Agro tourism, One of the Main Factors in Rural Development

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Abstract: The paper describes the steps in projecting agro-tourism activity and it presents the issues and opportunities that show the importance of agro tourism activity as source of improving the income of small agricultural households. This paper examines the effects of agro tourism activity on standard small agricultural household - A and it is presented the empirical evaluation of agro tourism effects on resource distribution within a small agricultural household A as on net income.

Keywords: agro tourism, rural tourism, touristic potential

Jel Classification: L84, O18

1. Introduction

Agro tourism comprises all the touristic activities unfolded in the rural area, outside the areas destined to “the tourism of lights” (in cities), “the blue tourism” (the seaside), “the health tourism” (in spas), and “the white tourism” (in mountainous areas).

The agro touristic potential in the Romanian village is extremely complex, comprising natural and cultural-historic elements of great variety and touristic attraction.

Through this, Agro tourism is a mean of integral utilization of rural environment, with its agricultural, touristic, anthropic and techno-economic potential. Apart from other types of rural tourism and countryside vacations spending, Agro tourism does not comprise anything else but the activities through which the family that accommodates tourists
obtains income from this, not only from the accommodation activities, but also from the agricultural ones.

Thus, two agricultural households were analysed, each of them having different activities, one of them performs the agro touristic activity besides the agricultural one.

2. The Analysis of Income and Costs at the Agrotouristic Pension (Household A)

The agrotouristic pension is situated in Chiril Village, Crucea Township, 29 km from Vatra Dornei Municipality. It is located at the feet of the Rarău Mountains and also on the course of Bistrița River.

The pension is placed in an area that offers very good conditions of spare time spending. It has an accommodation capacity of 20 places, in 2 and 3 persons room as it follows: 4 family rooms, 4 double rooms, equipped with all utilities necessary to perform this activity. The management staffs are represented by the members of the family and there are two more persons hired, one full time and one part time.

<table>
<thead>
<tr>
<th>Investment in:</th>
<th>Unit-$</th>
<th>Value</th>
<th>Percents</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Pension building</td>
<td>$</td>
<td>26052</td>
<td>91,59</td>
</tr>
<tr>
<td>2. Facilities (showers, etc)</td>
<td>$</td>
<td>1302</td>
<td>4,58</td>
</tr>
<tr>
<td>3. Fence (wall)</td>
<td>$</td>
<td>466</td>
<td>1,64</td>
</tr>
<tr>
<td>4. Inventory</td>
<td>$</td>
<td>622</td>
<td>2,19</td>
</tr>
<tr>
<td>5. Other</td>
<td>$</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td></td>
<td>28443</td>
<td>100,00</td>
</tr>
</tbody>
</table>

The initial capital requirement is usually higher in relation to average agricultural household income. Because the agricultural household A cannot afford it, it is a need to barrow money from bank or other sources.
For paying back the investment value in this projection was used the actual interest rate (14 %) from the Romanian Bank from investment in RON currency.

Because the risk is increasing in case of borrowing money, farmers that want to implement agritourism activity in agricultural household should examine the particulars of their own situation: the agricultural household location, the characteristics of their land and natural resources and the potential consumer population of the surrounding area. They should also assess their own individual strengths and interests regarding agritourism activity. Implementing new activities it may also reflect the financial needs and liquidity problems of the agricultural household.

