, maintain local rural communities by providing important social, cultural and environmental services (public goods).

This duality in the image of semi-subsistence farms (SSF) and subsistence farms (SF) reflects the great division between policies, affecting the efficiency of production as a decisive factor and affecting the role of agriculture for the provision of public goods in the rural areas. Therefore, the condition of small farms, no matter whether they are semi-subsistence farms or not and the impact of policies, programmes, and structural changes on their survival or extinction are of great importance to rural areas in the EU. Questions of their existence and their development are extremely important to local communities, cultural heritage, and agri-environment.

In the report of the Directorate-General for Agriculture and Rural Development, it is emphasized that certain agricultural practices may not be competitive or may have lost their competitiveness, but have helped to build characteristics such as "functioning of the ecological system, maintenance of beautiful landscapes and the related idea of cultural heritage"[1] . Further the same document says that:

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[1] EC, Why do we need a Common Agricultural Policy? Discussion Paper by DG Agriculture and Rural Development, 2009, p.2

"…public funds for public goods can only be granted as long as there is agricultural presence, to which one can set that requirement". Semi-subsistence and small farms are the main structures, to which we can refer such an "agricultural presence" and which have a crucial role in the viability and attractiveness of rural areas in Europe.

Semi-subsistence farms have different origin and way of development and they have played different roles in the various Member States of the European Union. For this reason the present study examines them in a wider context and aims at conducting comparative analysis of the status of semi-subsistence farms in the various Member States of the EU and on the basis of data on the impact of the measures of the Common Agricultural Policy (CAP) to indicate prospects for their restructuring and development.

1. Criteria in defining subsistence and semi-subsistence farms

Subsistence and semi-subsistence farms are small holdings, usually related to the production of food to satisfy their own needs, which show a low degree of market orientation. However, there is no generally accepted definition of subsistence and semi-subsistence farm, which is a point for discussions and proposals of various author's criteria.

Most definitions focus on the objective for the satisfaction of the individual needs of the household for food. A lot of economists refer to the following characteristics, through which they define subsistence holdings: 1) farming is a strategy for the provision of nourishment; 2) products are directly consumed; 3) a few raw materials, purchased outside, are involved in the production process; 4) the percentage of the marketed production is small.

Difficulties in defining the concepts of "subsistence" and "semi-subsistence" derive from the subjective element in the determination of the thresholds (Brüntrup and Heidhues, (1)) and the fact that "subsistence economy" can be considered both from the consumer and from the production point of view (Mathijs, E., Noev, N. (12), connected with incorporation of products in future production. In the most general definition of semi-subsistence agriculture involves the use of one of three criteria: *physical size, economic size and market orientation*.

The physical size such as agricultural area, number of cattle, volume of the production factors (such as labour) can determine a physical proportion and semi-subsistence agriculture by thresholds. McConnell, D. and Dillon, J. (13) suggest the use of land cultivating within the 0.5 -2.0 ha as a good approximate benchmark for semi-subsistence farms. On the other hand, in Europe there is a wide consensus that SSF or small farms are those which use agricultural area, equal to or less than 5 ha. Agricultural area is a good and easy to apply criterion, which is comprehensible for agricultural producers and to all stakeholders in the rural areas. Main disadvantage of the use of agricultural area in the determination of SF and SSF consists, however, is the fact that there are differences in terms of fertility and manner of land use.

Anywhere in the EU the physical size is the basis for the formation of thresholds. Their application is necessary in the following cases:

- To determine the amount of the utilised agricultural area, which should be referred to by the term "farm"
- To determine eligibility for assistance under Pillar 1;
- In order to define criteria for eligibility for application on some measures for the development of rural areas, for example agri-environmental measures.

Another way of use of physical indicators for the classification of the holdings in size (small, medium, large, etc.) is the use of the indicator "input labour" (part-time or full-time holdings are classified here). This approach is used by the Department for Environment, Food and Rural Affairs *(Defra)* of the United Kingdom for the classification of farms in the following varieties: farms for your leisure time; part-time and full-time farms. The so-called Standard labour requirement (SLR) is used as a unit of measurement (8). The study of agricultural holdings in the United Kingdom determines the size of the holding in compliance with the SLR. The Standard labour requirement is "the requirement for labour (reduced to full-time) for all agricultural activities on the farm, based on standard coefficients for any agricultural product

under the typical conditions for enterprises with medium size and performance"[2].

The thresholds of the criterion *economic size* are widely applied for the purpose of statistics and the policy all over the EU and are expressed in the form of size units (ESU). In the Farm Accounting Data Network (FADN) of the EC the thresholds, used as a criterion for market farm, are different in the different countries. According to the methodology of the FADN the market farm is defined as a holding, which is large enough to provide the basic activity of the farmer and to provide such income, which is sufficient for the maintenance of his/her family. In practice, to be classified as market, farm must exceed minimum economic size. It varies from 1 ESU in Bulgaria and Romania (according to the data from 2008) to 16 ESU in Belgium, Germany, the Netherlands and the United Kingdom.

In the series of Eurostat "Statistics in focus" holdings of less than 1 ESU are classified as subsistence, and holdings of less than 8 ESU as small farms. Therefore, we can conclude that the farms corresponding to the Eurostat definition of small farms (1-8 ESU) are regarded as semi-subsistence farms in the EU scope.

The third widely used approach for the determination of SF and SSF is based on the criterion for *market orientation*. In a sense this criterion is still subjective, but offers an easy way for the classification of holdings. Wharton (19) argues that agricultural households may vary in the two extremes of "completely subsistence" to "completely market" farming with different combinations between them. In order to be distinguished as the criterion "market orientation", Wharton introduces threshold of 50% of the produced for the market products. The applied threshold determines agricultural producers, who sell more than zero but less than the above threshold as semi-subsistence farms, whereas those above this threshold-as predominantly or completely market.

[2] According to this criterion Defra classifies farms in England as “farms for leisure” (or defined as “hobby farms”), if the SLR is less than 0.5 human-years. They are regarded as “part-time farms” if the SLR is 0.5-<1 human years and “small full-time farms” if SRL is 1<2 human years.

