

European Network for Rural Development

Semi-subsistence farming in Europe: Concepts and key issues



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**Background paper prepared for the seminar
*"Semi-subsistence farming in the EU: Current situation
and future prospects"***

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This background paper was commissioned for the European Network for Rural Development seminar entitled "Semi-subsistence farming (SSF) in the EU: Current situation and future prospects", in Sibiu, Romania, from the 21st – 23rd April 2010. The seminar seeks to assess the current situation and policies affecting SSF in the EU-27, together with an overview of the challenges, needs and prospects faced by SSFs and their role in relation to rural environment and society.

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GLOSSARY

Equivalised income per capita	Total household income divided by household equivalised size which assigns a value of 1 to the household head, 0.5 to each additional adult member and 0.3 to each child.
ESU	European Size Unit, represents the economic size of farms. (1 ESU=1200 € of Standard Gross Margin (SGM)).
Extensive agriculture	Extensive agriculture uses small amounts of labour and capital relative to the farmed land area. The crop yield in extensive agriculture depends primarily on the natural fertility of the soil, the terrain, the climate, and the availability of water.
Farm type	Eurostat classifies holdings according to their main source of income. A holding is considered 'specialised' if it earns more than two-thirds of its total income from a single type of production.
Intensive agriculture	Intensive agriculture requires large amounts of labour and capital relative to the farmed land area for the application of chemicals and purchase and maintenance of equipment.
Pluriactivity	Pluriactivity is generally defined as gaining an income from more than one economic activity.
Poverty line	The poverty line refers to the minimum level of income deemed necessary to achieve an adequate standard of living in a given country. Throughout this report, the poverty line refers to a threshold of 60 percent of median equivalised income in each country, which is the Eurostat at-the-risk-of-poverty threshold.
PPP	Purchasing Power Parity is a measure of the relative purchasing power of different countries' currencies over the same types of goods and services.
UAA	Utilised Agricultural Area includes arable land (including temporary pastures, fallow land, greenhouse crops, family gardens, etc.), the areas always under grass cover, and permanent crops (vineyards, orchards, etc).

EXECUTIVE SUMMARY

- a) Subsistence farms (SFs) and semi-subsistence farms (SSFs) are typically characterised as small, family run agricultural holdings, associated with production for own food needs and a low degree of market participation. However, there is no universally agreed definition of subsistence and semi-subsistence farming.
- b) Definitions of subsistence farming can be grouped according to three different criteria: *physical measures*, *economic size*, and *market participation*. The most commonly applied *physical measure* is that of utilised agricultural area (UAA). There is a broad consensus that small farms operate on an agricultural area of 5 ha or less. *Economic size* thresholds are widely applied for statistical and policy purposes within the EU, expressed in terms of European Size Units (ESU). For the EU Farm Structure Surveys (FSS), Eurostat classifies farms smaller than 1 ESU as “subsistence” and those of less than 8 ESU as small farms. On this basis farms between 1 and 8 ESU may be labelled as semi-subsistence. Academic studies often employ a measure of *market participation* to define subsistence farms. For example Wharton (1969) labels farms selling some but less than 50% of their output as semi-subsistence farms.
- c) The market participation approach has been adopted in Article 34 (1) of Council Regulation on Support for Rural Development by the European Agricultural Fund for Rural Development (EC No. 1698/2005), where semi-subsistence farms are defined as “agricultural holdings which produce primarily for their own consumption and also market a proportion of their output”. This definition deliberately avoided setting thresholds for consumption and sales, in order to allow individual Member States to adopt their own eligibility criteria in the Rural Development Programmes (RDPs) for support of semi-subsistence farms undergoing restructuring (Measure 141). This decision was taken largely because of the difficulties in establishing the proportion of produce sold by such farms. Individual Member States thresholds are widely based on economic size. For example, Bulgaria defined semi-subsistence farms as farms within the size band of 1-4 ESU, Lithuania 2-4 ESU and Romania 2-8 ESU. The number of holdings that are classified as SFs and SSFs is highly sensitive to the definitions used. Of particular debate is whether holdings of less than 1 ESU should be considered a ‘farm’ at all.
- d) Data for physical measures, economic size, and market participation criteria are considered. Overall, SFs and SSFs are more prevalent in the NMS, but variations between NMS and across EU-15 are significant. In six NMS (Bulgaria, Hungary, Latvia, Lithuania, Slovakia and Romania) farms below 8 ESU represented 95% or more of agricultural holdings in 2007. Applying the market participation criterion it is apparent that SSFs are of significance mainly in the NMS and some southern EU-15 MS, notably Italy. The physical measure of defining small farms as those with less than 5 ha, illustrates the enormous heterogeneity within the EU-27. Apart from some NMS, small farms, by the last measure, prevail in Italy, Greece, Portugal and Spain. However, in most of the EU-27 MS small farms are clearly specialised in intensive horticulture, and specialist pigs and poultry, and therefore some farm specialisations can be relatively large economic enterprises despite the limited size of the land area used.
- e) SFs and SSFs have been afforded three main roles in agriculture and rural development: as a buffer against poverty; as a basis for farm diversification, and as a provider of environmental and other non-trade benefits. Their role as a buffer is most pronounced in the NMS, particularly for farm households who live in relative poverty. The Romanian and Scottish case studies illustrate how SSF and small farms may provide environmental, cultural and community benefits.
- f) Patterns of development in both EU-15 and NMS-12 indicate that as growth occurs in the rest of the economy, engagement in SF and SSF declines. Evidence from Poland and Spain suggests that the reduction in overall farm numbers is biased to the smallest farms.

However, rises in agricultural policy support may preserve small farms, as occurred in Ireland post-accession to the EU.

- g) Adjustment patterns evidenced in the EU-15 show that if small farms are to survive, they need to decrease their reliance on farm incomes and combine their farming with diversification and/or off-farm activity. This, however, can only be achieved with rural and regional development that can improve the attractiveness of rural areas to non-farm industries and increase job opportunities.
- h) Policies to aid small farms, or more specifically defined SSFs, can be divided into three groups according to their objectives: diversification, exit and restructuring. Most policies in the latter group seek to aid farmers to reach a critical size and become economically viable. Evidence from EU-15 on policies to promote diversification suggests that their impact will depend on household factors (age, education, size) and location (poorer, sparsely populated areas offer fewer opportunities for diversification), as well as agricultural policy.
- i) The Hungarian case study illustrates that to date it has been difficult to reach SSFs not only through networking/cooperation initiatives but also through other RD measures. Few SSFs are experienced in producing business plans, a requirement for support under measure 141. But the major impediments often relate to farmers' attitudes; many are reluctant to register, a condition necessary to apply for support for certain aid schemes in some MS.
- j) On the positive side, the agri-environmental scheme in Romania has been successful. It focuses on HNV landscape areas where there were actors to benefit from public money, i.e. SFs and SSFs, and the application procedure was simplified as compared to the Sapard pre-accession scheme.
- k) One overarching reflection which emerged is that wider attitudes to SFs and SSFs can be inconsistent. On the one hand they are regarded as an unwanted feature that hinders the competitiveness of the nation's agriculture. On the other hand, SFs and SSFs are also perceived as suppliers of environmental goods and a cultural asset that can provide the basis for diversification into speciality foods and rural tourism. In the latter regard, SFs and SSFs may be integral to locally distinctive rural development. This ambivalence to SFs and SSFs has led to rather mixed policy signals. It also reflects a wider divide between those who embrace a productivist agenda, seeing the primary focus of policy being to enhance agricultural competitiveness and productivity, and those who place more focus on the role of farming for the provision of public goods and therefore policy should support integrated rural development.
- l) At the level of the RDPs it appears that a group of SSF who have the capacity to diversity or restructure are often identified, but that in practice there are many barriers to reaching these farmers and implementing policies to support them.

1. INTRODUCTION

The motivation behind the ENRD's consideration of this topic and this background paper, which raises some key issues for further debate, is two-fold. Firstly, the last two enlargements in 2004 and 2007 brought millions of small farms into the EU, most of which are either subsistence farms (SFs) or semi-subsistence farms (SSFs). Their integration with markets is low and their competitiveness has been questioned. On the other hand, they populate rural areas, often the most fragile and disadvantaged regions. They also maintain local rural communities and provide important social, cultural and environmental services (public goods). Consequently, the present situation and the effects of structural change on their survival or disappearance are of great significance for rural areas in the EU. Secondly, similar issues in a broader sense affect all small farms in the EU, which may or may not be SSFs, but are equally important for local communities, cultural heritage and the agri-environment.

In the recent (December, 2009) discussion paper "Why do we need a Common Agricultural Policy?", DG Agriculture and Rural Development (DG AGRI) argues that specific farming practices may not be competitive or may have lost their competitiveness but they have helped to generate features such as "the functioning of [an] ecological system, the scenic view of landscapes, and the related notion of cultural heritage" (EC, DG AGRI, December 2009:2). These features may increase the attractiveness of rural areas for business, residence and leisure. However, in order to deliver such public goods, suppliers must be present and not disappearing due to low competitiveness. Referring again to the discussion paper: "...public money for public goods can only be delivered where there is an agricultural presence to which this condition can be attached". Therefore, the current situation and future fortunes of SSFs and small family farms, which are the main farm structures in some rural regions, are central to rural development (RD) and associated policies in Europe. The other rationale is related to the continuing prevalence of small farms in most Member States (MS) in the EU-27, despite the fact that the process of farm restructuring and consolidation of holdings has been going on for quite a long time, albeit with different modalities and timing.

Understanding semi-subsistence farms raises other related issues such as farm-size, tenancy arrangements, rural poverty and deprivation, and pluriactivity arrangements etc. SSFs have different origins and patterns of development, and have played varying roles in different EU MS. For this reason, this background paper adopts a wide perspective that covers the relevance and characteristics of SSFs, which are always small family farms (or individual farms as they are labelled in some of the EU NMS), in different rural contexts. In addition, there are valuable insights to be gained from the various patterns of restructuring experienced by individual EU countries.

In order to illustrate some of the key issues and the use of RD measures by small farms, three case studies centred on different countries are included in 'Appendices 2, 3 and 4'. The first case study ('Appendix 2'), written by Csaba Forgacs from the Corvinus University of Budapest, focuses on the national definitions and origins of SFs and SSFs in Hungary, and their characteristics and attitudes towards RD policies. The second case study ('Appendix 3'), authored by Nathaniel Page of Fundatia ADEPT, discusses the delivery of public goods, specifically environmental goods, by SFs and SSFs in Romania. The third case study ('Appendix 4'), by Mark Shucksmith from Newcastle University, discusses the role of the CAP and other support policies in allowing crofters in Scotland to maintain the provision of social, cultural and environmental services.

This background paper is structured as follows. The next section presents some key issues in regard to SFs and small farms in the EU-27. In the third section, several socio-economic characteristics of SFs and SSFs are presented, and their typologies discussed. In section four, the multifunctions of SSFs and small farms are presented, in particular their social role as providing a safety-net for poor farming households, their contribution to diversification and pluriactivity, and their importance for the provision of environmental public goods. Section five presents adjustment patterns of SFs and SSFs in different institutional and rural contexts. Section six describes the mix of CAP policy measures available to SFs, SSFs and other small farmers and raises some issues concerning their access to, reliance on and uptake of these instruments. Section seven concludes.

2. HOW MANY SFs AND SSFs ARE THERE?

Assessment of alternative definitions of SFs and SSFs for statistical and policy purposes

The future of small farms has always been of political importance in the EU, in part because of their social role in preserving rural communities. Subsistence and semi-subsistence farming have played a more prominent role in Europe since the fall of the Berlin wall due to the creation of millions of small farms resulting from post-communist land reforms in Central and Eastern Europe. It is generally agreed that SFs and SSFs are small, family-run agricultural holdings, associated with production for own-food needs and a low degree of market participation. However, there is no universally agreed definition.

Most definitions stress the objective of *satisfying household food needs*. Barnett *et al.* (1996) define subsistence farming in terms of the following characteristics: (i) the farming activities form a livelihood strategy; (ii) the output is consumed directly; (iii) only a few purchased inputs enter the production process; (iv) the proportion of output sold is low.

Difficulties in defining 'subsistence' and 'semi-subsistence' stem from the arbitrary element of fixing thresholds (Brüntrup and Heidhues, 2002) and the fact that subsistence can be considered both from a consumption and production point of view (Mathijs and Noev, 2004). Generally, a definition of subsistence farming involves the use of one of three different criteria: *physical measures*, *economic size*, and *market participation*.

Physical measures, such as agricultural land and number of livestock and volume of inputs (e.g. labour), can define subsistence and semi-subsistence through thresholds. McConnell and Dillon (1997) have suggested that 0.5-2.0 ha of cultivated land might be a good proxy indicator for semi-subsistence farms. In Europe, there is a broad consensus that SSFs or small farms are those that operate on an agricultural area of 5 ha or less. Land area is a feasible operational criterion, understandable to farmers and all rural stakeholders. However, the major weakness in using land area to define SFs and SSFs is that there are differences in terms of fertility of land and the type of land use.

Throughout the EU physical measures are generally used to set thresholds for: i) what is considered a farm, ii) eligibility for Pillar 1 support and iii) eligibility for some rural development measures, e.g. agri-environmental measures.

Thresholds for agricultural holding: examples from Hungary and Romania

Hungary

a) *General definition of a farm in national statistics:* all households having at least one big animal (cattle, horse), or minimum 25 poultry, or minimum 0.15 ha of agricultural land are regarded as agricultural holdings

b) *For receipt of SAPS:* 1 ha for total farm size, plots must be minimum of 0.25 ha.

Romania

a) *For inclusion in the national agricultural census:* no minimum size threshold. Farms defined as 'a technical-economic unit of agricultural production, consisting of one or more plots of land, utilized entirely or partially for agricultural production, operated by a holder, alone or together with others regardless of the size of the land, the number of animals or the contribution to agricultural production.'

b) *For receipt of SAPS:* agricultural area of 1 ha with the smallest plot not less than 0.3 ha.

Source: Hungary and Romania case studies

An alternative way to apply a physical measure and to classify farms not only by size (small, medium, large etc.), but also as part- or full-time is to consider labour input. This approach is used by the 'UK Department for Environment, Food and Rural Affairs' (DEFRA) to classify farms as spare-time, part-time or full-time, according to their Standard Labour Requirement (SLR). The Farm Business Survey (FBS) in England defines farm size in SLR meaning "the labour requirement (in full-time equivalents) for all the agricultural activities on the farm, based on standard coefficients for each commodity on the farm under typical conditions for enterprises of average size and performance".⁴ According to this criterion, DEFRA classifies farms in England as 'spare-time' (in other words 'hobby farms') if the SLR is less than 0.5 person-years. It is deemed part-time if the SLR is 0.5-<1 person-years; and 'small full-time' if the farm's SLR is 1<2 person-years.⁵

Economic size thresholds are applied widely for statistical and policy purposes throughout the EU, expressed in terms of European Size Units (ESU), for example, in the 'EC Farm Accountancy Data Network' (FADN) where the thresholds of what is considered a commercial farm vary between countries. According to FADN methodology a commercial farm is defined as a farm which is large enough to account for the main activity of the farmer and supplies a level of income sufficient to support his or her family. In practical terms, in order to be classified as commercial, a farm must exceed a minimum economic size. This ranges from 1 ESU in Bulgaria and Romania (data for 2008) to 16 ESU in Belgium, Germany, the Netherlands and the UK.

For the EU Farm Structure Surveys (FSS) and Eurostat's corresponding series "Statistics in Focus", farms smaller than 1 ESU are classified as *subsistence*. In addition to this, Eurostat defines farms smaller than 8 ESU as *small farms*. For the purposes of this examination of

4 <https://statistics.defra.gov.uk/esg/asd/fbs/sub/slr.htm> (28-01-2010).

5 https://statistics.defra.gov.uk/esg/asd/fbs/sub/farm_size.htm (28-01-2010). One SLR roughly equals 95 ha of cereals, or 50 dairy cows, or 400 ewes (https://statistics.defra.gov.uk/esg/asd/fbs/sub/min_size.htm, 28-01-2010).

semi-subsistence farming, holdings corresponding to the Eurostat definition of small farms (1-8 ESU) are being considered as semi-subsistence holdings.

The third widely used approach to defining SFs and SSFs is based on a *market participation* criterion. The market participation criterion is still arbitrary but offers a straightforward approach to the classification of farms. Wharton (1969) argues that farm households may sell between zero and 100% of their agricultural output. At the two extremes are 'purely subsistence' and 'purely commercial' operations, with different mixes in-between. With regard to this continuum, Wharton introduced a threshold of 50% of marketed output, classifying farmers selling more than zero but less than this as semi-subsistence, while labelling those above the threshold as semi-commercial and commercial. Moreover, he defines "subsistence production" as a situation in which the agricultural activities undertaken by the household are directed towards meeting consumption needs, with few, if any market transactions.

A similar approach has been adopted in Article 34 (1) of the 'Council Regulation on Support for Rural Development by the European Agricultural Fund for Rural Development' (EC No. 1698/2005), where semi-subsistence farms are defined from a *market participation criterion* as "agricultural holdings which produce primarily for their own consumption and also market a proportion of their output". This definition deliberately avoided setting thresholds for consumption and sales, in order to allow individual Member States to adopt their own eligibility criteria in the Rural Development Programmes for support of semi-subsistence farms undergoing restructuring (Measure 141). This decision was taken largely because of the difficulties in establishing the proportion of produce sold by such farms. The criteria adopted by the Member States are widely based on economic size. For example, Bulgaria defined eligible semi-subsistence farms as farms within the size band of 1-4 ESU, Hungary and Lithuania defined it as 2-4 ESU and Romania as 2-8 ESU. In conclusion, whilst the market participation criterion would give the most accurate picture of the extent of SF and SSF agriculture, it can only be assessed through detailed surveys and is impractical with a very large population. The physical size criterion has significant flaws. Therefore the economic size criterion would appear to be the best proxy measure to indicate the extent of SF and SSF activity.

SFs and SSFs in the EU-27: relevance within the farm structure

Bearing in mind the definitional issues discussed above, this section reviews appropriate statistics and attempts to provide evidence to describe the role of SFs and SSFs in the EU-27, as well as to illustrate their development over the past decade. Data are extracted from the EUROSTAT database⁶ and in particular the results of FSS conducted in the 2000s. Some insights into the characteristics of SFs and SSFs in five NMS – Bulgaria, Hungary, Poland, Romania and Slovenia – are presented based on a unique dataset created by the 'EU Framework 6' project SCARLED (Structural Change in Agriculture and Rural Livelihoods).

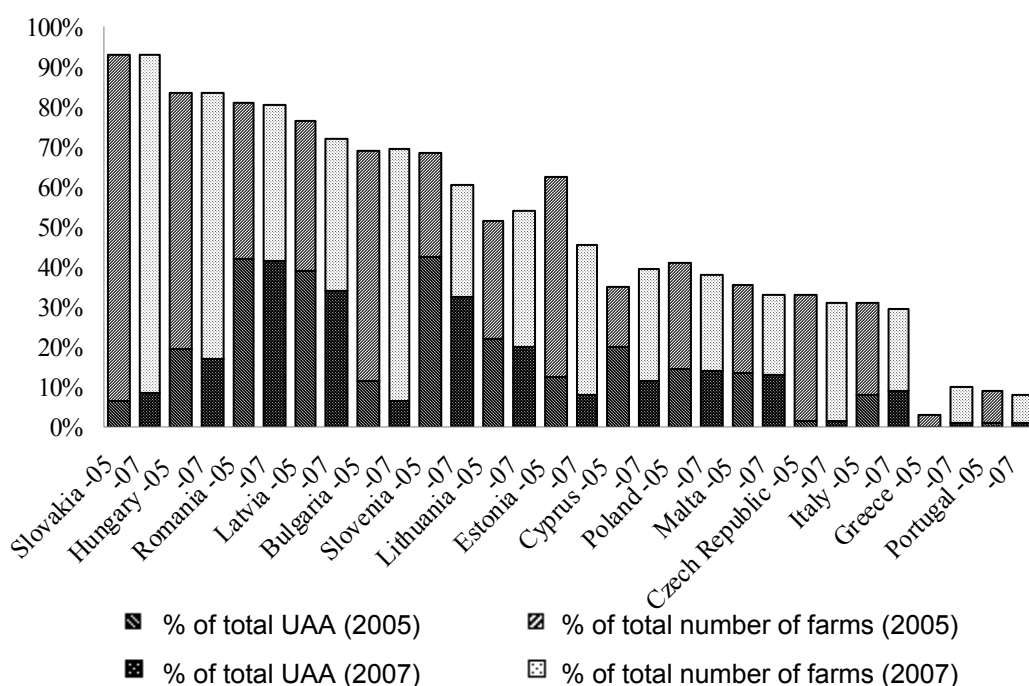
Market participation criterion

As seen in the previous section, the market participation criterion is probably the most

⁶ Data referred to as "Eurostat" were extracted from Eurostat's 'Agriculture' database, which is part of the Eurostat Eurofarm domain. The Eurofarm domain contains statistical information on the structure of agricultural holdings collected through agricultural structure surveys. Information on the data of Structure of Agricultural Holdings on the Eurostat Eurofarm domain can be accessed at http://epp.eurostat.ec.europa.eu/cache/ITY_SDDS/EN/ef_esms.htm. Due to varying definitions of what constitutes a holding, the coverage of the FSS varies across Member States and the total number of farms is consequently not comparable between countries. This is why the analyses in the Eurostat series "Statistics in focus", centres on holdings of at least one European Size Unit (ESU).

appropriate basis on which to produce a farm typology when subsistence production is involved. FSS data indicate big variations across EU-27, with a divide East-West and North-South (Figure 1). In seven NMS, most farms produce mainly for self-consumption. These are Slovakia, where in 2007, 93% of the farms produced mainly for self-consumption, Hungary (83%), Romania (81%), Latvia (72%), Bulgaria (70%) and Slovenia (61%). Despite their prevalence in terms of the total number of farms, SSFs manage smaller shares of the utilised agricultural area (UAA). At the extreme is Slovakia where 93% of farms only manage 8% of UAA. There are only three EU-15 countries where farms producing mainly for self-consumption play a significant role in the farm structure, namely Italy, Greece and Portugal. The importance of SFs and SSFs is decreasing in most countries. Between 2005 and 2007 the most accelerated structural change was recorded in Estonia, where the share of SSFs in total farm holdings decreased by 17% and Slovenia where the share of UAA decreased by 10%.

Figure 1: Share of agricultural holdings producing primarily for their own consumption and the share of UAA they manage by MS, 2005 and 2007 (excluding all holdings <1 ESU)



Source: Eurostat FSS, (2005) and (2007).

Eurostat data do not shed much light on the characteristics of SSFs. For this reason, the SCARLED project surveyed 1,102 agricultural households in five NMS and recorded their situation in 2006. 'Table 1' presents some important characteristics of those households who produce primarily for self-consumption (selling less than 50% of their output). The data in 'Table 1' is representative of the survey.

Table 1: Characteristics of SF/SSFs from the SCARLED Project

	Bulgaria	Hungary	Poland	Romania	Slovenia
Share of SF/SSFs in country sample (%)	57.8	34.1	34.2	75.4	32.1
For these SF/SSFs:					
Share of output sold (%)	19.6	12.0	26.6	25.5	16.6
Share of food consumption from own production (%)	50.2	40.3	43.3	59.1	42.6
Total cultivated land area (ha)	2.7	4.1	5.6	3.2	6.5
Equivalised income per capita (PPP€)					
- Excl. the value of subsistence production	4060	7609	5884	4460	8836
- Incl. the value of subsistence production	6623	8694	9018	6701	11186
Age of household head	54.8	55.3	52	58.1	55.3
Household head time on-farm (%)	74.4	68.2	67.5	79.8	70.2

Source: SCARLED database, sample of 1,102 farm households.

As expected, Bulgaria and Romania have the highest share of SSFs in the SCARLED sample. A characteristic of SSFs is their very low share of output sales. The survey confirms the small size of SSFs - in three of the countries the average farm size is smaller than 5 ha. The heads of households are approaching retirement age and, although managing small farms, they devote most of their working time to on-farm work. This exemplifies the low labour productivity of SSFs.

Economic size criterion

According to Eurostat FSS, in 2007 there were 11.1 million small farms (below 8 ESU) within the EU-27. Of these, 6.4 million were below 1 ESU, therefore considered SFs and the remaining 4.7 million were SSFs. Expressed as a percentage, the share of SFs and SSFs was equal to 46.6% and 34.5% of the total number of agricultural holdings respectively. The averages for the EU-27 illustrate the lesser importance of SFs when the UAA is considered. In 2007, SFs operated only 6.8% of the EU-27 UAA. The share of both SFs and SSFs (i.e. all farms below 8 ESU) combined was higher, 22.5%. Between the two FSS in 2003 and 2007 the importance of SFs and SSFs has decreased slightly.

In terms of the NMS, the relevance of SFs, SSFs and small farms in general using the economic size criterion, is akin to the situation depicted when the market participation criterion is applied, namely that SFs and SSFs predominate within the farm structure ('Table 1A' in 'Appendix 1'). One important trend is that in some countries the share of SFs (smaller than 1 ESU) has decreased whilst the weight of SSFs (between 1 and 8 ESU) has increased. Estonia, Slovakia, Cyprus and the Czech Republic are examples of the latter. This is a positive trend as SSFs can provide more cash income to the farm households than SFs and thus may contribute more to the growth of the rural economy. The dual farm distribution is most extreme in Bulgaria, the Czech Republic and Slovakia, where the small share of UAA operated by SFs and SSFs contrasts most strongly with their prevalence in the farm structure.

With regard to the EU-15, in 2007 there were seven countries (Portugal, Greece, Italy, UK, Sweden, Spain and Austria) where more than 50% of farms operated at a level of less than 8 ESU. However, in contrast to the market participation criterion, there is no obvious North-South divide when the 'economic size' measure is applied. In general, for the EU-15 the ESU seems a more appropriate criterion to delineate small farms. For the NMS, the 'market

participation' criterion is more useful as production decisions are frequently influenced by the food-needs of the household. In the EU-15 the largest share of UAA managed by small farms is in Austria and Greece with 36% and 33% respectively

Physical measures of small farms

As previously mentioned, farms of 5 ha of UAA or less may be defined as small. Use of this physical measure illustrates the enormous heterogeneity within the EU-27. In 2007, farms <5ha represented more than 90% of all farms in Malta and Bulgaria, but only 2.8% in Denmark ('Table 2A' in 'Appendix 1'). The North-South and East-West divide evident when the 'market participation' criterion is applied, is echoed by the findings of the 'physical' measure. Prior to EU accession (2004 and 2007), small farms were predominant in all NMS. However, post-accession accelerated structural change and consequently a declining proportion of small farms has led to 3 NMS (Czech Republic, Estonia and Latvia) having fewer than 50% of their farms in this category.

The situation in the EU-15 is varied. Small farms prevail in Italy, Greece, Portugal and Spain. With the exception of Greece, the share of small farms has gradually decreased over time amongst this group of countries.

As regards agricultural land, with the exception of Malta, farms smaller than 5 ha operate less than half of UAA. Nevertheless, they are important in Romania (operating 35% of UAA in 2007), Cyprus (29%), Greece (27%) and Slovenia (22%).

Taking the EU-27 as a whole, in 2007 there were 9.65 million small farms, below 5 ha, (70.4% of all agricultural holdings), operating on 8.4% of UAA.

Overall, the period between 2003 and 2007 saw a reduction in the number of small farms measured in land area, in terms of the total number of farm holdings and UAA they manage.

One important aspect is the specialisation of some of these small farms. It may be expected that small farms would concentrate on intensive horticulture, orchards, vineyards, olive groves, and some mixed farming. 'Table 3A' in 'Appendix 1' presents the role of the smallest farms (smaller than 2 ha) according to their share in the different farm types in selected EU-27. In some of the EU NMS, particularly in Bulgaria and Romania, there is no clear relationship between farm size and specialisation. Farms below 2 ha are overwhelmingly prevalent in all specialisations (the only exception being arable crops in Bulgaria), However, in most of the EU-27 MS small farms are clearly specialised e.g. in intensive horticulture and specialist pigs & poultry. Therefore, in addition to land heterogeneity issues, this is another argument for the 'physical criterion' being perceived as a less accurate measure for SSFs or even small farms than 'market participation' or 'ESU', particularly as some farm specialisations can be relatively large economic enterprises despite the limited size of the land area used.

In conclusion, the 2004 and 2007 EU enlargements increased the importance of small, SFs and SSFs in the EU. Structural change has brought about a slow, gradual decline in the importance of small farms in the EU-15, but the rate of decrease in some of the NMS has been much faster. This suggests that in the future, the NMS may present a greater variety of situations, with SFs and SSFs remaining the dominant farm type in some rural areas while in others agriculture may become much more commercialised.

