RESEARCHES ON ECO-BIO-GEO ECONOMIC POTENTIAL OF RURAL AND BALNEARY TOURISM IN ARAD COUNTY

Marius Boiță; Gheorghe Pribeanu
Assoc.Prof., PhD; Assoc. Prof., PhD, "Vasile Goldiș" West University of Arad

Abstract: Rural tourism, more than any other sphere of the science of tourism activity is subordinated both to the environment and food reserves, being its "raw material", its scope and activity. This study seeks to identify and assess the potential of bio-resources and of bio-productivity in order to develop rural tourism; for the completion of modern indicators of territorial capital; developing a model for implementation of eco-bio-geo economic paradigms in the development of agricultural tourism; development of eco-bio tourism packages in Arad county. Our research has focused on identifying the traditional bio-resources and developing a strategy for promoting and implementing of the regional eco-bio-geo economic concept in rural tourism, on the identification and evaluation of bio-productivity in order to develop rural tourism and for the development of eco-bio tourist packages in Arad county. Through this study we were able to capture current and future main sides of the rural and balneary tourism in a territorial system.

Keywords: tourism, agricultural tourism, eco-bio tourist packages, bio-resources, bio-productivity

JEL Classification:E62, H20, L83, M10

1. INTRODUCTION

The vision of the Eco-Bio-Economy is to develop a sustainable welfare of mankind in all ways, through an economy of the future, put at the service of human life through rational use of environmental resources. Eco -Bio - Economy is a scientifically, economical and philosophical attempt dedicated to developing health integrated environmental well-being of humanity through an integrated multipolar, eco -bio- economical concept, promoting Agrifood Green Power and Smart Sustainable Integrated Development, of the future, through an economy of the future, in the service of human life through the rational use of environmental resources "(Bogdan A.T., 2011).

Eco-economy (eco-economy) is a concept proposed by Lester Brown, who refers to an economy that can develop in the long run without harming your own support system (environment).

Eco-economy is satisfying human needs and not to jeopardize the prospects of future generations to meet their needs, namely a sustainable economy. "Bio-economy is an economic discipline initiated and developed mainly by our noted economist Nicholas Georgescu-Roegen, especially the entropy which actually use the analysis of economic processes"
The problem of bioeconomics would be thorough investigation of links between man and nature.

The use of the biological resources of the soil, waste as raw materials for food, animal feed, industrial and energy production, what is called in one word Bio-economy is a global concern because as we know, natural resources are finite and then just use of renewable biological resources for food, feed, energy would be the solution for the future. In this context, we can speak with certainty of solutions in implementing innovative economy results for healthy environments and with beneficial influences in sectors such as agriculture, forestry, fishing the chemical industry and power engineering. Eco-Bio-Economy is a concept proposed by academician Dr. Alexander T. Bogdan, to define sustainable development of welfare of mankind in all its forms, through an economy of the future, put at the service of human life through rational use of environmental resources. It is a test for a new common vision eco-economic and bio-economic development, which brings together in an integrated format the economy, ecology, biodiversity, eco-economy, and the bio-economy and which focuses on the sustainable development of integrated intelligent world.

Eco-Bio-Economy accepts the contribution of the valuable ideas of social economy, excellence and quality, of the economy's well-being, of solidarity, social responsibility, as applied in the future and which could be integrated and used basically in a multi-polar world for a healthy environment and ecology, for ensuring and promoting sustainable economic development.

2. MATERIALS AND METHODS

2.1. The concept of rural tourism and health resorts

The output of the world from this deadlock has led to the practice of tourism in an unpolluted environment, suitable for direct contact with nature in an area through which it returns temporarily to the ruler of rural life in harmony. The impact of rural tourism in the technological, economical, social and professional field, of sources of income of the ecological balance, by minimizing the negative consequences and maximizing benefits, outlines and emphasizes the cross-sectored and plurifactorial character of activity.