The approach of market orientation in the scientific literature is adopted in Art. 34, par. 1 of the Regulation of the Council on rural development support on the part of the European Agricultural Fund for Rural Development, where semi-subsistence farms are determined according to the criteria of market orientation as "agricultural holdings, which mainly produce to meet their own needs and at the same time offer to the market part of their production". This definition deliberately avoids defining of the share of production for self-sufficiency and for market purposes, for the individual Member States to adopt their own criteria for eligibility for the support of semi-subsistence farms in the process of restructuring (measure 141) in their Rural development programmes (RDP).

As a result, the thresholds, set in the separate Member States on the occasion of realization of the relevant measures in the RDP, is based mainly on the economic size. For example, in Bulgaria semi-subsistence farms are farms with 1 to 4 ESU, in Lithuania-2-4 and, in Romania-2-8.

In conclusion it may be pointed out that:
•The criterion physical size of holdings is easy to apply, but there are significant shortcomings associated with many of the number of factors such as characteristics of the ground in a certain region, degree of mechanization of production, the possibilities for the replacement of one production resource by another, etc.
•The criterion "market orientation" gives an accurate picture of the degree of development of subsistence and semi-subsistence farms, but it is applied on the basis of many serious studies and in densely-populated regions it is inappropriate.
•In this stage the counter "economic size" proves to be the best comparative indicator of the degree of activity of the holdings, which is applied in the statistics, providing reports on the holdings in the countries of the EU. Generally in the EU-15 ESU represent a more suitable criterion for the differentiation of small farms, but for the new Member States the criterion market orientation is more useful, as decisions for the production are often influenced by the needs of the household for food.

2. Comparative characteristics of the holdings in the countries of the EU

Data from Research on the structure of farms and the Eurostat database, made in the last decade of the 20th century shows large differences in the EU-27.

In most Western European countries small family farms are many in number, although their share in the total production is relatively small. On the other hand, some family farms are classified as large structures in terms of indicators such as agricultural area, staff and / or the volume of production.

In the European Community from 12 states in 2001, a total of nearly 7 million farms (not including those with less than 1 ha land), almost half of them have had less than 5 ha. Most of these very small holdings are in the countries of Southern Europe. In the United Kingdom, which has the largest holdings in terms of the "area" indicator, only 13% are under 5 ha, while 59% are over 20 ha.

It should be ponted out, that the area is not a good basis for comparing the size of holdings taking into account the different quality of the ground. In the European Community the amount of production of the holdings is measured by the so called "European size units" (ESU). In **Table 1** data on seven key states in the Community, summarized by this method, is presented there. The most consolidated land to have agricultural holdings is the Netherlands, followed by the United Kingdom and Denmark. In Germany and France there are farms with a variety of sizes. At the opposite pole are Italy and Spain with a high percentage of small farms.

Table 1. *Rated proportion of the types of agricultural farms on the basis of EU (ESU) in 2001*

ESU	**<2**	**2-4**	**4-8**	**8-16**	**16-40**	**>40**	**Total number**
European Community of 12 countries	**40**	**17**	**15**	**11**	**11**	**5**	**100**
Of them:							
UK	**23**	**8**	**10**	**11**	**20**	**27**	**100**
Denmark	**1**	**6**	**15**	**19**	**31**	**29**	**100**
The Netherlands	**0**	**4**	**11**	**13**	**27**	**44**	**100**
Germany	**19**	**12**	**15**	**18**	**26**	**10**	**100**
France	**15**	**9**	**13**	**18**	**30**	**15**	**100**
Italy	**46**	**20**	**15**	**9**	**7**	**3**	**100**
Spain	**51**	**19**	**15**	**9**	**5**	**1**	**100**

Source: Eurostat, Farm structures, 2001 Survey (p. 246-7)

Although large holdings are few in number, their contribution to the development of economy is significant. In the 12 Member States of the Community, farms of 20 ha are only one-fifth of the total number of farms, but they have three-quarters of the agricultural land. In economic dimensions 17% of the holdings are of a size over 16 ESU, but this is 73% of the total amount of arable land in the Community, measured in ESU. These holdings are concentrated mainly in the countries of Northwestern Europe. The share of the large holdings in the total volume realized agricultural production is probably larger, as small farms earmark a relatively large part of their production for domestic consumption and animal feed.

Figure 1 illustrates distribution of labour force in the seven countries of the Community. In the United Kingdom employed workers are one third of the total number of workers. An important factor are also in other countries such as Denmark, the Netherlands, and France (mostly Northern France). The general trend, however, indicates that the members of the family farms still represent a major part of the labour force in the agricultural sector. In Spain and Italy hired workers are a relatively small number.

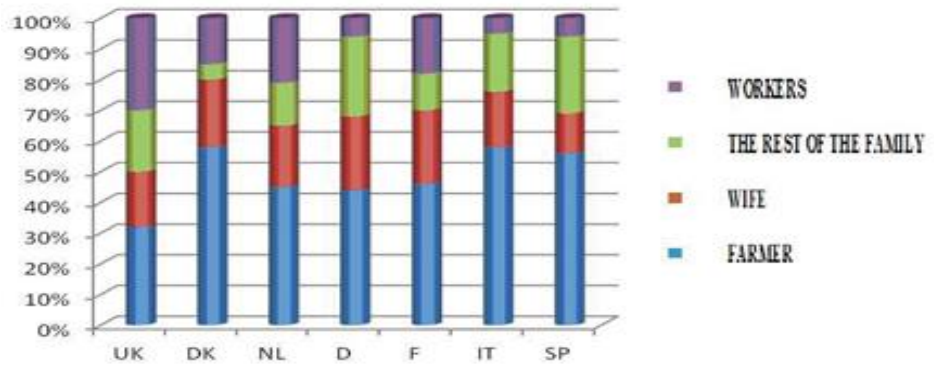

Figure 1. Distribution of labour force in the farms (%)
Source: Commission, The Agricultural Situation in the Community – 1991 Report

The submitted data outlines the necessity of relatively large, market-oriented agricultural organizations in the countries of Northwestern Europe. However, in most cases, family holdings play this role: they attract significant capital funds, employ workers and provide the main part of the consumption of agricultural production. In most countries of Southern Europe, and in some underdeveloped areas in Northwestern Europe, a large number of small farms, which are failing to develop their capacity (and sometimes work sporadically , i.e. through temporary employment) still remains.