What are the barriers to market participation of SSFs?

Irrespective of what definition is applied and what threshold is used, an essential feature of SSFs is that a significant proportion of farm output is not sold. There are three reasons which

could explain the lack of market participation: transaction costs, inability to meet agricultural standards, and non-pecuniary benefits of consuming own-produced food. In the context of the NMS, particularly the poorer countries, a fourth argument is that households do not sell their output as they depend on it to satisfy their own food-consumption needs, not only because they are cash-poor, but also because there are few alternative sources of fresh produce in isolated rural communities.. This aspect of SSF is discussed in 'Section 4' in relation to SSF acting as a buffer against poverty.

'Transaction costs' refer to the expenses incurred in economic exchange, of which the main forms are: the search for potential partners, gathering information about prices, bargaining and contract enforcement costs. They also refer to the distance to the market and transport costs, which can be particularly high for small farmers in remote areas. Goetz (1992) demonstrates that transaction costs lower the prices received by farmers as sellers of agricultural output and raise the prices effectively paid by them when buying inputs, generating a 'price band' within which some producers find it unprofitable to either sell their output, or buy inputs. Moreover, for buyers downstream the transaction costs of sourcing a particular quantity of raw material from a mass of small-scale producers will be significantly higher than from a small number of larger suppliers (Swinnen, 2005). For this reason co-operation between small farmers is central to improve their access to markets. Attempts to stimulate commercialisation should focus on policies to reduce transaction costs by reducing the expense of transportation and encouraging co-operative marketing. However, despite the importance of co-operation, in some areas, particularly the NMS, the willingness of SFs and SSFs to co-operate formally is low.

A second approach to the analysis of the potential barriers to commercialisation of SSFs examines the extent to which agricultural standards may act as a barrier to market participation. Agricultural standards can apply to: quality (e.g. organoleptic, cosmetic), safety, authenticity and the production process (e.g. organic) (Reardon, 2006). Traditionally, public sector agents set and enforce such standards but private standards, including third party arrangements, such as 'GlobalGAP' or the 'British Retail Consortium'(BRC), or buyer specific standards, have become increasingly prominent in international food supply chains. While the exclusion of small-scale producers has not occurred in all cases, the costs of gaining certification may be prohibitive for those with poor access to credit due to a limited asset base and/or modest production volume. With the increasing penetration of supermarkets, the market for non-certified produce diminishes (Dries *et al.* 2004; Reardon, 2006) and in certain cases, disappears entirely.

The third argument explaining a low level of market participation is that some producers may gain satisfaction (non-pecuniary benefits) from growing and consuming their own food. In Western Europe this is often associated with 'hobby farming'. Mellor (1970:220) labels it 'subsistence mindedness': farmers that 'attach special value to crops and livestock produced for home-use relative to production for sale'. Price signals, transaction costs and policies may be relatively unimportant in explaining the production and marketing decisions of such farmers. Although difficult to define and monitor for statistical purposes, hobby farmers are important to rural-urban linkages, related extensively to urban employment and commuting. Their presence affects environmental benefits⁷ since their objectives are lifestyle orientated rather than economic.

⁷ DEFRA estimated that out of the 130,000 farm businesses in England, around 66,000 were hobby farms. From a production point of view they are insignificant as they account for only 4% of the total agricultural production but they manage 10% of the agricultural area.

In reality, farm households are heterogeneous. While some SSFs are already well integrated into markets, others are not, and while many of these still farm out of necessity, others appear simply to enjoy the lifestyle (Davidova *et al.*, 2009).

3. WHO ARE THE SUBSISTENCE AND SEMI-SUBSISTENCE FARMERS?

Several authors attempt to produce typologies of SFs and SSFs, and to classify them into homogenous groups (clusters), by investigating the characteristics of farm holders, the farm asset base, the availability of non-farm incomes, and the attitudes of farmers towards farming, diversification and exit from agriculture.

Hawkins *et al.* (1993) identify three types of farm household adjustment patterns in Western Europe, namely *engagement* in agriculture, *disengagement* – including in extreme cases exit from farming altogether, and *stability*. Though larger farms continue to pursue the pattern of further engagement in agriculture, smaller units have recorded a trend towards disengagement. Within their sample, covering over 6,000 households in 24 areas in 12 EU countries, the mean size of the engagers was 18 ESU or 48 ha, whereas the size of disengagers was 7.7 ESU and 13 ha respectively. The size of 'stable' households was in-between these two ranges. The authors indicate three typical characteristics of disengagers – exit due to retirement, increased pluriactivity, or closing down of non-profitable enterprises. However, the smallest farms may be stable simply because for them further disengagement would amount to stopping farming altogether.

In all typologies, an important differentiating characteristic is the degree of pluriactivity and farm diversification. Hawkins *et al.* (1993) found that farm tourism was more typical for larger farms as it required developed farm resources. Off-farm work was undertaken more on smaller farms but it depended mainly on the external conditions, i.e. the development of the rural economy and infrastructure, and the availability of non-farm jobs.

As presented in the previous section, one of the EU-15 countries where SSFs are important is Greece. Daskalopoulou and Petruo (2002) produced a typology of Greek farms focusing on their survivability and adjustment patterns. They identified three main types of farm households – *subsistence*, *survivalist* and *productivist*, differentiated by off-farm employment, rented land, hired labour and the degree of mechanisation. *Subsistence* farms are small (less than 1 ha), have a very low share of rented land or hired labour, and a low use of mechanisation. They produce either for self-consumption, e.g. olive oil, or as a result of the CAP when they are allocated a quota. One third of these households have off-farm incomes. The authors argue that these households will most probably exit agriculture in future.

Survivalist farms range from small SSFs of between 1-5 ha up to 20 ha and sometimes even larger areas. They have more rented land and have a higher degree of mechanisation than subsistence farms, but survivability is based on farming part-time. Therefore, pluriactivity is an important characteristic. However, not all the households in this group are part-timers; some generate their main income from agriculture and pursue a productivist strategy based on farm modernisation.

Productivist farms operate on farm sizes above 10 ha. They are much more integrated into factor markets, have a high share of rented land and hired labour, and are typically commercially oriented. These farms are run mainly by full-time farmers.

With increased policy interest in the characteristics of SFs and SSFs in the NMS, some work

has been done on farm typologies in these countries. Davidova *et al.* (2009a) produced a typology of farm households based on the returns from the SCARLED survey in five NMS covering three regions in each country, 15 regions altogether. They defined four types of farm households: *part-timers*, *subsistence farms (small SFs/SSFs)*, *small commercial farms* and *large commercial farms*.

Part-time farmers have a high level of involvement in off-farm wage employment, are relatively younger and better educated. Cultivated land areas are the smallest amongst all farm clusters (5.5 ha). Part-time farmers are, however, not homogenous. Some are typical SSFs with one third of them considering subsistence production as essential for survival. At the same time, 10% of part-timers claim to have sufficient household incomes to live comfortably and 22% find that the contribution of own-production to household welfare is not important. This suggests that among the part-time farmers there is a sub-group of *hobby farmers*. With regard to the future, a majority of part-time farmers do not envisage any changes in the short to medium term. Yet around one fifth of part-timers would like to increase their commitments to agriculture. Provided they are targeted by appropriate policies, they may move to a more commercial type of farming.

Around one quarter of households fall into the group of *small SFs/SSFs*. Although these farm holders spend almost all their working time on-farm, they manage small areas (around 7 ha), and are thus characterised by low productivity and often under-employment. SFs and SSFs are also typified by older farmers (on average 57 years-old), a lower level of income diversification in comparison to the other farm types and a smaller share of output sold (around one third). They are asset poor (only one third owns some agricultural machinery) and either depend on other peoples' machinery or use mainly manual labour. The remote locations of this group limit the possibility to find off-farm work. Consequently cash incomes are low and reliance on subsistence production is high, resulting in an increased incidence of poverty. The majority of SFs and SSFs assess subsistence production to be either very important or essential for survival. Thus, in general, this farm type needs social policies aiming to alleviate rural poverty.

The most wide-spread farm type is *small, commercially oriented farms*. The average farm size is 6.3 ha. They are located close to urban centres, yet are still mainly agricultural with respect to the time-allocation of the head of the household and sources of income. Furthermore, household labour predominates, ownership of machinery is relatively high and they do not rely very much on subsistence production. However, the farmers are relatively old – 58 years. Therefore, it is not surprising that nearly one in ten are looking to transfer to the next generation within a five-year time frame. Only a small proportion of farm holders will take action to intensify farming or increase the share of sales. The majority envisage continuing with current practices. Some early-retirement schemes and programmes to assist transfer to young farmers may be suitable measures for this farm group.

The *large, commercially oriented holdings* (large is used in a relative sense in comparison to the other farm clusters) operate on average 30 ha. These farmers, in general, are fairly young, relatively asset rich with respect not only to land, but also agricultural machinery, and their objective is commercial profit. They are users of both advisory services and credit. They are committed to agriculture and a third of households state an ambition to commit further to farming in the future, thus they are similar to the engagers in Western Europe.

Different types of farm households have different relative importance across the five countries. For example, if in Bulgaria the predominant group are the small SFs/SSFs, in Hungary, Poland and Slovenia the prevailing type are small commercial farmers (Table 2).

Table 2: Share of different clusters per country (%)

	Large	Part-time	Small	Small	Country total
	commercial	farmers	commercial	subsistence	
	N = 68	N = 283	N = 418	N = 243	
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 et al. (2009).

Another recent typology employs a wider rural perspective. Wegener *et al.* (2009) produced a typology of rural households in three EU NMS profiling them as *rural diversifiers*, *rural pensioners*, *farmers*, and *rural newcomers*. As expected, the rural diversifiers have the highest share of non-farm income sources. They also have a relatively high educational attainment. Rural pensioners are old, manage small holdings and have a high share of household members beyond working age. The farmers are operating the largest farms and they seem mainly commercial. Rural newcomers are young but with limited education and very low incomes. They seem most in need of specific support.

The reviewed typologies indicate that both in EU-15 and NMS, many SFs and SSFs, are small and run mainly by older farmers who are either unwilling to change or intend to disengage from farming altogether. However, there is also a significant minority of SF and SSF farmers who are younger and better educated, who are seeking to develop the business, either agriculturally or through some form of diversification. There is also a group tending to become more reliant on pluriactivity to increase household income. It is clear that if SFs and SSFs are to survive, they need to decrease their reliance on farm incomes and combine their farming with diversification and/or off-farm activity. This, however, can only be achieved through rural development aimed at improving the attractiveness of rural areas to non-farm businesses and increasing job opportunities.

4. ROLE OF SMALL AND SEMI-SUBSISTENCE FARMS IN AGRICULTURE AND RURAL DEVELOPMENT

According to established literature, semi-subsistence farming has been afforded three main roles in agriculture and rural development:

- a) as a buffer against poverty;
- b) as a basis for farm diversification and multifunctionality;
- c) as a provider of environmental benefits.

These arguments are considered in turn.

Buffer against poverty

Kostov and Lingard (2002) argue that subsistence agriculture acts as a buffer against absolute deprivation, providing at least meagre levels of food and income. It is most valuable in environments of weak or absent social safety nets, high urban unemployment, weak non-farm rural economies and tumultuous economic change, as witnessed in Central and Eastern Europe in the 1990s. In this way subsistence agriculture provides "insurance against economic risks – albeit a fragile one" (Abele and Froberg, 2003, p.iv).

Recent empirical evidence confirms that semi-subsistence agriculture acts both as a buffer

and a safety-net for rural households contending with low incomes and limited off-farm employment (Fredriksson *et al.*, 2010). 'Table 3' provides a general picture of the contribution of subsistence production towards the total household income of the households surveyed by the SCARLED project. The non-marketed output consumed by the household was valued at market prices (either household specific, or averages for the villages thus accounting for the quality and the small volume of sales). Its value was added to real household cash incomes to ascertain the contribution of this 'income in kind' to household incomes and to alleviating poverty.

Table 3: The contribution of the value of non-marketed output to household income (%)

	Households where total income is below poverty line⁸	Households where total income is above poverty line	Country average	Households shifted from below to above poverty line due to valuation of non-marketed output
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

Source: analysis based on the SCARLED database

Subsistence production contributes significantly to household incomes, particularly in Romania, Bulgaria, and Poland. As expected, the contribution of subsistence farming is higher for households that are below the poverty line. For example, in Romania subsistence farming is crucial for the survival of poor rural households. Of the total income received by these households, a majority share of 58.5% is 'in-kind'. However, despite the central importance of subsistence production as it relates to the incomes of the Romanian poor, it is in Bulgaria where its valuation appears to have the largest effect, in alleviating poverty as indicated by the decrease in the number of households living below the poverty line once value of own production is included. However, despite its effect in terms of decreasing the incidence of poverty, subsistence farming cannot eradicate it altogether. Moreover, evidence for Romania suggests that the poorest are those living in rural areas without either employment or access to land (Petrovici and Gorton, 2005).

It must also be stated that, even though it can act as a buffer against rural poverty, semi-subsistence agriculture can nonetheless be inefficient and/or even impede structural change. For example, in their analysis of Poland, Petrick and Tyran (2003) note that widespread semi-subsistence agriculture tends to reaffirm a rather inefficient use of labour and land, thus, impeding the growth of commercially-oriented farms. As a result the so-called 'opportunity costs' of semi-subsistence agriculture can be significant.

⁸ The poverty lines were in 2006 (the year for which the survey applied) as follows: Bulgaria - €1022; Hungary - €2308; Poland - €1867; Romania - €828; and Slovenia - €5589. (Equivalent to 60% of the national median equivalised income).

Basis for farm diversification and multifunctionality.

Several types of diversification are available to farmers. Ilbery (1991) identifies two such types. The first is agricultural diversification, in which case the farming focus is retained. This type of diversification includes unconventional enterprises, farm woodland and agricultural contracting. The second type – structural diversification - emphasises the use of farm assets for non-agricultural activities, e.g. value added processing or agro-tourism. Larsen (2009) argues that semi-subsistence agriculture provides an important resource for diversification and growth of the non-farm rural economy. She argues that the characteristics of semi-subsistence farming (local food production, short supply chains, high bio-diversity, and rich cultural heritage) provide a valuable asset for the creation of greater value-added and alternative rural enterprises such as agri-tourism and speciality foods. Rather than perceiving semi-subsistence farming as an economic problem, she argues that it should be embraced as a resource for rural development. Van Huylenbroeck *et al.* (2007) believe that agriculture which provides the basis of development for a wide range of non-commodity goods and services should be considered the essence of multifunctionality.

There are several examples of speciality food production providing the basis for improving farms' value added (Tregear *et al.* 2007). However, the creation of such enterprises often requires managerial and marketing skills and financial capital, which semi-subsistence producers lack. It may also depend on infrastructure which is absent from the most remote rural regions. Meert *et al.* (2005) studied 49 farmers in Flanders Belgium about different farm strategies employed to alleviate or prevent the cases of insufficient incomes. They reported pluriactivity as the most frequent one, followed by structural diversification.

Perrier-Cornet and Aubert (2009) provide three strategies for small farms in the EU-15 exemplifying diversification patterns of 'small' French farms (up to 40 ESU). The first strategy relates to the demand for rural tourism which provides opportunities not only for accommodation, but also for farm-shops and crafts. The second includes the provision of high-value organic products and use of labelling frameworks; and the third is the development of pluriactivity with a combination of farm and off-farm work. Sometimes income provided by off-farm work is invested in the farm and thus helps make the farm a more viable enterprise. In the study of French farms the authors indicate that for more small farms, successful diversification into quality labelled products such as '*appellation d'origine*' is difficult but that successful production of higher-value organic products might be easier.

In the NMS, economic growth following accession has stimulated diversification and pluriactivity. For example, one of the important characteristics of Polish agriculture post-accession is the decreased reliance on agriculture as the main source of income within small and medium-sized farms, and an increase in pluriactivity, in particular the combination of farm income and wage employment (Wolek, 2009). The importance of wage employment has decreased as the main source of income for only the smallest farms of 0-1 ha. These smallest farms are also the only size group whose total income decreased post-accession.

Statistics can be complemented by case studies documenting individual farm experiences. Two cases of successful farm diversification in NMS are presented below.

Diversification in rural tourism – a small farmer in Romania

The head of the household, 36 years old, has 4 hectares in a hilly area of Neamt County in Romania. After completing high school, he went to Spain to work in the construction industry.

His work in Spain involved frequent trips around the country where he stayed in guesthouses. This is how the idea of investing in a guesthouse in Romania emerged. His home village is located in an area with gentle landscapes, and monasteries with wall paintings which attract tourists. After returning to Romania, the head of the household decided to look for SAPARD support for his idea. Having been informed about the SAPARD programme by the national media he contracted a consultancy company to help him with the SAPARD application. He found the process bureaucratic but not impossible. In parallel with the SAPARD application, the farmer invested in his education and completed an undergraduate university degree before continuing with a Masters degree.

His SAPARD application was successful, particularly as he invested his remittances in the project. He built a 10-room guest house with modern facilities to attract Romanian and foreign tourists. He also opened a restaurant in which he uses produce from his own farm as well as from other local farmers. He and his wife work in the business and employ nine others. His spouse is now completing a vocational high school qualification specialising in tourism.

The guesthouse was opened 2 years ago. The first year was successful, particularly during the summer. However, last year the business struggled as the financial crisis hit the tourism market.

In this case the location of the farm and the availability of personal capital as well as SAPARD funds were crucial for success. In addition, the head of household was young and entrepreneurial and the family invested in their education.

Source: phone interview conducted by C Suta and S Davidova (March 2010)

Low start-up costs: diversification of an SSF in Poland

This case study involves a small farm of 3.2ha producing mainly for subsistence, marketing only excess supply. Though the income from the surplus sold varied, it was generally low. This was a factor in the decision to diversify. Previous experience in the retail trade was an important factor in the decision to open a farm shop. The head of the household had previously been employed off-farm selling non-farm goods in the local market. Before opening the shop itself, he set up a stall selling groceries in the local market. This experience acquainted him with market and legislative requirements, necessary in the setting-up of a stall. This helped reduce the transaction costs associated with the business start-up. His spouse had previously worked in the confectionery trade and she utilised this experience by making confectionery which could be sold directly to customers in the shop. The possibility of selling their own meat was also considered, but they deemed the investment required to meet appropriate standards 'uneconomical' due to the small scale of their production.

The farm is located in the village with a main road passing through, thus, it is readily accessible and close to a bus stop. Customers therefore find the farm shop convenient to use as they do not need to make a special journey to reach it.

The main factors affecting the successful diversification in this case have been: previous retail experience, the availability of space which could be converted into a shop and the location of the farm on the main road making it readily accessible to customers.

Source: Chaplin, 2003

As previously mentioned, diversification either through pluriactivity, such as taking salaried employment off-farm, and / or enterprise diversification, such as creating a tourism or leisure business either on- or off-farm, might be a survival strategy for small farms. Evidence from European studies suggests that the likelihood of diversification depends on several factors. On larger farms the head of the household is less likely to take up off-farm employment as such units are more likely to sustain full-time employment. Tenanted farms appear less likely to pursue enterprise diversification, in some cases due to restrictions within their rental agreements. More remote farms are less likely to engage in either enterprise or employment diversification (Barlas *et al.* 2001). This reflects that sparsely populated areas with lower purchasing power generate fewer new business and employment opportunities. There is often a mismatch between those most in need of diversification (small, remote farms) and those with the human and financial capital required to pursue successful diversification (Chaplin *et al.* 2007). Agricultural policy also impacts on the propensity of farmers to diversify. Chaplin *et al.* (2007) found that the presence of Pillar 1 measures, including direct payments, decreased the propensity to diversify. This is because most farmers treat diversification as a means to smooth or augment their income. A 'strong' Pillar 1 may therefore suppress the take up of some Pillar 2 measures. However, it can also increase the uptake of some e.g. Investments in Agricultural Holdings, M121, because higher agricultural incomes encourage farmers to invest in agricultural development projects.

Provider of environmental benefits

Promoting sustainable agriculture that respects the natural environment is a critical objective of the CAP and wider EU policy. This includes responsible management of natural resources by avoiding overexploitation, improving the efficiency of natural resource use, recognising the value of ecosystem services, and halting the loss of biodiversity (EU, 2008).

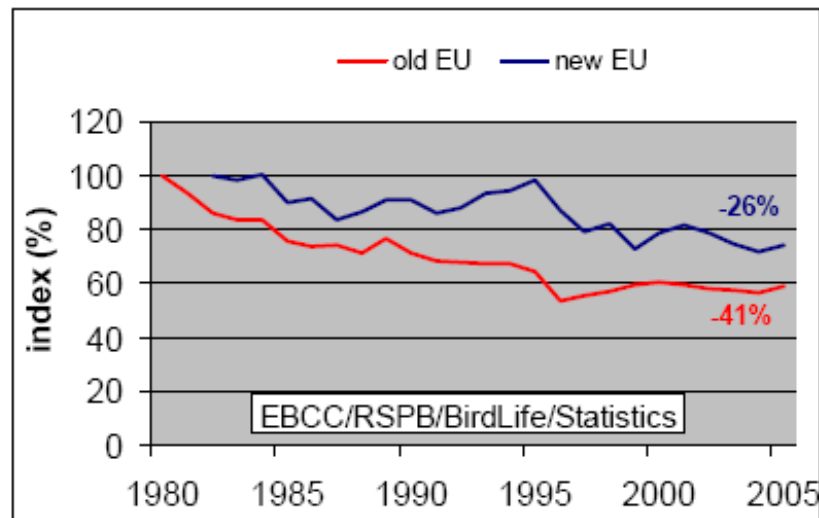
Mattison and Norris (2005), studying the linkages between policy, land-use and biodiversity, identify three broad categories of farming systems depending on the overall level of development: i) developed agricultural systems, ii) transition agricultural systems, and iii) mainly subsistence farming in a developing country context, with farming practices intensifying in tandem with economic development. It is often suggested that the extensive farming practices characterising most SSFs and small scale farms present a more sustainable way of farming, as opposed to the intensive farming practices characterising developed agricultural systems which, in turn, may generate negative consequences for the environment.

However, an extensive review by the Organisation for Economic Co-operation and Development (OECD) of the literature regarding the relationship between farm characteristics and environmental effects, reached few clear conclusions (OECD, 2005). A link was identified between intensive production techniques normally employed by larger commercial farms and loss of biodiversity. However, larger scale farms appear more likely than smaller operations to take positive environmental action, and more frequently adopt conservation practices and join agri-environmental schemes. Moreover, regardless of the farm characteristics, site-specific characteristics (e.g. soil structure, moisture levels) and a farmer's personal inclination often overshadow the effect of other farm characteristics. The type of farm production (e.g. crops, livestock) is also a significant determinant of the type and nature of any environmental impact.

BirdLife International (2008) argues that semi-subsistence agriculture supports High Nature Value (HNV) farmland. The rationale for this is that lower stocking densities and less use of chemical inputs support higher biodiversity. In support of their argument, BirdLife

International (2008) compares the evolution of bird numbers in the NMS and the EU15, noting significantly higher farm populations in the former, especially during the early 1990s when agriculture experienced considerable decapitalisation (Figure 2). The NGO fears that the loss of semi-subsistence agriculture will lead to a 'destruction of valuable landscape features or small pockets of habitat' (p.8).

Figure 2: Farmland Bird Numbers



Source: BirdLife International (2008), p.7

Similar conclusions have been drawn by the 'European Forum on Nature Conservation and Pastoralism' (EFNCP), and the 'WWF Danube-Carpathian Programme' (WWFDPC), in a series of papers concerning the two most recent EU MS – Bulgaria and Romania. They underline the environmental public goods delivered by SFs and SSFs which increase the benefits of their activities far beyond the traditional contribution to production of food and fibre (WWF, 2008).

However, many of the SFs and SSFs deemed important for environmental benefits are too small to be eligible for support, not only in terms of 'Pillar 1' but also 'Pillar 2'. Many of these farmers are not registered and are thus currently outside the reach of some policy instruments. Nevertheless, the CAP affects farmers' willingness to register. For example, a case study on Strandzha in Bulgaria⁹ indicates an increased rate of registration due to 'Pillar 1' SAPS (Single Area Payment Scheme), but a much lower effect in relation to 'Pillar 2' policies (WWF, 2008). This corroborates the findings of the case study on Hungary which emphasised farmers' reluctance to register, as one of the main reasons for the low uptake of Measure 141.

However, farmers ineligible for support deliver positive externalities as well. The Romanian case study emphasises that agri-environmental measures are not available to 1.9 million holdings below 1 ha. Therefore, there is an important policy issue, namely how the RD policy channels can reach these farmers in order to compensate them for the delivery of public goods, thus providing incentives for the continuation of the provision of environmental benefits. These issues are discussed in more detail in the case studies on Romania and Scotland in 'Appendices 3 and 4'.

⁹ Strandzha is a national park.

Romania and Scotland: Environmental benefits brought about by SFs, SSFs and crofters

Romania

SFs and SSFs are associated with the management of large areas of semi-natural grassland. This forms the basis for low intensity HNV livestock farming. SFs and SSFs in Romania are mainly located in hilly areas, not suitable for intensive farming. Due to their small size and mixture of grazing and field crops, SFs and SSFs contribute to a landscape rich in biodiversity.

Scotland

Crofters deliver important environmental benefits. The counties where crofters are located have a rich biodiversity of species, habitats, landscapes, and wetlands. Their preservation requires low intensity land management. Crofters traditionally provided this type of management as they were neither commercially oriented nor strongly dependent on farm incomes.

Source: *Romania and Scotland case studies*

5. HOW HAVE SFs AND SSFs ADAPTED IN DIFFERENT CIRCUMSTANCES?

On a global scale quantitative analyses suggest that there is a negative correlation between the proportion of land given over to, and employment within, SF and SSF, and GDP per capita (von Braun and Lohlein, 2003). However the role of SSF depends not only on economic development but also agricultural policy, the inherited land structure and land tenure policy, and culture. The country case studies highlight these factors.

Previous studies on Western Europe seldom adopt the terminology of subsistence or semi-subsistence farming. Rather the debate is framed in terms of the future of 'small farms'. In the consideration of the future of small farms in an enlarged EU it is useful to contrast the evolution of farm structures in established MS, post EU accession, with their evolution in some NMS which have a tradition of small family farms. The experiences of Ireland, Spain and Poland are particularly interesting.

Ireland: Hubbard and Ward (2007) review the evolution of Ireland's farm structure post-accession to the EU. At the time of accession (1973), the average size of farms was approximately 22 ha and there were around 34,000 farms of less than 5 ha. In the initial years following accession little changed. As such, between 1975 and 1985, the number of farms decreased by only 3.4%. Significant changes only occurred from the mid-1980s onwards, when between 1985 and 1991, one in four Irish farms went out of business. Those exiting the sector were disproportionately weighted towards small farms and from the mid-1980s onwards the average farm size increased. Lafferty *et al.* (1999) and Hubbard and Ward (2007) argue that structural change in Irish agriculture was initially slow post-accession due to the increasing level of farm support that accompanied adoption of the CAP10 and a

10 Between 1973 to 1978 Irish farm income doubled in nominal terms and increased by 15% in real

tradition of owner occupied, small-sized family farms. The latter enshrined a custom which saw the transfer of land from one generation to another, resulting in a rigid land tenure system with "a virtual absence of long-term leasing and a limited scale of land market" (Lafferty *et al.* 1999, p.16). From the end of 1970s until mid-1980s, real farm incomes fell dramatically in absolute terms, thereby stimulating structural change. Exits from the sector were skewed towards the smallest farms because of their lower productivity. Rather than selling land, renting out became more popular, a trend which continued to grow in the 1990s and 2000s (Hubbard and Ward, 2007).

Spain: In Spain, structural change was far more rapid post-accession (Sumpsi, 1995). Iraizoz (2008) reviews the evolution of farm structures in Spain using data from the 'Agricultural Census' and the 'Survey of the Structure of Agricultural Holdings'. Both sources highlight similar findings: restructuring accelerated after EU membership with a rise in the mean farm size and a decline in farm numbers most notably in the smallest size classes. For example, the share of the total number of farms accounted for by those of less than 2 ESUs fell from 63.4% in 1989, to 47.1% in 1999. In contrast with the Irish situation, EU accession did not lead to an increase in farm incomes. Instead they declined by 5% in nominal terms in 1986 compared with the previous year and the annual growth rate of total agricultural income did not exceed 1% between 1986 and 1990 (Iraizoz, 2008). Furthermore, post-accession, a significant proportion of farms found it difficult to obtain an acceptable level of profitability and competitiveness (Ceña, 1997). A flexible land tenancy system also aided structural change in Spanish agriculture.