In this context could delineate the three essential elements (Cosmescu I., 1998):

- **Rural community keen or engaged in tourism activity**
  
  Behaviors of this community are not evaluated in compliance with the legal requirements relating to the reception, hosting customers, tourists, although they have their importance. Education, specific training for strengthening and improvement of specific activities of rural tourism plays an important role, but the decisive factor remains the community's reception capacity.

- **Natural, cultural and built heritage**
  
  Atmosphere that is located the tourist offer has to be attractive, but at the same time it must be underlined that binding and offered as a bouquet of assorted flowers, able to snatch the admiration, to impress, to print it in the memory area not only as a pleasant and exceptional memory but also as a firm's recall.

- **Environment and rural society**
The tourism is activating more serious environmental problems through the frequent presence of man, into the environment. This care for the protection of the environment extends to rural tourism, whose implementation must be of ecological type. This type of tourism must be a form of education in which the collective betterment, beauty, honesty, cleanliness, mutual help prevails the negatives thereof. Organizational entities of rural tourism, with a functional structure of heterogeneous services and accommodation, debuts with peasant household, the most desired and appreciated form of hosting, which is filled with other structures and forms of reception of tourists, motel, hotel, bed and breakfast pavilion, camping, and tourist village, camp school of artistic creation or for ecological activities.

Rural tourism represents a whole complex consisting of 4 parts which are interwoven: the tourism potential and rural countryside, hospitality industry, material and technical base of rural and human potential.

Practicing any particular forms of rural tourism has as effect a sustainable development of its due:

- conservation and recovery of the natural and anthropogenic resources;
- reciprocal involvement of forestry;
- to conduct large-scale cultural events, specific activities of the rural space of storage, conservation and transmission of local art and crafts to folkloric celebrations and traditional customs;
- protecting and valuing households of rural structures;
- environmental improvement in terms of rural infrastructure;
- diversification trades and jobs present in those rural spaces, keeping the job of great importance for rural tourism activities;
- emphasizing the role of women in the activities undertaken for rural tourism.

2.2. Rural tourism potential of Arad County

The attractiveness and functionality of rural tourist area, is given by the appreciation of the landscape which at the same time constitute a heritage of community in a particular region with the identification value. The quantitative appreciation criteria (mathematical, statistical and cartographic data, technical-instrumental), qualitative (relationships between landscapes and benchmarking), establishing the degree of degradation of the landscapes and villages included, by surprise as to the degree of stability of determining homogeneous territorial units of landscape, etc. can delineate the degree of attractiveness of rural tourist area in Romania.

The methodology of the research phenomenon’s of rural tourism and health resorts, is a continuing challenge requiring explanation and discussion of the implementation of a methodology of research both in Arad County and at the national level.

Rural tourism is devolving among others in conjunction with rural economy, which leads us to the idea that merging with other areas can generate the theory that this can lead to the idea of taking their specific methodology.
In order to achieve this we have a thorough bibliography research, realizing that it was the starting point towards the research done; I added information from the locals, keepers of traditions and crafts.

In terms of rural tourism and health resorts in Arad County, it is analyzed in terms of specific indicators and calculation-based methodology used at national level too (accommodation, tourist movements, request/inquiry, indices of seasonality, income, expenses, etc.). Rural tourist product actually represents the service offered to the tourists, namely: accommodation, breakfast, half board, bed and breakfast, trips, spa treatment, participation in different activities and traditional holidays.

Provider of information that determines the type of tourism management and suitable area is given by tourism indicators. The evolution of rural tourism is analyzed in the light of the existing harnessed tourist resources, as well as those who currently were not exploited to their real capacity.

In this context it was made a statistic of all attractive district resources, in terms of quality of the existing tourism infrastructure, services and tourism, with classifications of all existing resources, but also with the demonstration of the connections which shall be determined at the level of the collaborators from the point of view of demand and supply for some of the sights of this area.

The techniques used in my research mainly were: analysis and synthesis, induction and deduction, analogy, statistical method, methods of economic forecasting.

An important role has the comparative process.