Comparison on the basis of the criterion "market orientation" shows that there is a division between east-west and north-south. In the seven new members most farms produce mainly for their own consumption. These are Slovakia, in which in 2007, 93% of the holdings produced mainly for their own consumption, Hungary (83%), Romania (81%), Latvia (72%), Bulgaria (70%) and Slovenia (61%). Although that SSF prevail in number, they manage the smaller part of the Utilised agricultural area (UAA). Only in three countries in the EU-15, namely Italy, Greece and Portugal, the holdings, which mainly produce for their own consumption, play an important role in the overall structure of the holdings. Importance of SF and SSF in most countries is decreasing. Between 2005 and 2007 the most rapid structural change was reported in Estonia, where the share of SSF in the total number of farms decreased by 17% and in Slovenia, in which the share of the agricultural area of SSF was reduced by 10%.

Due to the differences in defining the concept of "holding", however, the separate Member States include different size farms, characterised as SSF, due to which it is impossible to be made comparisons regarding their number. Moreover, the statistics of the EU does not use the term "Semi-subsistence farm", but may make conclusions on the basis of the data for agricultural holdings with size less than 5 ha. They show that in 2005 there was the most significant number of farms with similar sizes in Italy - 923,000, Romania - 850,000, Greece - 480,000, Spain - 457,000, Poland - 357,000, France - 108 000, Bulgaria - 95,000. Each member state of the EU has holdings of these sizes(7).

Eurostat data does not provide a detailed picture of SSF. Therefore, the number of researchers in the semi-subsistence farms refer to the results of the project SCARLED [(16)]. Through this project 1 102 agricultural households were researched in five new Member States and the condition of these households in 2006 was also registered. The data in **Table 2** is representative for the research.

The basic characteristic of the SSF, which is apparent from Table 2, is the small share of the sales of their products on the market. The small size of SSF- in the greater part of the surveyed countries the average size of holdings of less than 5 ha is also confirmed. The leading persons in the households are at preretirement age, manage small farms, but they spare most part of the work time on farm activities. These facts give the opportunity to claim that holdings are characterized by low productivity of labour.

Table 2. *Characteristics of SF and SSF according to the SCARLED project*

	Bulgaria	**Hungary**	**Poland**	**Romania**	**Slovenia**
Share of SF/SSF in the sample of the country (%)	57.8	34.1	34.2	75.4	32.1
For these SF/SSF: Share of the marketed production (%)	19.6	12.0	26.6	25.5	16.6
Share of the individual production in the total consumption of food (%)	50.2	40.3	43.3	59.1	42.6
Total arable land (ha)	2.7	4.1	5.6	3.2	6.5
Average income per capita (according purchasing power parity in €)					
Excluding the value of the products produced in the subsistence farming	4060	7609	5884	4460	8836
Including the value of the products produced in the subsistence farming	6623	8694	9018	6701	11186
Age of the household head	54.8	55.3	52	58.1	55.3
Percentage of the time spent by the head of the household in the farming (%)	74.4	68.2	67.5	79.8	70.2

Source: Database of SCARLED (4) project, sample of 1102 farmer households

A comparison of the holdings by the criterion "*economic size*" can be done by using data from agricultural census of Eurostat in 2007 we speak to the number of holdings below 8 ESU. In the EU-27 is there are 11.1 million small farms as of them 6.4 million have been below 1 ESU and are therefore considered SF, and the other 4.7 million are SSF. Or the percentage ratio between them shows a higher proportion of SF (46.6%) of the total number of agricultural holdings.

In the new Member States are obtained similar results for cases of SF, SSF and small farms, whether used the criterion economic size or the criterion market orientation, namely, that SF and SSF are prevalent in the total number of holdings. An important trend in some countries is the reduction in the share of SF (less than 1 ESU) and the increase in the share of SSF (between 1 and 8 ESU). This is typical of Estonia, Slovakia, Cyprus, the Czech Republic. This positive trend can contribute to ensuring the greater monetary income of rural households and therefore to the growth of economy in the rural areas. With common features are farms in Bulgaria, the Czech Republic and Slovakia, where SF and SSF manage small share of Utilised agricultural area (UAE), but represent a large percentage of the total number of holdings.

As an essential feature of semi-subsistence farms is that a substantial part of the output is not for sale, thus scientific literature is looking for an explanation of the reasons for the weak market orientation. The authors cite several reasons, among which transaction costs, failure to comply with the agricultural standards and intangible benefits of consumption of food, produced in their own farm. In the new member countries, and especially in the poor ones, the fourth argument is added, namely, that households do not sell their products as they depend on them to satisfy their own needs of consumption of food, and not only because they do not have enough funds, but also because there are small alternative sources of supply of fresh products in the isolated rural communities.

Transaction costs are related to the search for potential partners, the collection of information for the prices, the cost of negotiation, conclusion and implementation of the treaties. They are calculated also due to the remoteness of the market and the high transport costs. In general, transaction costs decrease the prices received by farmers in the sale of their production and increase real prices paid on the purchase of raw materials, in which the difference in prices does not encourage farmers to sell on the market or to buy raw materials from outside. Moreover, the transaction costs in the purchase of raw materials from a number of small producers are significantly higher for the buyers in comparison with the situation, where there is a small number

of large suppliers (Swinnen, (16). That is why co-operation between small holdings is of particular importance for the improvement of their access to the market. Promotion of market orientation should be directed to policies to reduce transaction costs by transport costs reduction and co-operation promotion. Regardless of the role of co-operation, however, in most areas, and in particular, in the new member countries, there is little desire for association of SF and SSF.

