# DEVELOPMENT SCENARIOS AND OPPORTUNITIES FOR RURAL HOUSEHOLDS IN MOUNTAIN AREAS

### Daniela MATEI<sup>1</sup>

e-mail: daniela\_matei2004@yahoo.com

#### **Abstract**

The subsistence agriculture that is still practiced by rural households remains very much under the influence of traditionalism: crops include more or less cereals and field crops, while animal husbandry covers the needs of the household. The development of the society and its demands, and the laws of the market economy, all call for the reorientation of traditional agriculture. Thus, peasants should consider their households not only as food production units, but also as a piece of land where business can be conducted. Depending on demand, on entrepreneurs' courage and even on their imagination, a plot of land may generate significant income from newly established and more intensive activities: gardening, medicinal plants, ponds, traditional processing of agricultural products, agritourism etc. We aim to provide a comparative assessment for two types of households: focused exclusively on agricultural activity, possibly selling output on food markets in the county; engaged in agricultural activity and additional agritourism/ rural tourism/ ecotourism (hotel, hostel) activities. For the designed scenario / model we analysed income and expenditure patterns for: family wage income and self-consumption; farming activity; combined agritourism and farming activities.

Key words: agriculture, animal husbandry, agritourism, utilisation.

Mountain areas account for a large share of the territory of Romania, raising specific demographic, economic and environmental issues, now compounded by a drive to develop new local, regional and European functions and interests.

In such a context, pluriactivity, which has always been linked to the evolution of the agricultural production system, is among the ongoing shifts in the mountain territories and social environment. Generally, pluriactivity entails any combination of several paid activities, at a level that should be extremely precise, regardless of the reference sample: individual, family or agricultural holding. A generally accepted definition in French specialist literature [Beteille, 1996] lays out a very precise status of pluriactivity: it defines the situation of a person who carries out several jobs, distinctly remunerated, either

# MATERIAL AND METHOD

The aim of the paper was to examine a family holding – from the mountain area of Moldavia (Suceava county), focusing on the entrepreneurial decision that the head of the holding must make, at a given point, in order to diversify and increase revenue. For the purposes

simultaneously or successively during a calendar year, involving several job profiles.

Consequently, a pluriactive household is any family that derives income from more than two remunerated activities. Under the banner of this apparently simple definition, pluriactivity encompasses extremely varied situations such as: worker – farmer, accommodation services on the farm managed by the spouse of the head of the holding, or services provided for other farmers.

For the purposes of researching the phenomenon, we will use three main variables:

- 1. pluriactivity of the manager of the agricultural holding or his family members;
- 2. activities conducted in the non-agricultural or para-agricultural sector;
- 3. the location of the activity, on the farm or outside the holding.
- of the research, the following hypotheses were considered:
- A core family structure typical of mountain villages: five people four adults, one underage, and 3 generations. The grandparents are retired, the parents did not complete higher education, and the child is in school.
- A farm type very common in the mountain areas of Moldova, with the following

\_

<sup>&</sup>lt;sup>1</sup> Romanian Academy, Iassy Branch

characteristics: 20 ha of land, of which 5 ha of pasture land, 20 acres of open field, 2 acres of vegetable garden, 14.78 ha meadows;

- the family farm includes 8 cows, 3 young cattle (under 6 months), 1 steer (14 months), 5 pigs, 2 horses, 20 hens and 30 broiler;
- the holding premises include two buildings, one available for accommodation activities while the other is used by the family;
- the building used for agritourism has five twin bedrooms equipped with rustic furniture and is ranked as two daisies;
- Minimum required training: the head of the holding has specialist training (as animal husbandry technician and pork butcher), the spouse is a seamstress, both have completed training courses provided by tourism trade associations, courses organised by CEFIDEC, cooking courses.

Given all the available data, the manager of the holding must examine the potential paths for development, based on the present situation of the holding and family:

- 1. the gradual expansion of agricultural land area by leasing and purchasing land to establish a modern, high-performance private agricultural holding;
- 2. the development of the agricultural activity could be combined with the development of processing agricultural produce on the farm in order to sell processed foods, as these entail higher earnings compared to unprocessed agricultural products;
- 3. raising a larger number of dairy cows, combined with the total or partial processing of milk on the farm. The developing of intensive activities such as cow milk production and processing on the holding and the sale on the farm or direct to consumers, including perhaps home delivery, creates added value and considerably increases farm income (Ciurea, 1995). This could be a good solution in the long run, providing that the necessary investments are made;
- 4. using surplus residential area and surplus agricultural products on the farm in tourism activities.

The expansion of the farm holding, production concentration and integration require a degree of specialisation of the farm, since the family alone cannot handle all the potential business branches and activities. In this context, agritourism can prove an appropriate choice for business diversification and increasing revenue.

### RESULTS AND DISCUSSIONS

In order to underpin decision-making regarding the organisation and development of agritourism on the holding, the next step for the manager next step is to analyse revenues and expenses arising from this type of activity. To efficiently organise any agritourism activity, the

farmer family must have three resources available: residential area, agricultural food products and labour time in excess of family and household needs. As regards the first criterion, the farm has two buildings, one available for the tourism activity, the other used by the family. There are 5 twin-bed rooms each with two rooms, and two bathrooms, one on each floor.