2.3. Rural tourist product between the present and the future

Economic and social development harmoniously combines with rural tourism development, between the two there is a correlation and reciprocity. The statement is substantiated by the dual involvement that appears as a toggle, meaning that rural tourism-specific activities through the complexities of their commitment, brings the performance in full evaluation of the rural areas, while this development will cause in turn, an increase in tourist traffic.

From the moment of opening the "Act" of tourist activities the components specific to rural tourism complex, taken as a whole that it creates, are influencing the developments in other areas, causing the basic effects of the national economy. The interaction of these components, determines the immediate effects or the long-term economical effects, social, cultural, etc., which manifests itself not only at national but also regional and can highlight the influence of rural tourism in economic and social development of a touristic areas.

2.4. Trends in the evolution of the tourist activity of Arad County

The transition to a market economy has led to reconstructions in all areas of activity, triggering multiple economic and social implications, political and cultural. Thus, it was emphasized the stress of life city, there was a high degree of urbanization and pollution of the environment and to reduce the length of the work week. These changes have affected tourism in the sense of a change in holiday destinations in favor of its assets, in the midst of nature, with favorable implications and deep in rural tourism activity.

Because rural tourism is based on attributes of the rural space and represents a convergence of existing socio-economic interests at the local level, the factors of influence on this type of tourism
can be structured and as bio-psycho-social-eco factors like: potential rural environment is an asset that touches all deeper connotations due to the context in which the present social and economic life at the national and international level.

2.5. The evolution of the main indicators characterizing the tourist movement

The most expressive use indicators to characterize the dynamics of tourist circulation in spas are: tourists, overnight stays number and average length of stay. The number of tourists as the most representative indicator, quantitatively, had in the period 2010-2015 the evolution presented in table 1.

As of 2010 the number of tourists arriving in spas fells, reaching that in 2015 is representing 61.6% of recorded values. An important factor leading to this development is represented by the decrease in the purchasing power of the population of Romania, due to low growth in income in relation to the jump in prices.

Under these circumstances, the number of Romanian tourists who arrived in spas, with a total of tourists (90-93%), has been declining and naturally gave the outline of the evolution of the total number of tourists staying in this period.

Thus, if the average annual decrease in the total number of tourists arriving in spas was in a rhythm of 3.07%, Romanian tourists registered in 2015, which represented 61.2% of the arrivals in 2010, the average annual pace of decline was 3.22. After a sine and a minimum evolution recorded in 2010, arrivals of foreign tourists in the spas returned, level in 2015 is at 90.2% compared to 2010.

Table 1

Evolution of the number of tourists staying in spas from Romania in the period 2010-2015

<table>
<thead>
<tr>
<th>YEARS</th>
<th>NR. OF TOURISTS thousands</th>
<th>DYNAMIC INDEX %</th>
<th>DYNAMIC INDEX</th>
<th>The share of Romanian tourists</th>
<th>Foreign thousands</th>
<th>Dynamic INDEX</th>
<th>The share of foreign tourists</th>
</tr>
</thead>
<tbody>
<tr>
<td>2010</td>
<td>678</td>
<td>64.2</td>
<td>653</td>
<td>63.2</td>
<td>96.3</td>
<td>25</td>
<td>52.1</td>
</tr>
<tr>
<td>2011</td>
<td>689.5</td>
<td>65.3</td>
<td>663</td>
<td>65.8</td>
<td>96.2</td>
<td>26.5</td>
<td>55.2</td>
</tr>
<tr>
<td>2012</td>
<td>634.5</td>
<td>60.1</td>
<td>601.7</td>
<td>59.7</td>
<td>94.8</td>
<td>32.8</td>
<td>68.3</td>
</tr>
<tr>
<td>2013</td>
<td>674</td>
<td>63.8</td>
<td>637</td>
<td>63.2</td>
<td>94.5</td>
<td>37</td>
<td>77.1</td>
</tr>
<tr>
<td>2014</td>
<td>682.8</td>
<td>64.7</td>
<td>637.7</td>
<td>63.3</td>
<td>93.4</td>
<td>45.1</td>
<td>93.6</td>
</tr>
<tr>
<td>2015</td>
<td>650</td>
<td>61.6</td>
<td>614</td>
<td>61.2</td>
<td>90.2</td>
<td>36</td>
<td>90.2</td>
</tr>
<tr>
<td>I</td>
<td>-</td>
<td>96.93</td>
<td>-</td>
<td>96.78</td>
<td>-</td>
<td>-</td>
<td>99.55</td>
</tr>
</tbody>
</table>
The following units preferred by the tourists are tourist villas which occupies nearly 8.99% of total arrivals. The preferences for tourist villas can be made on account of low cost accommodation, on the one hand, and on the other hand, confer privacy and tranquility.

