

FAMILY FARMING IN ROMANIA

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Photo: Bob Gibbons

SUMMARY

There are 3.9 million farm holdings in Romania, the majority of which are Family Farms of extensive semi-natural grassland pastoral systems and mixed farming systems. These semi-natural small-sale farmed landscapes are of significant economic importance. For example, the 1 million holdings between 1-10 ha (3.1 m ha, 20% of Romania's agricultural area), are classes as semi-subsistence farms producing for home consumption, local sales and for their extended families. Yet these farms are estimated to produce 25-30% of national food consumption. They also provide rural vitality, as compared to the largest farms which are associated with rural poverty.

Their importance is not only economic. They are providers of many public goods: sustainable land use; biodiversity conservation; other environmental, social, cultural and economic benefits. The associated concept of HNV farmland is used by the Romanian Government as the basis for the main agri-environment measure supporting small-scale farmed landscapes in Romania. The HNV farming concept also offers the basis for the further sustainable development of rural areas through promotion of traditional food products, and diversification through sustainable tourism.

However, these small-scale farmed landscapes, strongly associated with family farming, are under increasing pressure due to loss of economic viability, failure to provide adequate living conditions for young farmers, and resulting abandonment. The importance of Family Farmed landscapes in their provision of public goods merits policy support for the small-scale farming communities which maintain them. Romania is rich in family farms. We hope in this paper to show that the large number of small-scale holdings is an important source of economic, cultural, social, and natural strength for Romania.

THE ROMANIAN AGRICULTURAL CONTEXT

Land use patterns vary considerably across Romania. Arable and more intensively farmed areas predominate in the south, the east and the extreme west of the country, while livestock farming and permanent grasslands are concentrated in the northern and central areas of Romania (see Fig. 1). Romanian farm sizes cover a wide spectrum, influenced by land use. Very large corporate farms are concentrated mostly in south and east. In Braila County in the south-east, 88% of land is arable, with some of the largest arable units in the EU, while only 9% is under permanent pasture and 6% forest. In Sibiu County in central Romania, under 20% of land is arable, 50% permanent grassland and 30% forest. Although family farms are found in great numbers all over Romania, they are found in their highest numbers, and in the most typical traditional small-scale farmed landscapes, in the northern and central parts of Romania.

Figure 1: approximate distribution of main land use types in Romania. From “High Nature Value Farming in Europe”, edited by Rainer Oppermann, Guy Beaufoy and Gwyn Jones, Verlag Regionalkultur, Ubstadt-Weiher (2012)



HISTORY

During the communist period 1947-1989, 90% of agricultural areas came under the authority of state farms and collective farms. The remaining 10% of agricultural land, not under state control, was in mountain areas, where the steep terrain and relatively thin and nutrient-poor soils hindered attempts at collectivisation. The average size of a mountain holding in 1985 was 2.4 ha with one to two cows, three sheep, one pig and fifteen chickens. The end of communism in 1989 increased the reliance of rural communities on subsistence and semi-subsistence farming, while the land was restituted to its former owners in the original pattern of small parcels.

CURRENT SITUATION

This smallholding-based production has persisted, especially in Romanian mountain and upland regions. However, livestock numbers have fallen since 1990, initially as a result of the dissolution of state and co-operative farms, and later due to rises in input costs and loss of market share, as a result of cheap imports after Romania's accession to the EU in January 2007. The sharpest decrease in cattle numbers began in 2009 when the milk market failed. Many small farmers sold

their cows because the milk price was too low; in addition, subsidies were specifically targeted at farmers with three cows or more.

The persistence of the fragmented land structure of Romania through the last 20 years, despite the expectations of many land consolidation experts, is largely due to the important role subsistence and semi-subsistence farming plays in providing livelihoods where pension and welfare payments are extremely low, food prices are similar to that of Western Europe, and access to credit is difficult. Romania's National Rural Development Programme (NRDP, 2008) states that *'by providing livelihood to vulnerable groups, subsistence holdings play an essential socio-economic function'*.

