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RESEARCH ONTO THE IMPLEMENTATION OF THE ECOLOGICAL LABEL IN AGROTOURISM

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Abstract

The European Ecolabel for tourism accommodation services was created to reward accommodation and environmentally friendly tourists. It is a way of marking good environmental performance and providing quality assurance for tourists choosing a particular structure. The assignment criteria of the ecological label for the tourist housing services are governed by the European Commission Decision no. 287/2003/CE. The work we are proposing is the result of a study by university professors and master students from the management and agro-tourism specialty at the University of Agronomic Sciences and Veterinary Medicine of Bucharest. The study was carried out during 2017-2023 period, the target group consisting of 150 agro-tourist hostels, from the most representative agritourism areas in Romania: Alba, Argeș, Brașov, Bucovina, Buzău, Danube Delta, Harghita, Maramureș, Neamț, Oltenia, Sibiu, members of National Association of Ecological and Cultural Rural Tourism. The study looked at the possibility of implementing the ecolabel for accommodation services in the agro-tourism hostels. Although in 2017 the implementation rate was low – 58%, the results of the year 2023 – 81% are encouraging to implement the Ecolabel in agro-tourism.

***Key words*:** *agro-tourism, ecological label, implementing, tourism management.*

INTRODUCTION

Agro-tourism is defined by moving people to an unpolluted rural location, set in a scenic area, completed by a stay of at least 24 hours and by the consumption of specific food and non-food, supplemented by cohabitation and integration in a rural society in all its complexity [4] [3].

This form of tourism comprises two major components: the actual tourist activity, materialized in accommodation, food related services, recreation (travel, fishing, equitation), other current services and, on the other hand, the economic activity (agricultural) the owner of the agro-farm (boarding house), which is involved in the primary production and processing of agro-food products in the household and their direct marketing to tourists or other commercial networks [1] [17].

Agrotourism undoubtedly plays an important role in the overall metamorphosis of rural area, especially villages and small towns with a high degree of rurality and a valuable tourist potential [2] [18]. Settlements with a long historical past, with architectural buildings typical of the region, with their habits, traditions and a way of life, attract tourists who want to know these aspects [7] [19].

Despite agritourism is not a new phenomenon, specific regulation for this tourism segment does not exist thus far in Europe [10] [20].

The development of this sector has been promoted by two EU regulations [8] [13]. EU regulations intended as methods for diversification of farm households in the rural economy and thus contributing to the rural area development [6] [15]. These EU directives are not able to carefully take into account the wide [11] [3] [22].

In this context, the paper aimed to the study looked at the possibility of implementing the ecolabel for accommodation services in the agro-tourism hostels.

MATERIALS AND METHODS

The work we are proposing is the result of a study by the university teachers and master students from the management and agro-tourism specialty at the University of Agronomic Sciences and Veterinary Medicine of Bucharest [21].

The study was carried out during 2017-2023 period, the target group consisting of 150 agrotourist hostels, from the most representative agritourism areas in Romania: Alba, Argeș, Brașov, Bucovina, Buzău, Danube Delta, Harghita, Maramureș, Neamț, Oltenia, Sibiu, members of National Association of Ecological and Cultural Rural Tourism [12] [27] [28].

The study looked at the possibility of implementing the ecolabel for accommodation services in the agro-tourism hostels [16][24].

Fig. 1. Physical map of Romania
Source: [5].

RESULTS AND DISCUSSIONS

The research conducted in this field aimed to compare the criteria for awarding the ecological label for tourist accommodation services with the actual existing conditions. Additionally, it sought to highlight the agritourist sites where the ecological label can be effectively implemented [9] [22].

These criteria can be divided into two groups: compulsory and optional criteria [23] [25].

Compulsory criteria. All such criteria in the group must be fulfilled.

Table 1. The Energy Criteria

1	Electric energy coming from regenerating resources – At least 22% of the electric energy has to come from regenerating resources.
2	Windows insulation.
3	Coal and hard oil fuel – The coal and the resources of hard oil fuel having a sulphur concentration higher than 0.2%.
4	Using electric energy for heating.
5	Air conditioning units.
6	Low energy consumption bulbs.
7	Working capacity of hot water boilers.
8	Lighting switch off.
9	Heat and air conditioning stop.
10	Sauna timing out.

Source: [38].