Poland: Wołek (2009) reviewed structural change in Poland after EU accession. Poland's strong tradition of family-farms dates back centuries. Even during the communist era, Poland preserved its privately owned farm-structure with only a small share of holdings being collectivised/nationalised. In the early 1990s, private agriculture managed 76% of farmland and only about 23% was in the so-called "socialised" sector (19% in state farms and about 4% in co-operatives) (Milczarek, 2002). Currently, Poland has the second highest number of small semi-subsistence holdings in the EU according to all the definitions considered, although the share of subsistence farms within the total farm structure is somewhere in the mid-range of the NMS-12. At the time of accession (2004), Poland had 2.8m 'family farms', out of which 988 thousand were smaller than 1ha (Wołek, 2009). As is the case with Spain, Poland experienced rapid structural change immediately post-accession witnessing the disappearance of many of the smallest subsistence farms (within the ranges 0-1 and 1-2 ha). According to the thresholds set in Poland the smallest farms of 0-1 ha are ineligible for CAP support from both 'Pillar 1 and 2' and also for the generous national support afforded by the farmers' pension scheme. As mentioned above, these smallest farms are the only size group whose total income decreased post-accession. This might be a sign that these SFs are facing an accelerated exit.

These three examples reveal that despite different timing and rural contexts, the major effect of accession to the EU is farm exit skewed toward the smallest operations. It is difficult to gauge the extent to which this 'exit' denotes a complete cessation of agricultural activity, and to what extent it is due to the smallest farms dropping out of agricultural statistics. In any case, many small farms were pushed to exit due to low profitability and decreasing incomes, not only in relative terms but also in absolute terms. However, if the structural change in Spain was facilitated by flexible tenancy arrangements, in Poland it has been accelerated by a lack of support (nationally or through EU policies) for the SFs and the overall improved

terms (Walsh and Gillmor, 1993).

economic situation which has provided opportunities for off-farm wage employment. Therefore, Poland is a typical example of the interaction between 'push' and 'pull' factors.

6. POLICY APPROACHES

CAP Pillar 1 and 2

Both the CAP and national policies have objectives that are much wider than supporting small, or more specifically, SSFs. However, as this background papers focused on SFs and SSFs the policy approaches will be discussed from the angle of small farms. Policies that can aid small farms in their economic role can be divided into three groups according to their objectives: diversification, exit and restructuring. Most policies in the latter group seek to aid farmers to reach a critical size and become economically viable. A wider range of other policies can also be directly or indirectly relevant to small farmers. These can range from support for land management and the provision of public goods, to investments in public infrastructure which improve the quality of life and economic development opportunities for rural communities, including small farmers.

This section reviews the different EU support instruments of relevance for SSF under the CAP. This is followed by a more detailed consideration of the access of SFs and SSFs to Pillar 1 and 2 support and identifies some difficulties they may face. There is a particular focus on the specific measure for SSF undergoing restructuring applied by some NMS. The section concludes with some issues regarding the potential role and challenges of co-operation and networking for small farmers, which may offset some of their disadvantages in relation to transaction costs, and access to information and capital. Under Pillar 1, the most relevant support instrument for those SSF who meet the minimum size thresholds are the area-based direct payments (SAPs in most NMS), which can provide an important contribution to the farm household's income.

EU RD policy for the 2007-13 period offers a wide toolbox of support measures, many of which, while not specifically addressed at SSF, can be relevant for addressing their restructuring/diversification needs or for providing some public support to SSF households for provision of public goods. The chart below identifies measures from each of the three strategic axes of the current RD policy framework which are of particular relevance for SSF. It is not intended to be exhaustive.

RD Policy Framework 2007-2013: Key support measures relevant for SSF

Axis 1: <i>Competitiveness of agriculture & forestry sectors</i> (min. 10%)	Axis 2: <i>Environment & land management</i> (min 25%)	Axis 3: <i>Quality of life & diversification of rural economy</i> (min 10%)
<ul style="list-style-type: none"> • vocational training (M111) • setting up of young farmers (M112) • early retirement (M113) • advisory services (M114) • farm modernisation (M121) • infrastructure for agriculture and forestry (M125) • meeting Community standards (M131) • participation in food quality schemes (M132) <i>Transitional measures for EU-12 NMS only)</i> • supporting semi-subsistence farms under going restructuring (M141) • setting up of producer groups (M142) • farm advisory services in BG/RO (2007-09) (M143) 	<ul style="list-style-type: none"> • less favoured area payments in mountainous areas (M211) and other LFA (M212) • Natura 2000 payments • agri-environmental payments (M214) 	<ul style="list-style-type: none"> • Diversification into non-agricultural activities (M311) • creation & development of micro-enterprises (M312) • encouragement of tourism activities (M313) • basic services (M321) • village renewal (M322)
<p><i>Leader axis:</i></p> <p>Integrated, local development strategies implemented via Local Action Groups (LAGs)</p> <p>(min. 5% EU-15; 2.5% EU-12)</p>		

Support for accessing advisory services and training under axis 1 can be essential first steps to help SSF understand available opportunities and participate in RD support programmes, e.g. by assisting in preparation of aid applications and business plans for diversification projects. Alongside the specific support measure for SSF undergoing restructuring (M141-examined in more detail below), additional investment support for restructuring and modernisation is possible under M121, or for diversification into non-agricultural activities or micro-business creation (e.g. small-scale tourism, local craft production) under axis 3. In certain conditions, support under the early retirement (M113) and/or young farmers measure (M112) can assist in the restructuring process by facilitating the process of land transfer, and exit of older farmers. Support for setting up producer groups in NMS (M142) can be a means to help SSF overcome the difficulties they face in accessing markets. RD support can also be used for facilitating access to credit, which can be a significant barrier for SSF (e.g. a credit

guarantee scheme has recently been added into the Romanian RDP).

Where SSF can fulfill any minimum size thresholds set in MS RDPs to access LFA payments (M211 & M212) or agri-environmental payments (M214) under axis 2, such annual payments can be a valuable contribution to household income, to maintaining farming activity on land that might otherwise be abandoned, and to the continuation of traditional farming practices which generate public goods. A high dependence on LFA and other area-based payments by crofters and other livestock farmers in less favoured areas emerges from the Scottish case study.

Support under axis 3 for upgrading of basic public infrastructure in rural communities (e.g. local roads, water supply and sewage networks, provision of broadband access) while not directly targeting SSF can be a key tool to help alleviate rural poverty and remoteness, and facilitate the diversification and restructuring efforts of SSF.

The local development strategies drawn up and implemented by Local Action Groups (territory based public-private partnerships) under the Leader axis, seek to capitalise on specific local assets. This could include developing and promoting specific food specialities or crafts from the LAG area; developing local tourism trails or small-scale accommodation etc. The local focus and typically smaller projects supported under Leader may be better adapted to SSF needs and strengths.

In practice, the relevance of the above potential support for SSFs will to a large extent be determined by the programming choices of individual MS within their RDPs: which measures they include in their programmes given competing priorities and limited funds; and then the specific design of measures (eligibility criteria such as minimum size thresholds, targeting, project selection criteria, scope to combine different support measures etc.). Decisions on RDP delivery mechanisms and provision of accompanying information and support services for potential applicants are also key factors. Issues such as complexity of application procedures and supporting documentation required; (perceived) need to use external consultants; access to credit can be barriers for all small farmers in accessing EU RD support. It is even more difficult to target SFs and SSFs individually in the NMS due to the previously discussed difficulty to identify them as a large fraction are not registered.

A specific example of adapting programming to the national rural context is that in the Romanian RDP it was deliberately decided not to include the farm diversification measure (M311), but only the micro-enterprise (M312) and rural tourism (M313) measures, so that the whole rural population would be eligible, not only "farmers" which would have required establishing a definition of eligibility, excluding the smallest, typically SF/SSF, holdings. It was recognised that the greatest need for diversification and alternative activities is concentrated within this often poorest sector of rural society.

Under Pillar 1, MS can determine the minimum size of agricultural parcels and total farm size which are eligible for direct payments. Prior to the Health Check the minimum size of an agricultural plot was 0.3 ha and for the NMS the minimum size of total holdings was also 0.3 ha, although states had discretion to raise this up to 1 ha. MS could also decide not to grant any aid if the total value of an application for direct payments was less than €100.

Following the Health Check process, Article 28(1) of Council Regulation establishing Common Rules for Direct Support Schemes for Farmers under the CAP (EC No 73/2009) confirms that from 2010 onwards the minimum size of eligible area as 1 ha or a minimum amount for payments of €100, with some discretion for MS to adapt the thresholds in function of their farm structure (Table 5).

Table 5: Minimum thresholds for eligibility for CAP Pillar 1 support

Minimum thresholds		
	Value €	Hectares
Belgium	400	2
Bulgaria	200	0,5
Czech Republic	200	5
Denmark	300	5
Germany	300	4
Estonia	100	3
Ireland	200	3
Greece	400	0,4
Spain	300	2
France	300	4
Italy	400	0,5
Cyprus	300	0,3
Latvia	100	1
Lithuania	100	1
Luxemburg	300	4
Hungary	200	0,3
Malta	500	0,1
Netherlands	500	2
Austria	200	2
Poland	200	0,5
Portugal	200	0,3
Romania	200	0,3
Slovenia	300	0,3
Slovakia	200	2
Finland	200	3
Sweden	200	4
United Kingdom	200	5

Source: DG Agriculture and Rural Development

Although not excluded from direct aid payments under Pillar 1, due to their small size SFs and SSFs either receive very little, or nothing at all if they are below the minimum area threshold. For example, in Romania around 3 million household farms are not eligible for the SAPS as they do not fulfil the eligibility criteria (Guirca, 2008). Even when SFs and SSFs do receive some Pillar 1 support, payment distribution is naturally skewed towards larger farms. SAPS beneficiaries represent a relatively small segment of the existing farm holdings in Bulgaria and Slovakia (taking into consideration the number of holdings as reported by FSS including holdings smaller than 1 ESU), whilst in Lithuania they cover 94% of the holdings. A positive signal is that the concentration of SAPS applications on larger farms has been gradually decreasing together with the increasing learning curve of farmers and administration for the application for payments, and the processing and monitoring of the claims (Davidova, 2008). For example, between 2005 and 2007 the share of beneficiaries in the Czech Republic increased from 44 to 56% and in Poland from 56 to 61%. Of course, there are many more very small farms that are not covered in FSS and are not included in these statistics. It could be argued that particularly for SFs and a fraction of SSFs the second pillar of the CAP might be more relevant.

For the NMS, one measure (Measure 141) specifically supports semi-subsistence agricultural holdings undergoing restructuring. For the 2007-2013 programming period, five MS have included this measure in their RDPs (Bulgaria, Hungary, Latvia, Lithuania and Romania).

Poland initiated the measure on SSF during the accession negotiations and implemented it in 2004-2006. In Poland's 2004-2006 programme, the measure's objective was to act as 'a temporary income support that will serve to alleviate cash flow constraints and household income difficulties whilst further restructuring is undertaken to ensure the commercial future of the holding'. It was restricted to farms of between 2 and 4 ESUs. Poland chose not to adopt this measure for the 2007-2013 period.

Table 6 summarises the implementation of Measure 141 in the five MS that adopt it in the current programming period. The table reveals significant differences across the countries in terms of objectives, eligibility and permitted activities. All five MS recognise the development of commercially viable farms as an objective of the measure, but differ in terms of additional aims. Romania presents an increase in the proportion of agricultural produce that is marketed as an objective. At the EU level the measure is designed purely as income support but Bulgaria and Romania are the only countries which appear to view explicitly the measure in these terms, according to their RDPs.

All countries employ size thresholds to determine eligibility. For Hungary and Lithuania this is set as between 2 and 4 ESUs, while Bulgaria and Romania adopted thresholds of 1-4 ESUs and 2-8 ESUs respectively. Bulgaria and Romania also employ maximum age limits on eligibility (60 and 62 years respectively). Latvia applies a turnover threshold of between €3,000 and €10,000. In Latvia only land owners are eligible but in other MS, such as Bulgaria, those renting land can also apply subject to them presenting written agreements with the land owner as evidence.

To obtain funding, applicants must present a business plan. Funding is based on a 3+2 principle, whereby successful applicants after 3 years must demonstrate progress against stated objectives. If farmers have not met those objectives, funding for the final two years is withheld, but the initial funding does not have to be returned. In Romania, for example, after 3 years of support beneficiaries must demonstrate a 20% increase in marketed production and an increase in size of at least 3 ESUs compared to the initial situation.

The maximum limit for funding under Measure 141 per beneficiary is €1,500 per annum. As mentioned, the funds are intended as pure income support to help with household cash-flow during the farm restructuring process. This is why at level of EU rules there are no requirements on how the money should be spent. Some MS also attach additional eligibility conditions related to the branch of production. For example, in Lithuania apiculture and members of fruits and vegetables producer organizations are ineligible. Romania and Bulgaria make enrolment in professional training courses, defined as those funded under Measure 111 (Vocational training) a requirement for continuation of support after the first 3 years. In Bulgaria, such training concerns general environmental problems in agriculture. Although at first glance a positive approach, in Romania the delay in certification of vocational training institutions has meant that M141 beneficiaries cannot yet fulfil this requirement.

Table 6: Overview of the implementation of Measure 141

	Bulgaria	Hungary	Latvia	Lithuania	Romania
Stated objective(s)	Restructure semi-subsistence farms into viable commercial units. Provide temporary income support.	Assist small farms that are capable of market-oriented production and comply with market requirements	Develop commercial farms	Increase the number of market oriented holdings	Increase marketed volumes to transform SSF into economically viable units. Diversify production.
Size Eligibility	Between 1 and 4 ESU.	2–4 ESU.	Turnover of between €3000 and €10,000. At least 50% of turnover from agriculture	Between 2 and 3.99 ESU. Size of holding should increase by 20% over first 3 years.	Between 2-8 ESUs.
Application requirements	Submit a business plan detailing investments and activities for next 5 years. Complete vocational training on environmental issues in agriculture during 1 st three years of support.	Business plan demonstrating that the holding can be economically viable.	5 year farm development plan. Minimum estimated increase in net turnover by 30% over the first 3 years	Business plan. Expenditure on construction of ag buildings, ag. machinery and general costs.	Business plan. Enrol in vocational training during 1 st three years of support.

Table 7 details the targets for the total number of farms supported under Measure 141 for the period 2007-2013, alongside the expected outcomes and total public expenditure. In all cases only a small share of SSFs are targeted to benefit from the measure. This appears to be in line with the objective of the EU rules, which seek to target the assistance on those SSF who are genuinely committed to restructure and develop, rather than to provide a social measure to support income of all SSF households. Comparing the number of intended beneficiaries against the total number of farms of between 1 and 8 ESUs indicates that between 2.7 and 19.7 % will be reached. Other additional criteria – for example the maximum age used in Bulgaria and Romania for access to Measure 141 – may further reduce the number of eligible holdings, with a view to targeting support where it may be most effective. The allocation of funding to, and reach of, this instrument is particularly small in Hungary. The key output indicator of Measure 141, as detailed in RDPs, is the number of farms entering the market. This varies, by country, between 75 and 98% of the target number of farms supported. It is a proxy for the expected success rate of support under Measure 141: of each 100 farmers supported, how many will with EU support be able to restructure from a SSF into a fully-commercialised farm business.

Table 7: Target for number of farms supported under Measure 141

	Target for number of farms supported	Outcome: expected number of farms entering the market	Public expenditure (€ million)	Target number supported as % of all farms of between 1 and 8 ESUs in 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

To gauge the formal accessibility of certain other RD measures to SSF, Table 8 details whether size restrictions are employed by the NMS for access to Measure 121 (modernisation of agricultural holdings), a key measure under Axis 1¹¹, and Measure 214 (agri-environmental schemes). The latter is important given the potential linkage between SSF and HNV farming.

Table 8: Use of specific size thresholds for access to Measure 121 and Measure 214

	Measure 121 (modernisation of agricultural holdings)	Measure 214 agri-environmental schemes
Estonia	None	1 ha total farm size
Romania	2 ESUs	1 ha total farm size, plots at least 0.3 ha
Bulgaria	1 ESU	0.5 ha
Hungary	None	1 ha total farm size
Latvia	None	1ha total farm size, plots at least 0.3 ha
Lithuania	None	1 ha total farm size
Slovakia	None	1 ha total farm size
Slovenia	None	0.3 ha, at least 0.1 in agri-environmental measure
Poland	At least 4 ESU	1 ha farm size
Czech	None	Between 0.5 and 5 ha depending on type of scheme

As detailed in Table 8, most of the NMS do not impose specific size thresholds for access to Measure 121. However, applicants must submit a business plan and, while not a direct requirement in EU rules (which focus on need to demonstrate that the investment will improve the overall performance of the agricultural holding), some MS may judge applications on their financial viability. Very small holdings may struggle to demonstrate the economic viability of any investments or to access credit for the required private contribution for M121 investment support. Poland has the highest size threshold for eligibility (4 ESUs).

Land included in Measure 214 must be registered in IACS and in 7 cases for the NMS the minimum farm size is 1 ha. SSFs are likely therefore to formally be able to join agri-environmental schemes, but not the millions of SFs which, as mentioned, may also provide environmental public goods.

¹¹ Investments financed under MEASURE 141 cannot also be claimed against Measure 121.

However barriers to accessing funding under RDPs by SSF relate not just to *formal requirements* but also to a set of factors connected to their inherent characteristics. Such problems include: i) difficulty to individually target smaller producers as a large fraction are not registered; ii) prohibitive transaction costs to reach high numbers of SSFs (and in turn for authorities to process and control high numbers of often small financial claims); iii) difficulty to reach them by policies requiring formal co-operation due to farmers' reluctance to co-operate; iv) high age and low level of education of many semi-subsistence farmers. The contrasting cases below illustrate the difficulties of reaching SSFs with direct policy measures, and how access to support is easier for larger farms.

Policies towards SFs and SSFs: the issue of uptake in Hungary

There are no specific national policies. However the tax system benefits low commercialised subsistence producers (producers with an annual turnover below HUF 600 thousand, approximately €2,140¹², do not pay tax).

The Implementation of RD Measure 141 (Supporting semi-subsistence agricultural holdings undergoing restructuring) was not successful in the two first years following EU accession. This was mainly due to a lack of interest and during the period 2004-2006 there were only 600-800 applications per annum. The suspected reasons, stated in the case study, are the low level of the grant and the requirement for the farmer to be registered. Thus, farmers may have feared that this would have tax implications. The Hungarian Ministry of Agriculture and Rural Development (MARD) commissioned a study involving various professional associations to understand the reasons behind the low uptake in order to improve the situation during the next calls (local experts estimate that the potential group of beneficiaries is 15-20,000).

In general, SSFs have not shown interest in benefiting from other RD measures either, e.g. support to producers' groups, agri-environmental measures, support for meeting standards or for use of advisory services. Few have signed up to agri-environmental schemes despite the set thresholds for eligibility being low (e.g. for most of the measures the minimum size of the eligible land is 1 ha and of the plot is 0.3 ha). The overall conclusion from the Hungarian case study is that so far *SSFs have not found RD measures attractive and/or accessible*.

Source: Hungary case study

Accessing EU Rural Development Funds: A Tale of Two Farmers

Interviewee X manages a 800 ha farm in Békés County on Hungary's fertile Great Plain. The farm employs 16 people, including an accountant, and is predominately arable but also has around 200 sows and their offspring at any one time. The farm was established in 1991. Since EU accession there have been no changes to farm size or employment. The farm accountant works with an external expert, linked to a producers' association, to prepare IACS forms. The external expert was viewed as valuable due to the 'huge paperwork' and 'questions which we do not really understand'. The interviewee complained that regulations had been translated by 'young Hungarians with very good English but no practical experience of working in farming'. This led to substantial confusion. None of the farm's employees speak a foreign language.

¹² ECB average 2009 reference rate of €=HUF 280.33 is applied.

The farm has also benefited from several opportunities under CAP Pillar 2. It learnt about these measures via the producers' association and presentations from MARD officials. The farm receives agri-environmental payments for 100 ha of land which is included in a bird protection zone. The producers' association was instrumental in this application and devising the five year management plan. The farm also received a machinery grant to purchase a combine harvester (under Measure 121). For this the farm had to prepare financial and business plans, detailing how the investment would affect economic performance over five years. The farm must also submit annual reports regarding the impact of the investment on farm profitability. The interviewee regarded this as difficult 'as I do not control the weather or prices'. The business plans were devised for obtaining European funding rather than to guide operations. The farm is also currently preparing a bid for investment in manure storage. For this, the farm must present three quotations for the building work. In many regards this farm has been proactive in benefiting from the opportunities presented under the CAP since EU accession but this has not led to job creation.

In the same village as interviewee X's farm, lives *Farmer Y*. He is 47 and owns 2 ha of land, split into two plots: surrounding his house and on the fringe of the village. He has always worked in agriculture and his main source of income comes from working as a contractor and machinery driver on a large farm (not interviewee X's farm). This provides periods of intensive work during harvesting but he is relatively underemployed in winter. Adjacent to his house he keeps chickens, pigs and geese, largely for self-consumption. His wife shares the responsibilities of looking after these animals. As part of his contracting work, he is able to use the larger farm's machinery in cultivating and harvesting his own land. He is registered for direct payments after gaining help from an administrator at the larger farm. However he had not heard of any of the opportunities available under Pillar 2. He associated rural development with what 'local authorities do', he is neither a member of any producer association nor a marketing group. When explained to him, he would be interested in Measure 141. He keeps mangalica pigs, an indigenous breed that has become fashionable in many Budapest restaurants and saw this as a potential business opportunity. The €1,500 per year grant would make a difference to his family's fortunes – at present he cannot afford to buy and run a car, which limits his employment and business opportunities. However, he recognised that he would need help in writing a business plan, something he has never produced before.

Source: interview conducted by M Gorton (March 2010)

Cooperation and networking

Cooperation is recognised as a means of strengthening the competitiveness of small farms and hence enabling their successful participation in both input and output markets. In essence, there are three ways in which small farmers can cooperate by forming commercial producer groups: i) *input supply groups* who can reduce transactions costs through sharing resources or collectively buying inputs; ii) *service groups* enabling access to e.g. agricultural extension services, finance and risk insurance; and iii) *marketing groups* improving the prices received by members through joint selling of their output.

As seen in 6.1 above, EU RD policy offers financial support for setting up of producers groups under Measure 142, providing financial aid for up to 5 years to help set up and run such groups which could be particularly relevant for SSF. This measure is only available to the EU-12, in recognition of the particular interest to stimulate such joint initiatives in these countries with typically very high shares of small farms, and little history or awareness of this type of

cooperation.

Studying two countries with strong traditions of private farming and cooperative movements – Denmark and Poland - Chloupkova *et al.* (2003) find a significantly higher level of social capital in Denmark, arguing that the communist regime in Poland was detrimental to social capital accumulation. Today, many farmers in Central and Eastern Europe remain suspicious of all forms of cooperation due to the history of communist collectives. In addition, what cooperation there is among small farmers, is often informal. As pointed out by Millns and Juhasz (2006), this poses a problem for commercialisation of small farmers as informal groups do not provide the long term stability and confidence of formal groups, which is likely to send negative signals to all involved: members, suppliers and financial institutions as well as to customers. Moreover, many buyers and suppliers are not able to enter into commercial negotiations and to establish contracts with groups that are not formalised.

Problems with cooperation and networking

Hungary

Willingness to co-operate decreased post-1990 and is particularly low amongst SFs and SSFs. Therefore it is hard to reach and support SFs and SSFs through networking initiatives due to their non-cooperative preferences.

Poland

In Poland data and opinions on social capital and co-operation collected from 245 farm households in villages in three Polish regions indicate that small farmers have rarely participated in formal co-operation. They have mainly co-operated informally and not with the objectives to decrease their market disadvantages and increase sales, but with the aim to offset their lack of capital and improve access to machinery. Data at the country level indicate that the majority of formal producers' organisations are established in regions where the agricultural sector is characterized by a higher share of larger and more commercial farms (Northern and Western Voivodeships). In regions with a predominance of small farms, formal co-operation has been less wide-spread (Central and South-East parts of Poland).

Source: Hungary case study, Wołek and Łopaciuk-Goncaryk (2010)

Networking refers to wider and typically less formalised channels used to connect different actors, share information and exchange experience. EU RD policy supports the establishment of national and European-level networks for rural development, the latter having as an objective "to help bring rural communities closer together in order to improve the implementation of the Rural Development Policy". Encouraging small and SSF farmers to participate more actively in such RD networks could be one tool to improve their access to information on development opportunities including how to access related EU funding, and so help overcome their isolation. Networking may over time help build links and confidence, leading to concrete co-operation projects. A first step could be for SFs and SSFs to come together through the formation of interest/support groups (e.g smallholders' associations, small farm associations), which could then represent the interests of SFs/SSFs in networking activities and act as a two-way information channel. But to what extent SFs and SSFs are active in these initiatives, as well as in the Leader local action groups or in producer organisation, is one of the key issues on which a fuller overview is needed, in order to identify and share good practice in reaching and engaging them.

7. CONCLUSIONS

This background paper seeks to inform the debate about SFs, SSFs, and small farms in general, in the EU. The 2004 and 2007 enlargements raised the salience of this debate, as they led to a massive expansion in the number of agricultural holdings, the overwhelming majority of which are small. While SFs and SSFs have an increased importance in the NMS, several EU-15, however, retain a large proportion of small farms. The functions and future viability of these small farms remain an important issue for rural areas in Europe.

The debate on SF and SSF is hampered by the lack of a universally agreed definition of subsistence and semi-subsistence farming. This matters for policy as the number of holdings that are classified as SFs and SSFs, and consequently their share of total utilised agricultural area and the agricultural labour force, is highly sensitive to the definitions used. Of particular debate is whether holdings of less than 1 ESU should be considered a 'farm' at all.

Definitions previously applied can be divided into three groups: physical measures, economic size, and market participation. The most frequently used physical measure is that of utilised agricultural area with a common threshold being that small farms operate on an agricultural area of 5 ha or less. ESUs are a measure of economic size and Eurostat classifies farms smaller than 1 ESU as "subsistence" and those of less than 8 ESU as small farms. On this basis farms between 1 and 8 ESU may be labelled as semi-subsistence. The number of small farms in the EU-27 according to economic size amounted to 11.1 million in 2007 of which 6.4 million are in the "subsistence" and 4.7 million potentially in the "semi-subsistence" category.

The market participation approach has been adopted in Article 34 (1) of Council Regulation (EC) No. 1698/2005, where semi-subsistence farms are defined as "agricultural holdings which produce primarily for their own consumption and also market a proportion of their output". This is the most relevant definition when SSFs are the specific focus of policy. It gives a clear signal that the most important characteristic differentiating SSFs from the commercial operations is market participation.

Data presented in Section 2.2 reveal that, overall, SFs and SSFs are more prevalent in the NMS. However, variations between NMS and across EU-15 are significant. The market participation criterion indicates a divide East-West and North-South with important share of SSFs mainly in the NMS and some southern EU MS. However for the EU-15 the terms SFs and SSFs are applied rarely. Rather the focus is on 'small farms'.

In several NMS, farms below 8 ESU represent almost 100% of agricultural holdings, most notably Romania and Bulgaria (99.4% and 97.7% respectively in 2007). In the EU-15 small farms are relatively more abundant in Austria, Greece, Italy, Portugal, Spain, Sweden and the UK. Evidence from both EU-15 and NMS-12 suggests that as growth occurs in the rest of the economy, engagement in SF and SSF declines and the reduction in overall farm numbers is typically biased to the smallest farms. However, rises in agricultural policy support may preserve small farms as they provide important social and environmental public goods.

Farm typologies indicate that, although labelled in different ways, one large section of SSFs are small, run by older farmers and either do not want to change or intend to disengage from farming. However, it emerges that there is also one category of SSFs which are run by younger, better educated farmers with drive and motivation to increase business size, either through developing agricultural production or diversifying into non-agricultural activities. It is clear that if SFs and SSFs are to survive, they need to decrease their reliance on farm incomes and combine their farming with off-farm activity. This, however, can only be

achieved with rural and regional development that can improve the attractiveness of rural areas to non-farm industries and increase job opportunities.

SFs and SSFs have been afforded three main roles in agriculture and rural development: as a buffer against poverty; as provider of environmental benefits, and as a basis for farm diversification and multifunctionality. Their role as a buffer is more pronounced in the NMS and particularly in the poorer NMS. Subsistence production contributes significantly to household incomes, particularly in Romania, Bulgaria and Poland. The contribution of subsistence farming is higher for households that are below the poverty line. Policies strongly in favour of efficiency, commercialisation and competitiveness might decrease the survival chances of SF/SSFs and thus might undermine the safety net provided by subsistence production.