![Graphic 1. Tourists’ preferences for accommodation in spa’s resorts in 2014](source)

In terms of comfort category (table 4) the preference of tourists headed to the two-star category, which attracted almost ¾ from arrivals.

<table>
<thead>
<tr>
<th>Comfort category</th>
<th>Nr. of tourists</th>
<th>%</th>
<th>Romanians</th>
<th>Romanians %</th>
<th>Foreign</th>
<th>Foreign %</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total arrivals</td>
<td>682756</td>
<td>100</td>
<td>637676</td>
<td>100</td>
<td>45080</td>
<td>100</td>
</tr>
<tr>
<td>4 stars</td>
<td>8773</td>
<td>1.29</td>
<td>6811</td>
<td>1.07</td>
<td>1962</td>
<td>4.35</td>
</tr>
<tr>
<td>3 stars</td>
<td>52665</td>
<td>7.71</td>
<td>43461</td>
<td>6.82</td>
<td>9204</td>
<td>20.42</td>
</tr>
<tr>
<td>2 stars</td>
<td>501230</td>
<td>73.41</td>
<td>470658</td>
<td>73.81</td>
<td>30572</td>
<td>67.82</td>
</tr>
<tr>
<td>1 star</td>
<td>93411</td>
<td>13.68</td>
<td>90383</td>
<td>14.17</td>
<td>3028</td>
<td>6.72</td>
</tr>
<tr>
<td>Unclassified</td>
<td>26677</td>
<td>3.91</td>
<td>26363</td>
<td>4.13</td>
<td>314</td>
<td>0.69</td>
</tr>
</tbody>
</table>

**Source:** INS-Statistical Yearbook of Romania, 2015, data processed by author
After forecast it results a favorable trend, but our appreciation is that it expresses the actual situation and future demand in tourism, which will record higher values. Influence of catalysts that act on the demand for tourism, some hardly quantifiable, but mainly the resumption of economic growth with the population's incomes improve, we believe it will lead to a positive evolution of these indicators.

Table 5
Forecast of the total number of tourists in spas

<table>
<thead>
<tr>
<th>Year</th>
<th>NR. OF NIGHTS thousand s</th>
<th>DYNAMI C INDEX</th>
<th>Romanian s thousands</th>
<th>Dynami c Index</th>
<th>The share of night s</th>
<th>Foreign thousand s</th>
<th>Dynami c Index</th>
<th>The share of night s</th>
</tr>
</thead>
<tbody>
<tr>
<td>2000</td>
<td>5407</td>
<td>63.2</td>
<td>5266</td>
<td>63.2</td>
<td>97.4</td>
<td>141</td>
<td>65.3</td>
<td>2.6</td>
</tr>
<tr>
<td>2010</td>
<td>5554</td>
<td>64.9</td>
<td>5370</td>
<td>64.4</td>
<td>96.7</td>
<td>184</td>
<td>85.2</td>
<td>3.3</td>
</tr>
<tr>
<td>2015</td>
<td>5304</td>
<td>62.4</td>
<td>5156</td>
<td>62.1</td>
<td>92.3</td>
<td>148</td>
<td>78.2</td>
<td>2.8</td>
</tr>
<tr>
<td></td>
<td>I</td>
<td>-</td>
<td>96.96</td>
<td>-</td>
<td>96.9</td>
<td>-</td>
<td>98.86</td>
<td>-</td>
</tr>
<tr>
<td></td>
<td>R</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-1.14</td>
</tr>
</tbody>
</table>

Source: INS Statistical Yearbook of Romania, 2010-2014, data processed by author

2.6. Rural tourism and the Spas in AradCounty
Structured around two important categories, the general and specific infrastructure, each of them having its role well determined, the material and technical base puts its imprint, on both the magnitude and intensity of tourist flows as well as the satisfaction of tourists.

