

## Small Family Farms in Romania for Biodiversity

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### 1. Abstract

A vast majority of policy tools (first and second pillar of the CAP, Natura 2000) are not yet implemented in Romania, because of lack of possibility to comply with the requirements. This contribution discusses the pro and contra arguments for the introduction of a new tool: the small farm scheme.

### 2. Introduction<sup>1</sup>

Asymmetric development of rural regions is a problem throughout Europe, however in few places more so than Romania. Romania's turbulent recent history combined with its diverse biogeography has created an agricultural country of extremes, with 45% of the population living in rural areas, and around 30% managing exploitations of 0.5-5 ha, whilst 76% of the country's agricultural payments go to around 10% of farms covering almost 40% of surface area (Luca, 2009).

The Romanian Government supports the introduction of a new measure in the context of the reform of the Common Agricultural Policy (CAP): support for small farms. This is due to the myriad difficulties in applying current EU policy to small, part-time or semi-subsistence agriculture, compounded by the fact that the vast majority of payments from the first pillar support large farms and are not enough to take into account the conditions of mountain, or 'less favoured area' farming. These problems are common to several EU member states (including marginal areas of Scotland, Spain, Italy and Portugal) but especially the New Member States (NMS), which have vast surface areas of small semi-subsistence smallholdings (Beaufouy and Marsden, 2010).

In the context of the complex image of Romanian agriculture, in this paper we examine the Gyimes region of the county of Harghita, situated in the Carpathian Mountains of Transylvania. Gyimes is a very mountainous and therefore marginal area of Romania, with two unique characteristics: the county (and the region) is one of the most densely populated areas of the Magyar<sup>2</sup> ethnic group in Romania; it is also one of the regions most rich in biodiversity in Romania as a result of its biogeography and traditional Magyar farming techniques (Csergo et al, 2010). It is thus an excellent case study to demonstrate the challenges in applying agricultural policy to a marginal agricultural area, and also to highlight the alternative methods of revalorisation of marginal lands in Europe. This paper presents observations made in the village of Lunca de Jos, Harghita County, Romania in 2011, five years after accession of Romania to the European Union (EU).

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<sup>2</sup> Hungarian

### 3. General context of Romanian Agriculture

#### 3.1. One country but two agricultural areas: total opposites

Five years after the entry of Romania into the European Union, there is still little discernible improvement in living conditions in rural areas. Romania comprises 29% of farms in the EU, but a large proportion (over 40%) are not helped by subsidy, since their total size doesn't comply with eligibility criteria for direct payments (farms less than 1 ha or individual plots less than 0.30 ha, Guvernul Romaniei 2009). The continuation of these small farms corresponds with their low economic viability, demonstrating that agriculture still has a role in self-sufficiency in all rural areas (including mountain) acting as a social buffer (Sabates-Wheeler, 2002).

In this configuration, the Common Agricultural Policy (CAP) is not much help. 70% of direct payments are received by 3% of Romanian farmers (Luca, 2009), who account for over half of the utilised area. Located in lowland agricultural areas in the south and east of the country, these former collective farms are now huge areas operated on a capitalist model. 600,000 hectares are considered held by foreign investors who bring money and invest in advanced equipment.

#### 3.2. Rural depopulation

This economic underdevelopment has forced young, working-age Romanians towards migration: distant and often definitive. Romanians have left their homelands in large numbers, particularly for Spain (40%) and Italy (30%) for the non-official migrations or non-temporary migrations (AP, 2009), often leaving their children in the care of their own parents. For official migrants, Canada, Germany and USA are the first three most welcoming countries.

But now, with the worsening economic crisis, some have come back and the social situation is deteriorating in rural areas. It is clear, given the rapid degradation of the national economic and financial situation<sup>3</sup>, that solidarity must be put in place for a minimum of cohesion within the country itself, and with the European Union.

There are currently a suite of issues implicated with the support of Romanian agriculture and Rural Development. Due to migration, rural areas are populated by the very old and the very young, missing a cohort of working age adults who could bring entrepreneurship into these areas. Lack of alternative employment, which drives this migration, traps local populations in subsistence farming, which in turn prevents entry of the products of these farms into the domestic value chain. Products in supermarkets must therefore be imported, the resulting price preventing their purchase by rural dwellers, reinforcing the need for subsistence agriculture (Sabates-Wheeler, 2002). The origins of Romania's small-scale land structure are themselves rooted in a series of land reforms stretching back to before collectivisation (Cartwright, 2001)<sup>4</sup>. All these factors challenge the availability of support to agriculture and rural development. Social stability and economic development is urgently needed in the whole rural area in the NMS.