The Romanian and Scottish case studies illustrate the multiple benefits from SSF and small farms beyond the safety net, particularly in fragile and hilly areas. They provide environmental public goods, cultural and community benefits. However, current thresholds mean that significant numbers in some MS may not be eligible for the public support available linked to the provision of environmental public goods.

Small farms contribute to diversification and multifunctionality of rural economy. However, some forms of enterprise diversification are difficult for SSFs, particularly in the NMS, due to their poor asset base, and low education level and high age of farm holders. There is often a mismatch between those most in need of diversification (small, remote farms) and those with the human and financial capital required to pursue successful diversification.

Accession to the EU has in general accelerated structural change. Exits from agriculture have been skewed to the smallest farms. Even in countries that joined the EU in 2004 signs of accelerated structural change are evident. One typical example is Poland which witnessed a rapid decline of the smallest farms (0-2 ha).

For those SSF interested in restructuring or diversifying, EU RD policy and the current generation of RD programmes offer several relevant support measures, including the specific support measure for semi-subsistence holdings.

So far, as reported in the Hungarian case study, the interest in the uptake of the semi-subsistence measure has been low as farmers either found the procedures too complex or were reluctant to register. Similar constraints have been identified in relation to other measures.

Good practice in policy implementation, as reported in relation to the Romanian agri-environmental grant scheme, requires a clear focus on areas where the potential benefits are substantial and which are populated with farms able to contribute to the objectives of the measure. Significant input in terms of advisory and administrative support is often necessary to encourage uptake. In general, the reach of policy to small farms has been weak.

Finally, one general reflection. Wider attitudes to SFs and SSFs can be inconsistent: on the one hand they are regarded as an unwanted feature that hinders the competitiveness of a nation's agriculture. However, on the other hand, SFs and SSFs are also perceived as suppliers of environmental goods and a cultural asset that can provide the basis for diversification into speciality foods and rural tourism. In the latter regard, SFs and SSFs may be integral to locally distinctive rural development. This ambivalence to SFs and SSFs has led to rather mixed policy signals. It also reflects a wider divide between those who embrace a productivist agenda, seeing the primary focus of policy being to enhance agricultural

competitiveness and productivity, and those who place more focus on the role of farming for the provision of public goods and therefore policy should support integrated rural development and the emergence of higher value added, often niche and locally distinctive, agri-food production.

At the level of the RDPs it appears that a group of SSF that have the capacity to diversity or restructure are often identified, but that in practice there are many barriers to reaching these farmers and implementing policies to support them.

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APPENDIX 1: STATISTICAL INFORMATION

Table 1A: SFs and SSFs according to economic size and corresponding UAA in the EU-27, per country, 2003 and 2007 (% of country total)

		2003						2007					
		% of total no. of farms			% of total UAA			% of total no. of farms			% of total UAA		
		ESU <1	ESU 1<8	Total ESU 0<8	ESU <1	ESU 1<8	Total ESU 0<8	ESU <1	ESU 1<8	Total ESU 0<8	ESU <1	ESU 1<8	Total ESU 0<8
NMS-12	Bulgaria	76.4	22.3	98.7	9.5	11.5	21.0	76.1	21.6	97.7	6.0	10.8	16.8
	Cyprus	37.1	47.8	84.9	4.9	28.1	33.0	29.9	53.0	82.9	5.1	27.8	32.9
	Czech Republic	43.3	35.2	78.5	1.0	4.3	5.3	34.2	38.2	72.4	0.8	4.4	5.2
	Estonia	60.5	34.5	95.0	11.6	27.5	39.1	45.4	43.9	89.3	6.5	20.9	27.4
	Hungary	79.2	17.7	96.9	6.2	19.6	25.8	77.5	17.9	95.4	4.1	13.7	17.8
	Latvia	58.4	38.8	97.2	19.3	44.6	63.9	58.8	36.0	94.8	19.5	33.9	53.4
	Lithuania	67.2	31.1	98.3	26.7	41.5	68.2	63.0	33.3	96.3	19.4	33.0	52.4
	Malta	33.7	47.3	81.0	12.0	39.0	51.0	30.9	55.6	86.5	13.4	44.2	57.6
	Poland	51.4	38.6	90.0	10.7	39.8	50.5	52.8	36.9	89.7	10.5	38.0	48.5
	Romania	73.0	26.4	99.4	23.7	29.7	53.4	78.0	21.4	99.4	30.9	31.3	62.2
	Slovakia	83.0	12.7	95.7	2.0	3.1	5.1	77.0	18.0	95.0	2.4	5.3	7.7
Slovenia	20.4	67.4	87.8	7.8	57.2	65.0	18.4	66.0	84.4	5.6	50.1	55.7	
EU-15	Austria	19.1	35.7	54.8	16.9	17.5	34.4	20.9	33.8	54.7	19.2	16.7	35.9
	Belgium	4.1	20.3	24.4	0.2	3.3	3.5	3.9	18.3	22.2	0.1	2.9	3.0
	Denmark	0.0	20.0	20.0	0.0	2.9	2.9	0.6	26.0	26.6	0.1	3.7	3.8
	Finland	1.1	37.3	38.4	0.1	14.0	14.1	2.4	37.4	39.8	0.3	13.7	14.0
	France	7.8	23.7	31.5	0.4	3.5	3.9	6.9	22.0	28.9	0.4	3.1	3.5
	Germany	5.4	30.0	35.4	0.4	5.2	5.6	5.9	31.6	37.5	0.4	5.6	6.0
	Greece	20.6	56.6	77.2	2.3	32.7	35.0	17.3	57.4	74.7	2.0	31.1	33.1
	Ireland	5.0	40.8	45.8	1.4	19.9	21.3	8.1	40.8	48.9	2.9	21.9	24.8
	Italy	27.3	50.4	77.7	3.3	21.5	24.8	17.6	54.5	72.1	2.3	19.8	22.1
	Luxembourg	6.1	19.6	25.7	0.5	3.5	4.0	3.0	20.0	23.0	0.5	2.8	3.3
	Netherlands	0.2	11.1	11.3	0.0	1.7	1.7	na	11.1	11.1	na	1.7	1.7
	Portugal	27.2	58.5	85.7	4.2	24.7	28.9	34.0	52.2	86.2	4.4	22.8	27.2
	Spain	14.2	51.2	65.4	9.7	12.6	22.3	10.0	47.0	57.0	4.1	14.6	18.7
	Sweden	11.3	42.5	53.8	2.0	14.6	16.6	20.8	41.9	62.7	4.1	16.6	20.7
	United Kingdom	22.8	36.1	58.9	3.8	10.8	14.6	40.5	23.3	63.8	11.1	8.7	19.8

Source: Eurostat (2007)

**Table 2A: SFs and SSFs according to land area and corresponding share in UAA in the EU-27, 2003 and 2007
(% of country total)**

		2003						2007					
		% of total no. of farms			% of total UAA			% of total no. of farms			% of total UAA		
		<2 ha	2 < 5 ha	Total 0<5 ha	<2 ha	2 < 5 ha	Total 0<5 ha	<2 ha	2 < 5 ha	Total 0<5 ha	<2 ha	2 < 5 ha	Total <5 ha
NMS-12	Bulgaria	88.9	6.3	95.2	10.8	4.2	15.0	84.6	8.0	92.6	6.3	3.8	10.1
	Cyprus	70.2	16.0	86.2	13.2	14.4	27.6	67.9	17.9	85.8	13.5	15.3	28.8
	Czech Republic	37.3	16.8	54.1	0.4	0.6	1.0	31.9	16.2	48.1	0.3	0.5	0.8
	Estonia	20.4	30.3	50.7	1.3	4.5	5.8	12.4	23.3	35.7	0.4	2.0	2.4
	Hungary	73.3	8.5	81.8	4.8	4.7	9.5	72.2	7.6	79.8	3.4	3.4	6.8
	Latvia	24.4	26.1	50.5	1.8	7.4	9.2	17.2	23.5	40.7	1.0	4.8	5.8
	Lithuania	12.6	49.5	62.1	2.1	17.0	19.1	13.8	46.7	60.5	1.7	12.7	14.4
	Malta	85.2	10.6	95.8	50.9	31.5	82.4	87.7	7.4	95.1	56.1	24.3	80.4
	Poland	42.9	22.4	65.3	5.0	11.0	16.0	43.8	24.3	68.1	5.4	12.2	17.6
	Romania	68.4	21.2	89.6	14.6	20.9	35.5	63.2	24.6	87.8	13.1	22.0	35.1
	Slovakia	78.3	10.8	89.1	1.4	1.1	2.5	72.0	11.6	83.6	1.4	1.2	2.6
Slovenia	22.4	35.1	57.5	4.3	18.7	23.0	24.7	34.3	59.0	4.2	17.6	21.8	
EU-15	Austria	11.3	20.7	32.0	0.7	3.7	4.4	11.6	21.4	33.0	0.7	3.7	4.4
	Belgium	13.5	12.6	26.1	0.5	1.6	2.1	12.0	11.6	23.6	0.4	1.4	1.8
	Denmark	1.3	1.6	2.9	0.0	0.1	0.1	1.1	1.7	2.8	0.0	0.1	0.1
	Finland	2.5	6.9	9.4	0.1	0.9	1.0	2.5	6.7	9.2	0.1	0.7	0.8
	France	14.2	12.1	26.3	0.3	0.9	1.2	12.1	11.6	23.7	0.2	0.7	0.9
	Germany	7.1	16.2	23.3	0.1	1.3	1.4	6.4	15.9	22.3	0.1	1.2	1.3
	Greece	47.5	27.9	75.4	8.6	18.2	26.8	48.9	26.6	75.5	8.9	17.6	26.5
	Ireland	1.2	5.1	6.3	0.0	0.6	0.6	1.2	5.2	6.4	0.0	0.6	0.6
	Italy	55.2	21.6	76.8	6.9	10.2	17.1	49.5	23.6	73.1	6.1	9.8	15.9
	Luxembourg	10.6	9.0	19.6	0.2	0.6	0.8	10.0	7.4	17.4	0.1	0.5	0.6
	Netherlands	13.3	14.8	28.1	0.6	2.1	2.7	11.4	14.2	25.6	0.5	1.9	2.4
	Portugal	48.3	27.7	76.0	4.7	8.2	12.9	46.3	26.0	72.3	3.6	6.4	10.0
	Spain	29.0	24.2	53.2	1.5	3.5	5.0	26.3	25.2	51.5	1.3	3.3	4.6
Sweden	0.7	8.1	8.8	0.0	0.6	0.6	1.0	13.4	14.4	0.0	1.1	1.1	
United Kingdom	12.2	11.8	24.0	0.2	0.7	0.9	11.1	11.7	22.8	0.2	0.7	0.9	

Source: Eurostat (2007)

Table 3A SFs smaller than 2 ha by specialisation in selected EU MS, 2007 (% of country total by specialisation)

	Bulgaria	Greece	Hungary	Italy	Poland	Portugal	Romania	Slovakia	Slovenia	Spain
Specialist cereals, oilseed and protein crops	32.7	25.1	35.6	36.7	46.1	27.2	51.4	28.1	27.6	5.2
General field cropping	84.6	22.7	65.3	39.6	55.2	56.6	60.1	67.7	36.0	16.9
Specialist horticulture	92.1	57.7	79.4	67.5	55.5	66.1	72.7	81.5	47.9	56.8
Specialist vineyards	91.2	57.7	86.2	60.7	0.0	53.8	82.1	94.1	58.2	16.7
Specialist fruit and citrus fruit	83.5	61.3	86.0	61.7	67.9	44.5	57.0	65.4	46.1	50.2
Specialist olives	0.0	65.6	0.0	70.8	0.0	49.4	0.0	0.0	76.9	28.8
Various permanent crops combined	82.5	50.7	87.5	53.1	55.5	32.5	64.0	75.0	60.7	26.4
Specialist dairying	76.7	18.7	26.9	4.7	19.3	16.1	60.1	73.3	4.5	5.1
Specialist cattle-rearing and fattening	76.3	25.1	26.8	10.0	40.5	22.3	62.3	22.5	9.9	10.8
Cattle-dairying, rearing and fattening	70.3	9.1	20.0	6.3	9.4	25.0	50.0	42.9	4.6	12.2
Sheep, goats and other grazing livestock	83.0	25.4	43.3	44.3	66.6	27.4	50.3	42.9	20.4	17.8
Specialist granivores	93.6	58.7	66.0	28.8	53.6	64.6	75.7	51.4	21.2	17.5
Mixed cropping	82.4	48.6	76.3	35.6	30.0	54.5	55.4	89.9	42.5	20.8
Mixed livestock, mainly grazing livestock	83.9	30.5	64.6	17.9	19.3	43.4	51.4	75.0	19.4	18.7
Mixed livestock, mainly granivores	93.2	70.4	94.9	30.4	21.3	72.6	87.3	96.2	39.6	37.1
Field crops-grazing livestock combined	79.9	12.5	16.1	13.4	24.9	41.1	27.6	38.3	14.9	13.3
Various crops and livestock combined	91.5	58.6	86.1	37.1	34.0	53.9	80.4	92.0	29.6	25.2

Source: Eurostat (2007)

APPENDIX 2

CASE STUDY: SEMI-SUBSISTENCE FARMING IN HUNGARY

This case study was commissioned for the European Network for Rural Development seminar entitled “Semi-subsistence farming (SSF) in the EU: current situation and future prospects”, in Sibiu, Romania, from the 21st – 23rd April 2010.

It was prepared by Csaba Forgacs¹³ on behalf of the European Network for Rural Development. The views expressed are those of the author. They do not represent the views or opinions of the European Commission.

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2.1 Definition of SF and SSF

Different countries use varying criteria when defining 'subsistence' and 'semi-subsistence' farms. The three more commonly used criteria in this regard are: farm size, economic size and market participation.

In order to understand the situation in Hungary, it is first necessary to review how subsistence farms (SF) and semi-subsistence farms (SSF) are defined by the Central Statistical Office (CSO). According to the CSO an 'agricultural holding' is any household with at least one large animal (cattle, pig, horse etc.) or minimum of 25 poultry or 1500 square-metres of land area. An agricultural census is carried out by the CSO once every decade in order to obtain data from these agricultural households. It uses the obtained data to assess and categorise the surveyed farms. In this regard, the CSO uses three differentiating criteria in its definition of the farm-type: if the agricultural products are for self-supply only - the farm is regarded as 'SF', if agricultural products not used for self-supply are sold at market - the farm is defined as 'SSF' and finally if the farm is commercially oriented it is defined as a 'commercially oriented farm' (COF). In the intervening period between census-taking, the CSO uses varying samples of farms to obtain data on structural changes and development. It also uses economic indicators to categorise households, namely the size of land or farm according to 'European size units' (ESU). Taking ESU as an indicator to assess the number of SFs and SSFs within a given country, the CSO uses the following approach: the farm is considered an 'SSF' if it is between 1 < 2 ESU, an 'SF' if it is less than 1 ESU and a 'COF' if it is between 2 < 6 ESU. However, it is worth noting that COFs are permitted to use a small amount of their produce for self-consumption.

The Ministry of Agriculture and Rural Development in Hungary (MoARD) defines SSF farms as between ESU 2 < 5. MoARD fixed the minimum guideline for viable farms as ESU 2 for some EU programmes. However, a limit of 5 ESU was set for eligibility in terms of the 'National Rural Development Plan 2004-2006' (Hedgy J.-Kacz K.-Kettinger A.). In the Hungarian Rural Development Programme for 2007-2013 a semi-subsistence farm is defined as following:

- has to be involved in agricultural activities;
- minimum 50% of its total revenues arises from agricultural activities;
- in the year prior to the disbursement of the support, a size of 2 – 4 ESU (based on total sales revenues from agricultural activities).

Historical background of small farms

In Hungary, SFs and SSFs have long played a very important role both socially and economically. During collectivization (1959-1961), a large number of cooperatives were organised and this cooperative sub-sector contributed to the production of 50% of Hungary's 'Gross Agricultural Output' (GAO). As a further incentive to encourage this process, cooperative-members were allotted small plots of 0.3-0.1 ha for household production (SF, SSF). Household farms produced mainly fruit, vegetables and animal products for the family with a small amount directed to markets. However 'co-op.' members could also use their labour force (including family members) for household production when no tasks were given in the coops.

In order to increase the efficiency of the national economy, a new economic mechanism was introduced aimed at giving more freedom to both enterprises and farms alike, to fix their production structure in a way that maximises profit, without the constant need for government directives. This new economic system was initially applied to the agricultural sector in 1967

before its extension to include the wider economy on January 1, 1968. Since that time Hungary has pursued a dual economic policy, comprising both central-planning and market economics.

The deepening-integration of both private agricultural holdings and Co-operatives (1967-1985)

Since 1967, small-scale farming became more intensive in terms of labour and capital. Conversely, certain types of farming associated with larger farms became more advantageous in terms of economies of scale or the requirement for less capital (crop, poultry, pig and beef production to a certain extent). Furthermore, the disparity, in terms of income between those engaged in agriculture and those employed in other sectors of the economy has been significant. Therefore closer collaboration between coops and household production was employed as a mechanism to provide additional income for coop members. In this way coops allowed members to purchase goods at cost price whilst also providing a premium outlet for the sale of goods produced by members. In addition, they provided marketing and other services to members. Furthermore, coop members could avail themselves of a type of credit system, whereby, payment for these services or indeed goods themselves could be deferred, until such time as they received payment for the goods sold at the coop. In 1972 there were as many as 1.6 million small-scale farms in Hungary, half of them owned by coop members and the majority of remaining farms consisting of very small-scale house farms (kitchen gardens). The market share for small farms became significant in some sectors. For example, small farms accounted for 60-80 % of vegetable production and 50-60 % of pig production. In terms of distribution of income for small scale farms: 36 % went to peasant families, 25 % to families with double income sources, 25 % to workers and professionals and 14 % to those for whom a pension was the main source of income.

The development of household farming in terms of commercial viability clearly demonstrates that producers were willing to increase output where there was a capacity for income growth. Small scale production (mainly coop members' households) represented one third of the total GAO from the 1970s until the political reform of the late 1980s. However, since then, coops have experienced growing financial difficulties resulting in increasing service charges for members.

Effect of the economic and agricultural reforms of the late 1980s early 1990s

The political reform of the late '80s and early '90s would, it was hoped ensure the following: (a) the cancellation of part of Hungary's national debt; and (b) that Hungary would become an accepted member of the EU. However, by the mid 1990s neither of these two expectations had been met. Rather, the period between 1993 and 1994 saw GDP fall by 20 %, and GAO fall by 30 %. Although the standard of living did improve, it was marginal in terms of what had been expected. The 'large-farm' model began to break down and, at the beginning of the 1990s, politicians cited the 'family-farm' as the most desirable agricultural model. Accordingly, agricultural policy began to pursue this goal. Coops involved in production were reorganised to meet new legal requirements. New coops were no-longer obliged to provide members with jobs. In the early '90s, the CSO counted some 1.4 million private agricultural holdings, mostly SFs and SSFs, cultivating more than 50 % of agricultural land. The dual characteristics of farm structures in Hungary were similar to some other Central and Eastern European countries (CEECs). However, in terms of land use, neither small nor large farms dominated the sector in Hungary. In a continuation of agricultural policy from previous years, in the late 1980s, coop

members and employees (1.6 million people) who were not land owners were allotted some 0.5-2 ha land each, according to their coop shares. In addition, as part of new laws passed in compensation for previous dispossession, more than 1 million people were returned land they or their descendents had originally owned (Table 1). Therefore by the early 1990s the average land area of private agricultural holdings amounted to 2.3-2.6 ha.

Table 1: Land distribution to those eligible for compensation in Hungary in 1991

Eligible persons	Number of people eligible	Number of land parcels	Average size of parcels, ha
Compensation to original landowners	1,040,000	592,000	1.8
Allotted land to those not having land ownership (coop members, and coop employees)	1,600,000	3,000,000	1.7
Total	2,640,000	3,592,000	1.8

Source: Varga Gy. Presentation (2002)

After the radical reforms associated with CoMECON (Council of Mutual Economic Assistance, CMEA), Hungarian food exports decreased substantially and domestic food consumption fell by 20%. Small farmers experienced severe difficulties finding suitable markets for their products and although coop members were initially unaffected, they too became susceptible with the increased collaboration between coops and members in terms of market integration.

During the first decade of Hungary's political and economic transition, the number of private agricultural holdings declined steadily. This was a result of the sustained unprofitability of farming as a whole. In fact, the number of individual farms amounted to only 958,500 in the first decade post-transition. Despite an initial increase in the number of holdings as a result of compensation laws, many new landowners were either elderly and/or retired from farming and living in towns and cities by that time. As a result, many decided not to cultivate the land but rather lease or sell it if possible. Concurrently, small and medium private holdings (as well as some large corporations) with land area for production, sought to rent more land as required. In this way, a pattern began to emerge which saw fewer landowners hold an increasing concentration of land.

Political and economic changes have had an effect on smaller farms leading to knock-on effects in terms of rural development. Difficulties associated with small-scale farming can be attributed to an array of factors, including the newly introduced 'quota system', the delay in adjusting to market needs and discrepancies in direct payments between farmers in NM states and those in EU-15. Consequently, the number of private farms has been steadily decreasing since the early 1990s. However, there were as many as 706, 900 private holdings in Hungary in 2005 (Annex 1) with 73.3 % of these comprising less than 1 ha of 'utilized agricultural area' (UAA) (Annex 2). This indicates the low-level of concentration in terms of ESU in comparison with selected EU-15 members (Annex 3).

As a result of the decline of cooperatives, most of those unemployed in rural areas found it impossible to gain employment within the agricultural sector. The number of people engaged in agricultural work fell from 700,000 at the beginning of the 1990s to around 120,000 in 2007. Most of those without work found the only way to survive was to run a SF or SSF and either rely solely on this for income or combine it with off-farm work (on a full or part-time basis). As the 'input' costs of farming increased (chemicals, seeds, etc.) small farms were unable to

modernize and therefore left with no choice but to exit farming altogether. This has resulted in an increasing number of people, mainly elderly pensioners, living below the poverty line. Unemployment levels in those rural areas dominated by agriculture reach anywhere from 30-35% to 50-70% in some areas. This is despite the fact that Hungary has a UAA of 63%, much greater than the European average of 43%.

2.2 Socio-economic characteristics of SSFs

In 2000, private holdings (958,534 of them in total) were dominated by small farms consisting of parcels of land sufficient only for production for self-consumption. In fact, 60.4% of private holdings produced for the family alone. Another 31.5 % of small farms were regarded as SSF and only 8 % were regarded as COF (75-77000 farms in total), producing mainly for markets. The total land area for private holdings accounted for just over 50 % of agricultural land. Apart from arable land, grassland and forested areas were the most important types of land used for cultivation in 2005. Furthermore, 41.8 % of agricultural holdings have no arable land at all and consist of either animals around the house, some grass area, orchard, or vineyards, mostly in gardens. Another 30 % of holdings have less than 0.5 ha of arable land. Meanwhile less than 1 % of private holdings have an arable land area above 50 ha, accounting for more than 42% of the arable land cultivated by private holdings in Hungary.

The mean age of farmers and workers employed in private holdings has increased. In 2005, 52% were over 54 years of age and 50% of primary producers were pensioners. However, by 2003 the percentage of those younger than 34 years, increased to 8%. In terms of the educational attainment of farmers, little changed between 2000 and 2005. In 2005, only 2% of farmers had attained a college/university degree while 6% of farmers had a secondary school certificate. However, 80 % of farmers were educated to merely primary school level, benefiting from only practical experience other than that. In terms of gender, men were better educated than women. Those engaging full-time in farming represented 61% of the total, largely unchanged from previous years, with 38% having a full time job in an area outside of agriculture. Two-thirds of holdings had 2-3 people employed and 30 % of holdings had only one employed worker.

2.3 Development of SSFs since EU accession

According to the 'Farm Structure Survey 2007' (FSS 2007) about 7,400 agricultural enterprises were engaged in agriculture. However, nearly 619 thousand private-holdings were involved in agricultural activity not taking into account the observable agricultural production taking place in kitchen gardens and holiday-home gardens (CSO). Most SFs (43.8 %) and two-thirds of COFs were involved in crop production with 45.6 % of SSFs involved in mixed farming (Annex 4). SFs accounted for 48.2 % of crop production and 77.8 % of animal husbandry in terms of private farms (Annex 5).

As regards the distribution of individual farms by EU regions, the majority of farms were SF in all regions, with a particularly high share (around 60 %) in Central and West Transdanubia and Central Hungary (Annex 6). With the exception of the South Great Plain, crop production accounts for the highest share of farming in all other regions. Mixed farming is the second highest type of farming carried out in all regions apart from Central Hungary. In the South Great Plain all three types of farming are well balanced in terms of distribution share (Annex 7).

Between 2003 and 2007 mixed cropping farms declined by 33%. In the case of other mixed farms they declined by more than 25 %. However, the decline in specialized farming was less

pronounced. In this regard, specialist grazing livestock saw significant decline (20.5 %), while specialist horticulture and specialist granivores (pigs and poultry) decreased by 4.5 % and 3.3 % respectively. Concerning the distribution of types of agriculture among private holdings specialist granivores prevailed, with 19.2% of private holdings involved in this type of farming in 2003. As regards other types of farming, the breakdown for private-holdings is as follows: mixed crops (17.4%), specialist permanent crops (16.7%) and mixed livestock holdings (16%) in 2003. In 2007, specialist granivores extended their share to 23 %, special grazing livestock increased by 50 % and the share of all other types (except non-classifiable farms) decreased. In 2003, SFs accounted for 79.2 % of the total number of private holdings and SSFs accounted for 8.9 %. In 2007, these figures were 81.4 % and 7.5% respectively. Between 2003 and 2007, the number of total private holdings decreased at a higher rate than the decline of SFs and less than that of SSFs (Annex 8 and 9). In particular, elderly people living alone decided to quit their semi-subsistence farming. The decline in SSFs exceeded the total decline in terms of individual farms (Annex 10).

Based on MoARD data from 2005, the total number of SFs was some 50 % higher than the number of SSFs. The share of SFs involved in animal husbandry was 400% higher than SSFs. However SSFs exceeded SFs by two-thirds in terms of mixed farms. Commercially oriented private holdings accounted for 15.5 % of private holdings, and were more involved in crop production than animal husbandry (Table 2).

Table 2. Breakdown of private agricultural holdings by goal of farming, 2005.

Goal of farming	Crop production	Animal husbandry	Mixed	Total
	%			
SF	48.15	77.82	38.03	51.36
SSF	29.73	19.18	47.45	33.06
Commercially oriented	22.07	2.86	14.39	15.48
	100.00	100.00	100.00	100.00

Source: MoARD

2.4 Production orientation of SSFs

In 2000, the value of GAO in private holdings amounted to HUF 525,000 on average. In terms of the type of farming carried out, the GAO of holdings with a mixed profile was almost double that amount, at HUF 914,000, while farms with animal husbandry accounted for a GAO of only HUF 260,000. The profile varied according to region. Farms located in the Great Plain were above average in terms of GAO (especially in southern parts), while figures for crop and mixed farms in all other regions were below average. Private farms with animal husbandry in West and South Transdanubia had above-average figures.

As regards the production goals of farms, COFs had an average GAO of HUF 2,196 thousand. For SSFs the GAO amounted to HUF 738 thousand and this figure in SFs amounted to only HUF 192 thousand. No detailed data is available regarding the market share for SSFs but it can be stated that SSFs sell their products at local producers' markets once a week, primarily on Saturdays. Therefore consumers who prefer to buy fresh fruit and vegetables from primary producers visit these markets and purchase goods even if prices are higher than typical food stores. This could mean that these consumers trust producers' products more than goods in food stores. But it could also be accounted for by the fact that many consumers who frequent

producers' markets are elderly and therefore unable to travel to food stores located out of the village or town.

Over the last two decades there has been a marked decrease in the propensity of SSFs and SFs to cooperate. However, small producers within a village or town continue to cooperate on a long-term basis. In the early '90s a political agenda which opposed the concept of cooperation was pursued and this ethos has proved more than effective. As a result small farms prefer to work alone and are less likely to trust in the concept of cooperation even if this means paying a higher price.

