

## Opportunities for Other Gainful Activities in Small and Very Small Farms

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**Abstract.** In general terms, development of other income-generating activities at farm level may be defined as the utilization of farm resources for a non-agricultural objective, in order to obtain a certain marketable production. Diversification towards other income-generating activities reflects a reduced dependence of the farmer on agriculture, as its sole income source. As well, diversification involves some type of entrepreneurship activity for the benefit of the farmer. The paper aims to assess the orientation of the Romanian smallholders towards agricultural diversification and the relationship between farm size and involvement in diversification. The objectives of the study is to identify the international approach in defining the small and very small farms and to assess the implication of this segment in diversification, but also to make a delineation of other income generating activities compared to other potential activities that might be developed at farm level. The results confirms that diversification is significantly more common in larger farms, sized over 20 hectares, more likely to have the resources, flexibility and perhaps entrepreneurial management, enabling them to explore opportunities for diversification. Holdings classified as small and very small, sized less than 2 hectares are part of the less diversified group, more oriented towards activities related to processing agricultural products, as compared with larger farms more oriented towards contract work.

**Keywords:** diversification, family work, income-generating activity, small-size farming.

### INTRODUCTION

In recent years small and very small farms have received increased attention in the political debates, recognizing the role they play in rural areas and the need to improve their economic and social conditions in times of structural change of the agricultural sector towards fewer and larger farms (Brief AGRIL.2 – No.2, 2011). Diversification of activities on the farm is one of the options adopted by farmers to generate non-agricultural income for a farming household, representing a large opportunity for non-farm rural employment. Over the past few years, more than 12% of EU-27 family farmers carry out another gainful activity (European Commission, 2008). Though they are mainly small farmers looking for complementary income, they may also be animated by an entrepreneur's will for setting up diversification activities on their own farm. Farm diversification is understood as the creation of any gainful activities that do not comprise any farm work but are directly related to the holding (i.e. use its resources or products) and have an economic impact on the holding. As, on average, diversified holdings occupy more people than the non-diversified ones, the impact on employment and income by setting up of diversification activities on farm level should be more encouraged via rural development programs (Bachev, 2012). As well, it is assumed that investment of non-agricultural farm income in inputs for developing farm agricultural activities may lead also to an increase in farm productivity. The present study analyzes the existence of other gainful activities at farm level and the share of the diversified farms in total Romanian farms, but also the distribution of the farms developing other gainful activities, by size classes of utilized agricultural area.

## MATERIALS AND METHODS

Agriculture in Romania is characterized by smallholders cultivating small plots of land. The main type of farm is small peasant holding less than 2 hectares (74% of total family farms), with an average size of 0.63 hectares and a share of 23% of the utilized agricultural area of the country. Family farms sized less than 1 hectare and also high fragmented (not eligible for being financed from EU agricultural budget) amounts 54.2% of total agricultural holdings and operates 9.5% of total UAA, mostly kitchen gardens and pastures and meadows. The holdings sized 1-2 hectares (19.1 %) operates 13.5% of total UUA of the country.

For being possible to assess the implication of small and very small farms in other gainful activities, it is necessary to identify the segment of holdings that could be defined “small and very small farms”. According to various international classifications, for the definition of the very small farms, the so-called marginal holdings, it might be taken into consideration the physical size farms up to 1 hectare, while farms sized from 1 to 2 hectares, could be considered as part of the small farms, irrespective of the ownership of the land (owned, leased, or other forms of ownership).

In order to assess the opportunities of other gainful activities in the small and very small Romanian farms, an extended research was carried aiming to identify the international approach in defining the small and very small farms, but also for marking the delineation of other gainful activities as compared to other potential income generating activities that might be developed at farm level, but not related to agriculture.