### 4. Method

In August 2011, a group of extensionists, PhD students, researchers and local actors undertook a one-week long seminar and field trip<sup>5</sup> in the village of Lunca de Jos, Harghita County, Romania.

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<sup>3</sup> See for ex. the article in the The Guardian, 07/02/2012.

<sup>4</sup> The challenges of Romanian land structure and the value supply chain are long term issues which do not fall within the explicit objectives of the CAP, and will thus be ignored in this paper as the 'status quo'.

<sup>5</sup> <http://www.ruralest.com/article-rural-havas-or-rural-boros-11-13-august-2011-lunca-de-jos-romania-83747345.html> (access January 2012).

Research material and data are: the presentations about Romanian agriculture in general and about the local situation, interviews with local farmers and dairies, completed and ongoing PhD and post-doc research on rural areas in Eastern European Countries (Ghib, Grandjean, Grouiez, Larkham, Tudor, Alboiu, 2011 and on-going), desk and literature studies.

The seminar itself comprised part of the on-going work of Rural'Est6, a network set up in 2007 as a platform for information sharing between young francophone researchers working on rural issues in Eastern Europe. The organisation develops academic conferences, seminars and workshops for actors and stakeholders in Eastern European Rural Development, and networking evenings around specific issues. The seminar on which this paper is based was entitled 'Assessing Transformations in Rural Areas'.

### 5. The case of the county of Harghita

In the complex image of Romanian agriculture, the county of Harghita, situated in the Carpathian Mountains of Transylvania, provides even more complexity by its very mountainous characteristics. The county has also the specificity of being of the most populated county of Romania by Magyar<sup>7</sup> population.

In socio-economic terms, Harghita county remains quite similar to the Romanian average. For agricultural data, mountain characteristics prevailed, in particular the larger areas of permanent pasture and hay contributing to the increased average surface area of farm (table 2).

Table 2: Comparative figures on Romania and Harghita county

	<b>Romania</b>	<b>Harghita</b>
Population*	21 431 298	304 969
% of Magyar population*	6.6%	85%
PIB/inhabitants in 2005 (€) (POR)	2933	2469
Unemployment rate (ILO <sup>8</sup> ) in 2010*	7.3%	8.9%
Population occupied in farming in 2005 (*, **)	7 159 477 persons 32.8 % of occupied population in 2005 and 36.8% in 2010	129 761 persons 36,5 % of occupied population in 2005
Number of Farms **	3 856 245	72 286
Medium farm size (ha) **	3.45	4.96
Agricultural area (ha) **	13 298 190	358 344
From which percentage of mountains area	19 %	91 %

<sup>6</sup> [www.ruralest.com](http://www.ruralest.com)

<sup>7</sup> Magyars are an ethnic group also called Hungarians. In Romania they are official recognized as a minority but in Harghita county they are the majority.

<sup>8</sup> ILO: International Labour Office.

	<b>Romania</b>	<b>Harghita</b>
Population*	21 431 298	304 969
From which percentage of pastures land **	4 493 902 ha or 33,8%	310 144 ha or 86,5%
Percentage of agricultural area covered by the first pillar ***	~ 9 millions (~ <b>70%</b> )	45 537 ha ( <b>12.7 %</b> )
Abandoned land **	565 757 ha (4.25%)	13 940 ha (3.89%)

Sources: \* Romania in Cifre 2011 and Harghita in Cifre 2011; \*\* date provizoriu RGA 2010; \*\*\* date APIA 2010.

It still requires eight hours to travel the 400 kilometres between the village of Lunca de Jos and Bucharest because of the roads' works along the route. Infrastructure schemes both under pre-accession programs and the 2<sup>nd</sup> pillar of the CAP were the best implemented/consumed in Romania and in the other NMS. Results of those programmes are starting to be visible but the delay of investment during communism and after, during the so-called transition period, has been very hard to catch up (Von Hirschhausen, 2008).