Agricultural standards are also reported as a barrier to market orientation of the holdings. They can be applied for: quality (for example organoleptic characteristics, appearance), safety, authenticity and the production process (e.g. organic production) (Reardon, (15)). Usually public authorities determine and introduce such standards, but due to the more and more massive introduction of supermarkets, the market for the products without certificates is hard to be found, and in certain cases it completely disappears.

Third argument that explains the low level of market orientation is that some producers may receive satisfaction (intangible benefits) from cultivation and consumption of their own products. As already indicated in the United Kingdom this is often associated with "hobby farms". Although that they are hard to be differed and examined, the "hobby farms" play an important role for the connection between urban and rural areas, as they are mostly related to urban employment and travelling to work. Their presence is associated with benefits to the environment, since their purposes are oriented more to the way of life, rather than to the derivation of economic benefits.

As a result of the analysis of barriers to market orientation, one may conclude that the listed reasons, decreasing the commercialisation of holdings, do not include all that exist in practice. A similar analysis, however, cannot give a detailed presentation of all the barriers to the market focus of the holdings, since agricultural households are by nature heterogeneous. So, for example, some SSF are already well-integrated in the markets, others are very weak and sporadically presented on the market. On the other hand, a number of authors emphasize that as long as many of these holdings continue to deal with farming out of necessity, others like rural way of life (Davidova, etc., (3).

3. Typological groups (clusters) of SF and SSF

In order to bring small farms into groups according to certain characteristics, some authors are trying to evict typologies of SF and SSF and classify them in homogeneous groups (clusters). Normally, indicators such as: characteristics of the farmers, the assets of the holdings, the presence of non-agricultural income, and the attitude of agricultural producers to the holding, diversification and the suspension of agricultural activity, are used.

Hawkins, E., Bryden, J., Gilliatt, N., etc. (6) defined three types of models for the adjustment of agricultural households in Western Europe:

- *Engagement* in agriculture;
- *Withdrawal*-including in extreme cases a complete suspension of the agricultural activity;
- *Stability*.

Although that larger holdings continue to follow the model of engagement in agriculture, smaller ones tend to withdraw. In a sample of the study 6,000 households in 24 areas in 12 countries of the EU were included there. The average size of holdings, which are characterized by involvement in agriculture, is 18 ESU or 48 ha, while the amount of holdings, which are withdrawn from agriculture, is respectively 7.7 and 13 ha. "Stable" households are with sizes between these two limits. Authors identify three typical characteristics of the holdings, which are withdrawn from agriculture-leaving due to retirement, diversification of activities or closure of non-profitable farming. They also fear that the smallest holdings may be stable, simply because a further withdrawal would lead to a complete termination of the agricultural activity for them. Usually the agricultural activity in the smallest farms is the basis of their existence and a withdrawal is not applicable.

An important distinctive characteristic of the holdings is the degree of their pluriactivity and diversification. Hawkins, E., Bryden, J., Gilliatt, N., etc. (6) established that tourism as a form of diversification is more typical of large holdings, since it requires developed agricultural resources. When pluriactiviy is present, work outside the holding is undertaken primarily by

contractors in the smaller holdings. Level, however, depends primarily on external conditions, namely the development of economy in rural areas and infrastructure, the availability of jobs in the non-farming sectors.

One of the countries of the EU-15, in which semi-subsistence farms are important, is Greece. Daskalopoulou and Petrou (2) prepared typology for the Greek holdings, focusing on their models for survival and adjustment. On this basis they identify three basic types of agricultural households-subsistence, surviving and producing. The distinction in the groups shall be carried out according to the level of employment in non-agricultural sectors, the taken on lease land, workers and the degree of mechanization. In that study subsistence holdings are small (less than 1 ha), renting small land or leased workers and having a low degree of mechanization. They produce either for their own consumption, or for another product, for which in the framework of the Common Agricultural Policy have a certain quota. Prospects of these households, according to authors, are related to their suspending to deal with agriculture due to the fact that one-third of these households have non-agricultural income.

Surviving holdings range from small SSF with an area of 1 to 5 ha to farms with an area of 20 ha, and sometimes more. They are renting more land and have a higher degree of mechanization in comparison to the subsistence holdings, but their survival is based on a part-time work on the farm. Pluriactivity is an important characteristic of theirs. Not all households in this group, however, work part-time. Some generate their main income from farming and follow production strategy based on modernisation of the holding.

Producing agricultural holdings cultivate land of over 10 ha. They are much better integrated in the markets of factors of production, a large part of their land is leased and employ a lot of workers who are usually market-oriented. They are controlled mainly by full-time farmers.

There are other typologies of holdings, made on the basis of the different indicators. So, for example, Davidova, etc. (3) prepared characteristics of agricultural households on the basis of the results obtained in the SCARLED project, in five new member countries; these results refer to three regions in each country, or a total of 15 region. Authors define four types of agricultural households: *part-time holdings, subsistence holdings (small, SF and SSF), small market-oriented farms and large commercial farms*.

Part-time farmers have a higher level of paid employment outside agriculture; they are relatively younger and better educated. The areas they cultivate are relatively the smallest as compared to the remaining agricultural clusters (5.5 ha). Part-time farmers, however, are not homogeneous. A large part of them are typical SSF, but for one-third a subsistence farming is important for their survival. At the same time 10% of part-time farmers say that their household receives sufficient income to live comfortably, and 22% believe that the contribution of their own production to the welfare of the household is not important. These results, according to the authors of the study, indicate that among part-time farmers there is a sub-group of farmers, who consider agriculture a hobby. It is interesting to note that approximately one fifth of part-time farmers want to increase their employment in agriculture. It may be expected that, promoting them through measures and programmes, may lead to their commercialisation.