### Small and small farms - classification criteria

Over the past few years diversification of activities at farm level has been increasing and more than one third of EU-27 family farmers carry out now another gainful activity. However they are mainly small farmers (up to 5 ha) looking for complementary income (Krakowiak-Bal 2009). Some authors have argued that certain holdings are developing other gainful activities just to maintain their household income (Bowler *et al.*, 1996) and/or to pay for necessities (Bowler *et al.*, 1996). Kodithuwakku (1997) further argues that survival may not be the only reason for getting involved in other gainful activities and when households are attracted by new opportunities developing other gainful activities is an approach for matching opportunities with resources, which will ultimately result in wealth creation and accumulation.

Different criteria can be used to describe small farms. The definition of this concept can be approached from different angles. The most common measure is farm size: many sources define small farms as those with less than 2 hectares of crop land. Others describe small farms as those depending on household members for most of the labour or those with a subsistence orientation, where the primary aim of the farm is to produce the bulk of the household’s consumption of staple foods (Hazell *et al.*, 2007). A diversity of definitions of the conceptual term was approached internationally, such as:

- Lipton defined family farm as “operated units in which most labour and enterprise come from the farm family, which puts much of its working time into the farm” (2005);
- The World Bank’s Rural Strategy defines small holders as those with a low asset base, operating less than 2 hectares of cropland (World Bank, 2003);
- Dixon *et al.* defines smallholders as farmers with “limited resource endowments, relative to other farmers in the sector” (Dixon *et al.*, 2003);
- Narayanan and Gulati (2002) characterize a smallholder “as a farmer (crop or livestock) practicing a mix of commercial and subsistence production or either, where the family provides the majority of labour and the farm provides the principal source of income”.

- The European Union uses the concept of “professional” holding defined as a farm large enough to provide a main activity to the holder and an income level sufficient to meet the needs of his family. The issue related to the size of the agricultural units is an element of the “structural policy” and it is correlated with the potential of the farm for practicing an agriculture mainly marketed oriented. In the European Union, farm size is characterized by two indicators: (i) physical size in number of hectares of Utilized Agricultural Area (UAA) and (ii) economic size, expressed in number of European size units (ESU), with equivalent of EUR 1,200.

A small number of hectares of arable land has been mentioned as a suitable indicator to designate small-size farming in several FAO, IFAD and World Bank documents, even if it is often overlapped with other farm characteristics, such as the reliance on household members for most of the labour, a low asset base, more work units per hectare than large farms, etc. By applying this criterion, small farms are often defined as those farms having less than 2 or less than 5 hectares of UAA. The FAO Programme for the World Agricultural Census 2010 recommended the classification of agricultural holdings by 18 size class, according to "operated area". Starting from the particular classification approached by India, and for a clear evidence of the small and very small farms, there are particular recommendation to be used 11 classes for statistical research goals and five large cumulative classes more suitable for policy decisions in agriculture (Tab. 1).

Tab. 1

FAO recommendations on size classes for tabulation of data from agriculture census and their application in India

FAO recommendations	Classifications used in India	
	For statistical purposes	For policy purposes
<b>Holdings without land</b>		
<b>Holdings with land</b>		
<i>Less than 0.1 ha</i>	Less than 0.02 ha	<b>Marginal farms ( below 1 Ha)</b>
<i>0.1 – 0.19 ha</i>		
<i>0.2 – 0.49 ha</i>		
<i>0.5 – 0.99 ha</i>	0.02- 0.5	
<i>1 – 1.99 ha</i>	0.5- 1.0 ha	
<i>2 – 2.99 ha</i>	1-2 ha	<b>Small farms (1-2 ha)</b>
<i>3 – 3.99 ha</i>	2-3 ha	<b>Semi-medium farms (2-4 ha)</b>
<i>4 – 4.99 ha</i>	2-4 ha	
<i>5 – 9.99 ha</i>	4-5 ha	<b>Medium farms (4-10 Ha)</b>
<i>10 – 19.99 ha</i>	5-7.5 ha	
<i>20 – 49.99 ha</i>	7.5-10.0 ha	
<i>50 – 99 ha</i>	10-20.0 ha	<b>Large farms (over 10 ha)</b>
<i>100 – 199 ha</i>		
<i>200 – 499 ha</i>		
<i>500 – 999 ha</i>		
<i>1,000 – 2,499 ha</i>		
<i>2,500 ha and over</i>		