In these traditional areas of fragmented mosaic land ownership, arable land and hay meadows are usually owned by individual farmers in small parcels, while pastures are owned by the municipality and rented out partly to village grazing associations for common cattle grazing, and partly to shepherds who have their own flocks and usually also manage small-scale farmers' sheep for the 6 summer months. Such common grazing is a very significant factor in the management of permanent grassland areas and plays a major role in the viability of small farms. An estimated 2 million ha of common grazing land exist, accounting for just under half of the permanent grassland in the country.

ANALYSIS OF SIZES OF ROMANIAN HOLDINGS (See also Annex A)

1. 2.8 million holdings (71%) are under 1 ha in size. They account for 5 m ha, 35% of Romania's agricultural area.
2. 1.04 million holdings (27%) are between 1-10 ha, regarded as semi-subsistence farms, listed in the Farm Register and eligible for area-based payments. They account for 3.1m ha, 21.2% of Utilisable Agricultural Area (UAA), and mostly produce primary products for home consumption. These farms are estimated (Otiman 2013) as producing 25-30% of national food consumption.
3. 60,000 farms (1.6% of Romanian holdings) are between 10-100 ha. They cover 1.49m ha (10% of Romanian's UAA)
4. Only 12,000 farms, 0.3% of holdings, are commercial operations over 100 ha which cannot be considered too large as family farms: they occupy 34% of UAA.

WHAT ARE THE NUMBERS AND EXTENT OF ROMANIA'S FAMILY FARMS?

- In the broadest sense, 3.9 million farm holdings covering 9.5m ha (66% of agricultural area) of Romania's land are in the hands of families (Categories 1, 2 and 3 above)
- Looking only at holdings listed in the Farm Register, 1.1 m holdings covering 4.6 m ha are family farms between 1-100 ha (categories 2 and 3 above)
- In the narrowest sense, holdings between 2-50 ESU¹ are recognised as Family Farms under current Romania law². This includes farms approximately between 4-100 ha: about 310,000 farms and 3 m ha (part of category 2, and category 3 above).

Romania is therefore **rich in family farms**. We hope in this paper to illustrate how the large number of small-scale family farms is a source of strength in the national economy, culture, society, and sustainability of agriculture. This preponderance of small-scale family farms has until now has been seen as a weakness in Romania's agriculture, a barrier to competitiveness that needs to be rectified. However, recently there has been a re-appraisal of the social and economic value of small-scale farming.

FARMER AGES, FARM SIZES AND FARM TYPES IN ROMANIA

There is a link between the age of farmers and farm size. This suggests an ageing problem in smaller farmers, which may lead to some land consolidations.

- In farms under 20 ha, 70% of farmers are over 55 years old, and 13% under 45 years old.
- In farms over 100 ha, 37% of farmers are over 55 years old, and 35% under 45 years old.

¹ ESU: Economic Standard Unit, a measurement of economic activity equivalent to standard gross margin of €1,200. On a livestock farm, 1 ESU can be equated very roughly to 2 ha.

² Emergency Ordinance nr. 43 of 15 May 2013 regarding measures for development and support of family farms and assisting farmers' accessing to funding

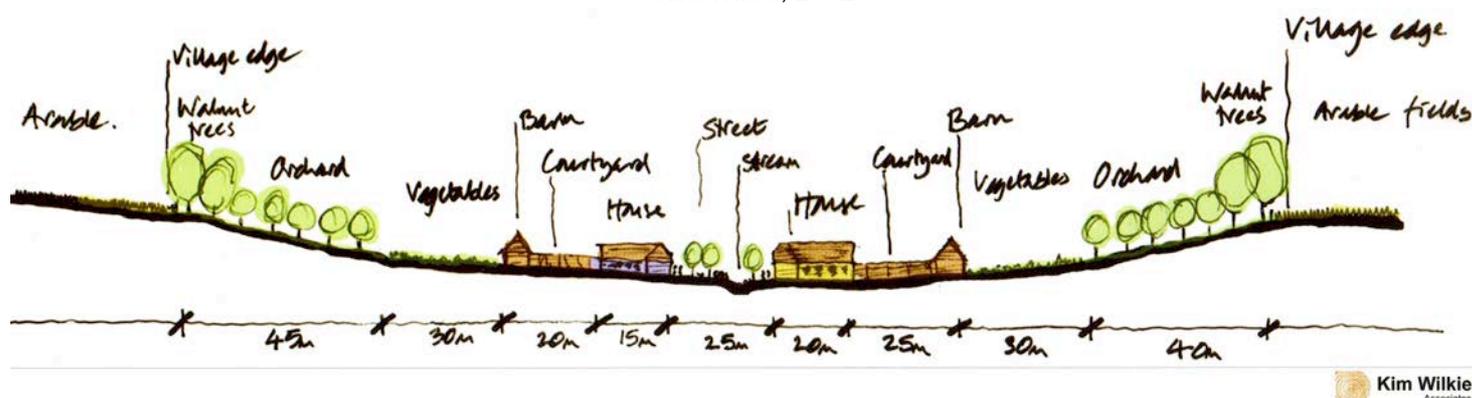
Table 1: Distribution of farm sizes in Romania per age of owner-operator. Older farmers are associated with smaller farms (Eurostat 2009).