<table>
<thead>
<tr>
<th>Item</th>
<th>Unit</th>
<th>Value</th>
<th>Percents</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 Energy</td>
<td>$</td>
<td>397</td>
<td>11,35</td>
</tr>
<tr>
<td>2 Employers expense</td>
<td>$</td>
<td>2239</td>
<td>6,39</td>
</tr>
<tr>
<td>3 Tax for social protection</td>
<td>$</td>
<td>671</td>
<td>1,92</td>
</tr>
<tr>
<td>4 Medical fees</td>
<td>$</td>
<td>156</td>
<td>0,448</td>
</tr>
<tr>
<td>5 Raw materials</td>
<td>$</td>
<td>13435</td>
<td>38,391</td>
</tr>
<tr>
<td>6 Drinks</td>
<td>$</td>
<td>10076</td>
<td>28,79</td>
</tr>
<tr>
<td>7 Repairs, maintenance</td>
<td>$</td>
<td>622</td>
<td>1,77</td>
</tr>
<tr>
<td>8 Tax for added value</td>
<td>$</td>
<td>4467</td>
<td>12,76</td>
</tr>
<tr>
<td>A. Total direct costs</td>
<td>$</td>
<td>21210</td>
<td>60,61</td>
</tr>
<tr>
<td>9 Interest rate</td>
<td>$</td>
<td>12738</td>
<td>36,39</td>
</tr>
<tr>
<td>10 Administrative expenditure</td>
<td>$</td>
<td>933</td>
<td>2,66</td>
</tr>
<tr>
<td>11 Miscellaneous</td>
<td>$</td>
<td>113</td>
<td>0,324</td>
</tr>
<tr>
<td>B. Total variable costs</td>
<td>$</td>
<td>13784</td>
<td>39,39</td>
</tr>
<tr>
<td>Total</td>
<td>$</td>
<td>34995</td>
<td>100,00</td>
</tr>
</tbody>
</table>
The exploitation situation is:

The surface of agricultural land owned by the agrotouristic farm is 2.50 ha, of which 96.8% is arable land that is exploited in order to obtain production, part of them for domestic consumption, and the difference for capitalization through Agro tourism.

### Table 3 Land use

<table>
<thead>
<tr>
<th>Land use</th>
<th>Surface of agricultural land</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Agricultural land</td>
<td>2.42</td>
<td>96.8</td>
</tr>
<tr>
<td>Non-agricultural land</td>
<td>0.08</td>
<td>3.2</td>
</tr>
<tr>
<td>Total</td>
<td>2.50</td>
<td>100</td>
</tr>
</tbody>
</table>

The animal force is formed by 2 cows, 2 calves, 2 pigs, 20 hens and 20 chickens (table 4). The only product sold on the market in order to obtain profit, are the dairy product and a part of meat product.

### Table 4 The number of animals

<table>
<thead>
<tr>
<th>Effective structures</th>
<th>Number</th>
<th>Stock Value (RON)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cows</td>
<td>2</td>
<td>5400</td>
</tr>
<tr>
<td>Calves</td>
<td>2</td>
<td>3000</td>
</tr>
<tr>
<td>Pigs</td>
<td>2</td>
<td>600</td>
</tr>
<tr>
<td>Hens</td>
<td>20</td>
<td>240</td>
</tr>
<tr>
<td>Chickens</td>
<td>30</td>
<td>90</td>
</tr>
</tbody>
</table>

The value of a cow is 2,700 RON, thus the value of cows stock is 5,400 RON, also 1 calf represents 1,500 RON, resulting, thus, a value of 3,000 RON for 2 calves. The value of pigs stock is 600 RON which represents that a pig costs 300 RON. Concerning the value of bird stock, a hen is 12 RON and chicken is 3 RON/piece. Thus it results that the total value of animal force income is 9,330 RON.

Concerning the destination of animal production, this is mainly for domestic consumption and Agro tourism activity, the rest for marketing.
The zoo technical sector is for obtaining products of animal origin necessary for the Agro tourism activity. The obtained products are: milk, beef, pork, chicken, eggs. A part of the obtained products in this sector is destined to marketing, which has a favourable influence on the increase of household profit. The income in the zoo technical sector obtained from product sale on the market and from Agro tourism values 11,100 RON.

The agricultural production profit, compared to zoo technical production, is 4,102 RON higher, and, the profit obtained from agricultural product marketing and its use in the agro touristic activity, is of 15,202 RON compared to 11,100 RON, the profit of zoo technical production. This fact is owed to the marketing, in a higher proportion, of agricultural product, than that of zoo technical one, because buying alimentary products made of meat implies higher expenses.

The touristic activity performed by this household leads to an annual revenue influenced by the accommodation cost which includes a meal and by the pension’s extent of occupancy.

**The extent of occupancy**

When establishing the accommodation costs, there must be taken into account the personal expenses and the costs perceived by the other pensions in the area, as well as the expenses of raw materials and consumer goods.