Small SF and SSF are regarded as farmers, who spend almost all of their time working on the farm, but as a whole manage small areas (about 7 ha) and, therefore, are characterized by low productivity. SF and SSF differ also in the advanced age of the proprietors (the average age being 57 years), the lower level of diversification of income compared to other types of farms and the smaller share of marketed production (approximately one-third). The study suggests that they are poor in terms of assets (only one-third of them have agricultural machinery) and depend on machines of other people or use mainly manual labour. The geographical remoteness of this group with a view to its location restricts the ability to find work outside agriculture. Therefore, profits are low and rely to a large degree on subsistence farming, which leads to greater impoverishment. The majority of SF and SSF regard subsistence farming as very important or crucial for survival. Thus, as a

whole, holdings of this kind need social policies aimed at reducing poverty in rural areas.

Small market-oriented farms are the most wide-spread type of agricultural holdings. The average size of the farm is 6.3 ha and the holdings are located in the close proximity to urban centres, but are engaged mainly in agriculture in terms of distribution of the time of the household head and the sources of income. These farm use the labour of the members of the household, but many of them have agricultural equipment and do not rely much on subsistence farming. Due to the fact that farmers are not so young, approximately one of every ten farms is looking for ways to transfer the holding to the next generation within the next five years. It appears that only a small part of farmers will take action to intensify farming or to increase the share of sales. Most of them intend to continue their current practices. The authors of the study indicate that some schemes and programmes for early retirement, which make it easy to transfer activities to the young agricultural producers, may prove to be appropriate measures for this group of holdings.

Large farms with market orientation (large is used in relative terms in reference to other economic clusters) manage an average of 30 ha. Generally, these agricultural producers are relatively young, have large assets in land and in agricultural machinery and their aim is to gain profit. They use consultancy and banking services. They are employed in agriculture, and one-third of households claim that they have ambitions to be engaged even more in agriculture in the future, and in this way they become close to the group of holdings, following the model of engagement in Western Europe. The various types of agricultural households have different relative importance in the five countries. For example, if in Bulgaria dominates the group of small SF/SSF, in Hungary, Poland and Slovenia the biggest group is that of the small producers with a commercial orientation **(Table 3).**

Table 3. *Share of clusters by countries (%)*

	Large **Market-oriented** **N= 68**	**Part-time farmers** **N= 283**	**Small** **Market-oriented** **N=418**	**Small** **Subsistence** **N=243**	**Total for the country**
Bulgaria	5.6	21.5	8.9	64.0	100
Hungary	12.7	33.3	52.7	1.2	100
Poland	2.5	29.6	50.8	17.1	100
Romania	4.0	29.5	39.8	26.7	100
Slovenia	10.9	26.8	60.7	1.6	100

Source: Davidova, etc. (3).

A similar cluster classification is built on the broad perspective of rural areas. Fritzsch, etc. (9) prepared typology of rural households in three new member countries of the European Union, and divided them in diversificators in rural areas, rural pensioners, farmers, agricultural producers and newcomers in the rural areas. As expected, diversificators in rural areas are distinguished by the highest share of non-agricultural sources of income. They have relatively high education. Rural pensioners are adults, manage small holdings and a large share of the members of the households are not at the active age for labour force. Agricultural producers manage the largest holdings and are mainly market-oriented. Newcomers in the rural areas are young, but with lower education and with very low income. They appear to have the greatest need of special assistance.

It is interesting to take into account the typology of farms[(14)], presented by Pl. Mishev, according to which agrarian production structures on a global scale are divided into three types:

1. Agribusiness structures - large, technologically advanced agricultural structures, whose activity is seen as an alternative for investment, and their

production is entirely market-oriented. This kind of structures occurs mainly in countries with good conditions for the implementation of agricultural activity and liberal agriculture policy such as Brazil, Argentina, etc.

2. Farmer type structures - built on the family principle production structures, which combine in themselves market-oriented structures with life close to nature, typical of countries with agrarian policy of protection.
3. Structures of rural type- characteristic of developing countries and connected with the idea of household nourishment and the sale of part of the output on the market. Although they mark a less-developed economy and society, they are the product of agricultural policy, which empts of them income and resources.

The examined typologies show that, in the EU-15 and in the new Member States many of the SF and SSF are small and are managed primarily by older farmers who either have no desire to change, or intend to abandon the agricultural activity. However, there is a small group of young and better-educated subsistence and semi-subsistence farmers who seek to develop their business in the field of agriculture, or in other spheres. There is also a group in which there is a tendency to rely to a large extent on pluriactivity to increase the income of the household. Is clear that if SF and SSF want to survive, they have to rely less on income from agriculture and to combine agricultural activity with diversification or activity outside agriculture.

Achievement of the objectives can be implemented only through the development of rural areas, aiming to increase the attractiveness of rural areas for agricultural entrepreneurs and the growth of employment opportunities.

The correct selection of indicators for the cluster analysis and the accurate typing of the holdings is important for creating the appropriate effects on the national agrarian policies and those of the EU. So, for example, if some of the holdings need mainly social measures, related to the reduction of poverty, others need financial mechanisms for their commercialism.

1. Socioeconomic role of SSF

As we refer to the existing literature, semi-subsistence farming plays three major roles in the development of agriculture and rural development:

- •acts as a buffer against poverty;
- •occurs as the basis for diversification and multifunctionality of holdings;
- •and provides benefits to the environment.

Kostov and Lingard (10) argue that subsistent farming acts as a buffer against extreme poverty through the provision of minimum quantities of food and income. This agriculture is the most important in areas with weak or missing social security networks, high urban unemployment, weak development of non-agricultural sector in rural areas and deep economic changes, which were observed in Central and Eastern Europe in the 90s of the 20th century. In this way subsistence farming provides "though low, insurance against economic risks".

Recent empirical evidence confirms that semi-subsistence farming acts as both a buffer and an insurance network for rural households, which are satisfied with low income and limited employment outside agriculture (Fredriksson, etc., (5). The picture of the contribution of subsistence farming to the total income of the households, surveyed in the SCARLED project, can be seen in **Table 4**. The value of production for self-sufficiency is added to the real financial flows of the households, in order to confirm the contribution of that "income in kind" for household income and to improve the situation of poverty[3].