Size of farm (average)→ Age of farmer↓	Under 20 ha (av. 4.5 ha)	20–50 ha (av. 30 ha)	50–100 ha (av. 69.3 ha)	Over 100 ha (a. 530.8 ha)
Under 35 years	2.9	4.5	7.9	6.3
35-44	10.3	16.1	23.0	28.4
42-54	15.1	23.9	28.0	28.0
55-64	25.3	28.3	21.8	27.4
>65	46.4	27.5	19.3	10.0

DESCRIPTION OF ROMANIA'S FAMILY FARMS

Romania's Family Farms are centred in villages and communities. The traditional farmhouses and courtyards are gathered into villages. Crops are grown on the arable valley floors, and the valley slopes are given over to hay-meadows and large expanses of communal grazing land, for both sheep and cattle which are managed separately.

Figure 2: cross-section of typical Romanian farming village street showing family farm structure.
Kim Wilkie, 2002



The typical family farm consists of a farmhouse, barns and sheds for cattle, sheep, pigs, chickens and hay; a vegetable patch for household use, and an apple, plum and pear orchard. Family farmland is usually divided into small parcels of arable land and hay meadow, often no more than 0.3 ha in size, near the village. Further from the village are the common grazing pastures and forests which are a source of wood for cooking and heating. See also Annex B for description of Family Farming systems.

Figure 3: typical layout of a small-scale family farming community



Photo: Kim Wilkie

FAMILY FARM ECONOMY

Family farms income is derived mostly from sale of sheep cheese and milk, and cow milk, to milk-processing companies. Small-scale dairy production is the key to the survival of small-scale family farmers, who depend mainly on cow or ewe milk or milk products for their income. Small producers all deliver to one or two milk collection points in villages, from which the processors take delivery. It is key to survival of the smaller family farms that these milk collection points remain in profitable operation.

