

## IDENTIFYING TOURISTS' ATTITUDES ON ENVIRONMENTAL ISSUES

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### **Abstract**

*In the desire to survive and thrive, in its "battle with the environment," today's world has been under continuous and deep change. Technological revolutions are taking place, priorities are changing, and old ideas have been abandoned. All these occur against a background of natural disasters, among which is the environmental crisis. It is a well-known fact that the most cost-efficient way to protect the environment is to prevent pollution and take preventive measures at the initial stage. Tourism is one of the factors that negatively affect the environment since activities such as inappropriate waste disposal, excessive consumption of natural resources, and destruction of biodiversity have a direct impact on nature. The aim of this study is to identify the attitudes of tourists towards environmental issues, reflected in their behaviour towards the environment. In this respect, we designed a questionnaire containing several questions on how tourists perceive the degree of environmental pollution by tourist activities. The questionnaire was applied to a sample of 30 respondents who have been involved in tourist activities in the last 6 months. The main results indicate that tourist activities are responsible for the depletion of natural resources and the growth of waste. Also, respondents believe that school and society should be more involved in educating tourists in what regards the reduction of environmental degradation.*

**Keywords:** tourism; environment; environmental attitude.

**JEL Classification:** Z30; Z32

### **Introduction**

We leave to our children a world with fewer wonders than we had inherited. We contaminated their water, polluted their air and left them most of the waste. We are handing them over a world that seemed safe for us, but now is lying on the edge of the abyss.

In this paper, the aim of the research is to determine the attitude of tourists to environmental issues. This objective is considered to be of high relevance and importance if we take into consideration the major imbalances encountered in the environment all over the world. More or less, sooner or later, all activities made by individuals, communities, organizations, nationally and internationally will have to cope with the environment. Thus, the protection of the environment must become one of the main aims for every citizen, but also of the society as a whole.

Environmental decisions and actions have become the key to stopping environmental degradation, preserving and even improving its quality. By acting in another way, without involving us in the improvement of tourism and environmental problems, the very existence of life on the Earth is endangered.

By researching this issue, this study deals with a highly significant problem - the significant imbalances encountered in the environment all over the world. Various institutions have shown a growing interest and concern for this issue. So, entities such as international forums, governments, numerous local and international governmental and non-governmental organizations, as well as tourism, travel operators, and the population underline the gravity of the results of tourist activities that do not have as a priority the environmental protection. At the same time, ecological tourism has become an alternative for the conservation of the environment, and efficient consumption of natural resources.

The paper includes the study of the literature on the relationship between tourism and the environment, a section in which the author summarised aspects related to concepts and main results of the interaction between tourism and environment. The following section includes the research methodology presenting the indicators and statistical methods used in the analysis.

### **Literature review**

Tourist activity is among the few phenomena that have been imposed in the modern age, its spectacular development being a characteristic feature of our century. First, it should be noted that the etymological origin of the word "tourism" is the English term "to tour" (to travel, to hike). It dates back to the 17th-18th century, and it was coined in England in order to designate the action of traveling in Europe in general, and in France in particular. It refers to a trip and derives from the French word "tour" (travelling, hiking), which comes from the Greek term "tornos", and the Latin "turnus", having the meaning of travel. This word may be of Hebrew origin, respectively, the term "tour", which means travel, discovery, recognition, exploration. (Neacșu, Baron, & Snak, 1961, p. 19). By Tourism is meant the action of travelling and staying in certain locations for the purpose of visiting tourist attractions and pursuing recreational activities.

The beginnings of tourism go back to ancient times. It is most likely that people made, for example, "recreational" trips from one area to another immediately after detaching from their ancestors, no matter who they were (Gherasim & Gherasim, 1999, p. 11).

People have always travelled, the reasons being different. In the beginning, trips had the purpose of searching for food, conquer territory for power, or simply for the purpose of surviving, looking for the plants or animals that people needed but could not find around them.

In Antiquity there were no roads, the trips were made on foot, or by carriage, on land or by ships at sea. The Romans built a network of roads on which they were travelling with four-wheel public cars, wagons or postcards. Also, cargo ships carried a small number of passengers. They were the first people who built a road network to ensure the connection between Rome and other provinces of the Empire. It was a genuine state transport system: it can be considered as a precursor to flat-rate travel, given the fact that tickets gave the right, besides a seat in the carriage, at lunch and accommodation during the trip. There were also inns built along the traffic arteries, and there appeared first tourist guides with itineraries, stopping places, tourist attractions. Travellers from other areas came to Rome to visit the famous city. Tourist guides accompanied the strangers who

came here, and their integrity "was ensured by a badge, tessera hospitalis, the equivalent of today's passport" (Cristureanu, 1992, p. 13).