As expected the contribution of subsistence farming is higher in households which are below the poverty threshold. For example, in Romania subsistence farms are essential for the survival of the poor rural households. Of the total income of these households the predominant share of 58.5% is paid "in kind". Regardless of the crucial importance of subsistent farming for the income of the poor in Romania, such production plays the greatest role in the reduction of poverty in Bulgaria because in the evaluating of production for self-sufficiency, the highest percentage of households overcomes the poverty threshold.

[3] Thresholds of poverty in 2006 (the year the study refers to) are determined as follows: Bulgaria-1022 euros; Hungary-2308 euros; Poland-1867 euros; Romania-828 euros and Slovenia-5589 euros. (Equal to 60% of the national average income).

Despite its importance to the reduction of poverty, subsistence economy may not eliminate it completely. In addition, data for Romania shows that the poor are those who live in rural areas and are unemployed or have no access to land.

Table 4. *Share of the contribution of subsistence farming to the household income (%)*

	Households, whose income is below the threshold of poverty	**Households, whose total income is above the threshold of poverty**	**Average numbers for the country**	**Households, overcoming the threshold of poverty due to an assessment of subsistence farming**
Bulgaria	41.7	24.5	29.0	17.1
Hungary	19.2	5.7	7.6	3.5
Poland	39.0	22.7	24.2	7.4
Romania	58.5	31.5	32.9	2.8
Slovenia	23.1	9.0	12.5	8.4

[1.]

Source: Davidova, etc. (2009), collected data on SCARLED project

SF and SSF have importance also for the diversification and pluriactivity of holdings. There are several types of diversification, related to agricultural production. The first of these is the agricultural diversification, in which the focus on employment shall be retained in the field of agriculture. It includes production of non-conventional products, the development of forestry activities and the provision of agricultural services under contract. The second type, the so-called structural diversification, is based on the use of the assets of the farm for non-agricultural activities, such as added value by processing of agricultural raw materials or agrotourism.

Larsen (11) considers that semi-subsistence agriculture is a good basis for diversification and growth of non-agricultural economy in rural areas. According to the author, the characteristics of semi-subsistence agriculture (local food production, short supply chains, great biological diversity and the rich cultural heritage) provide valuable opportunities for the creation of greater added value, and the alternative enterprises in rural areas in agrotourism and culinary specialities. As a result of this, the author concludes that semi-subsistence agriculture is to be used as a source of development of rural areas.

Some French researchers present three strategies for small farms in the EU-15, following the example of diversification of the "small" French holdings (up to 40 ESU). The first strategy is related to the development of rural tourism, which provides good prospects not only for the accommodation business, but also for the retail trade and crafts. The second strategy includes the provision of organic products with great value and the use of different labels for designation; the third strategy consists in developing pluriactivity in the field of agriculture and the non-agricultural sectors. Sometimes income from activities outside agriculture is invested in it, and this helps for the revival of the holding.

In the new member countries economic growth after the accession stimulates diversification and pluriactivity. One of the important characteristics of agriculture in Poland after the accession for example is that small and medium-sized farms rely less on agriculture as a main source of income and pluriactivity increases, especially in the form of receiving income from agriculture and from paid employment (Davidova, etc., (5). Importance of paid work has declined as a main source of income for only the smallest farms with an area of 0-1 ha. These small farms are also the only group on the basis of the criterion physical size, whose total income have diminished after accession.

As it was already mentioned, diversification or by pluriactivity, (such as entering the paid work outside the holding), and/or through diversification of activities, such as development of tourism or the entertainment business both on

the farm and out of it), may be the strategy for the survival of small farms. Data from studies in European countries shows that the likelihood for diversification depends on several factors. In the major holdings the head of the household is less likely to accept employment outside the holding, since such holdings are more likely to provide full employment. Holdings on lease are less likely to seek diversify in the activities because of the limitations, inscribed in the lease contracts.

Distant farms are said to provide less diversification of business or employment, which is predetermined by the fact that sparsely populated areas with low purchasing power of the population provide less opportunities for business and employment. Often there is a gap between those who most strongly need diversification (small, distant farms), and those who have the necessary human and financial capital for successful diversification. Agricultural policy also influences the susceptibility of agricultural producers to diversify. Interesting is the conclusion of Chaplin, etc. ((5), who determine that the implementation of the measures in Pillar 1, including direct payments, reduces susceptibility to diversification. The reason is that most farmers adopt diversification as a means of obtaining permanent and higher income. The "strong" first pillar may therefore inhibit absorption of some of the measures in Pillar 2.

A detailed study of the Organization for Economic Cooperation and Development (OECD) of the literature concerning the relationship between the characteristics of the farm and the impact on the environment, led, however, to a few clear conclusions (OECD, 2005). The link between intensive production methods, typically used by larger commercial farms, and the loss of biodiversity, is established. However, larger farms appear to be more willing to undertake activities related to the conservation of the environment, more often take such practices and are more involved in agri-environmental schemes. In addition, characteristics of the place (for example, the structure of the soil, moisture level) and the personal characteristics of the farmer are often more important than the characteristic of the holding. The production structure of the holding (e.g. plant-growing or stock-breeding) is also an important determinant of the type and nature of the impact on the environment.

However, many SF and SSF, which bear important environmental benefits, are too small to be eligible for support not only in Pillar 1, but also in Pillar 2. A large part of these agricultural producers are not registered and therefore are not currently covered by some policy tools. Thematic study in Romania stresses that 1.9 million holdings below 1 ha have no access to the agri-environmental measures.

As a whole, however, even these agricultural producers who are ineligible for assistance, provide through their activities positive external effects. This is a serious problem that can be overcome, if rural development policy covers also small producers, who can be compensated for public goods and care for the environment.