Out of 365 days in a year, the pension is occupied only for 205 days; nevertheless, the profit obtained from accommodation is of 52,550 RON. The household has total annual revenue or:

\[ Ti = \text{income from zoo technical production} + \text{Income from agricultural production} + \text{Income from tourism activity} \]

\[ Ti = 11,100 + 15,202 + 52,550 \]

\[ Ti = 78,852 \text{ RON} \]

The household costs are distributed and the incomes too, on categories: costs of zoo technical production, costs of agricultural production and costs of tourism activity.
Costs of animal production

The total costs of animal production are of 6,161 RON, with annual revenue of 11,100 RON. Regarding the costs of production on crops, these are determined: costs of fertilizers and seeds or saplings, of transport of the products from the harvesting place to the 3rd storage, these costs include costs of fuel, labour, costs of mechanical field works (harvesting), costs of seasonal labour, all these depending on crop and on fluctuating costs (table 3).

The structure of the costs of production on crops

The highest costs of production are recorded at fodder plants, 1,545 RON, followed by potato crops with 1,125 RON. The fee on property is 450 RON, total on the whole arable surface.

The value and structure of costs in tourism activity

The presented data shows that the highest weight (one third) is represented by costs of salaries, followed by the costs of electricity (16.38%), costs of food acquisition (12.72%), annual liquidation (11.37%), insurance and social services (9.10%), restorations (2,95%) and advertising (2.28%) out of the total costs.

At the agro touristic pension, the costs added are those of agro touristic activity: 43,940 RON, thus the total costs are of:

\[ c = \text{costs of zoo technical production} + \text{costs of crops production} + \text{costs of agro touristic activity} \]

\[ c = 6,161 + 3,884 + 43,940 \]

\[ c = 53,985 \text{ RON} \]

Analysis of profit and costs in an agricultural household (household B)

In the first household practises, the agro touristic activity and owns a land surface of 2.50 ha, the second analysed household practises only agriculture, the income resulting from agricultural product marketing (milk, meat, potatoes, vegetables).
The modality of land use

The agricultural land is designated to potato crops, a very small surface to corn beans, onion, other vegetables and annual fodder plants. The surfaces occupied by these crops are different in size.

The structure of crops

It is noticed that the largest land surface is occupied by fodder with 0.62 ha (38.75%), followed by potato crops with 0.6 ha (37.5%); vegetables occupy a surface of 0.20 ha (12.5%), the corn with 0.1 ha (6.25%) and onion with 0.1 ha (5.0%) out of the total surface of 1.60 ha.

Most of these crops are designated to marketing; the rest is used for domestic consumption, animal feeding and seeds.

The total profit of agricultural production is 4,498 RON, quite low the annual revenue compared to that of the agro touristic pension.

The household’s animal force is a total of 56: 3 cows, 2 calves, 1 pig, 30 hens and 20 chickens.

The total economic efficiency of the analysed households

One of the most important indicators of economic efficiency in Agro tourism is profitability. Defined as a relation between the obtained result and the used means, profitability is an indicator under the basis of which are estimated the obtained performance, and also the possibility of making profit. Profitability is a currency excess, the balance between total returns and total costs.

The profitability of the activity is analysed on the basis of the indicators expressed in relative size, but also on the basis of those expressed in absolute size. Among the expressed indicators in absolute size, it can be mentioned:

- gross profit – expressed as a difference of total revenue and total costs;
- net profit – calculated as a difference of gross profit and income profit.

The difference of profit between the two households can be easily noticed, household A being the most profitable due to practising Agro tourism; in this case, the
income is remarkably much higher so the resulted gross profit is 24,867 RON and the net profit is 3978.72 RON, compared to the second household which does not perform Agro tourism activities, and it has a gross profit of 9,795 RON and a net profit of 1567.2 RON. From the efficiency point of view, the first household (agro touristic pension) has a higher profitability.

As in other economic activities, in Agro tourism too it is pursued obtaining a sufficient high profit so that it can ensure the payment of capitals, the maintenance of existent economic potential and the increase of the economic efficiency according to the evolution of touristic market and to the random factors.

An important role, in the analysis of the profitability of activity, plays the indicators expressed in relative size.