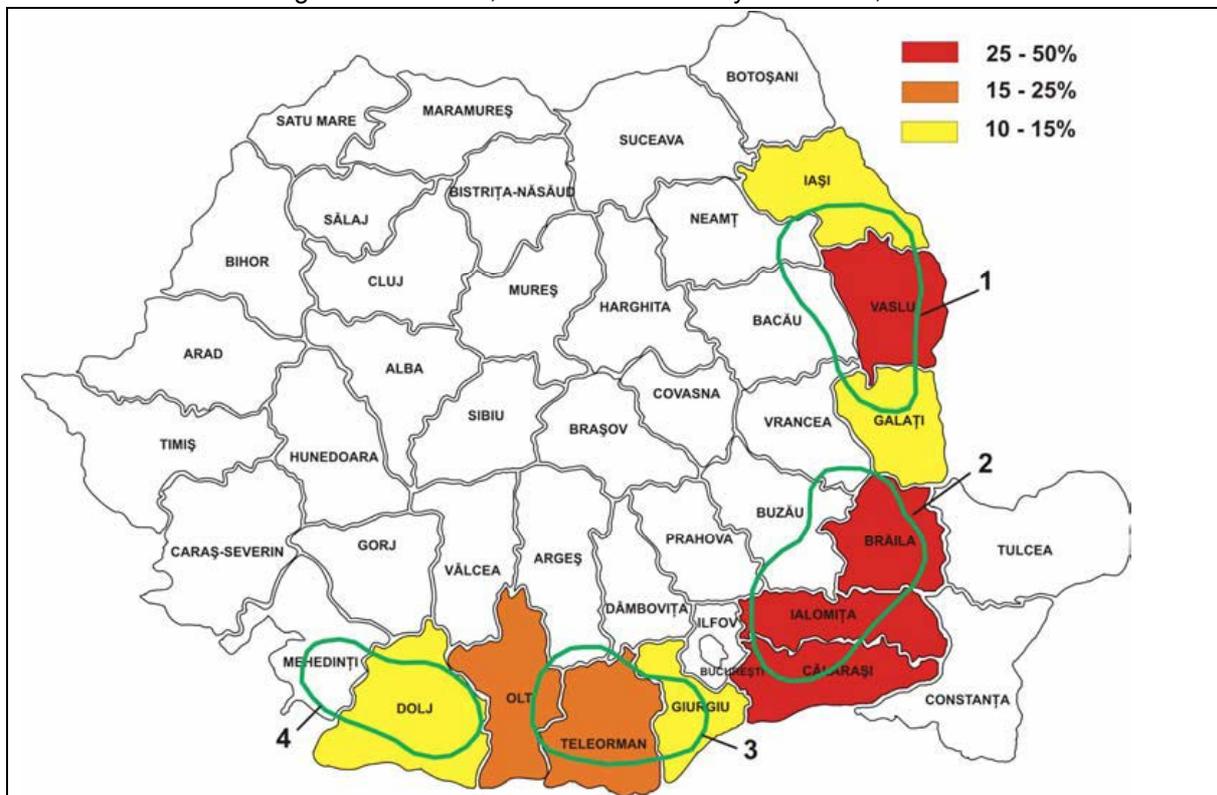
Over 50% of Romania's holdings sell less than half their products on the commercial market, and so may be classed as subsistence farms. However, subsistence farming can also include the informal networks that supply food products to family members in nearby towns and cities, due to the high prices of food in Romania.

The contribution of smaller Family farms to local, wider family and national economies should not be underestimated. It should be noted that the 1 million holdings between 1-10 ha, regarded as semi-subsistence farms, listed in the Farm Register, account for 3.1m ha, and mostly produce primary products for home consumption. These farms are estimated (Otiman 2013) as producing 25-30% of national food consumption. See also Annex C for case studies of family farms.

FAMILY FARMS AND RURAL POVERTY

It has long been supposed that large scale farm businesses, which are highly automated and employ few people, are poor contributors to the local, community economy. Further work by Otiman (2013) has demonstrated the role of smaller-scale family farms in providing economic vitality in rural areas. He has shown that the four severest poverty pockets in Romania are found precisely in the areas with the highest land cover by very large farms.

Figure 4: Map showing correlation between percentage of agricultural land in each county occupied by very large farms, over 2,000 ha, and severe rural poverty. Otiman, P., Romania's present agrarian structure, Romanian Academy Bucharest, 2013



- Percentages represent the percentage of eligible agricultural area of each county occupied by very large farms, over 2,000 ha.
- Numbers 1-4 indicate the severest poverty areas in Romania (1 being most severe).

If such large farms are associated with local poverty, this should lead us to question the widely accepted opinion that larger farms, leading to economies of size and efficiency through automation, are more competitive on the global market, and are greater producers of wealth. One must ask, for whom is this wealth produced? Furthermore, family farms, with a longer term vision and intention to leave farms in good heart for future generations, may well be better managers of land in terms of sustainability.

An additional factor is the impact of CAP payments on local communities. A large commercial farm is likely to receive investment payments, and spend them on specialist technology/equipment outside the area. Profits of commercial farm activities are also likely to be distributed to investors outside the local area, even outside the country. However, in the case of small-scale farmers, support payments received (direct payments, agri-environment payments, investment payments), and profits, will probably be spent locally, providing a stimulating trickle-down effect among local farming communities.