Source: Srivastava (2009)

Moving from physical to economic units of measurement, data availability represents a serious limitation for defining small farms according to their economic size. Since it will be

not possible to find an agreement on what is *small* if consistent data are not available for the EU-27 and given the lack of information on the revenue of the smallest farms, the only economic criterion which is utilisable is the economic size of the farm. The greatest advantage of using ESU as defining criterion for small farms lies in the fact that the economic size of farms can be compared across different farm types. A small economic size is closely related to concerns about a farm's ability to survive in the market and its need for special support measures. Applying the ESU criterion in relative terms has the added advantage of defining small farms in relation to all other farms in a Member State, thereby reflecting the particular situation in that country and identifying those farms which in relative terms are most disadvantaged.

Basically, an ESU is equivalent to approximately 1.5 hectares planted with wheat. According to this indicator farm size classification is done as follows: (i) very small farms: <4 ESU; (ii) small farms: 4-8 ESU; (iii) medium-sized farms: 8-16 ESU; (iv) large farms: 16-40 ESU; (v) large farms: > 40 ESU. Holdings exceeding certain thresholds of economic size farms are considered professional and enter the FADN field of survey. The other farms are considered unprofessional or leisure and are not RICA concerns. Minimum thresholds for the size of agricultural holdings are distinct for each EU Member State, reflecting the great diversity of agricultural structures encountered.

#### Other gainful activities - theoretical context

Other gainful activities of the holding comprise all activities other than farm work, directly related to the holding and having an economic impact on the holding. "Activities directly related to the holding" means activities where either the resources of the holding (area, buildings, machinery, etc.) or its products are used in the activity. If only the farm labour force (family and non-family) and no other resources of the holding are used, the workers are seen as working under two separate arrangements, and these other gainful activities are thus not seen as being directly related to the holding. Non-agricultural as well as agricultural work for other holdings is included. Gainful activities in this context mean active work; pure financial investments are therefore excluded. Renting out the land for diverse activities without being further involved in these activities is also excluded (European Commission, 2012).

The activities included under the category of „Other gainful activities”, refers to: (i) Tourism, accommodation and other leisure activities; (ii) Handicraft; (iii) Processing of farm products; (iv) Production of renewable energy; (v) Wood processing (e.g. sawing); (vi) Aquaculture; (vii) Contractual work (using production means of the holding); (viii) Agricultural (for other holdings); (ix) Non-agricultural; (x) Forestry; (xi) Other.

Non holding related activities and other type of income (income from employment, capital income and income from social transfers, etc.) are excluded.

Maintaining the land in good agricultural and environmental conditions on the own land is considered as the farm activity and therefore excluded from other gainful activities directly related to the holding.

Several other gainful activities directly related to the holding can be carried out on and by the same holding. A commercial activity not linked to any agricultural holding activity and localised on the holding is not another gainful activity of the holding (for example a hairdresser, an insurance company or if the farmer as a second activity is renting agricultural machinery that he does not use on his own holding, a shop where no own products are sold, hunting activities etc.).

Sale of the farm products directly to consumers is considered as the farm activity and therefore excluded from other gainful activities directly related to the holding unless the

processing of the product is taking place on the holding (for example milk sold directly to neighbours is excluded, since no processing is required).

The packaging of the products is excluded, except if it significantly increases the marketing possibilities (if it is not a standard marketing characteristics in the region).

Processing of farm products for self-consumption only or the sale of a possible surplus of such products is not included.

The information on other gainful activities should reflect the “standard” situation of the holding; therefore any occasional other gainful activities should be excluded.

In recent years, and in particular following the accession of Bulgaria and Romania to the European Union, small farms have received increased attention in the political debates. These debates quickly reached a point where a definition of 'small farms' is needed. However, the wide variation in farm structures across the EU-27 and the lack of consistent data for all Member States are amongst the main reasons why a commonly agreed definition of “small farms” does not exist.