Table 2. The Water Criteria

1	The housing unit has to announce the authority responsible for the water supply.
2	Water flow at taps and showers.
3	Saving bathroom and toilet water.
4	Garbage baskets in toilets.
5	Changing towels and bed sheets.
6	Watering plants and gardens.
7	Water flow for wee units.
8	Leakages – The personnel has to be trained.
9	Used waters treatment.
10	Administration of used waters.

Source: [38].

Other services:

Public transportation – Tourists and personnel have to be able to get easy access to information regarding the way they can reach the housing unit and other local places by means of the public transportation [24] [26].

Non smoking areas in the common places – In the common places, there have to be a non-smoking area [36] [37].

Table 3. General management system

1	Personnel training.
2	Data regarding the energy and water consumption.
3	Maintenance and repairs of hot water boilers.
4	Maintenance and general repairs
5	Establishing policy and action plan.
6	Tourist information.
7	Other data gathering.
8	The information shown on the ecologic service: Paragraph 2 on the ecologic label has to comprise the following text: (a)measures taken to save energy and water (b)measures taken to reduce waste (c)general measures for a better environment

Source: [38].

Optional criteria

Criteria regarding the scoring

Based on the information comprised in the title of each criteria in this section, a scoring has been established for all optional criteria. The number of complied criteria has to amount to a total of 16.5 points [29] [14].

The total scoring will be increased with one point for each of the following three supplementary facilities offered which are administrated or constitute the property of the tourist housing unit: food services, sports activities and green areas [30] [32]. The food services include breakfast [34] [35]. The sports activities include a sauna, swimming pools and other facilities located on the ground of the housing unit. Green areas include parks and gardens open for tourists [31] [33].

Table 4. The Optional Criteria

1	**Energy** Photovoltaic and wind generation of electric energy (2 points) – The housing unit has to have a photovoltaic and wind electricity generating system that supplies or will supply 20% of the total annual consumption of electric energy. Energy for heating deriving from regenerating energy resources (1.5 points) – The requirement for renewable energy: At least 50% of the total energy used for heating rooms or hot water must be sourced from renewable energy resources.Energy efficiency of hot water boiler: The housing unit must possess a hot water boiler with a '****' energy efficiency rating. NO(x) emissions of the hot water boiler: The hot water boiler must be classified under class 5 as per the Romanian standard SR EN 297/A3:201, governing NO(x) emissions, and it must release less than 70 mg NO(x)/kWh.-Urban central heating.-Combined heating and electric energy production.-Heating pumps.-Heat recuperation: The housing unit must be equipped with a heat recuperation system, earning one or two points based on the system's capacity.-Heating adjustment: The temperature in each room must be individually adjustable.-Insulation of the existing premises: The building must be insulated according to the national minimum criteria to significantly decrease energy consumption.-Air conditioning: The air conditioning system must be of class A. Automatic switch off of the air conditioning (1 point) Bioclimatic architecture (2 points) – The housing unit has to be built in full respect of the bioclimatic architectural principles. Freezers (1 point), dishwashing machines (1 point), laundry washing machines (1 point), and office equipment (1 point) that are efficient from an energetic point of view, class A. Location of freezers (1 point) Automatic lighting switch off in the tourist rooms (1 point) Automatic outdoor lighting switch off (1 point)
2	**Water** Using rainwater (1.5 points) and re-circulated water (1.5 points) – The water flow at taps and showers (1.5 points). The toilet water flow (1.5 points. The dishwashing machine's water consumption (1 point) The laundry washing machine water consumption (1 point) The temperature and water flow of the tap water (1 point) Shower timers (1 point)
3	**Dangerous chemical substances** Detergents (maximum 4 points) – 80% should have an ecologic label. Dyestuff and indoor varnish (1 point) – 50% ecologic label Swimming pool disinfectant dosage – (1 point) Mechanical cleaning (1 point) Ecologic gardens (1 point)
4	**Wastes** Tin packing (2 points) Single-use doses for drinks (2 points) Breakfast packing (2 points) Fat/oil discharge (2 points) Old textile materials and furniture (2 points)
5	**Other services** Communication and education regarding environmental protection (1.5 points) Rooms for non-smokers (1 point) Bicycles (1 point) Recyclable bottles (2 points) Paper products (up to 2 points) Long-lasting goods (up to 3 points) Ecologic food (1 point) Local food products (1 point)
6	**General management** EMAS registration (3 points) or ISO certification (1.5 points) of the housing unit EMAS registration (1.5 points) or ISO certification (1 point) of the suppliers Questionnaire regarding environment protection (1 point) Electricity and water meters (1 point) Extra measures for environmental protection (maximum 3 points)

Source: [38].