VALUES OF ROMANIA'S SMALL-SCALE FAMILY FARMING SYSTEMS

It can be argued that small-scale family farms are in many ways more productive than larger industrial farms, when all products are taken into account, for a variety of reasons

1. **food security:** family farms perform a very significant and underestimated role in providing food to localities and wider families. Empowering families to grow their own food on small plots has been shown to offer solutions to food shortages in many problem regions of the world. In Romania, 1 million semi-subsistence farm holdings between 1-10 ha (on 3.1 m ha, 20% of Romania's agricultural area), are estimated (Otiman 2013) to produce 25-30% of national food consumption. In a country that imports a significant percentage of its food, this is an significant achievement. Compare also with the example of Russia, where there are 35 million small family plots in Russia producing 50% of the nations agricultural output (The Bovine, 2012.)
2. **rural vitality:** small-scale farming communities provide considerable, and varied, local employment as well as the trickle-down effect of small local support payments
3. **resilience:** small-scale farmed landscapes are more flexible in their farming activities, adapting more quickly to climate change and environmental challenges
4. **low-carbon efficiency:** they are strongly associated with efficient, low-carbon short food supply chains, through local and direct sales

ECOSYSTEM SERVICES PROVIDED BY SMALL-SCALE FAMILY FARMING

The very high estimated value of the ecosystem services provided by Romania's small-scale family farming systems suggests that they merit strong policy recognition and support. The economic, social and environmental costs of losing them far outweigh the costs of support (Cooper, T., et al., 2009).

Ecosystem services provided by Romania's small-scale family farming systems include:

- a. **Biodiversity** – semi-natural pastures and meadows are central to the public goods of European farming, and at the same time represent a major part of European biodiversity. The fragmented ownership and land management creates a complex mosaic that is very biodiversity-friendly.
- b. **Agro-biodiversity:** family farms in Romania are an important source of agro-biodiversity: both fodder crops such as grasses and clovers, and fruit and vegetable varieties of great importance for global food security, providing high performance under local conditions and sources of resilience to climate change in the future.
- c. **Air quality and climate regulation:** natural woodland and permanent semi-natural grassland both act as substantial carbon sinks. Coupled with the low energy use of traditional agriculture, and short food supply chains, these landscapes and systems reduce CO² emissions and mitigate climate change.
- d. **Erosion protection and flow regulation:** erosion is prevented by avoiding disturbance to ground cover. Extensive forest and vegetation cover delays run-off of rainwater, replenishes groundwater supplies and moderating extreme flooding events. Such landscapes also provide water purification services.
- e. **Disease and pest regulation, pollination services:** healthy populations of insect pollinators, and natural predators of agricultural pests and diseases, are vital for good yields and high

agricultural production. These depend on structurally diverse and semi-natural habitats such as those found in traditional agricultural systems.

- f. **Cultural services: Heritage, recreation and tourism services:** as well as their cultural and spiritual values, these landscapes generate significant tourism income.

THREATS TO FAMILY FARMS

The small-scale family farmers of Romania face many problems including:

1. Market failures. Lack of markets for the goods they produce, owing to cheap imports and tighter regulations on informal sale of smallholder produce. Small-scale farmers cannot make an income that meets expectations of the next generation of farmers.
2. Markets and profitability of local small-scale production are further damaged by the imposition of unrealistic hygiene standards on small producers. This is a problem at the level of Member State's implementation of EU Directives: flexibility is shown in Romania in some areas, but not in other areas. Clear national guidance for flexibility towards small-scale family farmers is important.
3. The European Commission's package of seed regulations, as it is currently proposed, is a threat to agro-biodiversity, and to traditional farm management by small-scale family farmers. Clear guidance for Member States is required to avoid unintended consequences such as economic losses for family farmers and losses of local varieties
4. Breakdown of the common grazing system: until recently, grazing was effectively managed by village grazing committees, with pasture/meadow distinctions honoured. This system is increasingly abused and mayors do not have the power or incentive to take action.
5. Lack of a common voice, at national scale, and lack of access to information - the many agencies which they need to contact for variety of assistance measures are poorly coordinated and hard to access.
6. Diversification of income is poorly developed because of lack of opportunities. Support measures, such as investment measures in the Rural Development programme, are not easily accessible to the smaller family farmers.

OPPORTUNITIES FOR THE FUTURE

How can these complex farming systems be supported? What opportunities do they have?

The preponderance of small-scale farms in Romania has been seen as a weakness in Romania's agriculture until now.