## RESULTS AND DISCUSSIONS

Taking into consideration the FAO endeavours to classify the farms after physical size of the holdings, it comes out that at defining the very small farms, so-called marginal farms, there were taken into consideration the farms whose physical size was up to 1 hectare, while farms classified between 1-2 hectares, can be considered as part of the small farms group, irrespective of the ownership of the land (owned, leased, or other forms of ownership). This definition should be accompanied by the assumption that family work is the primary source of labour in the farm, and agriculture is the main source of income for the farm.

The analysis of the small and very small Romanian farms started from the assumptions foreseen in FAO recommended classification. As farm size increases, it occurs the phenomenon of diversification of activities in the farms, while small and very small farms (less than 2 hectares) are much less represented. Initiated diversification activities often consist in the extension of agricultural activity (contract work by utilising of farm equipment, processing of agricultural products).

Of the total registered holdings at General Agricultural Census (GAC) 2002 (4484893), only 299 901 family farms and 4900 legal units carried out agricultural income-generating activities, considered as diversification.

Family farms that were engaged in other income-generating agricultural activities represented 6.7% of the total number of farms and 31.7% of the total family farms which reported that the surplus obtained from farming activities is aimed for marketing.

The results indicate that 23% of the total family farms sized between 20-30 hectares and 20.3% of the total family farms sized between 30-100 hectares carried other gainful activities (Turtoi, 2011). Only 5.4% of family farms larger than 100 ha, reported diversification (Fig. 1).

Out of total farms with areas less than 1 hectare, classified as very small farms, only 3.5% family farms carried other gainful activities, and out of the total farms sized between 1-2 hectares (classified as small farms) only 7.1% family farms were engaged in other gainful activities. The rest of the family farms which were engaged in other gainful activity, covering all size classes from 2-20 hectares, represented 12.6% of total farms under these size classes. At country level only 6.7% of total farms were engaged in other gainful activities.

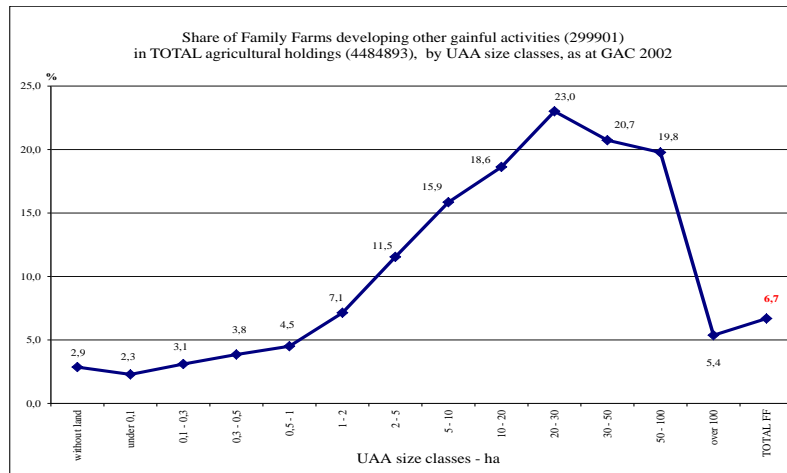


Fig. 1. Share of Family Farms developing other gainful activity in total number of farms, by UAA size classes

This leads us to assess that agriculture is still the only main source of farm income for more than 90% of family farms (Turtoi, 2013). Very small farms, up to 0.5 hectares, were less oriented towards developing other gainful activity, while the potential for developing other income generating activities increase with the increase of farm size (Fig. 2).

From the total number of Romanian family farms engaged in other gainful activities, 85% are sized up to 5 hectares. Farm size suggests that the probability of diversification is more pronounced in farms sized over 0.5 hectares showing greater orientation towards developing other income generating activities due to greater resources. Out of the total number of family farms developing other gainful activities (299901), 34.7% were found in the farms sized 2-5 hectares. As larger the family farm is, the interest for developing other gainful activities decreases (0.2% in farms sized over 50 hectares).