The main reasons for travelling during the period when science began to develop were business and pilgrimage. The discovery of other regions and continents emerged into major shopping centers in Italy, commercial nodes through which products from the new European territories and colonies were traded. The exploratory trips of Romans to Greece, the trips for their pleasure to Egypt, or the frequent use of places where thermal springs were found, more for playful reasons than sanitary purposes (Pierre, 2002, p. 7) are just a few examples of forms of incipient tourism that emerged in Antiquity.

Later in the Middle Ages, there appeared activities that can be considered "tourist", such as study trips to prestigious schools and universities in England or France, the organization of fairs, and even pilgrimages. In the Renaissance period, there were journeys motivated by intellectual curiosity, and Capitalism, at the beginning of the 19th century, stimulated business trips.

In the second half of the 20th century, with the changes that took place in the world economy, tourism began to have an ascending evolution. This coincided with the inclusion in the service (tertiary) sector of a branch in the national economy, commonly referred to as the tourism industry. The tertiary sector brings together economic activities producing beneficial effects (the result of which is not material or stockable), and tends to hold more and more weight in national economies. Tourism has become one of the most important phenomena of the 21st century, being driven by the development of means of travelling and communication.

Over time, tourism changed and enriched its meaning, so the definitions formulated by specialists in the field have become increasingly comprehensive. From the multitude of definitions given to tourism over time, I consider it worthwhile to **mention some definitions due to their importance.**

The English author F.W. Ogilvie in 1933 defined tourists as persons who "satisfy two conditions: they are away from home for a period not exceeding one year and they spend money in those places without gaining them" (Ogilvie, 1933). However, while A.C. Norwal in 1936 considered that "the tourist is the person who enters a foreign country for any purpose other than to establish a permanent residence or for business, and who spends money in the country, where he temporarily establishes money earned elsewhere ...".

Swiss Professor W. Hunziker brought a significant contribution to the study of the tourist phenomenon in 1940. According to him, tourism represents "the set of relationships and phenomena resulting from the movement and staying of persons outside the place of residence, as long as the travelling and the staying are not motivated by a permanent establishment or any gainful activity" (Hunziker, 1940).

A more recent definition of tourism, which is worth mentioning, is that of D.C. Gilbert in 1990: "the tourism is a part of recreation that involves moving to a less-familiar destination or community for a short time in order to meet a consumer's need for one or a combination of activities" (Gilbert, 1990). In this definition, the recreational side of tourism is emphasized, referring to the fact that it is travelling outside the area of residence, but also referring to the reasons of the trip.

Starting from the etymology of the word and analysing these definitions, **I found that tourism refers first of all** to the activities by which man spends his spare time travelling to another locality or country to visit places in order to enrich his general knowledge, for fun, recreation, relaxation or treatment. **Secondly**, tourism refers to the industry created to satisfy all the services requested by tourists at the place of destination,

at a high-quality level and in the conditions for protection and conservation of the tourist resources, especially of the environment.

The relationship between tourism and natural environment means that tourism has to be focused in all its actions in order to ensure the protection of the environment and by protecting its resources, as Krippendorff and Butter (1984) show: "if we can lose and then reconstruct our capital in many areas of the economy, not the same thing happens in tourism, where the basic substance - the landscape and the earth - once lost is irretrievably lost".

More than any field of activity, tourism is dependent on environment as it is an essential element of the tourist product, as tourists are looking for different landscapes and attractive places where to spend their free time during vacations and holidays. The more complex and varied the natural resources are, the more unaltered they are kept, with properties as close as possible to the primary conditions, more interesting they become for tourism, and the activities they generate are more valuable and more attractive, responding to very varied tourist motivations (Bran, 1998). The main asset of the tourism industry - *the natural environment*, is made up of several elements that influence each other: relief, climate, hydrographic network, soils, flora and fauna. Thus, *the relief*, through its types - glacial, karst, volcanic etc., its levels and altitudes, its geomorphological landscape, its bizarre forms, its geological phenomena and its natural monuments, constitute an independent tourist attraction, stimulating the hiking, mountaineering or relaxation and recreation as ways of spending the holiday. *The climate*, expressed in recorded temperatures, the rainfall regime, particularly the thickness and persistence of the snow layer, the duration of sunshine periods, characteristics (tonic, stimulant, sedative) create the appropriate framework for practising ski, helimarine and climate tourism. *The hydrographic network*, represented by the flow of rivers, surfaces of lakes and seas, and the associated shores, delta, mineral and thermal waters, are the main reasons for travelling for weekend tourism, fishing, heliomic cleaning, practising water sports and balneomedical treatment. *The vegetation*, through forests and species, through the presence of a specific flora or nature monuments, generates particular forms of tourism (scientific research, visiting parks and reserves), or complements other resources, enhancing their landscape and aesthetic value. *The fauna* shows the importance of tourism for hunting and fishery as well as in terms of its aesthetic and scientific value for the organization of reservations and zoos.