Hungary occupies a land-mass of 93,000 square km and is comprised of 9 counties. It also has 7 EU regions. Three are located in Transdanubia, three in Eastern Hungary and one in Central Hungary. Six regions include three counties each, while Pest County and the capital Budapest compose the Central Hungary region (Annex 11). As regards the geographical location of SFs, SSFs and COFs, an interesting phenomenon can be observed. The share of COFs within individual holdings is highest in North and Eastern Hungary (North Hungary, North and South Great Plain). These areas have the highest unemployment rate and are dominated largely by agriculture. The two-highest shares of SSFs also belong to North and South Great Plain. Those who lost their jobs in these regions have been forced into agriculture as a means of survival due to the extreme lack of employment opportunities outside of farming. Between 2004 and 2006, the majority of SSF applications (83.7 %) came from Eastern Hungary and South Transdanubia regions. In the other four regions, where unemployment levels are relatively lower, the share of SFs is highest (50-60 %).

2.5 National policy measures for SFs and SSFs

The taxation system in Hungary plays an important role in improving agricultural facilities and outputs in terms of SSFs and SFs. Farms are subject to taxation according to personal income tax rules; below a certain level of turnover, private holdings are not obliged to pay tax. SSFs and SFs are regarded as primary producers if the source of income is derived from the sale of goods produced by the SSF and SF himself/herself. Taxation of SSFs and SFs is complex and the limits on turnover and tax vary from year to year. However, the basic system of taxation remains the same. A simplified summary of the 2007 taxation system is as follows: for taxation purposes primary producers can choose: (a) costs based taxation or; (b) a fixed-tax version. In terms of the 'costs based' system for calculating the tax owed, the producer should use 10% of the total turnover for costs without any receipts or employ a 'full costs record' approach supported by invoices. If the total annual turnover is below HUF 600,000 then there is no tax obligation. Where a 'full costs record' approach is utilised (if turnover from primary producer's activity does not exceed HUF 7 million), then 40 % of the total turnover, excluding justified costs, can be recorded as general costs, even without a receipt. The calculated income from primary producers' activity becomes part of the total tax base and the latter is determined according to a personnel income tax table. For those choosing a 'fixed tax system', 15 % of turnover is regarded as the tax base. If turnover is derived from animal husbandry activity then the tax base is 6 % of the total turnover and tax is calculated on a personnel income tax table.

If primary producers choose the 'full costs record' and have a turnover of between HUF 600,000 and HUF 4 million with no other income, they can submit a simplified tax sheet indicating their lack of income from primary production. This applies if they have justified costs (receipts) equal to a minimum of 20 % of the turnover. The amount of tax payable from the total tax base can be decreased by a maximum HUF 100,000 conditionally. If the total annual turnover is above HUF 6 Million, the tax reduction is equal to an amount 20 % above the actual turnover after

deducting HUF 6 million. No tax preference can be justified if the total annual income is above HUF 5.5 million. Despite hopes to increase the number of small farms registered at the tax office, it was deemed more important to fix tax rules in such a way as to keep farmers interested in farming and increase future outputs.

According to a law passed in 1997 on the 'Eligibility for Social Security Benefits and Private Pensions...' (Act LXXX), primary agricultural producers qualify for social security. The law does refer to an exemption in terms of paying a social security fee. In terms of labour tax, levels (depending on minimum wage) are as follows: 29 % goes towards a social security fee, 7 % goes towards health care and 8.5 % towards a pension fund. However, if the total amount of turnover from primary production did not exceed HUF 7 million the previous year, then 20 % of the actual turnover is considered the base with 8.5 % of this going to a pension fund and 4 % to a health care fund.

According to VAT tax rules, anybody running a business is subject to taxation and should be registered at the tax office from January 1, 2010 onwards. All primary producers who have not registered are obliged to do so and obtain a tax number as a matter of urgency.

2.6 Measure to support SSFs' restructuring

SSFs receive both EU and national support (70 % and 30% respectively) in Hungary.

Between 2004 and 2006, MoARD put out three calls for applicants interested in securing assistance for the restructuring of SSFs. The calls clarified details of the scheme, the goals of support and guidelines on how to obtain a grant. The program was targeted at providing help to small farmers, in particular those suffering from lack of capital, who were interested in restructuring the farm to make it a more viable enterprise under market conditions. Eligible agents were primary producers, entrepreneurs engaged in agriculture and family farms. The conditions for eligibility are set-out below.

- Applicants had to have a min 2/max 5 ESU in the year prior to application from the following:
 - cultivation of arable land between 5 to 10 ha;
 - an orchard, vineyard or greenhouse vegetable production on maximum 0.3 ha;
 - sufficient grassland for 2 to 10 animal units where 1.4-1.8 animal units per ha can be calculated;
 - from other agricultural activities.
- They had to have a certificate from middle level professional school or 3-years professional experience.
- A 5-year business plan had to be drawn up which sets out steps to be taken, to see a 50% increase in farm size in terms of ESU by the final year as compared to the year prior to submitting an application.
- A commitment had to be undertaken to reach ESU 5 by the end of the fifth year.
- Applications had to be submitted on official forms.

Eligible farmers could apply for grants in 2004, 2005 and 2006. Each grant was worth €1000 per year for 5 years. In addition to standard monitoring procedures, beneficiaries of this grant were assessed in terms of the conditions of the grant in the third year. Those not meeting the required conditions had the support terminated.

Response to this scheme was poor and therefore it can be assumed that the grant was not deemed sufficient for SSFs to be restructured as economically viable farms within a 5-year time

frame. Within Hungary, three regions in particular had a high concentration of applicants. These were: North Great Plain with 440 applicants (38.6%), South Transdanubia with 262 applicants (23 %) and South Great Plain with 252 applicants (22.1%) (Annex 12). All three regions are primarily agricultural but are not homogenous. However, on average less than 400 SSFs applied for the grant annually with the total number of applicants amounting to just 1,139. This figure represents only 2-3 % of total the total number of SSFs in Hungary (ESU 2< 5). As a result, very few SSFs benefited from this scheme. Potential explanations for this could be that many farmers did not meet the criteria of the scheme or they simply did not want to incur the additional costs of being registered and monitored for such a small amount. Much fewer applications were submitted during 2004-2006 than expected. Surprisingly, the number of applications for payments was much less than the number of applications submitted for grants (Annex 13, 14). In total, the budget spent on supporting SSFs under this scheme amounted to less than €2 million between 2005 and 2009. The first two years cost €5-6,000 annually, followed by a decline in subsequent years (Annex 15).

As a result, government policy is now focused on having more SSFs included in this scheme in the period between 2007 and 2013, although the specific semi-subsistence measure in the RDP has not been launched yet. To improve the efficacy of government policy in relation to these measures, a detailed analysis of the first three calls should be undertaken. Where possible, the consistency of criteria should be assessed and improved upon for the next round. In an effort to explain the poor response to its SSF restructuring scheme, MoARD has ordered a study be carried out to assess the situation. The Department ordered the report be based on a survey using a sampling of applications. The aim of the report is to ascertain the underlying cause for such a low number of applications and propose any areas for improvement to the scheme which might increase the number of applicants in the future. In addition, the process of writing the report should involve close coordination and communication between related professional organizations and lobbying groups. The study should also take advantage of all available financial resources in order to compile a definitive report which includes revisions of the terms of previous calls, as well as propose amendments to extend the overall number of eligible farms. For example, apart from the restructuring calls, SSFs might also benefit from other measures, such as: supporting producers' groups, agro-environmental measures, assistance in meeting standards and technical assistance. However, to date these measures have received a similarly poor response from SSFs. They either do not appear interested in joining producers' groups, and/or have failed to meet standards or obtain technical assistance. In addition, few partook of any agro-environmental measures. It is expected that more SSFs will apply for restructuring support in the future but the grant itself (1.500 EUR per year for a period of 5 years), is not deemed sufficient to attract the required interest. Another disincentive, as far as farmers themselves are concerned, is most likely the requirement to register with the tax office and be subject to ongoing tax checks. However, experts say that if the conditions of a new call are more amenable to farmers' needs, it can be expected that an additional 15 to 20 thousand farms might be interested in applying for support.

2.7 Lessons for future policy from the Hungarian experience

Based on the Hungarian experience, the following is deemed important:

- a clearer vision regarding the type of farm structure the country would like to have in the future;
- to keep in mind that SFs and SSFs are not only economic units but belong to households and as such are also part of the social net;
- a conclusive review should be undertaken of the poor results of the first three calls for restructuring support;
- eligibility criteria for restructuring grants should be revised;
- future calls should be well publicised and promoted;
- improved communication with SFs and SSFs in terms of outlining the aim and benefits of the restructuring scheme is required;
- the administrative burden for applicants should be simplified as much as possible.

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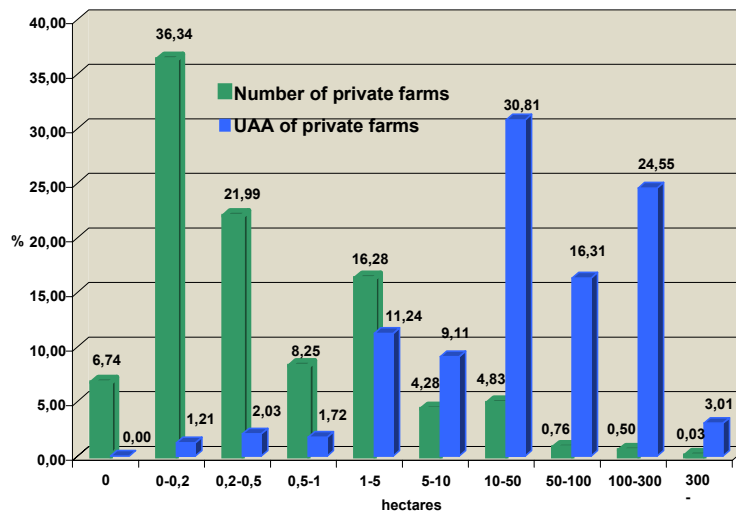
ANNEXES APPENDIX 2

Annex 1. Distribution of individual farms by arable land, 2005

Arable land (ha)	private holdings		arable land of private holdings
	number	share, %	
0	295 767	41.84	0
0-0,2	117 345	16.6	0.84
0,2-0,5	94 654	13.39	1.58
0,5-1	41 424	5.86	1.55
1,0-5	98 259	13.9	12.21
5,0-10	24 954	3.53	9.65
10-50	27 498	3.89	31.74
50-100	4 312	0.61	16.93
100-300	2 616	0.37	23.94
300-	71	0.01	1.56
Total	706 900	100	100

Source: MoARD

Annex 2 Breakdown of private farms by UAA in Hungary, 2005



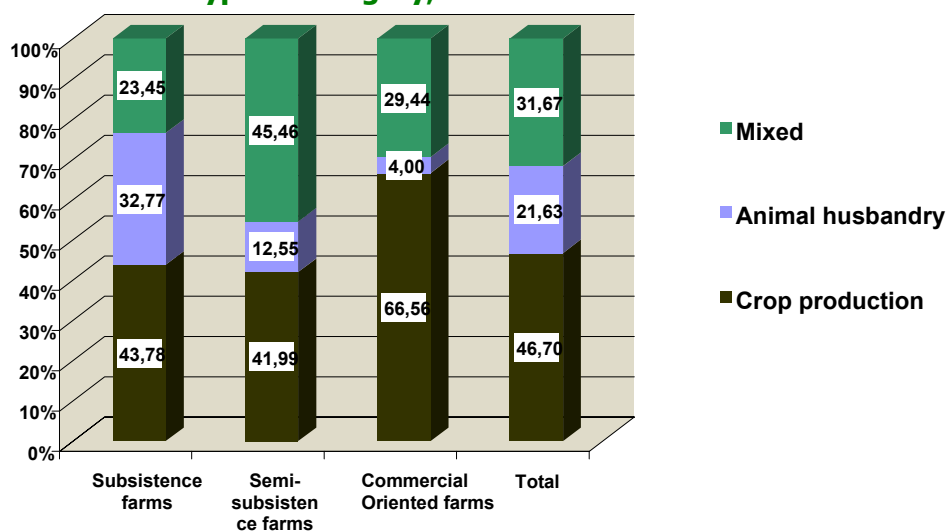
Source: MoARD

Annex 3. Breakdown of farms in selected EU countries by ESU (2003)

Product ion value In HUF	ESU	Hungary	Denmark	Belgium	Sweden	Finland	Ireland
< 750000	<1	79,2		4,2	11,3	1,0	6,3
750000 <1,5 million	1 < 2	8,9		4,5	10,5	7,1	8,1
1,5 < 3 million	2 < 4	5,6	5,4	6,5	15,5	13,1	14,3
3 < 6 million	4 < 8	3,2	14,6	9,1	16,5	17,2	19,6
6 < 12 millió Ft	8 < 16	1,6	17,3	10,0	13,1	18,1	18,8
12 < 30 millió Ft	16 < 40	0,9	20,5	16,7	13,7	27,2	18,0
30 < 75 millió Ft	40 < 100	0,4	17,7	29,5	13,1	14,5	12,5
>75	>100	0,2	24,5	19,5	6,3	1,8	2,4
	<i>Total:</i>	<i>100,0</i>	<i>100,0</i>	<i>100,0</i>	<i>100,0</i>	<i>100,0</i>	<i>100,0</i>
	Number of farms						

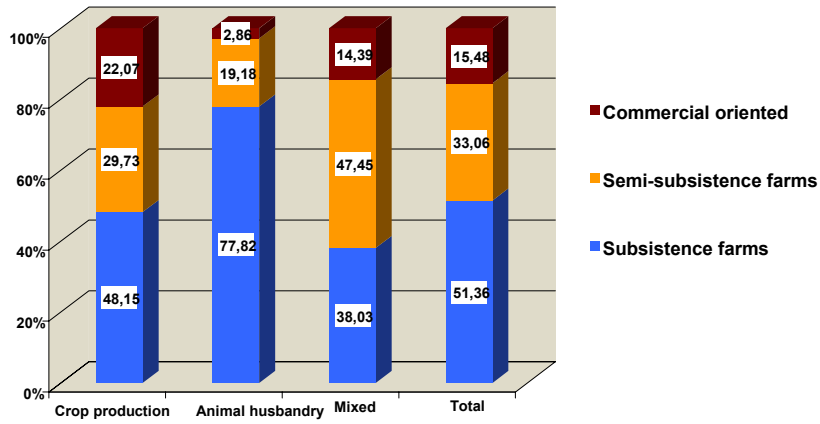
Source: Hegyi J.- Kacz K.- Kettinger A.: A gazdaság fogalmának változása
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Annex 4. Breakdown of private farms by production type in Hungary, 2005



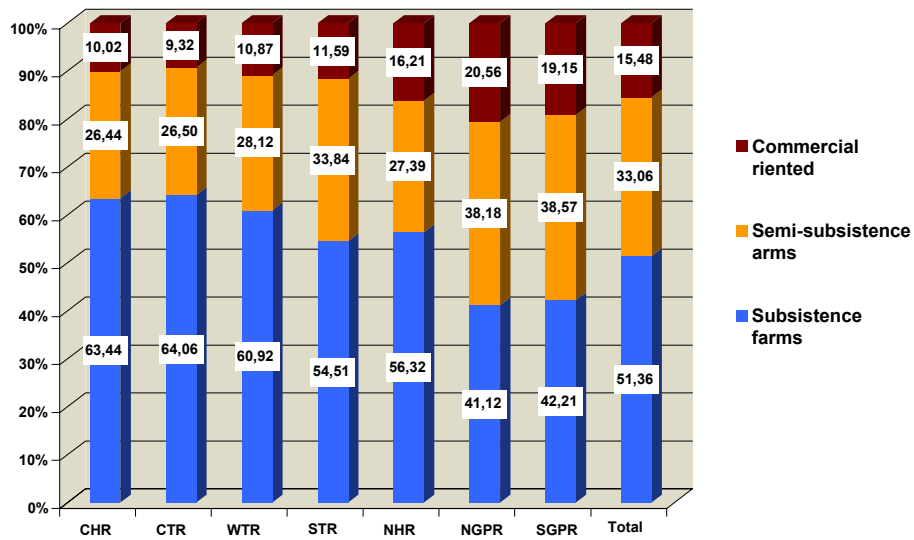
Source: MoARD

Annex 5. Distribution of individual farms by economic goal in Hungary, 2005



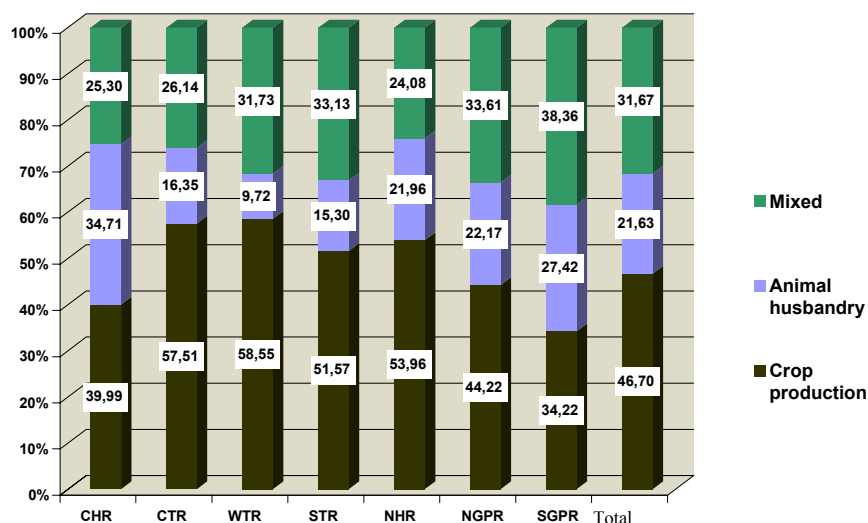
Source: MoARD

Annex 6. Distribution of individual farms according to economic goals



Source: MoARD

Annex 7. Breakdown of individual farms by production type and By EU regions in Hungary, 2005



Source: MoARD

Annex 8. Number of private farms engaged in agricultural activity by type of farming and size class (2003)

Type of holdings	Size category (ESU)										Total
	<1	1<2	2-<4	4-<6	6-<8	8-<12	12-<16	16-<40	40-<100	100<	
Specialist field crops	56042	18658	14946	6365	3232	3481	1862	3023	886	42	108537
Specialist horticulture	1509	1837	2201	866	617	559	315	475	101	34	8514
Specialist permanent crops	102625	11566	6652	2487	1274	1231	606	881	196	29	127547
sub-total	160176	32061	23799	9718	5123	5271	2783	4379	1183	105	244598
Specialist grazing livestock	8803	2862	2660	973	488	497	262	320	83	13	16961
Specialist granivores	138591	4969	1570	509	298	347	213	375	193	43	147108
sub-total	147394	7831	4230	1482	786	844	475	695	276	56	164069
Mixed cropping	75715	10640	6225	2149	1047	916	377	540	110	13	97732
Mixed livestock holdings	111862	6211	2757	743	259	197	77	86	16	2	122210
Mixed crops	111157	11421	6027	1940	819	715	315	476	106	12	132988
sub-total	298734	28272	15009	4832	2125	1828	769	1102	232	27	352930
Not-classifiable holdings	0	0	0	0	0	0	0	0	0	0	4012
Grand total	606304	68164	43038	16032	8034	7943	4027	6176	1691	188	765609

Source: Own calculation from: *Agriculture in Hungary (Magyarország mezőgazdasága) Farm typology. 2000, 2003 (CSO: 2004)*

Annex 9. Number of private farms engaged in agricultural activity by type of farming and size class (2007)

Type of farms	<1	1-<2	2-<4	4-<6	6-<8	8-<12	12-<16	16-<40	40-<100	100<	Total
Specialist field crops	52163	14003	10934	4824	2764	3128	1834	3467	1138	84	94340
Specialist horticulture	2152	1656	1682	784	458	450	275	523	116	32	8127
Specialist permanent crops	75208	7667	5056	2322	1061	963	474	711	132	16	93609
Specialist grazing livestock	13033	2022	1939	1268	626	620	303	565	61	3	20440
Specialist granivores	135299	4458	1282	394	141	213	102	212	71	28	142198
Mixed cropping	51975	6105	3846	1376	639	706	332	568	82	5	65635
Mixed livestock holdings	83277	3040	1521	467	218	187	69	110	4	-	88893
Mixed crops	79706	7724	3876	1306	653	631	260	413	95	3	94667
Not-classifiable holdings	0756		-	-	-	-	-	-	-	-	10756
Grand total	503569	46675	30136	12741	6560	6898	3649	6569	1699	171	618665

Source: CSO: http://portal.ksh.hu/pls/ksh/docs/hun/agarar/html/tablgtip07_02b.html?1163

Own calculation from data of CSO: Agriculture in Hungary (Magyarország mezőgazdasága) Farm typology, 2007

Annex 10. Number of semi-subsistence farms in Hungary (2000-2007)

Type of farms	2000	2003	2005	2007	2007	2007
	Size (ESU) 1-<2				2000=100	2003=100
Specialist field crops	25830	18658	15939	14 003	54.2	75.1
Specialist horticulture	2192	1837	2415	1 656	75.5	90.1
Specialist permanent crops	9468	11566	9072	7 667	81.0	66.3
sub-total	37490	32061	27426	23 326	62.2	72.8
Specialist grazing livestock	4957	2862	1525	2 022	40.8	70.6
Specialist granivores	7830	4969	4837	4 458	56.9	89.7
sub-total	12787	7831	6362	6 480	50.7	82.7
Mixed cropping	14269	10640	9526	6 105	42.8	57.4
Mixed livestock holdings	10376	6211	4500	3 040	29.3	48.9
Mixed crops	15451	11421	10288	7 724	50.0	67.6
sub-total	40096	28272	24314	16 869	42.1	59.7
Total	90373	68164	58102	46675	51.6	68.5

Source: CSO: http://portal.ksh.hu/pls/ksh/docs/hun/agarar/html/tablgtip07_02b.html?1163

Annex 11. NUTS 2 regions of Hungary



EU NUTS 2 regions:

Közép-Magyarország (KMR): Central Hungary Region (CHR)

Észak-Magyarország (ÉMR): North Hungary Region (NHR)

Észak-Alföld (ÉA): North Great Plane Region (NGPR)

Dél-Alföld (DA): South Great Plane Region (SGPR)

Közép-Dunántúl (KD): Central Transdanubai Region (CTR)

Nyugat-Dunántúl (NyD): West Transdanubia Region (WTR)

Dél-Dunántúl (DD): South Transdanubia Region (STR)

Annex 12.

Breakdown of SSFs applications by region and counties in Hungary (2004-2006)

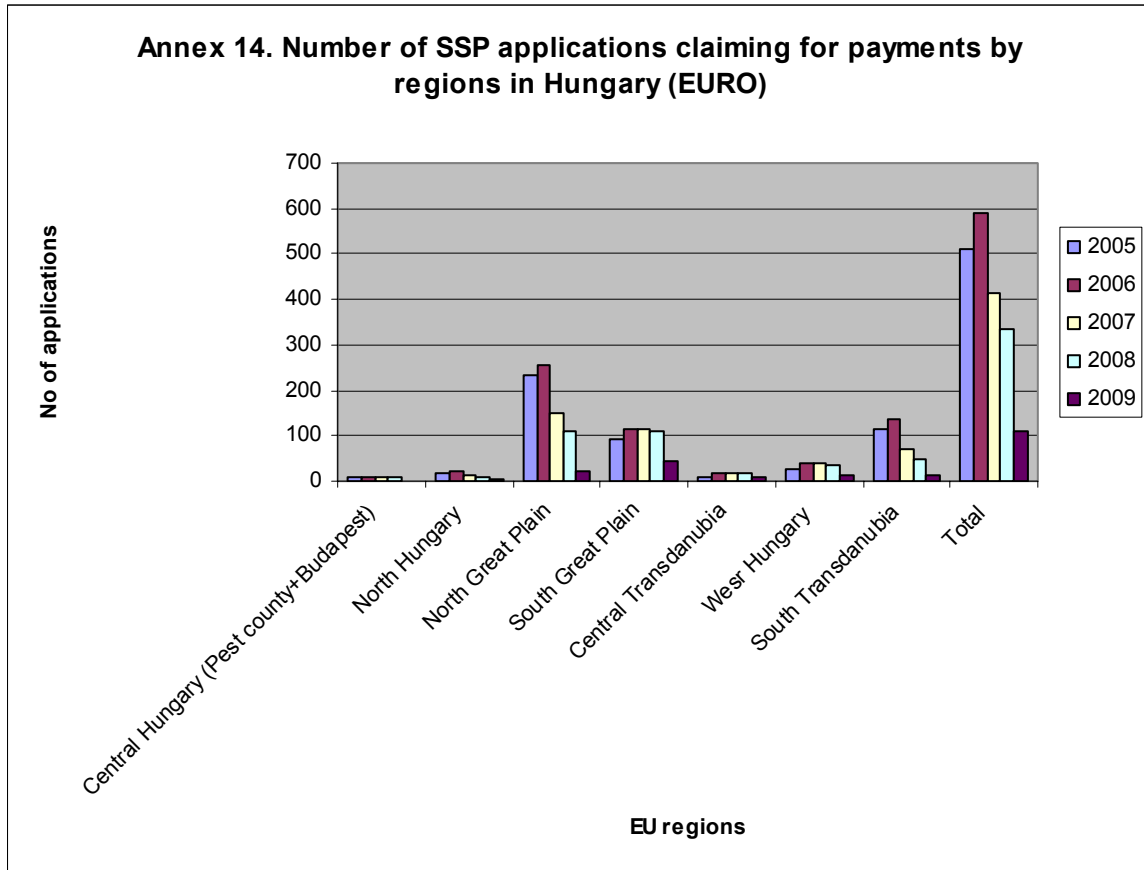
Region/county	2004	2005	2006	Total	2004	2005	2006	Total
	Number of applicants				in %			
Central Hungary (Pest County+Budapest)	14	3	11	28	2.0	1.8	4.3	2.5
North Hungary	26	3	3	32	3.6	1.8	1.2	2.8
Borsod-Abaúj-Zemplén county	9	1	3	13	1.3	0.6	1.2	1.1
Heves	14	0	0	14	2.0	0.0	0.0	1.2
Nógrád	3	2	0	5	0.4	1.2	0.0	0.4
North Great Plain	329	57	54	440	45.9	34.1	21.1	38.6
Hajdú-Bihar	75	25	20	120	10.5	15.0	7.8	10.5
Jász-Nagykun-Szolnok	21	2	1	24	2.9	1.2	0.4	2.1
Szabolcs-Szatmár-Bereg	233	30	33	296	32.5	18.0	12.9	26.0
South Great Plain	114	36	102	252	15.9	21.6	39.8	22.1
Bács-Kiskun	43	4	32	79	6.0	2.4	12.5	6.9
Békés	31	14	34	79	4.3	8.4	13.3	6.9
Csongrád	40	18	36	94	5.6	10.8	14.1	8.3
Central Transdanubia	14	14	13	41	2.0	8.4	5.1	3.6
Fejér	9	13	6	28	1.3	7.8	2.3	2.5
Komárom-Esztergom	1	0	1	2	0.1	0.0	0.4	0.2
Veszprém	4	1	6	11	0.6	0.6	2.3	1.0
Wesr Hungary	43	19	22	84	6.0	11.4	8.6	7.4
Győr-Moson-Sopron	26	6	7	39	3.6	3.6	2.7	3.4
Vas	10	2	4	16	1.4	1.2	1.6	1.4
Zala	7	11	11	29	1.0	6.6	4.3	2.5
South Transdanubia	176	35	51	262	24.6	21.0	19.9	23.0
Baranya	61	7	3	71	8.5	4.2	1.2	6.2
Somogy	107	15	29	151	14.9	9.0	11.3	13.3
Tolna	8	13	19	40	1.1	7.8	7.4	3.5
Total	716	167	256	1139	100.0	100.0	100.0	100.0

Source: Own calculations based on data from Agriculture and Rural Development Agency. Source: ARDA.