Legal entities that have developed income-generating agricultural activities represented 0.1% of total number of holdings, but 32% of the total legal entities who declared that the surplus obtained from farming activities is to be marketed (there are included both the ones that declared that the main destination of their production is for marketing and the ones that declared that they are producing only for marketing) (Turtoi, 2011).

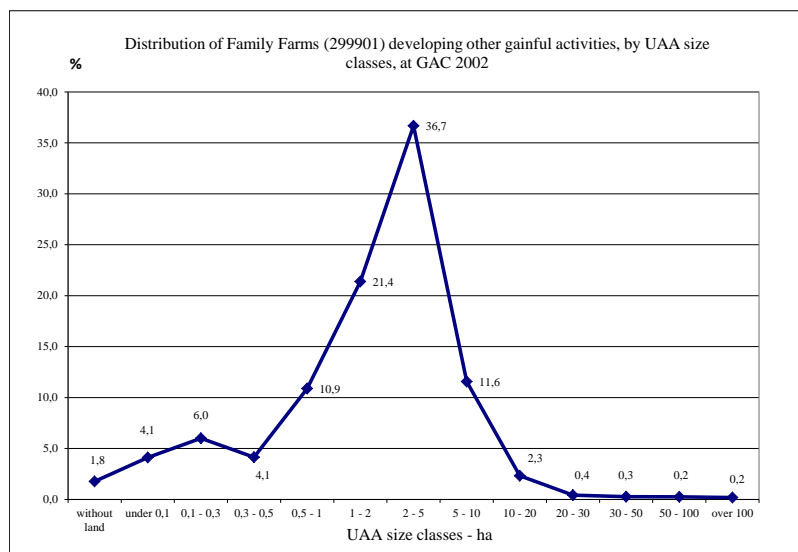


Fig. 2. Distribution of family farms engaged in other gainful activities, by UAA size classes

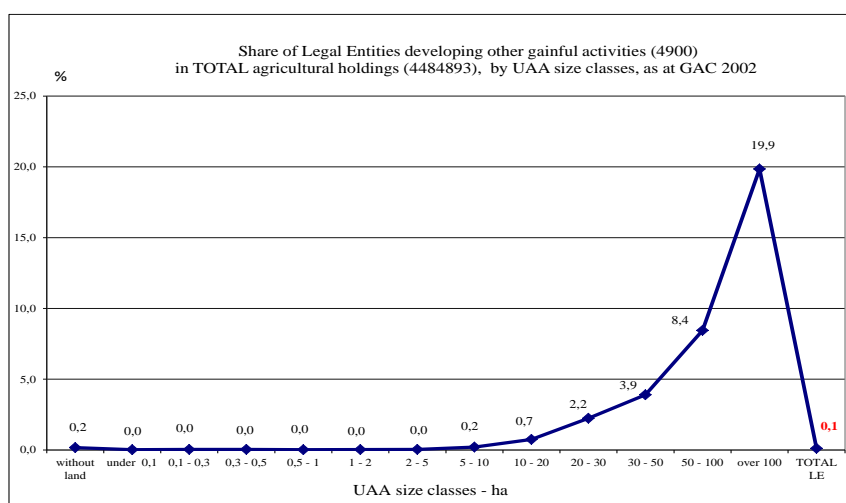


Fig. 3. Share of Legal Entities (LE), developing other gainful activities in TOTAL holdings, by UAA size classes

Legal entities sized over 100 ha and engaged in other gainful activities amounts 19.9.% of total holdings corresponding to this size class, while the ones having areas up to 10 hectares and that declared that they are engaged in other gainful activities amounts 0.05% of the legal entities under these size classes (Fig. 3; Fig. 4).