The output of food products made on the farm largely exceeds the family's own-consumption and production needs, which means that there are available food resources to provide meals for tourists or sale on the farm.

Making use of these resources on the farm prevents family members from spending time to sell products on the market and eliminates the costs of transporting products from the home to the point of sale. Agritourism would however entail certain changes in the production structure and the degree of processing in order to cover for demand by clients. In order to determine the required labour time, it is equally necessary to conduct a thorough analysis of how the family currently expend labour time. The detailed examination of expended labour time was carried out at one-week or ten-day intervals, in order to capture the essential changes in labour time distribution among the different activities.

Farm land work and animal husbandry obviously account for the main share of the family members' work. In the table below, we present the overview of labour time expended and labour time availability over a year (*Table 1*). The data in the table indicates that current activities take up 55.31% of the family's time, with the remaining 44.69% available for other activities, which means that the farmer family have the time resources necessary to establish an agritourism activity. The decision to move into agritourism must also take into account the area where the farm is located.

The area where the agritourism business is located has an important tourist potential owing to:

- its proximity to particularly important historical and cultural vestiges and monuments;
- the beautiful landscape, suitable for hiking or picnics, for sporting activities, relaxation and laisure:
- the location of the holding on a major route passing through the mountains towards the city of Suceava.

Given these conditions, one can expect the area and the locality to be frequented by following categories of tourists: passing tourists who wish to dine and stay overnight on the farm (transit tourism); tourists who come to unwind on Saturdays and Sundays and spend their spare time on picnics (weekend tourism); tourists who come

to visit historical and cultural monuments and sites in the area for a few days and prefer to sleep at night and have breakfast and dinner on the farm which is not far and can provide all the amenities of urban comfort in addition to a pleasant, quiet and relaxing rural setting.

Table 1

### Overview of the family's labour time

No	Name of activities	No. of hours allocated	% of total
1.	Farm land work	5,134	43
2.	Animal husbandry	2,114	17.69
3.	Household keeping and product processing	960	8.03
4.	Cleaning of residential areas	856	7.16
5.	Washing laundry and ironing	288	2.41
6.	Preparing meals and food	1,094	9.16
7.	Homework and home-based activities related to the daughter's education	1,502	12.57
Total time expended on regular activities		11,948	55.31
Tota	Il time available to the family	21,000	100
Time	e available for other activities	9,652	44.69

The next step consists in assessing income raised from tourism (*Table 2*).

For this stage too, the analysis of the holding's factual situation must be rigorous and clear-headed. Thus, manager, relying on all the available data, will make a forecast of the intensity of tourism activity. The total period when tourists may be accommodated on the farm and the total number of overnight stays are established as follows: Although the farm could welcome tourists practically all year round, it is unrealistic to take into account all the remaining family time because experience has shown that tourism demand, especially in rural areas, is not distributed evenly in each week of the year and across all seasons. Therefore, not all the 52 weeks of the year will be taken into account, but shorter

period of about 3 months, or 14 weeks. As detailed above, the space available permits the lodging of up to 10 visitors at a time, for a total number of 980 overnight stays. For the period considered, we project an average occupancy rate of 30% resulting in number of 294 overnight stays for the selected type of boarding house. The average accommodation rate taken into consideration, for the years 2009/2010, is 70 lei / room / day, plus the price of meals, ranging from 35-50 lei / day / person. To facilitate calculations, we will consider a full-board rate of 100 lei / day / person. During the holiday season, promotional service packages are offered (full-board accommodation) at the following rates: 25 euro / person / stay for New Year's Eve (4 nights) and 18 euros / person / stay for Christmas (7 days) and Easter (4 days).

Table 2

### Calculation of earnings from agritourism

Period	Overnight stays	Full-board rate person/day	Total (lei)
New Year's Eve	40	25 euro/102.5 lei	1,025
Christmas	70	18 euro/738 lei	7,380
Easter	40	18 euro/738 lei	7,380
Occasional	144	120 lei/day/tourist	17,280
Total	294		33,065

As regards the estimation of agritourism-related expenses, the total quantity of raw materials required for the provision of three meals daily is calculated by multiplying the raw materials needed daily for each tourist and the number of overnight stays. Food needs can be assessed in this manner. Once the required quantity of raw materials for the total number of overnight stays has been projected, it is compared with the agricultural products available for sale to determine the quantity of products that have to be purchased on the market.