Annex. 13.
**Number of SSP applications for claiming payments by regions/counties
in Hungary**

	2005	2006	2007	2008	2009
Central Hungary (Pest county+Budapest)	11	8	10	8	2
North Hungary	19	20	12	9	4
Borsod-Abaúj-Zemplén county	6	6	5	2	2
Heves	9	10	6	6	0
Nógrád	4	4	1	1	2
North Great Plain	235	256	151	108	23
Hajdú-Bihar	58	65	45	30	8
Jász-Nagykun-Szolnok	12	15	5	4	0
Szabolcs-Szatmár-Bereg	165	176	101	74	15
South Great Plain	92	114	115	108	45
Bács-Kiskun	32	33	27	25	5
Békés	23	32	37	31	18
Csongrád	37	49	51	52	22
Central Transdanubia	11	17	18	16	7
Fejér	7	14	10	8	2
Komárom-Esztergom	1	1	1	1	1
Veszprém	3	2	7	7	4
WestHungary	26	38	39	35	14
Győr-Moson-Sopron	13	16	15	12	3
Vas	8	9	7	5	2
Zala	5	13	17	18	9
South Transdanubia	115	138	69	49	14
Baranya	40	43	16	10	0
Somogy	72	82	43	35	10
Tolna	3	13	10	4	4
Total	509	591	414	333	109

Source: Own calculations based on data from ARDA



Source: Data from ARDA

Annex 15.
Payments under SSFs program in Hungary, 2005-2009 (EURO)

Region/county	2005	2006	2007	2008	2009	2005-2009
Central Hungary (Pest county+Budapest) KMR	11000	8000	10000	8000	2000	39000
North Hungary ÉMR						
Borsod-Abaúj-Zemplén	6000	6000	5000	2000	2000	21000
Heves	9000	10000	6000	6000	0	31000
Nógrád	4000	4000	1000	1000	2000	12000
North Great Plain ÉAR						
Hajdú-Bihar	58000	65000	45000	30000	8000	206000
Jász-Nagykun-Szolnok	12000	15000	5000	4000	0	36000
Szabolcs-Szatmár-Bereg	165000	176000	101000	74000	15000	531000
South Great Plain DAR						
Bács-Kiskun	32000	33000	27000	25000	5000	122000
Békés	23000	32000	37000	31000	18000	141000
Csongrád	37000	49000	51000	52000	22000	211000
Central Transdanubia KDR						
Fejér	7000	14000	10000	8000	2000	41000
Komárom-Esztergom	1000	1000	1000	1000	1000	5000
Veszprém	3000	2000	7000	7000	4000	23000
Wesr Hungary NYDR						
Győr-Moson-Sopron	13000	16000	15000	12000	3000	59000
Vas	8000	9000	7000	5000	2000	31000
Zala	5000	13000	17000	18000	9000	62000
South Transdanubia DDR						
Baranya	40000	43000	16000	10000	0	109000
Somogy	72000	82000	43000	35000	10000	242000
Tolna	3000	13000	10000	4000	4000	34000
Total	509000	591000	414000	333000	109000	1956000

Source: Own calculations from data from ARDA

APPENDIX 3

CASE STUDY: THE ROLE OF SUBSISTENCE AND SEMI-SUBSISTENCE FARMS IN THE DELIVERY OF PUBLIC GOODS IN ROMANIA

This case study was commissioned for the European Network for Rural Development seminar entitled "Semi-subsistence farming (SSF) in the EU: current situation and future prospects", in Sibiu, Romania, from the 21st – 23rd April 2010.

It was prepared by Nathaniel Page¹⁴ on behalf of the European Network for Rural Development. The views expressed are those of the author. They do not represent the views or opinions of the European Commission.

¹⁴ Since 1997 (after leaving the UK's diplomatic service) Nat Page has been combining rural development work in Romania with managing a 60ha organic beef farm in the UK. In 2004 he co-founded the ADEPT Foundation, dedicated to developing incentives for small farmers to continue the traditional management on which the survival of Romania's remarkable semi-natural landscapes depends.

3.1 Introduction

This case study will draw on the experience of an NGO programme in Romania to illustrate the role of Subsistence and Semi-Subsistence Farms (SFs and SSFs) in providing a wide range of public goods, and the role that NGOs can play in maximising the benefits of public goods.

3.2 What is the link between SFs and SSFs on the one hand, and public goods on the other?

Subsistence and semi-subsistence farming systems, certainly in Europe, are associated with High Nature Value Farmed (HNVF) landscapes: semi-natural grasslands often in a mosaic of small plots intermixed with forests and arable land. When valuing HNVF landscapes, it is useful to estimate their value in a broad sense, using the public goods concept. Such areas are to be valued as much for the public goods they produce, as for their economic agricultural productivity. Otherwise increased competitiveness will be given priority in landscapes without taking account of the broader social cost. The benefits of public goods go beyond the communities that live within the areas that provide them.

The extent to which extensive agricultural HNVF landscapes provide public goods (water quality and security, food quality and security, cultural heritage, quality of life, recreation, biodiversity conservation, carbon sequestration, fire and flood resistance, etc.) has only been fully appreciated quite recently. In terms of provision of public goods, HNVF landscapes compare favourably with wilderness areas, and the arguments for, and efforts put into, conservation of wilderness areas, apply equally strongly to HNV farmed landscapes.

It is now widely recognised that losses in the natural world have direct economic repercussions that we have systematically underestimated. These losses can go unnoticed at national and international level because the true value of natural capital is missing from decisions, indicators, accounting systems and prices in the market. The concept of public goods or ecosystem services – the benefits mankind derives from nature – is an attempt to make the value of our natural capital visible to economies and society. (The Economics of Ecosystems and Biodiversity for National and International Policy Makers – Summary: Responding to the Value of Nature 2009.)

This case study examines one of Europe's most important HNVF landscapes, in southeast Transylvania, which is characterized by small-scale farming communities (subsistence and semi-subsistence farming systems). We will use a rural development project, led by a local NGO ADEPT Transilvania, to illustrate the value of HNVF landscapes in terms of public goods; and how HNVF landscapes can be supported in order to maximize public goods, and at the same time to compensate the communities living within them.

3.3 Subsistence & semi-subsistence farming in Romania

SFs and SSFs can be defined in various ways: by physical or economic size, or by the way they use their products.

Use of products: subsistence farming is recognized by the Romanian System of National Accounts as holdings that use more than 50% of production for household's own final consumption. About 80% (3.4 million out of a total of 4.2 million) of individual holdings use more than 50% of their output for their own consumption. This definition is not used to control

access to Romania's National Rural Development Programme (NRDP) measures, but is useful in helping to understand the livelihoods of SFs and SSFs. The NRDP states that 'by providing livelihood to vulnerable groups, subsistence holdings play an essential socio-economic function'.

Economic size: holdings with economic activity under 2ESU (a measurement of economic activity equivalent to standard gross margin of €1,200) are classed as SFs in the NRDP. They cover about 45% of the Romanian Utilisable Agricultural Area (UAA) and to account for 91% (3.8 million) of the total number of holdings.

Holdings between 2-8 ESU are classed as SSFs in the NRDP. These are regarded as the class of holdings most likely to be able to benefit from investment measures under the NRDP. They are typically individual holdings - under 2% of them are legal entities. They have an average area of 4.9 ha for the 2-4 ESU group and 9.4 ha for the group of 4-8 ESU (Romanian NRDP).

Physical size: 1.9 million Romanian holdings are less than 1ha in area, and therefore are not listed in the Farm Register, nor are they eligible for area-based payments (SAPS, agri-environment). Many of these lack legal personality.

In this paper we will use the term SF to mean a holding under 2 ESU, and the term SSF to mean a holding 2-8 ESU in size. This is not intended as a definition of SSF in Romania as a whole, but is a specific size range selected by the Romanian government as encompassing those holdings most likely to be able to benefit from RDP investment measures.

- There are 3.8 million holdings under 2 ESU in Romania, 91% of Romania's agricultural holdings, 45% of Romania's total UAA. (Of these, 50% are under 1ha in size.)
- There are 336,000 SSFs (2-8 ESU) in Romania, 8% of holdings, about 10% of UAA.
- The remaining 42,000 holdings are over 8 ESU, and account for about 45% of UAA, mostly in flatter, arable and more intensively farmed areas such as the Danube plain.

As an indication of national distribution of SFs and SSFs, and associated HNV grasslands, see Figure 1. HNV grasslands are much less widespread in the southern Danube plain area of Romania, the flat arable areas of which have been intensively farmed for much of the 20th Century.

The distribution of SFs and SSFs in Romania is associated with semi-natural grasslands, which cover an estimated 2.3 million ha, 20% of total agricultural area (average is 12% in CEE member states).

91% of Romanian holdings, and 55% of Romania's UAA, is therefore farmed by SFs and SSFs. How should this be viewed? This preponderance of small-scale farms, HNVF landscapes with semi-natural grasslands has until now has been seen as a weakness in Romania agriculture, as a lack of competitiveness that needs to be rectified, but the concept of public goods has prompted a re-appraisal of the social and economic value of semi-natural grasslands.

3.4 What public goods do the SFs and SSFs of Romania provide?

Provisioning services such as clean air and water for local, regional, national and international supply. Agricultural intensification will cause a loss of water quality as a result of pollution from fertilisers, pesticides, manure or silage effluent. Downstream costs in water purification can be greater than the individual or national financial benefits of intensification.

Regulating services - water and climate regulation. These include essential functions such as maintenance of nutrient and water cycles, carbon storage, pollination and pest regulation, soil

erosion control and flood alleviation. Such areas are also genetic pools of wild crop relatives (dozens of wild crop relative species in Transylvania - Akeroyd 2009).

Climate change: HNV landscapes associated with SFs and SSFs also provide large-scale habitats that allow species to adapt to climate change. Conversely, these valuable habitats are threatened by some policy responses to climate change, for example change of land use for biocropping.

CO₂ emission reductions. Small-scale farming communities are extremely energy-efficient and offer models for the reduction of CO₂ emissions and resulting global warming.

Carbon sequestration. Although woodland sequesters large amounts of carbon above ground (approx 6t/ha/yr), grassland and woodland soils sequester similar amounts below ground (up to 140t ha). Soil carbon is the 'premium sink' that we should value the most as woodland is usually managed and selectively felled, even by conservationists, releasing large amounts back into the atmosphere. Grassland habitat represents a valuable carbon sink with the following properties and implications:

- Extensively managed permanent grassland rich in wildflower species has carbon rich soil. Many wildflower species are deep rooted especially in absence of fertiliser, and many species also have associated extensive networks of carbon-rich mycorrhizal fungi. Deep rooting and associated seasonal root death helps to push carbon deep into the lower soil horizon.
- Ploughing of grassland, especially unimproved grassland and conversion to arable farming releases huge amounts of carbon into the atmosphere through oxidation as well as releasing nitrates and suspended solids into water courses. Arable soils without fallow periods tend to have low carbon, mineralised soils and are ineffective in storing carbon. (Smith et al, 1997)

Cultural and support services - recreation and tourism. Aesthetic/spiritual values are unrecognized and uncompensated side effects of conservation of these landscapes. It is obviously important, socio-economically, that Romania offers her 4 million small-scale farmers an economic future. SFs and SSFs can create a natural image and regional brand, offering commercial incentives to communities to manage their landscapes sustainably. Many communities, often assisted by NGOs, have successfully added value to and improved markets for local products by creating brands that link small producers with natural food.

As a major part of these commercial incentives, rural tourism will continue to develop in rural areas, due to the unique landscapes, large semi-natural areas, hospitability of rural inhabitants, conservation of tradition, and the diversity of rural tourist resources. This will act as a form of "payment" to local people for landscape conservation. Local projects have been successful in working with local farmers to develop tourism-related economy - guest houses, food and crafts for tourists, nature guiding, etc.

Biodiversity. Semi-natural pastures and meadows (HNV grasslands) are central to the public goods of European farming, and at the same time represent a major part of European biodiversity. At a European scale, these man-made landscapes offer a haven for significant biodiversity. In fact, the mosaic nature of small-scale farming landscapes often contains greater species as well as habitat diversity. Wilderness areas have often reached a climax vegetation which is relatively uniform over large areas. The fragmented ownership and management of SFs and SSFs creates a complex mosaic which is very biodiversity-friendly.

The precise value of these environmental services is incalculable, although attempts at estimations are beginning to be made so that this factor may be incorporated in policy decision-making.

3.5 Assessing the threats to Romania's small-scale farming communities

Romania's small-scale farming communities are threatened by many pressures.

Trends in structure of population: In 2005, 70% of subsistence farmers were over 55 years old, and 65% of semi-subsistence farmers were over 55 years old. However, it is significant that, after a massive migration from rural to urban areas in the early 1990s, this pattern was reversed in the late 1990s as economic restructuring and land restitution increased the attractiveness of rural areas. From 1998-2005, there has been a net urban to rural migration in Romania. Most marked were increases in the 50-54 year old age group (retirement from urban areas) and 30-34 age group (many young people moved to rural areas once they had a family, because they found it easier to live there). (NRDP.)

Lack of sufficient roads, water supply and sewerage has a negative impact on quality of life and hinders economic development in rural areas. In 2007 only half of rural communes have metalled road access to the main road network, and more than 25% of villages could not use roads after heavy rain or snow. Only 33% of rural population has main water supply and only 10% main drainage. However, the situation has certainly improved since 2007, as there has been considerable infrastructure investment post-accession. Many villages in Transylvania have had their roads metalled roads in the last 2 years, funded by infrastructure funds made available to the local administrations.

Poor communications have affected the ability to diversify, and to market or add value to products and services. Only 10% of rural residents have internet connection at home. However, the mobile telephone has revolutionised communications - most small-scale farmers have a mobile phone. And post-accession, a number of rural communes in Romania have been selected for testing of Public Access Information Points (PAPI), a World Bank-funded project for village internet centres.

Rural infrastructure problems can be funded by NRDP Measure 322, Village renewal and development, including basic services for rural economy and population and upgrading of rural heritage. This has proved to be accessible to better-organised Town Halls, and can help to solve the infrastructure problems in HNMF landscapes.

Employment: in most rural villages in Romania, 90% of the population works in agriculture (NRDP). Some do this as a second income, but these are very much the exception, and the main income tending to be village schoolteacher, village mechanic/blacksmith etc. Most villages do not have centres of employment within reach, especially in view of transport problems. These subsistence and semi-subsistence farmers face many problems including:

- Lack of markets for their goods, owing to cheap imports and tighter regulations on informal sale of smallholder produce.
- Support measures to increase competitiveness or to diversify are not easily accessible to them. The focus of NRDP investment measures is the 8% of SSFs, not the 91% of SFs.
- Hygiene regulations have damaged local small-scale production by imposing unrealistic standards on small producers.

- SFs and SSFs really have no one lobbying for them, at national scale, and the many agencies with whom they need contact for assistance measures are poorly coordinated and hard to access.
- Economic migrations have led to a shortage of seasonal labour in villages: summer hand-mowers of hay meadows, for example.
- Breakdown of the important common grazing system: until recently, grazing was effectively managed by village grazing committees, with pasture/meadow boundaries honoured, and village boundaries honoured. This system is increasingly abused and mayors do not have the power or incentive to take action.
- Diversification of income is poorly developed because of lack of opportunities. The NRDP identifies a need to promote diversified employment, especially in tourism. But lack of local tourist information centres to promote tourism at local level is holding back development.

The above explains the hidden, broader social value of HNMF landscapes and the SF and SSF holdings that are essential for their survival. These significant public goods suggest that we should give priority to supporting them: the economic, social and environmental costs of losing them far outweigh the costs of support.

The above also explains the threats to HNMF landscapes. Without support, they will disappear, as they have in much of western Europe. Accession to the EU has intensified pressures on SFs and SSFs - for example stricter food hygiene regulations and vulnerability to competitive imports. However, the EU also offers tools to support them. Under the NRDP, there is a planned graduation of support for

- investment aimed at competitiveness, primarily under Axis 1, for which SSFs are eligible
- sustainable land management under Axis 2, where eligibility is wider bringing in many SF holdings as well as SSFs
- rural development in general under Axis 3, for which all rural residents are eligible.

In the case study below we show how some of these tools have been used and suggest ways to improve their effectiveness.

3.6 The case study: ADEPT and Târnava Mare

Capturing the value of public goods provided by small-scale farming communities, and rewarding the small-scale farming communities for their provision

The NGO Fundația ADEPT (Agricultural Development & Environmental Protection in Transylvania) has been active in Romania since 2003. It has cooperated closely with the Romanian Ministry of Agriculture and Rural Development (MARD), and Ministry of Environment and Forests. Its vision is to achieve biodiversity conservation at a landscape scale not primarily by creating protected areas, but by working with small-scale farmers to create incentives to conserve the semi-natural landscapes they have created.

ADEPT is focusing on an 85.000 ha area, Târnava Mare, a semi-natural landscape of remarkable biodiversity. It has recently been designated a Natura 2000 site both under the Birds Directive and the Habitats Directive. But this designation alone will not conserve the area for its biodiversity and broader public goods benefits. Only local small-scale farmers can conserve the landscape, an objective which can be achieved primarily through the National Rural Development Plan.

In the Târnava Mare area, 52% of registered holdings (those of more than 1 ha) have fewer than 5 cows. If holdings smaller than 1 ha were included, this figure would be around 90%. Similarly, the average holding size of farmers who have applied for agri-environment payments in the Târnava Mare area is 8.2ha (source: APIA), a figure which also excludes all holdings under 1 ha. (See Table 1.)

Table 1: applications for registration of dairy cattle farms in terms of herd size (APIA, 2009)

Herd size	Com. Bunesti	Com. Vanatori	Com. Danes	Com. Albesti	Com. Laslea	Com. Biertan	Total
≤5	69	30	33	20	67	17	236
5-10	31	5	8	13	40	8	105
10-50	26	9	7	13	37	5	97
50-100	2	0	3	0	3	3	11
>100	0	1	1	0	1	0	3
Total	128	45	52	46	148	33	452

Agri-environment payments

Romania has designated eligible areas for its grassland agri-environment payments on an assessment of HNV grassland distribution in Romania – see Figures 1 and 2 below. This is an effective way of targeting support towards the HNV landscapes which provide public goods, and is to be applauded.

In 2005-6, ADEPT carried out a pilot agri-environment programme in close cooperation with the Romanian Ministry of Agriculture & Rural Development (MARD). These were the only grassland agri-environment agreements in Romania at the time. SAPARD 3.3 revealed a number of design problems that impeded small-farmer access: complexity of forms to be completed electronically, complexity of supporting documents required, need for repeated visits to the regional capital to deposit the forms, etc. Under the pilot measure, ADEPT employed 3 staff members full-time for 6 months to promote the scheme and to help farmers complete and deliver the forms, in 6 out of the 8 communes of the Târnava Mare area. This proved to be very effective: 97 farmers and 1,980 ha entered the pilot agri-environment scheme SAPARD 3.3. ADEPT consultancy was also effective in raising longer-term awareness in the area of the benefits to small farmers of the agri-environment scheme.

MARD responded to lessons learned under the pilot project by simplifying the application process for the equivalent grassland agri-environment measure launched in 2008, measure 214. This has helped take-up of measure 214 in the project area, which was much higher than for SAPARD 3.3 (see Table 2).

Table 2: overall take-up of SAPARD 3.3 and Measure 214 in Târnava Mare area

Târnava Mare area			
No. participants in SAPARD 3.3 (2006)	Area covered by SAPARD 3.3	No. participants in Measure 214 (2008)	Area covered by Measure 214
97	1980	967	7940.48

The take-up in the Târnava Mare area (about 35% of eligible grassland areas) was also very high compared to national trends, as a result of ADEPT consultancy. This is further demonstrated by comparing 2009 take-up in a commune in the Târnava Mare area where ADEPT consultancy was active, with a neighbouring commune in which it was not (Table 3).

Table 3: comparative take-up of measure 214 in two Târnava Mare communes

Commune	Advisory services 2005-7?	Nr. of participants in Measure 214	Area covered by Measure 214
Biertan	NO	3	9.94 ha
Laslea	YES	99	558.00 ha

Impact: good results can already be seen from improved conservation management of land under agri-environment grants. This applies especially to scrub clearance, which is being carried out by land-owners in order to pass inspections by the national inspection agency APIA.

Dairy sector

Small-scale dairy production is key to the survival of the HNV landscapes of Romania. Over 50% of registered producers (that is, excluding those with under 1ha of land) have fewer than 5 cows. Over 75% of registered producers have under 10 cows. The small-scale farmers, who have created these landscapes, depend mainly on dairy cow or ewe products for their income. Small producers all deliver to one or two milk collection points in villages, from which the processors take delivery. These communal milk collection points have quality problems, since some farmers are less careful than others.

Table 4: trends in cow numbers per commune (where available) 2008-2009 – Târnava Mare area (data from Town Halls)

Commune	year/number of cattle		County
	2008	2009	
Bunesti	1764	1450	Brasov
Vanatori	520	377	Mures
Danes	740	500	Mures
Albesti	600	422	Mures
Laslea	1647	1077	Sibiu
Biertan	430	374	Sibiu
Total	5701	4200	

In the Târnava Mare area, as in all of Transylvania, there is a collapse in the market for milk and therefore a collapse in cow numbers. Without a market, agri-environment payments alone are obviously not sufficient to halt this collapse. Surveys show a reduction of cow numbers of

25% in the last year alone, 2008-2009. Total number of cattle in the 6 communes of Târnava Mare area for which we have figures was 5701 in 2008, but fell to 4200 in 2009 See Table 4. This could be disastrous for traditional land management, especially for the survival of the area's traditional wildflower-rich hay meadows.

The cause of the loss of market is that small farmers cannot guarantee the quality and quantity necessary to attract the milk processors. Although EU-standard milk hygiene is not obligatory in Romania until January 2011, milk processors are already using these standards as a commercial yard-stick. They can import good quality milk, in convenient large quantities, at a competitive price, from neighbouring countries such as Hungary. Many villages have been left without any milk collection by processors. Village producers are generally unable to organise a combined response to solve the problem. Does this spell the end for small-scale milk producers in the HNV areas of Romania?

ADEPT is working with farmers in this area to improve hygiene, and to improve discipline at the communal milk collection points, through hygiene workshops with farmers, discussions with village dairy associations, on-the-spot testing and naming-and-shaming of poor-quality producers (by posting up daily test results), and negotiations with processors.

Impact: within 6 months, two villages have had their milk collection points improved and milk collection reinstated, giving income again to 35 small-scale farmers.

Adding value to agricultural products

In 2005 ADEPT began a processing and marketing programme in the Târnava Mare area. This shows how branded local products can evolve with effective marketing. See Table 5.

First, ADEPT identified 20 producers of cheese, jam and pickles who were interested in participating in a marketing exercise. ADEPT wrote production protocols and trained producers to follow these and maintain consistent quality and hygiene standards. ADEPT also developed a local brand and labeling, and helped producers get to farmers markets (transport was paid for) as well as offering them the opportunity to sell jams and pickles in the tourist information centre. The "Saschiz Jams", unknown in 2005, are now sought after in farmers markets in several Romanian cities.

Table 5: trends in sales, Târnava Mare Producers Association

Year	Value of direct sales (cheese, jam, pickles, baskets)	Value of sales thro' Tourist Information Center
2005	-	-
2006	€3600	-
2007	€15900	€2500
2008	€75000	€8500
2009	€31500	€12161

Sales and associated skills have now increased to a point where the original 20 producers travel to farmers markets without assistance from ADEPT (often sharing transport at their own initiative). The producers are now commercially sustainable and ADEPT is encouraging more farmers and farmers wives to join the informal producer group, the Târnava Mare Producers Association. Once the first producers clearly derived useful profit, others asked to be included. This in general is the case: talking about potential benefits is met with scepticism:

demonstration of profit elicits immediate participation from others.

Note: 2008 direct sales figures were exceptionally high owing to a special order for goods from ADEPT sponsor, Orange Romania.

Impact: €43,661 extra income in 2009 for 25 producers (jam and cheese), in direct sales by producers mainly at farmers markets facilitated by ADEPT, and sales through the Saschiz Tourist Information Centre established by ADEPT. 15 trained women involved in jam-making in the summer months.

It is worth noting that the sale of these products in farmers markets was threatened by inconsistent interpretation of EU hygiene regulations, especially those relating to authorisation of premises for small-scale production and of points of sale (especially farm-gate direct sales). ADEPT and NGO partners WWF and Milvus have worked closely with the state food hygiene agency ANSVSA to clarify that a flexible approach should be applied to direct sales by small-scale producers in marginal areas: so long as food safety is retained, traditional production methods should often be allowed to continue. This message was published in a booklet supported by EU Delegation funds, in 2007, in order not only to reassure small producers, but also, equally importantly, so that local (DSVSA) representatives of ANSVSA receive a clear message from Bucharest that this is an approved approach. We are pleased to say that farmers markets selling local/traditional products are now becoming a feature in major Romanian cities this would not have occurred without active MADR and ANSVSA support.

These kinds of activities are eligible for support under various NRDP measures, such as 123 Adding value to agricultural and forestry products (although 50% co-financing is a problem for small producers), and 142 Setting up of producer groups (although thresholds are too high to help small groups in initial stages).

Development of agro-tourism in Târnava Mare area

ADEPT has also promoted diversification in the Târnava Mare area, which has witnessed an extraordinary growth in the number of visitors, according to records taken by the Tourist Information Centre that was opened by a ADEPT in partnership with the Town Hall. Of the visitors, 60% were foreign, 40% Romanian. See Table 6.

This growth in numbers has occurred in spite of a fall, nationally and globally, in 2009 as a result of the financial crisis. The tourists are attracted by a varied offer of cultural and nature-watching pursuits developed by the NGO: guest houses, meeting producers, guided nature walks, etc.

Table 6: trends in Târnava Mare tourism income

Year	Tourism (accommodation, meals, activities, guiding)	No. of tourists, Târnava Mare
2005	-	-
2006	€15000	350
2007	€25000	2120
2008	€38000	5970
2009	€62457	6328

Impact: €62,000 extra income in 2009 to 30 guest house owners and service providers.

ADEPT achieved this growth of numbers by carrying out a number of agro-tourism training courses, very practical in their content including basic English and explanation of visitor expectations. For example, potential guest house hosts were often concerned by lack of television and of supermarket food, quite opposite to the concerns of guests whose main concerns were cleanliness and some degree of privacy – requiring little investment. Perceived barriers were removed by such explanations.

Similar to the jam development experience, the initiative came from ADEPT, but once a small number had derived an income, ADEPT has received many spontaneous demands to become involved.

This diversification could be funded under 313 Encouragement of tourism activities, although lack of confidence and of co-financing are barriers to small-scale farmers wishing to diversify.

LEADER

ADEPT has recognised LEADER as highly relevant to smallholder communities, and has promoted the establishment of the Târnava Mare Local Action Group (LAG). This is already operational, although Axis 4 funding for LAGs has not yet started. As a result, small-scale farmers are participating in LEADER-type meetings, which helps ADEPT and others understand local concerns and priorities.

ADEPT has deliberately proposed the Târnava Mare LAG to cover the same area and include the same communes as the Târnava Mare Natura 2000 area, since these two measures (one for local involvement in sustainable rural development, and the other for biodiversity conservation) will assist each other in an innovative way. See Figures 3 and 4 below. The LAG will become a very useful tool to involve local people in the management of the Natura 2000 site.

The LEADER process will be used increasingly in guiding local rural development policies. Once Axis 4 funding starts, small-scale farmers will contribute directly to encouragement and initiation of local development actions, including new products and marketing systems, modernizing the traditional activities by applying new technologies, etc.

An example of new technologies relevant to village needs is the Public Access Information Points (PAPI) initiative referred to above. There are 2 in the 8 communes of the Târnava Mare area. Use is free, and assistance is available, for access to funding projects, internet banking etc., and there is a small charge for personal use. Although to begin with (2008) the PAPI was used mainly by younger Romanians, it is noticeable now that Romanians in their 50s are using the PAPI for access to banking, downloading of forms etc., especially for NRDP-related IACS maps and grant claim forms. PAPI is a World Bank project, but the system could be eligible for NRDP support, for example under Measure 322 Village renewal and development / basic services for rural economy.

Natura 2000

The Târnava Mare area is dominated by an astonishing 16 EU Habitats Directive Annex 1 grassland habitats, of which 6 are priority habitats: and 23 Habitats Directive Annex 2 species have been identified associated with these grassland habitats. These figures are remarkable at a European scale.

ADEPT led the process of designation of the Târnava Mare area as a Natura 2000 site, which took place in 2007. Under NRDP Measure 213, holdings within Natura 2000 sites will receive additional payments. These payments will not start in Romania until sites have management

plans with obligatory measures, and the costs of these obligatory measures can be calculated. Payments may take the form of increased Pillar I land area payments, which would then benefit all SFs over 1 ha as well as SSFs.

Natura 2000 plays an important role as the EU's flagship for biodiversity conservation, but it is important to take into account that public goods including biodiversity are derived to a large extent from semi-natural agricultural landscapes outside conventional Natura 2000 sites. Significant opportunities to secure biodiversity conservation and other public goods will be lost if the protection of semi-natural landscapes is ignored in favour of Natura sites. The HNV concept argues that high biodiversity should be recognised and protected by looser, more flexible tools than targeting areas with strict boundaries and formal designation: tools such as agri-environment payments. This is the area of overlap of DG Agriculture and DG Environment. The more closely they work together in policy development, the better.