2. Influence of CAP on the development of SSF

The CAP and the national policies have much broader objectives in support of small farms, and in particular to the SSF. Policies, which may assist economically small farms, are divided into three groups depending on their purposes: diversification, suspension of agricultural activity, and restructuring. A large part of the policies of the last group are intended to help agricultural producers to reach critical size to become economically viable. Other policies could also have a direct or indirect relation to small agricultural producers. Their focus may vary from support in management of the land and in the provision of public goods to investments in public infrastructure, enhancing the quality of life and the opportunities for economic development of communities in rural areas, including small agricultural producers.

The rural development policy of the EU for the period 2007-2013 offers a wide range of measures to support, many of which can be used for the purposes of restructuring/diversification or for the provision of some public support of SSF, which deliver public goods. Most of the measures are not directly aimed at SSF, but affect through their indirect effects. Below are the measures of each of the three strategic axes of this Rural Development Policy Framework,

which have any (direct or indirect) effects on SSF.

On axis 1: Improving the competitiveness of the agricultural and forestry sector - the following measures can be pointed out:

· vocational training (Measure 111)

· establishment of young farmers' holdings (Measure 112)

· early retirement (Measure 113)

· advisory services (Measure 114)

· modernization of farms (Measure121)

· infrastructure in the agriculture and forestry holdings (Measure 125)

· implementation of the standards of the Community (Measure 131)

· participation in schemes for the quality of food (Measure 132)

Transitional measures, valid only for the new Member States of the EU-12:

· support for semi-subsistence farms in the process of restructuring (Measure 141)

· establishment of producer organizations (Measure 142)

· provision of advice and consultation in agriculture in Bulgaria/Romania (2007-09) (Measure 143)

On axis 2: The following measures for the improvement of the environment and the management of the land, applicable to SSF, may be given:

· payments for disadvantaged areas in the mountain regions (Measure 211) and other disadvantaged areas (Measure 212)

· payments under the Natura 2000 programme

· agri-environmental payments (Measure 214)

On axis 3: Quality of life in rural areas and diversification of the rural economy - the following measures for SSF can be outlined:

· diversification towards non-agricultural activities (Measure 311)

· support for the establishment and development of micro-businesses (Measure 312)

· promotion of tourism activities (Measure 313)

· basic services (Measure 321)

· renovation of villages (Measure 322)

Support for the provision of access to consulting services and training on axis 1 can be implemented by important initial steps, to help the SSF to understand what opportunities they have and to participate in the programmes to support rural development, such as assistance in the preparation of applications for aid and the business plans for projects for diversification. In addition to the specific measures for semi-subsistence farms in the process of restructuring (Measure 141-viewed in more details below) it is possible to provide additional support for the restructuring and modernisation in Measure 121 or to the diversification of agricultural activities or the establishment of micro-businesses (for example small-scale tourism, local craft production) on axis 3. Under certain conditions aid in the early retirement (Measure 113) and/or under the measure for the establishment of holdings of the young farmers (Measure 112) can help in the process of restructuring, and facilitate transfer of the land and the suspension of the activity of the older farmers. Assistance for the establishment of groups of producers in the new Member States (Measure 142) may be a means by which to help the SSF to overcome difficulties that are in the assessment of the markets. Aid can be used also to facilitate access to credit, which could be a huge barrier for SSF (for example in the Romanian Rural development programme a scheme ensuring credits has recently been added).

When SSF can meet the requirements for the minimum size, set in the rural development programmes of the Member States and required in the scheme of payments in the disadvantaged areas (Measure 211 and Measure 212) or in agri-environmental payments (Measure 214) on axis 2, similar annual payments may be valuable source of income for the household. They play an important role for the maintenance of agricultural activity (which otherwise could be withheld) and for the continuation of traditional agricultural practices, creating public goods. In thematic study in Scotland data for the strong dependence of small farmers and stock-breeders on direct payments and payments in the disadvantaged areas.

Support on axis 3 for the improvement of the basic public infrastructure in rural communities (such as local roads, water supply and sewerage, the provision of broadband internet access), though not aimed directly at SSF, may be the main tool to reduce poverty and to overcome the

remoteness of rural areas, and to support the diversification and the efforts to restructure SSF.

To what extent the above opportunities for support are suitable for SSF depends on the process of programming and the development of national programmes for the development of rural areas: what measures will be included in the programme taking into account competing priorities and limited means, how will measures be (eligibility criteria, including the requirement of a minimum size, the preferences of a sector or geographical area or type of producer, criteria for the selection of projects, and coordination between the various measures of support, etc.) Decisions, regarding the mechanisms for implementation of the Rural Development Programme and the provision of supporting information and services to support the potential candidates, are also important factors. Issues such as the complexity of the procedures for application and the additionally required documentation; the tangible need for use of external consultants; the access to credit may prove to be barriers to all small agricultural producers to use aid in the development of rural areas. In the new Member States is even more difficult for the aid to be aimed specifically at NS and SSF due to the difficulty in identifying them since a large percentage of them are not registered.

A concrete example for compliance of the national programmes with the specific conditions of rural areas is the Rural Development Programme in Romania. It deliberately does not include measure for diversification (Measure 311), but only measures for the establishment and development of micro-businesses (Measure 312) and the promotion of tourism activities (Measure 313), for the entire population (and not only registered farmers), to meet the criteria for eligibility. Otherwise, the support would have to exclude the smallest farms, particularly SF and SSF. It was found that often the poorest sector of society in the rural areas has the greatest need of diversification and alternative actions.

When receiving direct payments on Pillar 1, the Member States determine the size of individual agricultural parcels and the total size of holdings. Before the Review of the condition, the minimum size of the agricultural plot of land was 0.3 ha; for the new Member States the minimum size of the entire farm was also 0.3 ha, although that states had the right to increase it by their decision to 1 ha. The Member States could also decide not to grant any assistance, if the total amount of payments is less than 100 euros.

After Verification of the condition, Art. 28, par. 1 of the Regulation of the Council on the establishment of common rules for direct support schemes in the framework of the CAP (EC No 73/2009) confirms that after 2010 the minimum amount of permissible size will be 1 ha or the minimum amount of the payments will be 100 euros, as the Member States have the right by their decision to adjust the thresholds, depending on the structure of their holdings.