After the fall of the dictator Ceaucescu, industry collapsed, and few works have been reactivated. After a period of foreign investment in the 2000s, the 2008crisis has crippled the Romanian industrial sector again. Even today, Transylvania is sorely lacking in attractiveness to investors, and unemployment in rural areas is a major and recurrent problem. Disguised unemployment (due to working on the family farm) traps young and old out of official statistics and out of the benefits system. The nearby town Miercurea Ciuc, the single center of employment in the region (barring logging, which is more or less legal), is more than an hour by car from the village of Lunca de Jos, by roads that are only partially sealed. Living conditions are harsh in this mountain region, located between 700 and 1 100 meters, where winters are very long and very cold (one of the coldest places in Romania).

### 5.1. Mountain farming: rudimentary, manual and semi-subsistence

In the side valleys, mountain agriculture is mostly performed in the traditional manner: mowing is done mainly by hand (scythe) and sometimes with a hand-held mowing engine, the hay is then gathered into "capite" (the haystacks which characterise the Romanian landscape). These haystacks are then brought down the mountainsides on sleds made of branches and pulled by a horse. Horses are very common: tractors are rare and used mostly for the arable crops of the plain main Miercurea Ciuc. In Boros Valley, extended families live on crofts of 4.8 ha of grassland on average, with a garden, cows (between 2 and 3 on average), a few sheep and farmyard animals. Contrary to Austria (Dax, 2004), in Romania, medium sized farms are higher in mountains area than in low land. We also notice that abandoned land is less important in mountain areas. This particularity is due to the grassland in the mountain areas (extensive activities) but before that to the very split structure of farms in Romania with numerous, very small farms in every type of agriculture.

Unlike more lowland areas of Transylvania, where geography allows for more mixed farms, only forage is produced on these smallholdings: natural grasslands are extensive (only 2% of grasslands receive fertilizer minerals). However, thanks to the generous nature of soils, well distributed rainfall and high temperatures in summer, forage quality is very high. The average yield is 1.25 t/ha. Simmental cows were introduced after World War II and are crossed with local breeds: the Baltata Romaneasca.

In summer, the herds are sent to pasture. Herding, mainly of sheep, is entrusted to the shepherds of the neighbouring poorest Romanian region named Moldova, who come to the area and agree to live

the summer months in very primitive conditions. Their main activities are milking, cheese making and monitoring of flocks against predators, of which there are many in Transylvania (wolves and bears).

The agriculture, very similar to mountainous European agriculture after World War II, is facing the brunt of the entry of Romania into the common agricultural market.

The lack of alternative employment or the need to complete an activity or irregular low-paid job outside of agriculture is the main reason for the maintenance of entire families on these small farms. A more complex approach shows the phenomenon of delayed entries for retired earning completion, 'step' for the accession of secondary goods (Ghib, 2011). Economical difficulties also enhance uncontrolled wood cutting in the area which is valued through a black market despite an increase in legislation in recent years.

## **5.2. Development Strategy partially address by the agricultural policies until now**

At the national level, before the accession, Romania implemented only a sectoral policy for agriculture as observed in the other NMS, while other countries implemented very integrated policies for mountains area. The most integrated used the concept of massifs at a political and operational level to propose, discuss and implement policies at a transregional level coherent with the mountain perimeter (Nordregio, 2004). Since 2007, in addition to direct aid, a specific support occurs through the definition of the Less Favoured Areas (LFA) in the framework of the CAP.

Besides this, many small farms do not even apply for direct aid, because of the administrative burden. Proper distribution of aid is also in question: local government is not always very active to inform farmers of their rights<sup>9</sup>. In addition, pressure on the farm for the normalisation and standards required by Brussels creates extra difficulties for farmers. There need to be large catch-up operations for farmers to come in line with EU requirements, especially with regard to detention or storage of livestock manure, or killing of animals at the farm.

Local authorities working to develop these assets by developing the region, hope to benefit from EU Structural Funds, which promote rural development in the package called "second pillar" of the CAP. For the board of the local association "Pogány-Havas Microregion-Association"<sup>10</sup>, extensive agriculture and tourism are the two soft areas of development for the region. The aim is to establish local people, to stop the exodus of young people, and to preserve the extensive use of grassland for biodiversity and open landscapes. This requires the preservation of rural housing, investment in land improvements and infrastructure (tarring roads, paths to the hayfields and pastures, water connections) and the upgrading of farms. However, the association was not retained in the list of Local Action Groups selected under LEADER programme for the first call, because his group was too small. Therefore, it does not yet benefit from European funds.