Between 2017 and 2023, a study was conducted targeting 150 agritourism hostels located in the most representative agritourism areas of Romania, namely Alba, Argeș, Brașov, Bucovina, Buzău, Danube Delta, Harghita, Maramureș, Neamț, Oltenia, and Sibiu. These hostels are members of the National Association of Ecological and Cultural Rural Tourism. The study aimed to assess the feasibility of implementing an eco-label for accommodation services in agro-tourism hostels. The initial findings in 2017 indicated a low potential for implementation, standing at 58%. In 2023, the implementation rate was 81%, by 23 pp. higher.

Table 5. Obtained results

AREA	RESULTS 2017	RESULTS 2023
ALBA	57%	80%
ARGEȘ	60%	82%
BRAȘOV	73%	95%
BUCOVINA	70%	92%
BUZĂU	50%	73%
DANUBE DELTA	42%	64%
HARGHITA	66%	88%
MARAMUREȘ	60%	82%
NEAMȚ	50%	72%
OLTENIA	55%	77%
SIBIU	72%	94%
TOTAL:	**58%**	**81%**

Source: Our calculation.

Interpretation of results based on compulsory and optional criteria

The increase in the degree of implementation in 2023 compared to 2017 is explained by the following:

- Many guesthouses obtain electricity and hot water from renewable resources, through the use of photovoltaic panels, acidified from their own resources or from government funds;
- Many hostels have implemented modern air and lighting systems, based on motion sensors and led systems;
- Accommodation units installed sensor-based water use systems in the bathroom and shower;
- Most of the residual water is recycled and used for watering own plants and gardens;
- Application of legislation regarding the prohibition of smoking in public places;
- All electrical appliances (supplied air, TV, refrigerator, freezer, boiler are energy class A, which save electricity);
- Development of the selective waste collection system;
- Banning or limiting the use of plastic bags, plastic cutlery, plastic containers in the bathroom;
- Widespread use of organic detergents;
- Bath towels are washed only if necessary;
- The buildings were, for the most part, insulated externally and internally, avoiding heat loss;
- Increased consumption of organic food, some obtained in the respective area;
- ISO management systems were implemented;
- The staff was trained to apply the new rules;
- Tourists were informed through leaflets and posters, located at the reception or in the rooms;
- Investments made by municipalities to modernize water and sewage systems.

Interpretation of the results by area:

Agritourism areas with a high percentage:

- They have a more developed water and canal infrastructure;
- They are economically more developed areas.
- Pensions have a higher degree of occupancy, therefore higher incomes;
- They have implemented selective waste collection systems;
- Administrators or owners of guesthouses are more trained;
- They have implemented ISO management systems;
- In the respective areas there are more guesthouses of 4 and 5 daisies, therefore more modern and developed;
- Tourists who come to these areas are mostly foreigners, more attentive to eco norms.

Agritourism areas with a lower percentage:

- They have not developed the water and canal infrastructure, in some cases (Danube Delta) it does not exist;
- They have not implemented ISO management systems;

- In the respective areas there are more guesthouses of 1, 2 and 3 daisies, therefore less developed;
- They are the least developed area from an economic point of view;
- Pensions have a lower degree of occupancy, therefore lower incomes;
- They have not implemented selective waste collection systems;
- Hostel managers or owners are less trained.

CONCLUSIONS

The results suggest a substantial need for a significant allocation of funds, which should be sourced from both local and central authorities to improve infrastructure. Furthermore, a substantial effort from individuals crossing borders is crucial. It's worth noting that these funds cannot be fully met by the profits generated from the eco-label's implementation. One potential solution could involve accessing finances from European sources or securing low-interest loans from financial institutions.

The favorable outcomes observed in 2023 offer encouragement for introducing the eco-label in agritourism, with an impressive rate of 81%.

We must mention the fact that, at the present time, there is no guesthouse in Romania that holds the ecological label.

The explanations would be the bureaucracy at the Ministry of the Environment, the rather high costs for authorization and the fact that this certification is voluntary, being more of a marketing tool.

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