3.7 These examples illustrate that

- Small-scale farmers suffer practical problems in applying for agri-environment schemes. This applies to other area-based and investment schemes also
- Small-scale farmers will not take the initiative to solve practical problems to meet quality and other commercial standards – they generally have a fatalistic and passive approach
- Such problems in these rural areas can be solved by integrated planning by qualified advisors
- Small-scale farmers respond to advisory services where they are available
- Results achieved appear, according to examples cited, to be commercially viable and therefore offer long-term solutions to the problem of small-scale community sustainability.

3.8 Conclusions

The Romanian Government understandably sees the need to increase competitiveness in the agricultural sector, because EU membership will increase exposure to competition from lower-cost and better-established producers in Western Europe. However, in parallel, the Public Goods approach to policy analysis suggests that more action may be justified to support the continued traditional activities of Romania's approximately 4 million SF and SSF farmers, rather than thinking of them simply as a sector to be restructured. These traditional management systems are important for delivering a whole range of vital public goods – water quality, flood prevention, resistance to effects of climate change, water and food security – which have a large economic value. The EU has well-designed tools in the NRDP to support these HNVF landscapes and communities: however, there are barriers to access, **policy**, and **delivery**.

Policy: the target of NRDP Axis 1 is the 8% of SSF holdings 2-8 ESU in size, not the 91% of SF holdings under 2 ESU. And measure 112, Setting up of young farmers, has a minimum threshold of 6 ESU, which is a barrier to young farmers. The target of NRDP Axis 2, and Pillar I area payments, is the 54% of holdings over 1ha in size, not the 45% of holdings under 1 ha. In other member states thresholds are lower for receiving these payments.

Could eligibility for be enlarged in Romania? This would present administrative challenges – for example, aid secured by a farm applying for say 0.5ha under agri-environment may be disproportionate to the administrative cost to deliver & control such support, and there would also be the additional administrative burden of a huge increase in the number of eligible

beneficiaries. But, when wider economic, social and cultural benefits are taken into account, in terms of public goods, this might be considered justified.

Delivery: this case study suggests that improvements in consultancy services will deliver much improved results on the ground, in terms of uptake by farmers. The study also shows that if the range of NRDP support measures is combined in an innovative way, it can be very effective in supporting small-scale farming communities. The challenge is to broaden such activity from localised, patchy implementation to wider, national-level implementation: for this, highly trained and motivated advisory services are required.

Romanian subsistence and semi-subsistence farmers will rely on good advisory services for many more years owing to their unfamiliarity with the process of grant applications. However, state agriculture advisory services are patchy, in some areas ineffective. State advisory and inspection services often lack training and basic equipment, such as vehicles to allow farm visits; such capacity is required to improve uptake of measures, and to improve the impact of measures through proper inspections.

This case study also shows that the role of NGOs can be significant, by helping government agencies to deliver policy in a very cost-effective manner, and by providing feedback from farmers to guide modification of NRDP measures where suitable. Perhaps the potential role of NGOs could be given greater policy recognition and financial support, for example by expanding and making more flexible NRDP Measure 143 (Providing farm advisory and extension services), so that local/regional NGOs can gain access to funding for such a role.

Figure 1: map of farmed semi-natural vegetation in RO (JRC/EEA)

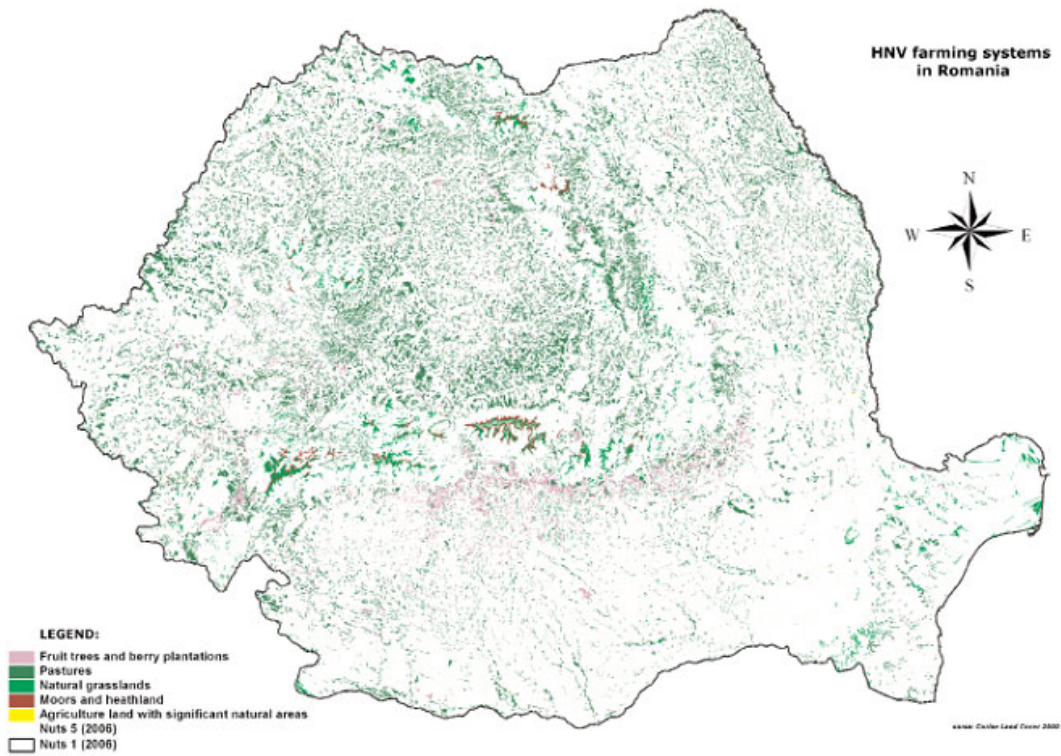


Figure 2: Map of area of RO within which the HNV grassland measure can be applied for on suitable land.

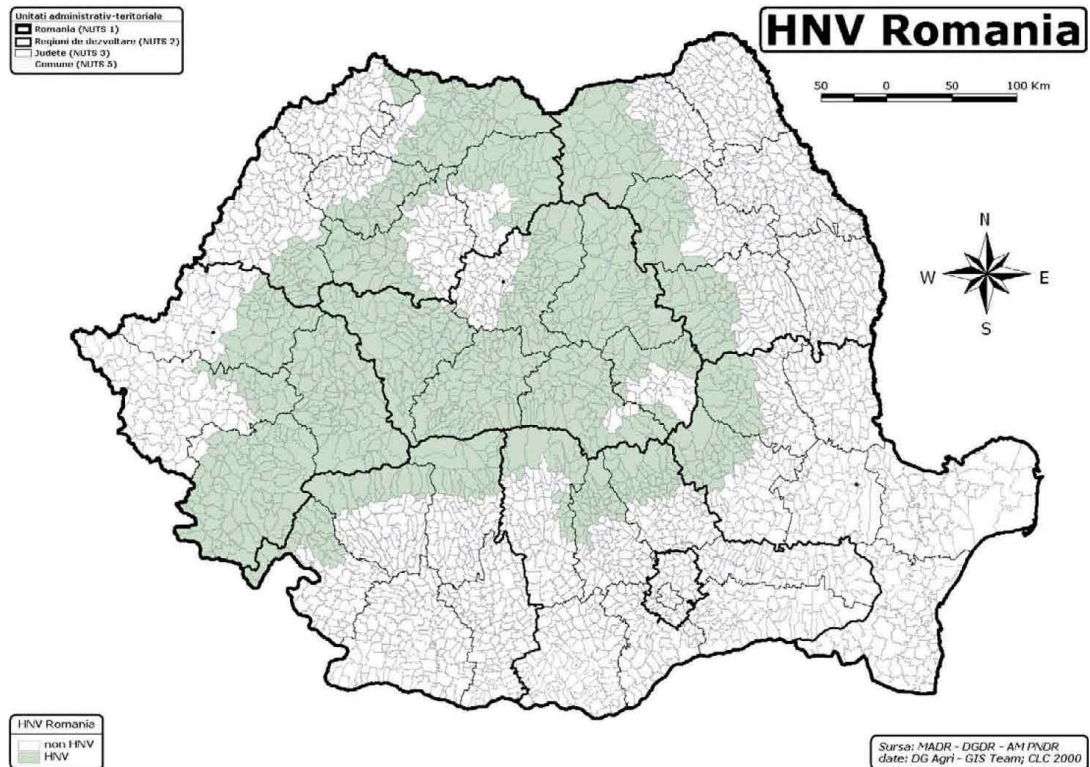


Figure 3: location of Tanava Mare pSCI Natura 2000 site

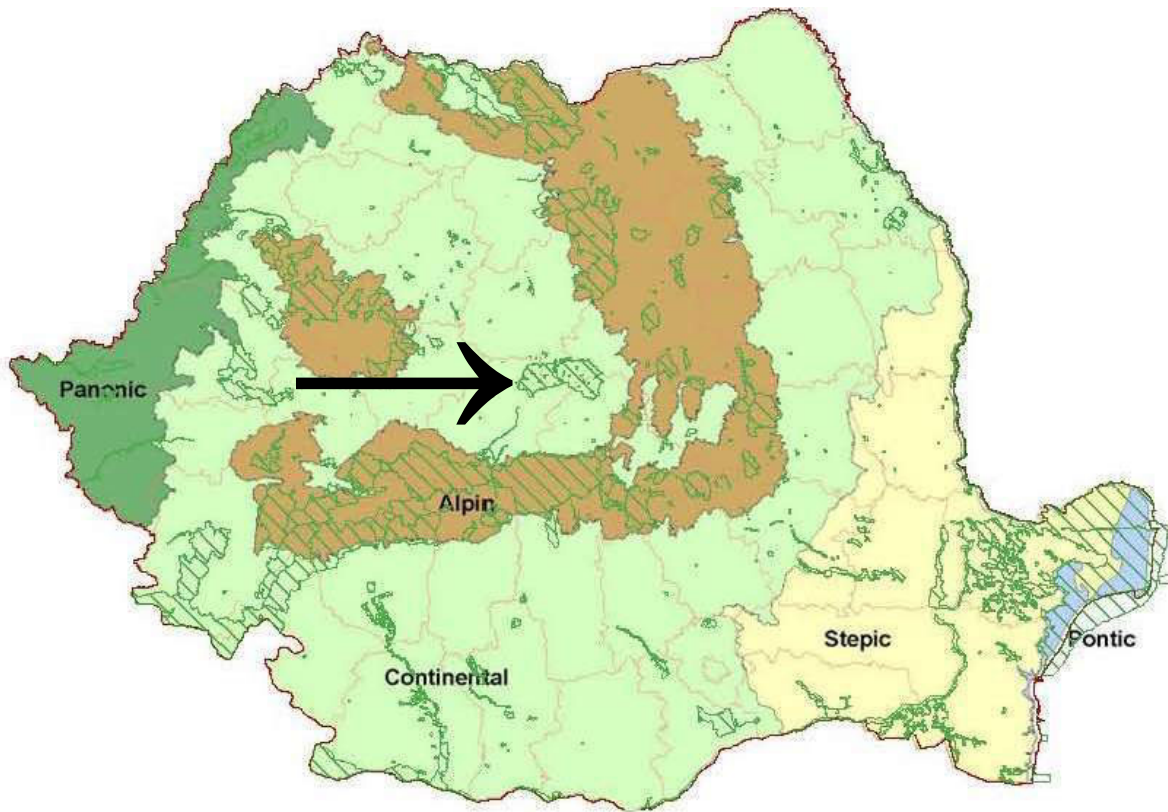
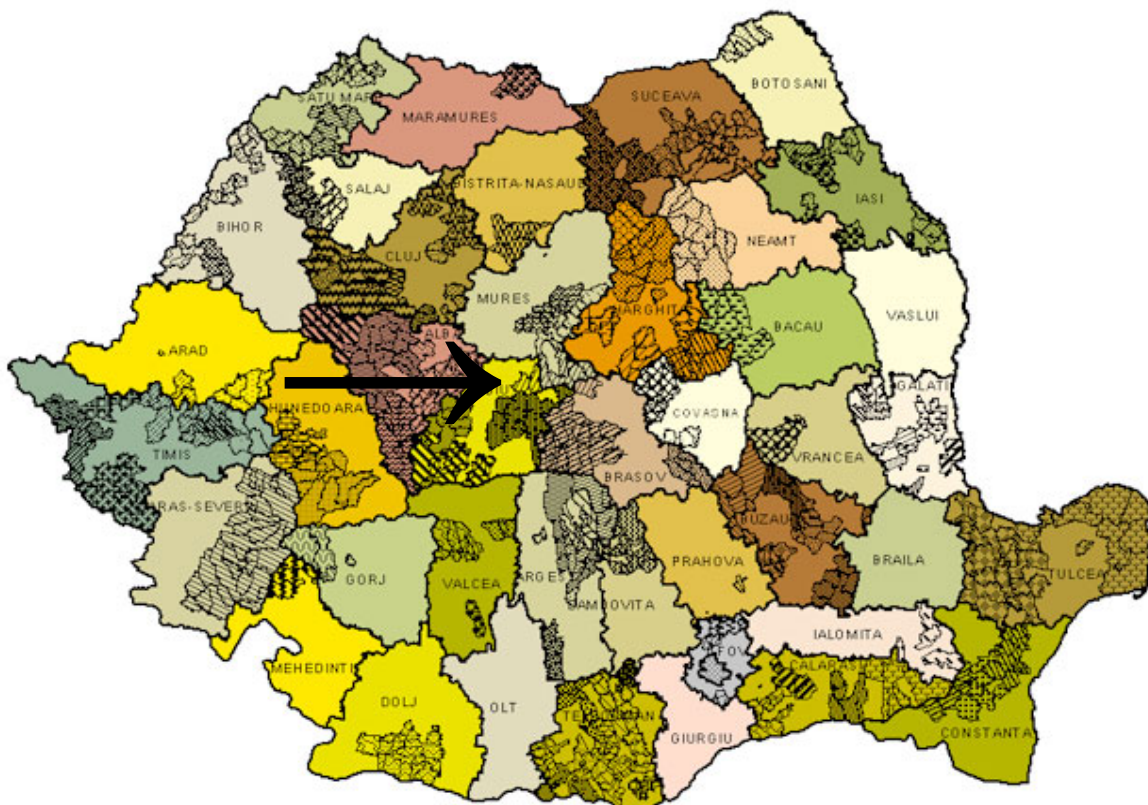


Figure 4: location of Târnava Mare Local Action Group, overlapping the Tanava Mare pSCI



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APPENDIX 4

CASE STUDY: CROFTING IN SCOTLAND - ADDRESSING SSF NEEDS IN RURAL DEVELOPMENT POLICIES

This case study was commissioned for the European Network for Rural Development seminar entitled "Semi-subsistence farming (SSF) in the EU: current situation and future prospects", in Sibiu, Romania, from the 21st – 23rd April 2010.

It was prepared by Mark Shucksmith¹⁵ on behalf of the European Network for Rural Development. The views expressed are those of the author. They do not represent the views or opinions of the European Commission.

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4.1 Historical and Geographical Context

Crofts are small strips of land rented or owned by a family unit, and generally worked alongside shares in common grazings. They are not defined by farm size but by legal status (tenure). They have their own distinct code of law and are specific to the Highlands of Scotland – the so-called ‘crofting counties’, most of which are mountains and islands, classified as ‘severely disadvantaged areas’ by the EU. Their origins lie in the process generally known as the Clearances through which Highland landlords between 1760 and 1880 evicted people to make way for sheep ranching, moving them either overseas or on to poor, marginal land. Tenanted small holdings (crofts) were created deliberately too small for crofters to subsist so that they would have to offer wage labour to their landlords in the kelp (dyes from seaweed) industry. Subsequent poverty and famine led to legislation in 1886 which defined the legal status of crofters and gave resident crofters security of tenure, the right to a fair rent, the value of their own improvements and the right to pass the tenancy on to a family successor. Land settlement in the early years of the Twentieth Century created further crofts and returned land to many families who had been dispossessed.

Over the following decades, these provisions allowed marked improvements in standards of living, though the Highlands and Islands remained far from prosperous. Poverty became more apparent during the 1920s-30s depression – with people returning to family crofts from unemployment in industrial areas – and in 1939 the Hilleary Committee recommended economic development to provide employment opportunities ancillary to the croft, but this initiative was overtaken by the outbreak of war.

From the 1940s, in the context of post-war food shortages, a very different view was taken by the Government and many others – namely that the ‘crofting problem’ was, in essence, an agricultural one, arising from the small size of the holdings and the impediments to their amalgamation. A new inquiry in 1951 - the Taylor Committee - proposed a new Crofters Commission whose “main function should be to stimulate the development of crofting communities in all possible ways”, especially through the gradual reallocation of land from less active to more active crofters and through promoting the ancillary occupations necessary to provide a reasonable living. But the Government’s focus on agriculture led to the new Crofters Commission being given a basic task of reviving agriculture, alongside a tortuous burden of administration and regulation. There was to be no new Highland Development Agency, despite the conclusions of the both these inquiries. This set the Crofters Commission and the Scottish Office on course towards proposals for the amalgamation of crofts to form “viable units” (ie. replacing pluriactive farms with fewer full-time holdings) which were rebuffed by the Federation of Crofters Unions in the early 1960s.

The alternative view, that crofters should rely on ancillary income rather than become full-time farmers, then prevailed. A Highlands and Islands Development Board was established in 1965 to promote economic development and this has proved highly successful. The relatively populated crofting areas are often contrasted with the deserted hills of southern Scotland where amalgamation of holdings has left very few farms or people. But the Crofters Commission argued off-farm employment was insufficient: in their view, crofters had to become owner-occupiers to access capital for on-farm diversification. The Crofting Reform Act 1976 duly gave crofters the right to buy the landlord’s interest in their crofts and a debate has raged ever since between those who argue that this is necessary to allow diversification and those who see this as creating a free market in crofts which will lead to the demise of crofting. Meanwhile,

support has grown for community ownership of croft land, harking back to pre-modern days when land was held in common as well as to contemporary models of community asset-based rural development (Carnegie Commission 2007). Since 1992 many crofters have become collective landlords of their estates (through community trusts), while individually remaining tenants of these trusts. This process was facilitated by the Land Reform Act 2003 and state-sponsored community development support. Most recently, the Crofting Reform etc Act 2007 sought to address some of the consequences of the emerging market in crofts, but this proved controversial and so the Government established a further Inquiry – the Shucksmith Committee – to review crofting, to develop a vision for its future, and to make recommendations (Crofting Inquiry 2008). Legislation informed by this report is now before the Scottish Parliament.

A number of themes emerge from this brief review.

- First, the balance struck by crofting legislation and regulation between the interests of crofting, crofters and crofting communities. Some see a croft as their individual or family asset that they should be able to dispose of as they wish because they or their family have lived on the croft and/or worked the croft land for generations. Others argue that crofting is a system of land tenure which has associated practices – social and cultural as well as agricultural and environmental – which should be protected and sustained for future generations because they are collectively beneficial. Those who hold this view see the disposal of crofts solely on the basis of individual gain as gradually eroding crofting and placing its continuation at risk.
- Second, the debate between those who see the future of crofting in terms of agriculture and amalgamation of holdings, on the one hand, and those who see its future in terms of non-agricultural sources of income and occupational pluralism. The predominant agricultural use of the land is for extensive livestock production, mainly sheep, but this offers poor returns and has been supplemented by off-farm employment from the beginning.
- Third, the debate between those who see the future of crofting in an Irish-style model of individualised owner-occupation and those who advocate a more collectivised model of community-owned estates and crofting tenants. This debate is often couched in terms of capitalist penetration, deregulation and neo-liberalism as against state intervention, regulation and communitarianism.
- Finally, there is debate between those who see the future of crofting as lying in the hands of 'others' – national agencies, civil servants, absentee landowners - (on the grounds that crofters lack the necessary ability or cannot be trusted to govern their peers impartially) and those who advocate crofters themselves taking responsibility for the future of crofting and crofting communities.

4.2 Characteristics of crofts within the Scottish farm sector

There are very few official statistics available which allow a comparison between crofts and other farms in Scotland, partly because there is no definitive croft identifier applied to agricultural statistics. Some special analysis was conducted for the Crofting Inquiry, using proxies (see footnote 1) and we can also draw inferences from sample surveys undertaken by academics and research institutes. Even then, very few comparisons are possible.

	Crofts	LFA farms	All farms
Average size (ha)	5 (+ common grazing)	152	121
Av Pillar 1 support ¹⁶	£ 3,746.40	-	£ 27,139.64
Av Pillar 2 support ¹	£ 2,816.95	-	£ 7,937.33
Av LFA payment ¹	£ 1,725.18	£ 6,622.80	N/A
Subsidy/income % ¹⁷	99-164%	210-320%	-

We can say with confidence that the size of a croft is much smaller than the average Scottish farm, in the LFA or otherwise (both because of their origins and also because of regulation which has promoted pluriactivity rather than amalgamation of holdings), but note that there are no reliable estimates of the extent of the common grazing land under crofting tenure and of course this is most of the croft land.

Comparisons between crofters and other LFA farmers have been made by the Macaulay Institute in terms of the proportion of income which comes from CAP support. In all the types of crofting system they studied in South Uist, "the ratio of subsidy to income was greater than 99%, and in the highest case it was 164%". They conclude "that support payments are critical to the current financial viability of crofters who derive significant proportions of their income from their crofts. In this respect, crofters are no different from the majority of livestock farmers in the Scottish LFA. For example, the SEERAD net farm income data for LFA 'mixed cattle and sheep' farm type show subsidies as a % of Net Farm Income on average being between 210-320% in 03/04 and 04/05, with sheep and cattle only LFA farms performing in much the same way. The inescapable fact is that all LFA livestock farms, irrespective of whether they are 'crofts' or not, are highly dependent on subsidy. However, the critical factor in relation to their continued existence relates to the dependency of the farm/crofting household on the farm/crofting income."

In this respect there is a major difference between crofters and other Scottish farms. According to the Scottish Executive, "most crofters rely on their crofts for only a very small proportion of their income. Kinloch & Dalton (1990)¹⁸ showed for the average croft in their study area, income from crofting agriculture accounted for less than 5% of total occupier income. In a similar survey undertaken ten years later, Sutherland and Bevan (2001)¹⁹ found that agricultural income was 'a very minor part of the total income of the croft holder and spouse'. Over 60% of households had an agricultural income of between +£2,500 and -£2,500, with around 30% having a negative income in 1999. On average, subsidy payments were five times higher than the profit from crofting agriculture. Only 7% of those surveyed obtained over 30% of their income from farming." No comparable figures exist for Scottish farms in general, but again the Macaulay Institute report attempts to make a comparison based on survey

¹⁶ Source: Scottish Executive, special analysis of 2007 Agricultural Census for Crofting Inquiry, using the Crofters Commission identifiers from the Scotland IACS and assigns one identifier to each BRN entry with its associated Main Farm Code.

¹⁷ R. Birnie, P. Shannon and G. Schwartz (2007) Trends, patterns and the environmental consequences of land use across the Crofting Counties, report to Crofting Inquiry, Macaulay Institute, Aberdeen.

¹⁸ Kinloch & Dalton, 'A Survey of Crofting Income', SAC 1990

¹⁹ R Sutherland & K Bevan (2001) "Preliminary Report on Survey of Crofting Incomes and Responses to Agricultural Policy Changes" SAC, August 2001

evidence which suggests that LFA farms rely on the farm business for around two thirds of their household income, though this rises in the Scottish Borders to 85%. Thus, many do not consider crofts as farms as such but rather a base from which to pursue a livelihood from various sources. A map showing the main crofting areas is given in the Appendix.

4.3 The role of crofts in land management

The relationship with the land is central to crofting. Working the land is at the heart of what it means to be a crofter, and agricultural practices are fundamental to the cultural heritage. As one crofter²⁰ put it, "the sheep were the glue which bound communities together." However, crofters are not simply small farmers but have been pluriactive from the outset, although there has been an ongoing debate since the 1940s about whether crofts should be amalgamated to form full-time farms. With the emergence of EU food surpluses during the 1980s and a new emphasis toward farm diversification, crofters' leaders began to claim that far from being a relic from the past, crofting could offer lessons for farmers and for agricultural policy across Europe. According to Bryden (1987) "crofting offers a pattern of adaptation or development that might be followed by full-time farming at a time of increased economic pressures. Whereas it has been traditionally regarded as an anachronism, it may equally validly be seen as a model to be emulated." Conservation groups have also seen crofting as a model in environmental and heritage terms (SCU/RSPB 1992).

Indeed, environmental conditions in the crofting counties are nationally significant in terms of species, habitats and landscapes. A much higher percentage of their area, compared to other parts of Scotland, is designated under environmental legislation. Crofting areas also contain extensive peat lands that function as carbon sinks, making the continued management of these areas important to moderating the risk of climate change and to safeguarding landscape and biodiversity. Historically, stewardship of the land has been an integral part of agricultural activity, although on average crofters derive less than 20% of their income from agriculture and the returns to labour from agriculture compare poorly with their other economic activities.

4.4 Agricultural Trends and the Common Agricultural Policy (CAP)

Unsurprisingly, agricultural practices and land use in crofting areas are changing. The Shucksmith Committee found evidence of a reduction in traditional land management, neglect, simplification of crofting to single enterprises, hay-making giving way to silage and both under-grazing and over grazing, all linked in turn to a reduction in the environmental benefits associated with traditional practices. Analysis of census data for crofting areas²¹ (Scottish Government 2008) shows significant trends:

- Between 1982 and 2007 on smallholdings (less than 30 ha), the cropped area of land fell by 49%, while grassland for grazing increased by 47% and grassland for mowing reduced by 24%.
- The number of ewes dropped by 18% between 2001 and 2006, representing 86% of the decline in overall Scottish ewe numbers. There was an accelerated decline in numbers between 2006 and 2007 when they dropped by 6% in the Highlands and Islands Enterprise (HIE) area (compared to 3.8% for Scotland as a whole).

²⁰ During the reviews for the Crofting Inquiry

²¹ Statistics are only available for crofting areas and do not distinguish between crofts and other farms

- Numbers of beef cows declined by 5.5% between 2001 and 2006, and by a further 3.2% between 2006 and 2007.

Declining incomes for crofters from hill sheep and increasing employment off the croft are leading to changes in sheep management (Yuill and Cook 2007). In particular, less available labour leads to declining use of hill grazings with sheep likely to be managed more intensively on inbye land. This can have negative environmental impacts due to overgrazing of inbye and under-grazing of abandoned common grazings. The abandonment of common grazing also threatens the communal practices – gathering, dipping, clipping sheep and cutting peat, for example - and their social benefits (see also Burton et al, 2008).

These trends have been driven by changes in EU agricultural subsidies and grants, fluctuating exchange rates²² and price movements. Agricultural subsidies were closely linked to production until the mid 1990s and, since then, have become 'decoupled'²³. Broadly, European policies from the 1970s–90s encouraged farmers and crofters to increase livestock numbers and at the same time made crofters more reliant on subsidies and more vulnerable to future changes in the CAP. Since the decoupling of support from production after 2000, there have been sharp reductions in output.

In more detail, crofting agriculture depends on livestock support and disadvantaged area (LFA) payments. In 1990, before the 'MacSharry' CAP reforms, these amounted to an estimated £16.2 million (£1,800 per active crofter) out of a total estimated support of some £22 million (£2,444 per active crofter) (Bryden 1993). To put these figures in perspective, they may be compared with an average net farm income per croft in 1989 of £560 (total output of £4,697 less total inputs of £4,137). The reliance of crofting agriculture on such support, notably on headage payments, is evident. Following the 1992 CAP reforms, and the devaluation of sterling, crofters enjoyed "significant increases in the value of output, especially in the most marginal upland and island areas... Shetland and Skye and Lochalsh for instance both saw output rise by almost 25%" in real terms from 1990-92 to 1993-94 (Copus 1996). However, these increases were predominantly due to the more generous levels of subsidy, so making agriculture in the crofting areas increasingly vulnerable to future policy changes. Thus, "the share of the HIE area's output accounted for by direct subsidies increased from under 10% in 1980, to 14% in 1990, and to almost 22% in 1994. The post CAP Reform dependence upon direct subsidies was even greater in certain areas, notably in Shetland, the Western Isles, Skye and Lochalsh and Lochaber [all crofting areas], in all of which they accounted for more than 30% of output" (Copus 1996). Bryden (1993) estimated that after these CAP reforms each crofter in 1993/94 received on average direct subsidies of £5,740 pa, almost all of which came from Brussels.

More fundamental reforms of the CAP in 2000 have had major impacts on the crofting areas, as support was decoupled from production, and even larger effects are anticipated in the years ahead as SFPs are reduced and as LFA payments change from a historic basis (which distributes support according to previous levels of production) to new formulae related to environmental objectives. Yuill and Cook (2007) found that some farmers and crofters "– the

²² As the value of the pound fell during 2008-09, so the value of EU subsidies to UK farmers has grown again.