However, there has been a re-appraisal of the social and economic value of small-scale family farming systems, both at national and EU levels. This will lead to increasing support from policy-makers, and from the public, as consumers. Specific opportunities include:

- Amendment of CAP rules so that farmers currently excluded can benefit from support payments: this could include eligibility of grassland with trees and rocks, higher area payments, or minimum payments under simplified schemes, for smaller farms.
- The survival of on-farm food processing and the link between the products and regional identity provide opportunities for effective marketing; 41% of Romanian family farms process their own farm products, compared to an average of 8% in the EU27.
- Stimulating the association between small farmers and small producers, to create effective and efficient local food chains, bringing broad benefits to the local economy. The Cooperation Measure and European Innovation Partnership under the new CAP will be important contributors to this process, and we hope that Romania will include the Cooperation Measure in its Rural Development Programme
- Traditional farming landscapes can also bring income to farming communities through rural tourism.
- Improved advisory services. Young entrants/successors to family farms will see a better future in farming if there is help to improve markets for local products, and to diversify their income sources.
- The strong attachment of family farmers to their land, and the lack of legal land ownership documents, combine to reduce the sales of land. This has been a factor in maintaining small-scale farming systems. Perhaps, now these systems are more valued, there will be reduced pressure to sell land and consolidate into larger farms.

ANNEX A: DIFFERENT SCALES OF FARMING CAN BE DESCRIBED AS FOLLOWS

Area

- i) 2.7 million holdings are classed as subsistence farms (71% of holdings), are less than 1 ha in area, and therefore are not listed in the Farm Register, nor are they eligible for area-based payments (SAPS, agri-environment). They account for 34.5% of Romania's UAA.
- ii) 1.04 million holdings (27% of holdings) are between 1-10 ha, regarded as semi-subsistence farms, listed in the Farm Register and eligible for area-based payments. They account for 21.2% of UAA (3.1m ha), and mostly produce primary products for home consumption. These farms are estimated (Otiman 2013) as producing 25-30% of national food consumption. Of these, approximately 75% of the farms and half the land is in holdings under 4 ha, equating roughly to 2 ESU (see below).
- iii) About 60,000 farms (1.6% of Romanian holdings) are between 10-100 ha. They cover 1.49 m ha (10% of Romanian's UAA)
- iv) The remaining 12,000 farms, 0.3%, are commercial farm enterprises over 100 ha: they occupy 34% of UAA.

Economic activity ESU³

- v) Holdings with economic activity under 2 ESU are classed as Subsistence Farms in the National Rural Development Programme. They cover about 45% of the Romanian Utilisable Agricultural Area (UAA) and account for 91% (3.8 million) of the total number of holdings. Subsistence farming is also defined by the Romanian System of National Accounts as holdings that use more than 50% of production for the 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 subsistence and semi-subsistence farms. The NRDP states that **'by providing livelihood to vulnerable groups, subsistence holdings play an essential socio-economic function'**.
- vi) Holdings between 2-50 ESU are recognised as Family farms under Emergency Ordinance nr 43/15 May 2013, under which a Family Farm must be registered in the national farm register, either as a physical person or as a legally-registered individual enterprise or family enterprise. It produces for its own consumption as well as, but not necessarily, for the sale of surplus production. If we assume this is between 4-100 ha, on average, about 310,000 farms (8% of Romanian's holdings) and 3 m ha are included in this category.

The definition of small farmers, for policy purposes, is especially problematical in Romania because of very diversified activities and farming system in the 5 bioregions of the country.

³ ESU: Economic Standard Unit, a measurement of economic activity equivalent to standard gross margin of €1,200. On a livestock farm, 1 ESU can be equated very roughly to 2 ha.

ANNEX B: LAND MANAGEMENT IN SMALL-SCALE FARMING LANDSCAPES IN ROMANIA

Hay-meadows.

The lower, more level hayfields are typically cut twice a year, in June and July, and again in September. The steeper upland meadows, difficult to cut by machine, are cut once a year by scythe, in July or August. After drying in the fields, hay is brought in to the villages by horse and cart or tractor. After mowing, owners put their own cattle on to their parcels of land for aftermath grazing. Local farmers regard this rich flora as beneficial for their cows' milk production and general health.

“One hay-cart for each leg” – one cow is said to eat 4 cartloads of hay over the winter



Photo: Bob Gibbons

Pasture

About 25% of the land is communal grazing land divided between cattle and sheep. Usually the land nearer the village, lower down and with richer grass, is reserved for the cattle since they return to the villages every evening for milking. The sheep remain on the upper pastures for the whole summer. This grazing land is owned by the Town Halls and the right to graze is rented out each year to the villages and to outsiders.