Thus, general infrastructure, by its components: network paths and means of transport and telecommunications, the network of water supply, gas, electricity, heating, cleaning, service units, represents permissive factor (www.agroturism.com) ensuring access to different areas of Spa's, as well as conditions for the deployment of production processes that are specific to the tourism industry. Within it, a particularly significant component is the network of routes and means of transport and telecommunications, which provides connections to all over the world.

Arad County has a great tourism potential and agro tourism is one of his chances. In addition, as closer we are to the European Union, the chances are increasing of being able to get loans, some may be non-refundable, for being invested in rural accommodation. Tourism only means the transformation of the house so as to be accepted. That means, mandatory, private bathrooms, even one that may not be shared with the owners. Then, we must insist on the local flavors, so that accommodation and dining that are the same everywhere will not be attractive to tourists. Both indoor decoration and gastronomy has to be specific.

2.7. Ecotourism and bio tourism in Arad County

With a rich and varied tourist potential, Arad County can offer to tourists, certainly, unforgettable moments. Alternation plain-hill- mountain, of rare beauty, the rashness of the soil and subsoil, plus “tourist attractions and cultural sites represents for those who want to take delight” (www.cross half marathon.ro) and to relax, attraction of which hardly to resist.

All this variety of elements that compose the tourist heritage enters the human cultural heritage feature: monuments and architectural ensembles, historic monuments and archaeological remains, monuments and memorial complexes, museums, memorial houses, public collections, elements of folklore and folk art.

Traditional products (www.agriculturae.ro):

- Sausages of Nădlac;
- Arad curd;
- The sausages of Hâlmațiu;
- Honey;
- Pecica bread;
- Inverted pie of Turnu;
- Cheese liptoi;
- Slovak dumplings;
- Bigly with poppy and nut;
- Socodor cabbage, Arad County;
- Traditional lamb haggis from Arad County;
- Sheep cheese;
- House made noodles;
3. DISCUSSIONS

Multiplying the possibilities of satisfying the need for rural tourism, have determined
significant mutations in the mechanism of tourist activity regarding the profitable management of
resources that are used.

The large amount of information that is constrained by the owner of demand under the
influence of application of new technologies and lifestyles more and more variety of consumer
tourism providers have to extend their own strategies for the conservation and development of clients.
A growing number of businesses establish their own intensive strategies on the intensive vector of
development on the market, and use less the extensive part. This direction of development of
economic activity finds the field of materialization in client-orientation, which gradually takes place
towards market orientation (Pop N. Al., Henţeş Z). In our view, sustainable development in the field
of rural tourism and health resorts in the West of Romania relates to the design and implementation
of an action based on rural tourism developed in a natural setting with integration into the Association
of European Regions (AER).

AER, a non-governmental association established in Brussels and Strasbourg includes 255 of
member regions from 30 countries; it is the initiator of Pan-European Route for Ecotourism. This
initiative falls within the spirit of the objectives of Agenda 21 concerning sustainable tourism for the
period 2007-2013. AER search partners (local action groups, rural groups, etc.) for a long-term
international cooperation involving rural communities so as to achieve sustainable development
through existing local resources put together creative synergy effects. In fact plays the coach who
teaches the recipients to "play" as best as possible and get as good performances in the competitive
system of the market economy. Currently there are some funding opportunities for tourism
development, but the absorption capacity for small entrepreneurs is low and they need a framework
organized under the conditions in which the procedures are often very technical and requires specialist
assistance, more so with how rural tourism development calls for simultaneous efforts in all fields in
order to be effective (training and skills for those involved, infrastructure, marketing, environmental
management). So far, the initiatives in this field have been isolated and have presented very few links
between them and the connections between interested ones. Transactions of sale of accommodation
services are no longer sufficient and efforts of the past have focused excessively on capacity
development. However even this was not adapted to the demands and hopes (expectations of) tourists
(Dumitrescu L., 1998).