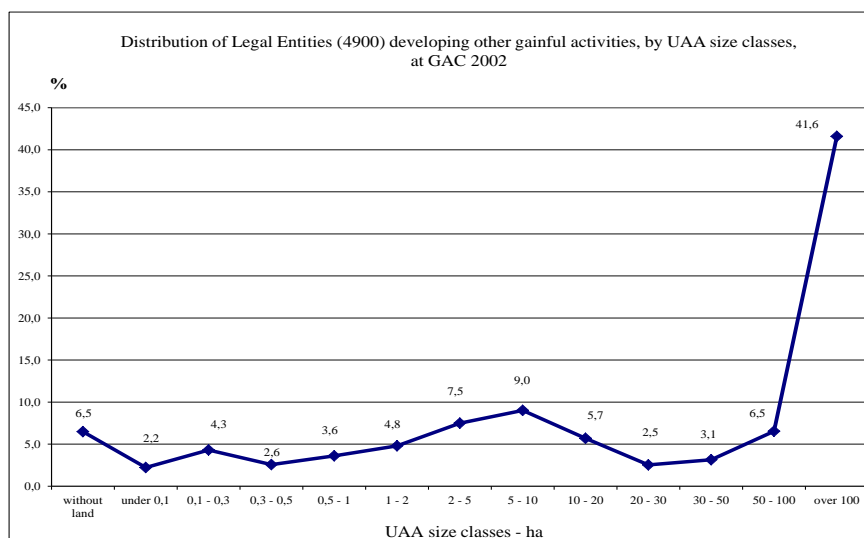


Fig. 4. Distribution of Legal Entities (LE), developing other gainful activities, by UAA size classes

In the situation of legal entities, farm size suggests that the probability of diversification is more pronounced in larger farms. Out of the total number of legal entities developing other gainful activities (4900), 41.6% were found in the agricultural units sized over 100 hectares.

Rest of legal entities carrying out other income generating activities are distributed relatively constant by size classes, indicating less interest for the small and very small farms to get engaged in other income generating activities. A small farm can be an indication with regard the limited resources for developing other income generating activities.

## CONCLUSION

In case that small and very small farms are defined on the basis of land use (irrespective of their ownership), or the number of animals, it is important to recognize the limitations of this measurement, given that this classification fails to properly account for (i) quality of resources, (ii) the types of crops grown, or (iii) disparities between regions. However, the farm definition based on the physical size does not allow analysis and comparison of institutional and market arrangements available to farmers, which play a crucial role in determining their income opportunities and their access to basic social services such as health and education. Moreover, the definition based upon the physical size of the farm does not allow highlighting work on the farm, such as contribution of waged labour and the non-paid labour, which may have also significant implications for the efficiency and productivity of the farm.

Both small and very small farms and, as well, larger farms were involved in diversification. Almost 50% of total farms engaged in other gainful activities are small and very small farms (General Agricultural Census, 2002). The highest percentage of the farms developing other gainful activities (85%), is found in the land size classes up to 5 hectares, indicating that they are mainly small farms looking for complementary activity, distributed as follows: 27% are very small farms (up to 1 hectare), 21% are small farms (1-2 hectares), 36% are slightly larger farms (2-5 hectares) and 16% are sized over 5 hectares.

Nevertheless the share of family farms engaged in other gainful activity in total number of farms amounts only 6.7% at country level, indicating that this opportunity is not enough explored by the small-size farming holdings. Given the particularities of the farm size, the study confirms that the share of farmers developing other gainful activities decreases with increasing of the farm size (General Agricultural Census, 2002).

The European Union has long been encouraging the development of other gainful activities for farming households. These have been mainly targeted at the development of diversification activities on farm. Diversification, being indirectly supported by measures encouraging participation in the labour market, contributes to the creation of new employment opportunities in rural areas, but also to viable alternatives for non-agricultural income.

However, sectorial macroeconomic policy instruments do not affect smaller farmers and larger farmers in the same measure. The large share of small and very small farms that do not have a commercial orientation requires the identification of the optimal policy to keep them viable, being recognized their social role in the harmonious development of rural areas.

Farm diversification can be a viable alternative to increasing the standard of living in rural areas, in terms of contribution to increase small and very small farmers' income and employment in rural areas.

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