Photo: Bob Gibbons

Sheep systems

Sheep are kept on communal pastures, in large flocks managed by locally elected shepherds. Sheep pastures are usually located a few kilometres from the village, on the higher ground. Sheep are taken up to the pasture in early May or before, and returned to their neighbours in November. Flocks vary in size between 200 and 700 head, a mixture of villagers' and the shepherd's own sheep.



Photo: Bob Gibbons

Sheep are valued in Romania more for their milk than for their meat. The sheep are hand-milked three times a day, at dawn, midday and late evening. Grazing intensity is approximately 4–6 sheep/ha, although this varies over the pasture due to the grazing regime. Pasture quality and grazing intensity is monitored by a town hall 'pasture committee', responsible for ensuring that pasture is grazed within acceptable limits.

Cow systems

The cattle are let out for daily grazing from early May. Each villager milks his cow or cows, and pushes them out of his gate at first light. The cowherd, a villager elected by the owners according to his terms and his reputation, drives the herd out of the village and grazes them in communal pastures until evening.



Photo: Cornel Stanciu

Towards dusk, the cowherd brings the herd back to the village. Each cow knows the way into its own yard, where it is milked again by hand. Milk is taken twice a day in buckets or churns to the village milk collection points, each with a bulk storage tank.

Annex C: ECONOMIC VIABILITY OF SOME FAMILY FARM TYPES

Farmer's portraits

1. Traditional sheep farmer



Photo: Cornel Stanciu

Stelica (centre in photo) manages a typical upland sheep farm, 1300 sheep and lambs on 197 ha. He works full time and his wife part-time; she is also a kindergarten teacher. They are in their 30s and have two young children. Her hopes that his son will continue farming, but is not sure.

They have 4 employees: 3 in their 20s, and one 49 years old. Stelica and three others milk 700 sheep three times a day. They also have 600 lambs for meat. Most of the sheep belong to other villagers, for whom he manages their sheep in the 6 summer months.

Stelica owns 7 ha of hay meadow, on which he receives subsidies. He rents all the other land, mostly from the Town Hall, on some of which he is able to claim for CAP payments. He sells his milk at €0.45/l and he also sells cheese privately at €3.1/kg. This is marginal, and the system is only viable as a result of agri-environment payments. If shepherds could claim for agri-environment payments on rented land, viability of this system would be much improved.

Stelica really enjoys his work and takes pride in it. But he says that he would not continue without the CAP payments he receives.

Economics of the holding	
• income from production	€20874
• Pillar 1	€1917
• agri-environment	€4914
• costs	€12300
• net income (per Annual Work Unit):	€15405 for 1 full time and one part time (€10270 / AWU)

2. Traditional mixed farmer



Photo: Bob Gibbons

Emil (photo) is a semi-subsistence farmer by Romanian standards, 2-8 ESU.

He keeps 5 milking cows, one heifer, and 15 sheep which are managed by Stelica during the summer. He owns 9 ha of land, a mixture of arable and hay meadow in the past, but he now uses it all as hay meadow, on which he receives direct payments and agri-environment payments, as it is all declared as permanent pasture (more than 5 years pasture). He owns a small tractor. His cows produce 3000 litres of milk/year average, for which he receives €0.16/litre.

Emil says that his only profit from his farming is from CAP payments, but is concerned that agri-environment payments require a hay cutting date after 1 July, which is very late for non-mountain grasslands and leads to large loss of feed value.

Emil estimates his work as 0.5 AWU: 3 hours per day plus haymaking extra time in the summer. Emil is 51 years old, his wife Eli is 48. Eli makes a better income from agro-tourism than Emil does as a farmer; they have two bedrooms for guests and Eli is a very good cook. They have 2 daughters, at university, who will not continue farming.

Emil is not optimistic about the survival of his size of farm in the future.

Economics of the holding	
• income from production	€3100
• Pillar 1: €639	€639
• agri-environment €1080	€1080
• costs: €1850	€1850
• net income (per Annual Work Unit):	€2969 part time (€5938 / AWU)

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