## **5.3. Biodiversity as an externality of small scale extensive farming**

The area surrounding Lunca de Jos was classified as part of the Natura2000 European directive, which helps protect the unique resources of biodiversity, with specific designated funds. In fact, the natural resources of the region are numerous, and most outstanding in the context of sustainable development are certainly that of biodiversity. Since joining the EU, international biologists have succeeded in discovering incomparable biodiversity in that region and more generally, in the whole of Transylvania. The inventories have shown that this natural area contains habitats, which are rare, unique and threatened. In many cases, these vegetal and animal biodiversities are related to ancestral farming practices.

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<sup>9</sup> Agricultural chamber creation was expected for the year 2011 but was subject to a huge delay.

<sup>10</sup> <http://poganyhavas.hu/>

Scientists have been able to prove that the inhabitants of Gyimes have developed extraordinary skills: they know the name in local dialect over 350 different species and varieties of plants that inhabit their meadows (Molnar and Babai, 2009; Csergo and al, 2010; Molnar and Babai, 2010, Babai and Molnar, 2010). This vernacular knowledge reflects traditional skills that meet exceptional coexistence between man and nature.

## 6. Discussion

### 6.1. A targeted direct payment for small farms

Pasture in Romania exists in three forms: (1) public sheep and cattle pastures owned and managed by the commune, where all the livestock of the village graze together as part of an agreement with the town hall; (2) small private pasture for sheep or cattle owned by medium sized family-farms; (3) very large surface areas (usually for sheep) owned by private individuals and operated as large corporate farms. If the area based system of payment presently implemented is very profitable for the second two forms of pastures owners (added to a coupled payment for animals, which is supposed to be phased out after 2014, at least partially), these advantages are often reduced for those whose animals graze on the first type of pasture by the confiscation of money destined for agri-environmental measures by local authorities, who are the owners of this grazing land<sup>11</sup>. Other additional payments such Natura 2000 are not always implemented in these areas, because of co-financing requested from states without taking into account the delays in implementation of rural development programs, due to the on-going delimitation of beneficiaries. This is a double disadvantage as the individuals who graze their animals on communal pasture are usually those who are small scale, semi-subsistence farmers, and opposed or not incited to enter into an associated form.

The introduction of direct payments adapted to these micro-farms is now discussed at EU level. The argument is based on the multifunctional role of agriculture even at a small level.

Since the accession in 2007, small farms can benefit from the CAP through direct payment and semi-subsistence schemes if they own respectively more than 1 ha or manage a holding between 2 and 8 ESU<sup>12</sup>. Even though the semi-subsistence scheme seems to be an efficient policy (Ghib, 2011), direct payments are not applied by the smallest farms because of the small amount or the minimal threshold of 1 ha (1 million beneficiaries in Romania for more than 3 millions farms).

The proposal of the European Commission for the next period (2014-2020) is a subsidy for small farms: a fixed-rate annual amount between 500 and 1000 €, for which the farmer has to apply on a voluntary basis, and for which the cross-compliance entails minor exemptions for certain requirements. The proposal is to allocate max. 10% of the total budget of the first pillar for this scheme. According to a simulation made by Giurca and al. (2012), 15% of the total national budget would be necessary to answer the needs of Romanian farm structure.

Arguments against supporting these exploitations are not lacking. Why spend public money on farms whose size does not allow for the modernization, upgrading, or economic viability? These micro-organisations are often characterised by pluriactivity: these holdings are not considered as sufficiently 'professional' and moreover not tax payers.

### 6.2. Small-scale farms in the mountain area context

Despite critics against even the existence of (and therefore against a support to) small farms, the discussion should consider the sheer numbers of individuals within the EU living on holdings of less

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<sup>11</sup> For the county of Harghita, the local council owned 23% on the 358 000 ha.

<sup>12</sup> ESU Economical Size Unit (1 ESU is equivalent to 1200€ of Standard Brut Margin).

than 5 ha, and thus acknowledge the benefits of their existence (and therefore a need to re-consider to supporting them).

In Romania, as the specific country examined in this paper, small farms play an important role at the social level for the whole country. Farming provides a source of food for the enlarged family and food consumption still accounted for 35.5% of global expense per family in 2010 (Romania in Cifre, 2011). In addition, it is a daily work, often shared with the neighbours, which slows depression and alcoholism, especially for those who have returned from abroad or from other urbanized areas, because of the economic crisis.