²³ Support was formerly paid through a variety of subsidy schemes primarily on the basis of cropped area or livestock numbers, to compensate farmers for reduced price support from 1992. Under the Single Farm Payment scheme, the money is now received in return for maintaining minimum standards of husbandry and on the basis of livestock numbers in a historic base period (2000-02) so that it offers no incentive for increased production today. This separation of the payment and current agricultural output is known as decoupling.

most peripheral and disadvantaged in terms of land quality and climate – are moving rapidly out of agriculture. Specifically, hills are being destocked, part-timers are leaving the industry and the pool of casual and seasonal workers is disappearing. The feared spiral of decline (reduced activity in the area, loss of infrastructure such as cost effective haulage, more pressure on the remaining producers, further loss of viability leading to more stock reductions...) may be operating in these areas.” While they believe this has affected larger farms more than crofts so far, Yuill and Cook expect rapid change in crofting too, with succession “the trigger for change, with those continuing with crofting activity adopting lower intensity, simplified farming policies. This basically means fewer stock,” with land abandonment, especially of the common grazings, as noted above. They note that for crofters “with less imperative to change, the Single Farm Payment gives a level of security and an overall profitability position which is little changed. The key question for these producers may be how long the current SFP regime will last and by how much and how quickly it is reduced.” Within Pillar 2, the most crucial support for crofters comes from LFA payments, which hitherto assisted farms to remain viable in such areas but which now sit within Axis 2 and must pursue only environmental objectives, having lost their social role. With spending of £61m per annum, this is by far the largest element of the RDR in Scotland, and is of vital importance to crofters. There is thus “a major difference in opinions over the future role of LFA support and a major confusion between what it is meant to deliver as implied by EU objectives, what it is actually delivering on the ground in Scotland, and what the various stakeholders would like to see from the scheme” (Yuill and Cook 2007)

Apart from LFA payments, there have been a number of genuine agri-environment schemes since 1992, designed to encourage environmentally beneficial land management practices. However the majority of farmers and crofters do not participate in agri-environment schemes, partly because of the bureaucracy and regulations involved. Shucksmith (1997) and Shucksmith and Rønningen (2010) found amongst crofters a common perception that such schemes are “not worth the paperwork.” Furthermore, crofters have been highly critical of the SRDP 2007-13 both because they feel it is harder for crofts and small farms to qualify for support in competitive schemes based on eligibility criteria which favour larger units; and also because applications have to be made online and most crofters do not have internet access. . Indeed in 2005, only 29% of crofters and 30% of non-crofters who claimed Single Farm Payment (SFP) were recipients of agri-environment scheme payments²⁴. The agri-environment schemes were also criticised by crofters as poorly targeted. Crofting is also supported annually by specific crofting grants from the Scottish Government (the Crofting Counties Agricultural Grant Scheme (CCAGS) (£3m budget in 2008/09), the Crofters Cattle Improvement Scheme (£258,000 in 2008/09)) and a Croft Housing Grant Scheme (£1.8m in 2005/06). Over the years there have been many other measures in support of crofting, including the Western Isles IDP, various Rural Development programmes, LEADER and similar national schemes, as well as business support and training from HIDB/HIE.

Evaluations of these measures have been rare: the Scottish Government stated to the Crofting Inquiry in 2006 that “there have been very few evaluations of the impact of crofting schemes and no recent ones.” The housing support scheme was evaluated (twice) and found to be “the single most effective means of support for maintaining the population of crofting communities” and “without the scheme there would have been a substantial fall in crofting numbers”. The LEADER programmes have also been favourably evaluated, though not in terms of its specific impact on crofting. Crofters’ own views were surveyed by the recent Crofting Inquiry (2008)

²⁴ This is based on figures supplied by SEERAD 2007

and they were highly critical of the SFP for “encouraging inactivity”. Crofters were more positive about LFA support, although better targeting was recommended, and the agri-environmental measure, the Rural Stewardship Scheme was said to have been good for the few crofters selected to participate. Praise was given to the CCAGS as “essential, simple and accessible” and to ESA schemes which were “non-competitive, understandable and locally effective” although only available in designated areas.

It is apparent that previous support schemes have been vital in sustaining crofting over past decades (especially the former grants and loans for crofter housing), but existing CAP support arrangements – as applied in Scotland - do not succeed in nurturing crofting practices that protect the land and secure environmental and cultural objectives for the nation. Indeed there is a real risk that current changes in agricultural and rural policy will lead to the loss of the landscape and environmental benefits of crofting, through de-stocking and abandonment, and to the loss of an internationally significant cultural heritage. Much will depend on the imminent review of the LFA scheme in Scotland, and on future CAP reforms.

4.5 Regulation and Deregulation: Absenteeism and Neglect

Another major issue is absenteeism and the neglect of land. Crofters are required to reside near to their croft, and to work the land in accordance with standard conditions, but in recent years these obligations have not often been enforced by the regulatory agency, the Crofters Commission. Partly this is because of the changing economics of farming, as described above. Cropping has all but vanished. Extensive livestock is declining, with many grazings being abandoned and communal practices threatened. In 2004, 50-60% of crofts were carrying no livestock whatever and the land was essentially unused. Many people (giving evidence to the Crofting Inquiry) complained about what they saw as neglect of the land, arguing that these unused crofts should be made available to others who would put them to use, whether active neighbours who wish to increase the size of their holding, or new crofters.

In relation to absenteeism, nearly 1800 of the total 17,700 registered crofts are classified by the Crofters Commission as ‘absentees’, with proportions varying from around 16% in Barra and Harris, and around 14% on the West Coast, to as little as 2% in Shetland and Orkney. This absenteeism derives partly from the tendency of young people to leave the area to work and to pursue a career, only later inheriting the family croft at an average age of around 50, and perhaps using it as a holiday home until deciding at retirement whether or not to return. Such instances tend to be looked on favourably by many, so long as the land is sub-let so it can be worked, even though it breaches the statutory regulations. However, in recent years it has become possible (and indeed widespread practice) to sell crofts for substantial sums as holiday homes to people who live elsewhere. Apart from exacerbating the problems of absenteeism and neglect, this is seen as weakening crofting communities, putting services at risk, and making houses and crofts unaffordable to the next generation of potential crofters.

Addressing these issues brings us back to the tension between individual rights and the interests of the community, now and in the future. Absenteeism and neglect were the most frequently mentioned issues in the evidence submitted to the Crofting Inquiry in 2007, along with the need to help young people into crofting to sustain crofting for future generations. Yet attempts to address these issues, even in sensitive ways, tend to provoke strong resistance as people see their individual freedoms curtailed and the market value of their assets constrained.

4.6 Agricultural policy or rural policy?

As mentioned above, there has been a long-running debate about whether crofts should be amalgamated to form viable agricultural holdings or if they should continue to follow a pluriactive tradition, drawing most of their income from off-farm employment. While it had generally been recognised that amalgamation of holdings on the necessary scale would empty the countryside of people, nevertheless crofting has continued to be viewed by policy makers (and especially by civil servants) as essentially small-scale farming. (In this context, it is worth noting that most crofters would surely reject any labelling of crofting as 'semi-subsistence farming'.)

The pluriactive tradition is crucial to the retention of the population in crofting and to the survival of small holding. The vast bulk of crofters' incomes are earned off the croft, despite the fact that they spend 40% of their time, on average, working on the croft. Thus crofters tend to farm for symbolic reasons, related to community and identity, rather than for primarily financial reasons. The income from farming is an important component of household income, but the returns to labour in farming are negligible in comparison to those off-farm. This history of multiple economic activities is crucial for crofting families to maintain competitiveness in a globalising economy, but the question remains as to how to promote economic activities that are both lucrative and compatible with a crofting lifestyle. As noted above, the Highlands and Islands Development Board (now HIE) has been successful in creating jobs and turning around population decline in the Highlands and Islands since 1965. In some areas, such as Skye, the population has grown markedly with a renewed prosperity. (Arnason, Shucksmith and Vergunst 2009).

One of the reasons for establishing the Crofting Inquiry was the recognition that there was no long-term vision for the future of crofting to guide policy. However, Scotland does have policy statements on sustainable rural communities (Scottish Executive 2007), further developed by an OECD review of rural policy in Scotland (OECD 2008). The central theme of these is empowering communities to envision their futures, building their institutional capacity and supporting them in developing and implementing strategies in pursuit of their hopes for the future. In the context of the Scottish Highlands this was the rationale for radical land reform legislation in 2003, which gave rural communities collectively the power to buy the landlord's interest in their estates and to bring these into community ownership, with funding from the lottery and strong support from a Community Land Unit within HIE, an economic development agency of the Scottish Government. Yet, in the main, crofting is characterised not by empowered local communities but by centralised control. This raises issues both of governance and of capacity-building (or capacity-revealing).

Government institutions tend not to be close to the people in the UK, notwithstanding devolution of powers to a Scottish Parliament in 1999. The local authority for most crofters, Highland Council, is the largest municipality in Europe, covering 26,484 km² - roughly the size of Belgium - although the main island communities (Orkney, Shetland, the Western Isles and Argyll and Bute) each have their own council. The entire Highlands and Islands region is also covered by HIE, which in turn operates the LEADER programme. Below local authority level there are sometimes community councils (CCs), which are elected bodies with no staff, no power and virtually no budget. In their nature they are akin to voluntary groups who have an interest in the well being of their community, and their effectiveness is highly variable. Within crofting communities there are community-level institutions specific to crofting, notably Common Grazings Committees which bring grazing shareholders in a township together to

agree on management of the common grazings. Again, some are active while others are moribund. There is also an energetic and effective crofters' union, the Scottish Crofting Federation, although its membership has been steadily falling in recent years.

However, this is not to say there is no institutional capacity in the crofting areas. In the last few years, as noted above, communities in some areas (notably the Western Isles) have mobilised, with the considerable help of HIE's Community Land Unit, to acquire the ownership of their landlords' estates. According to Bryden and Geisler (2007), the Community Land Unit and Scottish Land Fund have been "vital tools for community empowerment and enterprise in fragile rural areas of Scotland." More than half the land area of the Western Isles is now in community ownership. Members of these crofting communities are now engaged collectively in formulating strategies for their future, no longer passive in the face of others' decisions.

Mackenzie (2006) sees this community-centred land reform not only as a movement towards collective ownership with strong historical resonances but also as the removal of land from circuits of global capital, in turn permitting a re-visioning of the political possibilities of place and a commitment to social justice and sustainability. But a key question remains of how many communities are likely to mobilise in this way, and what might be the role of the State and other actors in building/revealing their capacity to act and otherwise supporting them. It is still a small minority of crofting communities which have mobilised in this way, and policy – despite the commitment to objectives of sustainable rural development – continues to prioritise agricultural support over investments in community and economic development.

Recently, the Crofting Inquiry's report (2008) suggested a series of measures to extend the 'place-shaping', neo-endogenous rural development approach beyond those areas in which community buy-outs had occurred, building on the EU LEADER approach. Briefly, the Inquiry report proposed community empowerment in respect of both regulation and development, supported by generative state action and by refocused managerial technologies which would operate to encourage local strategies. At the heart of its recommendations were proposals for *township development committees*, supported by HIE's 'Growth at the Edge' team, to engage in deliberative place-shaping and for their community-led strategies to have to be reflected in decisions made by local planning authorities and other bodies. In this way, the state would both support and incentivise local mobilisation. Meanwhile, regulation would be in the hands of locally-elected area boards rather than an appointed Crofters Commission, and these boards would be given stronger powers to address absenteeism and neglect through requiring residency and active land management. Alongside these changes in governance, other recommendations sought to refocus agricultural, economic development, housing and planning policies towards support for locally-agreed strategies. A Draft Bill to enact these proposals was published by the Scottish Government in 2009, and following consultation an amended Bill is now being debated in the Scottish Parliament (SPICE 2010).

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ANNEXES APPENDIX 4

Table A1: Resident population: 2001 - 2005

Area	2001	2005	% change (2001 base)
Argyll and the Islands	69,898	71,091	1.7
Caithness & Sutherland	38,426	38,262	-0.4
Outer Hebrides	26,450	26,370	-0.3
Inverness & East Highland	133,561	137,648	3.1
Lochaber	18,791	18,915	0.7
Moray	87,000	88,120	1.3
Orkney	19,220	19,950	1.9
Shetland	21,960	22,000	0.2
Skye and Wester Ross	18,142	18,765	3.4
Highlands & Islands	433,448	440,761	1.7
Scotland	5,064,200	5,094,800	0.6

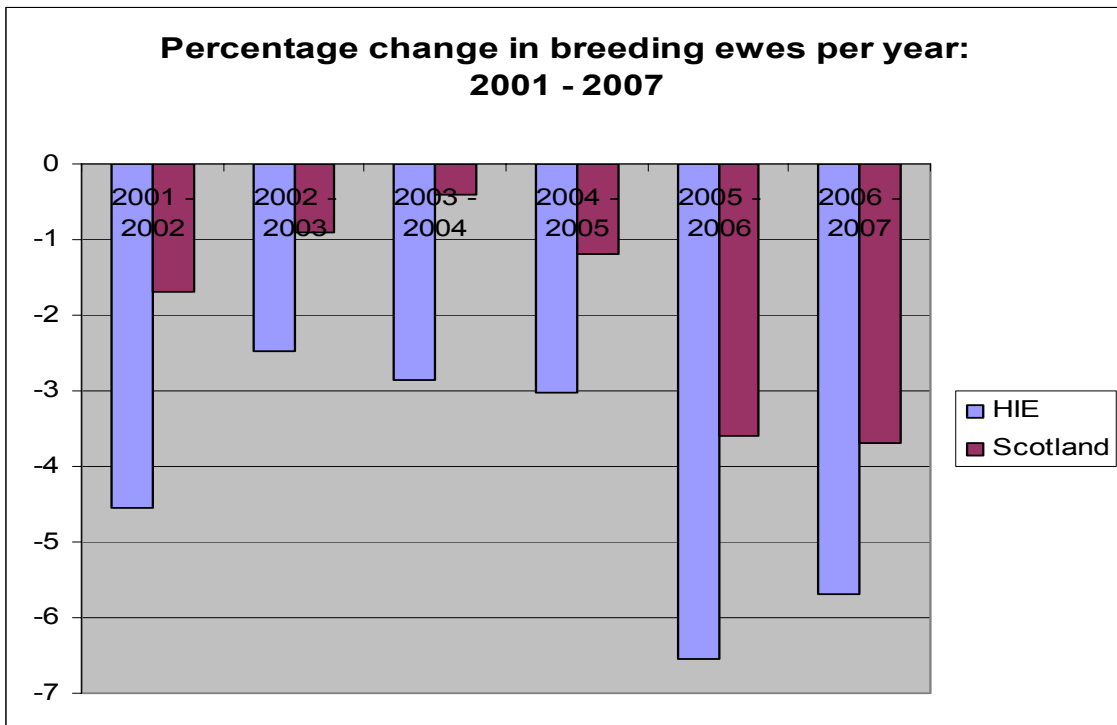
Source: HIE, 2007

Table A2: Number of absentee crofters by area

Area	Number of absentees	Absentees as a % of all registered crofts in area
Argyll and Bute	60	13.5
Lochaber	82	
Barra	72	16.2
Caithness	41	4.1
Harris	89	15.8
Inverness	19	4.1
Badenoch & Strathspey	15	
Lewis	378	10.5
North and South Uist	162	11.5
Orkney	6	1.3
Ross-shire	248	13.8
Shetland	52	1.9
Skye & Lochalsh	262	14.0
Sutherland	312	15.4
Total	1,798	

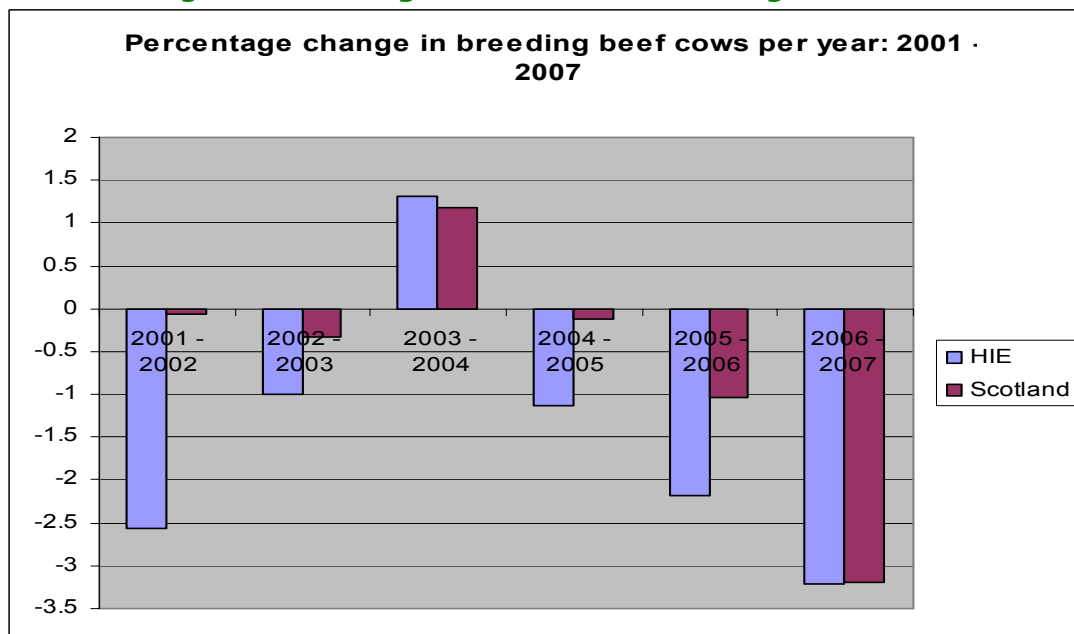
Source: figures supplied by the Crofters Commission, March 2008.

Figure A3: Changes in numbers of breeding ewes



Source: based on figures supplied by Peter Cook, 2008
Note: There is no separate information available for crofts.

Figure A4: Changes in number of breeding beef cows



Source: based on figures supplied by Peter Cook, 2008
Note: There is no separate information available for crofts.

Table A5: Total CAP payments of individual schemes (2005)

Total Payments per scheme (£)	Crofts	All holdings in Scotland
Pillar I		
Single Farm Payment	18,889,349	416,876,908
Pillar II		
Less Favoured Area Support Scheme	7,733,973	60,535,581
Land Management Contract Scheme	1,195,066	14,609,264
Agricultural Business Development Scheme	389,898	2,170,768
Countryside Premium Scheme	444,754	3,719,138
Environmental Sensitive Area Scheme	2,349,172	7,146,794
Farm Business Development Scheme	-	636,305
Farm Woodland Premium Scheme	132,865	3,067,169
Farm Woodland Premium	-	438,771
Scottish Forestry Grant Scheme	4,903	220,299
Habitats Scheme	67,205	303,875
Organic Aid Scheme - Conversion	700	485,821
Organic Aid Scheme - Management	-	92,675
Organic Aid Scheme	53,602	1,965,153
Rural Stewardship Scheme	760,487	12,150,240
Total Pillar II	13,132,627	107,541,852
Total Pillars I and II	32,021,976	524,418,760

Source: figures supplied by Scottish Executive, 2007

Note: LEADER+ was not included in these figures since this came under HIE's responsibility, and not under the Environment, Agriculture and Rural Affairs Department.

Table A6: Share of Income from croft-based activities

Area	Mean Proportion of Household Income From Crofting (%)
Orkney	43.48
Skye, Lochalsh, Lochaber	40.12
Tiree	35.37
North East Highland	32.86
North West Highland	29.92
Argyll and Bute (excl. Tiree)	28.52
Shetland	25.05
Inverness, Badenoch, Strathspey	24.52
Western Isles	22.82
All Areas	30.20

Source: George Street Research, 2007

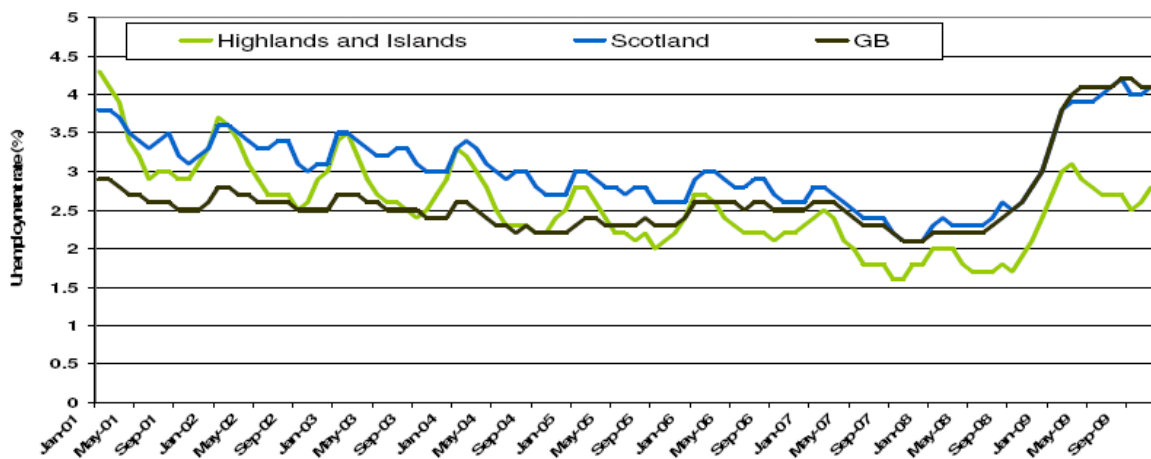
Table A7: Employment % in Highlands & Islands by sectors (2005)

Region	Agriculture and fishing	Distribution, Hotels and Restaurants	Public admin, education and health	Other sectors
Argyll and the islands	3.7	28.2	34.8	33
Caithness & Sutherland	2.0	22.0	32.6	43.4
Western Isles	3.7	19	43	34.3
Inverness & East Highland	1.0	26.9	32.9	39.2
Lochaber	3.0	34.2	30.6	32.2
Orkney	3.3	24.4	35.1	37
Shetland	4.0	17.7	35.6	43.2
Skye and Wester Ross	4.6	29.5	37.6	28.3
<i>Highlands and Islands</i>	<i>2.3</i>	<i>25.6</i>	<i>34.4</i>	<i>37.7</i>
<i>Scotland</i>	<i>1.5</i>	<i>22.4</i>	<i>38.5</i>	<i>37.6</i>

Source: HIE Economic Update, 2007, in Birnie et al., 2007.

Note: There is no separate information on crofters' employment.

Table A8: Unemployment in the Highlands and Islands, 2001-09.



Source: Claimant Count (NOMIS)

Figure A9: Targeting of SFP + LFASS beside areas of high nature value

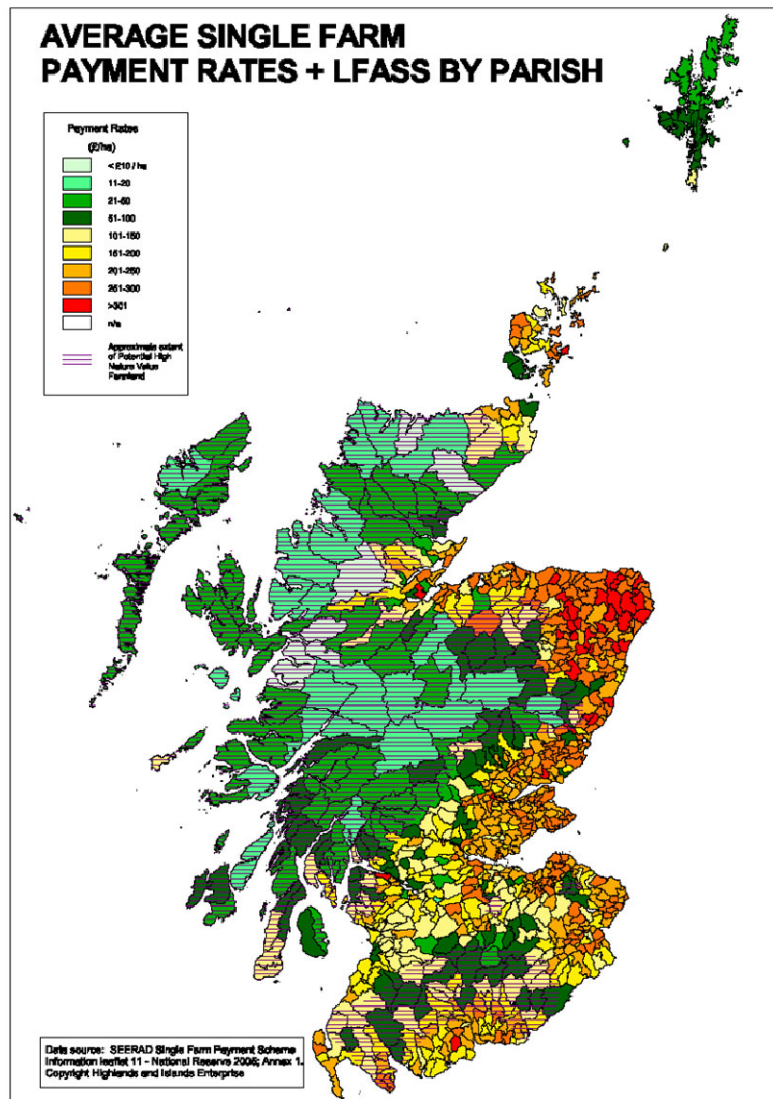
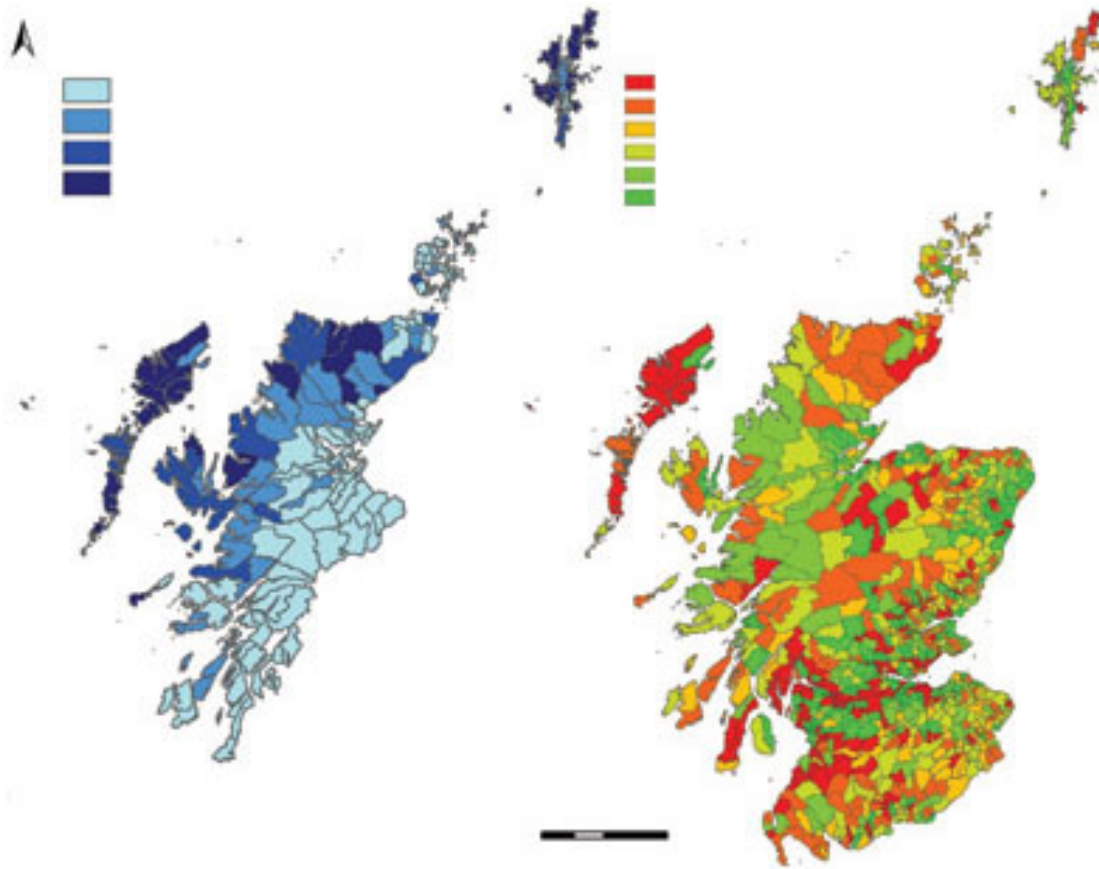


Figure A10: Main crofting areas
- proportions of crofts by parish (left) and population change (right)



Source: Crofting Inquiry (2008)