Tourist products and services are distinguished from other types of services through a number
of additional features, which requires a procedural approach, which aims at winning time of mutual
trust between business partners (providers of tourist services and beneficiaries). A new solution that
is looming, it refers to the flow of intellectual capital, not financial. The tourist industry is faced with many challenging municipality namely the one which regards how they manage the most precious resource-human talent. Traditional systems of command and control familiar to us yesterday, now are replaced by other, more suitable, including that of constructing networks (between humans and economic entities). The way for a sustainable future is the ability or capacity to innovate, the knowledge created, converting them into viable tourist goods and services and its application for profitable growth of a nation’s economy, vitality and progress of society.

CONCLUSIONS
The formulated conclusions are exposed to levels of development in the perspective of empty vision of rural tourism, ecotourism and spas in Romania: presentation and illustration of the methodology of investigation, deepening of the regional tourist potential and substantiation of regional touristic potential within the range examined. Invaluable heritage of Arad County is the resultant of the inter natural and human relations, the attractiveness and functionality of rural tourist area. Delineation of amount of rural tourist attractiveness of the Arad County is achieved through quantitative criteria for assessing (statistical, cartographic), qualitative (landscape versus comparative analysis), the criteria for determining the degree of degradation of landscapes and villages and making them too artificial. As in all tourist services and in rural tourism, the indicators used in the assessment of economic operators, refer to items such as: demand, supply, quality of service. Analysis of the possibilities and implications of rural tourism, ecotourism and spas is the gross margin time liked the concept of standard methodology for such analyses.

The potential gave by the relief, climate, architectural and natural conditions, and not only this, represents for the Arad County, attractiveness for tourism. Tourism has become an area of activity among the world's top industries, and forecasts show that in the future will continue to grow.

In the context of tourism development are brought the arguments concerning the promotion of priority ecological forms of leisure holidays, parallel with enhancing the accountability of all factors involved. Elements that help shape the concept of rural tourism are: location in the countryside; functionality, resulting from the research of the characteristics of rural world: peasant household, contact with nature and with material and spiritual heritage of the village; sizing, reflected by the size, distance and density of traditional rural coordinates (buildings, streets, attachments, rebound, etc.); specificity, reflected by the development of the physical records and a way of life what are improving the physical environment, history, economic and spiritual purchases and last but not least the harmony between man and nature. Issues related to rural tourism and Romanian agro tourism are developed gradually with special emphasis placed on the need for rural development, seen as a prerequisite for the development of this form of tourism in connection with promoting factors and elements that prevent development wherever possible.

Types of tourism in the county and in need of promotion are: cultural tourism (visitor), business tourism, as well as the recreation and health care, as well as the form of tourism backed by organization of circuit type. This action will stimulate tourism organized or staged, which allows the actors involved in tourism monitoring and streamline the movement of tourist to these destinations,
a better organization of it over time by reducing the negative effects of sezonality. Promotion activities of Arad County will not have negative effects on the environment, being complied with environmental protection legislation. For this purpose we will use material support for promotion of biodegradable type for an efficient management of waste, thus reducing the anthropogenic pressure on the environment resulting from the intensification and increase circulation. It also supported the county's promotion will contribute to attracting tourists, investors in the tourist areas, increasing interest in social responsibility actions of the entrepreneurs of tourist industry and not only facing the potential of Spa and rural county.

All the steps will eventually lead to an overall social, economical development of local communities of the county in general, to ensure the sustainability of tourism in the region, and to improve the image and quality of life in the County of Arad.

REFERENCES