Without direct aid, agriculture in these regions is doomed in the very short term. Since joining the EU in 2007, milk-processing companies can purchase milk on the European market (i.e. from neighbouring countries e.g. Hungary) for less than they were paying in Romania, and the transfer of agricultural policies from Romanian to EU saw a removal of per-head subsidy for livestock (Cazan, 2009). This double-pronged attack on the main source of cash income in the region (sale of cow milk) resulted in the village of Lunca de Jos losing 70% of its cattle population in three years. The departure of the cows led to a number of changes, which are identified in the following table.

Table 3: Short-term impacts of decrease of selling prices for agricultural commodities

	<b>Other context factors</b>	<b>Direct impacts</b>	<b>Indirect impacts</b>
<b>Economic consequences</b>	Weakness or absence of unemployment benefits and pensions	Increase in poverty in rural areas	Increased migrations at national and international level
<b>Social consequences</b>	Lack of human health policy	Social tensions	Malnutrition, alcoholism, children abandonment and violence
<b>Political repercussions</b>		Feeling of hostility towards the authorities at the national and EU level	Rise in intolerance between the linguistic communities and against the other EU countries
<b>Environmental impact</b>	Ageing process	Abandonment/sale and intensification of cultivated land	Loss of biodiversity and environmental goods and services linked with extensive farming

Source: own elaboration

The agricultural methods practised until now ensured a continuous level of grazing on upland pastures, and the need for strict management of hay meadows to produce enough fodder for livestock, which included fertilisation with organic matter collected during overwintering of the livestock, two cutting seasons and a process known as 'basketing' where animals were left to graze the meadows after the second cut. Constant disturbance and low levels of nitrogen in the soils result in very high levels of grassland biodiversity (Grime, 1973), and small units of land management lead to a diversity of habitats (including e.g. edge features, small patches of scrub, etc.) and a diversity of management techniques add to the complexity (Andersen and al, 2003). All these features are characteristic of Romanian low and highland High Nature Value (HNV) grasslands (Huband, 2007) such as those found in Gyimes, and the area has been recommended to become a N2000 site (Csergo and al., 2010).

Reduced numbers of livestock lead to lower levels of grazing intensity in pastures and less requirement for fodder, resulting in abandonment of the harder to reach areas of meadows, plus a reduced availability of organic fertiliser for traditional management. Abandonment leads to succession and a reduction in plant diversity, plus a change in habitat for local nesting birds. Reduction and

instability of the population income lead to enhance the pressure of the forest management despite a huge potential development in this sector.

It is clear, given the rapid degradation of the national economic and financial situation, that solidarity must be put in place for a minimum of social cohesion within the country itself, and within the EU. However, to counterbalance their disadvantages, these targeted direct payments must offer substantial social and environmental benefits from the rural development perspective.

### 6.3. The need to develop a program with a long-term and integrated vision

In the case under review, the most interesting benefits in the context of sustainable development are certainly those of biodiversity. The peasants of Transylvania provide all of Europe the treasures of plants and insects, birds and wildlife. Their very extensive agricultural practices should find a strong justification in the new CAP but also through the new integrated programs offered (multi-funds).

In addition to a solely environmental point of view, the maintenance of such valuable assets is a fundamental base to the regions development potential (Dax, 2004).

If severe obstacles to the implementation of the second pillar occurred as the requirement for national or private co-financing: the Romanian government faces significant pressures to balance its books, the proposal of the small-scale farm could facilitate and simplify the income stability of mountains farmers. But an integrated strategy is needed for a more efficient distribution of public European funds in the entire sector. Achievement of a better conciliation of nature preservation, a better income for the families in the remote areas, an efficient fighting against depopulation and “ghettoization” are major challenges.

## 7. Conclusion

The hidden, but primary role of subsistence farming in Romania is to buffer the social impacts of the economical difficulties in rural areas, in particular mountains zones. The second, global, positive impact of their existence is the high quality of biodiversity and ecosystem services provided by the cultivated landscape. The difficulties faced by these farms have been underlined in the first proposal of the European Commission for the pillar 1. Whilst the issues of an ageing population, land structure and income complementation cannot be solved by adjustments to the CAP, an increase in funds within pillar 2 for the support of rural area across EU, and particularly in Romania, can ameliorate living conditions and help to sensitively modernise agriculture in these zones, preventing wide-scale abandonment and the expensive social and environmental (conservation) costs associated with this. In the future, let's hope that the CAP will offset not only the efforts of farmers to give up some intensive polluting and destructive practices, but also the efforts of farmers working in an extensive way in the mountain areas and providing the preservation of biodiversity for an affordable cost!

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