For these purposes, we set the value of products consumed at the boarding house and produced on the farm, set according to the standard retail prices in the markets in Suceava

county in 2010 [4]: milk (400l x 3.0 lei / litre = 1,200 lei), eggs (400 eggs x 0.5 lei / egg = 200 lei), pork (250 kg x 12 lei / kg = 3,000 lei), poultry meat (50 kg x 7 lei / kg = 350 lei), potatoes (220 kg x 1.2 lei / kg = 264 lei) for a total of 5,014 lei. Besides the above there are other items bought on the retail market (totalling 2,283 lei):

- vegetables: 180 kg 540 lei
- fruit: 50 kg 200 lei
- sugar: 30 kg x 3.2 lei/kg = 96 lei
- cooking oil: 20 kg x 4,2 lei/kg = 84 lei
- rice: 15 kg x 4.2 lei/kg = 63 lei
- bread: 300 loaves x 1 leu/ loaf = 300 lei
- others: 1,000 lei

Total agritourism expenses:

Food-related expenses: 2,283 lei Non-food expenses: 800 lei

Utilities: 2,000 lei Heating: 5,474 lei TOTAL: 10,557 lei

The key point on which our analysis is based is the use of a proportion of the agricultural output of the household in the tourism-related activities. Comparing the required raw materials for the agritourism activity to the existing volume of farm production, the degree to which the need for raw materials is met using raw materials available on the farm. For this analysis, the index

degree of utilisation of the total output of the agricultural holding for tourism-related activities (II) (Matei, 2005), by dividing the products required for tourists' consumption to existing agricultural output available for each product, multiplying the result by 100.

Equally relevant for the conclusions to be drawn from the analysis is the *ratio of coverage of tourists' consumption based on the holding's agricultural production available for sale* (I2), by correlating the available output to the consumption needs of tourists, and determining a ratio.

Table 3

The ratio of the coverage of required raw materials by the available output of agricultural products

Category	Available agricultural products	Tourists' consumption	I1 %	12 %
Milk	2500 I	400 I	16	625
Eggs Pork	600	400	67	150
Pork	400 kg	250 kg	62,5	160
Poultry meat	50 kg	50 kg	100	100
Potato	2000 kg	220 kg	11	-

This analysis is particularly important as it exposes the intimate connection between the two activities, i.e. agriculture and tourism in the agricultural holding and the complementarity of the tourism activity in leveraging agricultural surplus in the farmer's household.

As a result, agritourism becomes an extension of farm functions, downstream from agricultural production and thus plays the same role as the processing of agricultural products in the agricultural holding and the direct sale by the producer of processed products, eliminating the need to transport the products to the market or the consumer's home.

The total earnings of the agritourism household under these circumstances amount to 22,508 lei / year.

Of course, the model is simple, as it does not factor in many other inputs and / or outputs, such as: various agricultural subsidies, secured non-reimbursable funding, taxes and levies, losses whether provisioned or not, etc.

Nevertheless, it is a starting point for a potential assessment of the alternatives for diversification of the activities of families and holdings located in mountain areas.

## **CONCLUSIONS**

Several conclusions emerge from the conducted study, concerning farms that decide to expand into tourism. Obviously, that the first element in decision-making is an economic one, linked to the profitability of the business and the increase in the family's standard of living. The category of economic benefits also includes the need to process the vast majority of products served to tourists, meaning that the family will expend labour time within the household.

Furthermore, the processing activity provides value added to agricultural products, which increases the selling price.

The utilisation of agricultural products within the household also offers additional

important economic advantages, namely: the elimination of costs of transporting the products

and the producer to the point of sale; avoiding degradation, loss and damage of products due to transportation and to display at the market; eliminating time expended on selling the products outside the holding.

Moreover, there are a few important social benefits: the upgrade of the skills of family members as they gain knowledge of processing technologies and hospitality skills; tourism services have specific standards that must be learned and mastered; acquiring marketing skills through knowledge of the agritourism market, product and service promotion skills, the capacity to assess the competition and achieve competitive

results, developing business calculation and analysis skills.

Ultimately, it is about the transformation of the traditional farmer into a genuine rural entrepreneur.

### **ACKNOWLEGMENTS**

This paper was prepared within the framework of the project Societatea Bazată pe Cunoaștere – cercetări, dezbateri, perspective [The Knowledge-Based Society – Research, Debates, Perspectives], cofinanced by the European Union and the Government of Romania from the European Social Fund through the Sectoral Operational Programme Human Resource Development 2007-2013, POSDRU/89/1.5/S/56815.

### **REFERENCES**

- Beteille, R. 1996 L'agritourisme dans les espaces ruraux européens, Edit. Armand Colin, Paris, p. 34.
- Ciurea I., 1995 Strategii privind proiectarea şi monitorizarea activităţilor turistice în zona premontană a judeţului Bacău [Strategies for planning and monitoring tourist activities in the pre-mountain area of Bacau county], Lucr. şt., seria Agricultura, Iaşi, p. 29-35.
- Glăvan V., 2003 Turism rural, agroturism, turism durabil, ecoturism [Rural tourism, agritourism, sustainable tourism, ecotourism], Edit. Economică, Bucureşti, p. 34
- Matei, Daniela, 2005 Turismul rural. Teorie şi realitate [Rural Tourism. Theory and Reality], Edit. Terra Nostra, Iaşi, p. 55-70.
- +++ Direcția pentru Agricultură și Dezvoltare Rurală, Suceava, 2011.