In the new Member States there is a measure (Measure 141), which assists special semi-subsistence agricultural holdings in the process of restructuring. In the programming period 2007-2013 five Member States have transposed this measure in their Rural Development Programmes (Bulgaria, Latvia, Lithuania, Romania, and Hungary). Poland started the measure concerning SSF during the accession negotiations and followed it in the period 2004-2006. The purpose of the measure was "temporary income support to mitigate the problems with liquidity, and difficulties with income of households in parallel with the further restructuring and guarantee of the future market orientation of the holding". The measure was available only for the holdings of size between 2 and 4 ESU.

In **Table 5** the total number of holdings, assisted in Measure 141 for the period 2007-2013, as well as the expected results and the general public expenditure are described in detail. In all cases only a small part of semi-subsistence farms are expected to take advantage of this measure. This appears to be in accordance with the objective and the rules of the EU, according to which the aid should be directed to those SSF, really determined to restructure and to develop, instead of having social nature and supporting the income of all households in SSF. A comparison between the number of potential beneficiaries with the total number of farms with size between 1 and 8 ESU also shows that they will be reached between 2.7% and 19.7% of SSF. Other additional criteria, such as the maximum age, used in Bulgaria and Romania in

Measure 141, may further reduce the number of eligible holdings and to direct assistance where it can be the most effective. The funds of the measure and the access to application are particularly limited in Hungary. A key indicator of the outcome of the implementation of Measure 141, as described in the Rural development programmes, is the number of holdings, realizing sales on the markets. It varies in the different countries between 75% and 98% of the target number of assisted holdings. This is the approximate value of the expected effectiveness in the provision of aid in Measure 141: how many of each 100 assisted farmers will be able to restructure from semi-subsistence farms to completely market-oriented businesses.

Table 5. *Target number of farms, supported in compliance with Measure 141*

	Target number of supported farms	**Result: expected number of farms which to be introduced on the market**	**Total costs (millions of euros)**	**Target number of supported farms as a part (%)of all farms in size between 1 and 8 ESU in the country (2007)**
Bulgaria	21000	16800	144	19.7
Hungary	3000	2500	16	2.7
Latvia	2667	2000	19	6.9
Lithuania	3650	3000	30	4.7
Romania	76172	60938	476	9.0

Access barriers of SSF to the Rural Development Programmes refer not only to formal requirements, but also to the other group of factors related to inherent characteristics of these holdings, namely: 1) difficulty in reaching subsistence producers, since a large part of them are not registered; 2) excessive transaction costs, which impede the reaching of a large number of SSF (respectively the administration frequently processes and controls a large number of applications for small funds); 3) difficulties in the implementation of policies, which promote formal cooperation between SSF, due to the unwillingness of agriculture business producers to co-operate; 4) advanced age and low educational level of many farmers in the SSF.

CONCLUSION

The role and the future viability of small farms remains an important issue for rural areas in Europe. The debate about SF and SSF is hindered by the lack of universally accepted definitions of subsistence and semi-subsistence farming. This is important for the policy, as the number of holdings, which are classified as SF and SSF, and thus the share of the managed land and the labour force they use, depend on many of the accepted definitions. The definitions, used so far, can be divided into several categories: physical size, economic size and market orientation.

Typologies of holdings show that, although it is set in a different way, a large part of SSF are small, controlled by older farmers, who do not want to be changed or have an intention to suspend agricultural activities. However, there is another category of SSF managed by younger and better educated producers with desire and motivation to expand their business, no matter whether in agriculture or in other sectors.

Finally, one common conclusion for the lack of common respect to SF and SSF may be provided. On the one hand, they are perceived as unwanted element, impeding the competitiveness of national agriculture. On the other hand, however, the role of SF and SSF in the provision of environmental and cultural goods, which can be a good basis for diversification, in the field of rural tourism for example, is recognized. From this point of view SF and SSF can contribute to pristine rural development.

These small farms are essential for a number of reasons. Their number gradually decreases. But

they are homes of over 9 million households, which form a large part of rural communities in many of the receiving regions. They offer a single or main source of nourishment for these families. Small farmers manage significant areas of land, for example 63% of the Utilised agricultural land in Romania. They contribute to the supply of food and to the local and national economy. Part of this contribution falls in the gray economy, but informal food supplies can support not only agricultural families, but also their neighbors and their enlarged families, including those that have moved to the cities. Traditional farming helps to maintain the landscape and biodiversity habitats with high values of nature. So, those who live in these farms should be viewed not only as agricultural producers (or at least as producers of food products), but also as actual or potential entrepreneurs, important managers of land in the EU, and rural residents, whose quality of life is an impetus for the development of rural areas.

This represents a significant policy challenge. The young members of many family holdings look out to cities or even to other countries, about their education, jobs and prospects for the future.

Migration, however, weakens rural communities and may lead to a vicious circle, which reduces population and this leads to a loss of services, which further weakens economy and society. The loss of the economic and social vitality can lead to extinction of the agricultural activity.

This cycle of decline depends on actions for improvement of the economy of agricultural holdings by adding value to agricultural products, by financing the farmers for the protection of ecosystems and the landscape, which depend on traditional agricultural practices, by promoting the diversified sources of income, such as tourism or others and by maintaining and strengthening the social infrastructure.

As a whole an integrated approach in the framework of the Rural development programmes, achieving social stability, economic viability and quality of the environment is needed.

Small farms may be considered a social, ecological and economic asset, since they are homes and sources of livelihood for millions of people, provide maintenance of valuable landscape and ecosystems and have an input in the supply of food for local and national economies. Flexible use of measures on all the axes of the European Agricultural Fund for Rural Development can help for the survival of the traditional agricultural communities, in which some holdings to become competitive, and the others to act as alternative sources of income. In all cases, the survival and support of SSF leads to improvement of the quality of life of communities in rural areas, for whom traditional farming is a way of living.

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