Among these is remarked the rate of profit calculated according to the formula:
\[ R = \frac{P}{RS} \times 100 \text{ or } R = \frac{P}{C} \times 100 \]

- household A has a rate of profit of:
  \[ R = \frac{24,867}{53,985} \times 100 \]
  \[ R = 46.06\% \]
- household B has a rate of profit of:
  \[ R = \frac{9,795}{8,423} \times 100 \]
  \[ R = 116.28\% \]

The economic profitability means the efficiency of total or part of the assets usage. It is expressed through the rate of economic profitability which should be superior to the rate of inflation. A sufficient high rate of economic profitability should allow the renewal and the increase of fixed assets in a short time. The rate of economic profitableness is based on the profit for a period of time and the total assets, thus:
PR = (profit for the period before taxation/total assets) x 100

• household A has an economic profitability of:
  PR = (24,867/35,600) x 100
  PR = 69.85%

• household B has an economic profitability of:
  PR = (9,795/11,750) x 100
  PR = 83.36%

The financial profitableness is estimated through the rate of financial profitableness of long term capital, and through the rate of profitableness of personal capital calculated according to the formulas:

FPr = (Profit for the period before taxation / long-term capital) x 100, where: long-term capital = personal capital + medium or long-term credits

• household A has a financial profitability of:
  FPr = 24,867/42,750 x 100
  FPr = 58.17%

• household B has a financial profitability of:
  FPr = 9,795/21,400 x 100
  FPr = 45.77%

From the presented data it can be noticed that both of the households are lucrative, but the agro touristic pension has a higher profitability compared to the common household. Having a net profit of 3978.72 RON and a rate of economic profitability of 69.85%, the pension can afford to invest in new objectives.

The social-economic efficiency can be entirely studied at the level of a touristic complex product or of a company, but it can also be analysed at the level of each constitutive activity of touristic product (result).
Table 5 Size and structure of the categories of utilization

<table>
<thead>
<tr>
<th>Specification</th>
<th>UM</th>
<th>Surface</th>
<th>% from total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total surface</td>
<td>ha</td>
<td>50</td>
<td>100</td>
</tr>
<tr>
<td>Agricultural</td>
<td>ha</td>
<td>47,5</td>
<td>95</td>
</tr>
<tr>
<td>Arable</td>
<td>ha</td>
<td>30</td>
<td>63,15</td>
</tr>
<tr>
<td>Pastures</td>
<td>ha</td>
<td>10</td>
<td>21,05</td>
</tr>
<tr>
<td>Meadows</td>
<td>ha</td>
<td>5,5</td>
<td>11,57</td>
</tr>
<tr>
<td>Vegetables</td>
<td>ha</td>
<td>2</td>
<td>4,23</td>
</tr>
<tr>
<td>Non-productive</td>
<td>ha</td>
<td>2,5</td>
<td>5</td>
</tr>
</tbody>
</table>

3. Conclusions

The Agri-tourism activity has two major purposes:

- The first is to provide leisure and recreation for the public;
- The second is to increase farmers’ income using their own products and avoiding in this case the expenses of transport and taxes, if we compare with another kind of tourism.

The standard small agricultural household can be motivated to implement new activities because there are a lot of other advantages:

- Agri tourism activity builds rural development and increases the job opportunities;
- Assuring continuity of agricultural activity in mountain regions where the agriculture is very poor;
- Authentic products and unique experience are made available to the agricultural households;
- Providing opportunities to show which products will be important in future, established crops that are needed for consumption in restaurant;
- Agri-tourism activity has potential for new sources of revenue from products and services that can be incorporated as part of “working” agricultural households;

- Agri-tourism activity can generate revenues and important cash flow during the off-season;

- Agri-tourism activity also, provides opportunities to create recognition of the landowners that practice this activity;

- Increasing the level of social behaviour in the relationships among another members from same or another community;

- To grow-up the aesthetic spirit that can improve also the hygienic-sanitary situation.

In conclusion Agri-tourism activity can provide additional income to farmers and rural community. It can provide additional supplement revenue that can make a difference between a profit loss for agricultural producers, agribusiness and rural community. It is a way to “add value” to crops and livestock currently developed on the farm. It also has the potential for building relationships between agriculture and industry.

4. References