The existence and development of tourism potential of a destination depends on the quality of the natural environment through all its elements as tourism is carried out in the environment, and through environment, and its quality can favour or discourage tourist activities.

The tourism - environment relationship is particularly important, the development and the protection of the environment being the essential condition for tourism, any change it produces, damaging the tourism potential by diminishing or even destroying its resources.

The natural environment is the highest wealth for tourism in Romania. The natural heritage, fauna, flora, seashore, delta and mountains represent powerful reasons for visiting and offer the opportunity to spend the holidays. If the environment is damaged, or if visitors' perceptions are altered, these two arguments will encourage the disappearance of visitors. Environmental protection is therefore crucial for tourism (Master Plan, 2007).

Equally important for tourism, due to current environmental problems, is the perception that the environment is damaged and that, at the national level, there is no concern for environmental protection (Surugiu, 2008). This is a barrier to visitors. Remedial action needs to be taken and effectively implemented. Romanians are generally proud of their own country and environment, so they will soon adopt good environmental policies if campaigns like "cleanliness", "recycling", "floral", etc. are implemented.

## Methods

In order to reach the research objectives of the study, the author used as research tool the questionnaire, which was divided into four sections. *The first section* contained 10 questions related to the identification of the main environmental issues highlighted by tourists. *The second section* included 8 questions highlighting the respondents' attitudes regarding the impact of tourism activities on the environment. *The third section* included 5 questions referring to the respondents' opinion on the involvement of authorities in the tourism-environment relationship through the measures applied in order to protect the environment, and the efficient consumption of natural resources. *The last section* had 6 questions regarding the socio-demo-economic status of the interviewed respondents. CAWI method (Computer Assisted Web Interviewing) was used to collect data. The applied questionnaire was accessed via a link on the Google Drive platform.

In the development of the questionnaire, the author covered three stages. In *the first stage*, the preliminary investigation, I clearly defined the information to be obtained and made sure that the questions were closely related to the issues, the purpose, the objectives and the provisional assumptions of the research. In *the next step*, we established the types of questions, namely closed questions (both dichotomic and multimotomic), and the questions with scale responses (sematic differentiation). We avoided open questions as the risk of receiving incomplete, missing, or out-of-subject answers was more significant than in the case of other types of used question. *The last step* involved the clear and precise formulation of questions in order to avoid misunderstandings.

The proposed sample included 30 tourists who performed tourist activities in the past six months. The dependent variables in this study are *resource depletion* and *waste multiplication*, and the independent variables are *society* and *school*. Other dependent variables analysed are *waste collection* and *material reuse*, and the independent variable is *gender*.

Assuming that the values (binary variable) are coded 0/1, the value 1 generally expresses the occurrence of a particular event, so what it is looking for is an estimate of the likelihood of event occurrence according to the values of the independent variables. The general form of the logistic regression model is:

$$P(y = 1|x) = \frac{e^{\alpha + \beta x}}{1 + e^{\alpha + \beta x}} \text{ and } \text{logit}(P(y = 1|x)) = \ln\left(\frac{P(y=1|x)}{1-P(y=1|x)}\right) = \alpha + \beta X \quad (1)$$

The meaning of the expression  $P(y=1|x)$  is the following: the probability of realizing the value  $y=1$  conditioned by  $x$ . In other words, the probability of classing the  $x$  observation in the  $y=1$  class, or the probability that  $x$  is associated with the occurrence of the event  $y=1$ . Next, we noted  $P(y=1|x)$  with  $p$ , the probabilistic binomial model (probability of "success") (Hosmer, Lemeshow & Sturdivant, 2013).

Logit transformation is required to design the probability  $p$  of the range  $(0,1)$  in the  $(-\infty, +\infty)$  interval, which is necessary for the estimation of the parameters. The model is directly related to the notion of *odds*, marked OR (*odds report*):

$$OR = \frac{p}{1-p} = e^{\alpha+\beta x} \quad (2)$$

which represents the ratio between the probability of "success" and the probability of "failure".

The interpretation of the  $\beta$  coefficient is either an increase in the logit quantity when  $x$  increases with a unit or increases by times when  $x$  increases with one unit. Testing the hypothesis  $\beta=0$  is performed by the Wald test, corresponding to the linear regression test, the test statistic being

$$\chi^2 = \frac{b^2}{Var(b)} \quad (3)$$

which follows the distribution with one degree of freedom.

Model construction can also be done through forward or backwards methods, testing the coefficients of significance through the Wald test, or the likelihood-ratio test (LR).

## Results

One of the objectives of the study was to identify the respondents' opinion concerning the need to involve society and school in the efficient management of resource depletion. Table 1 summarizes the main results obtained.

**Table 1. Respondents' opinion on the role of society and the school in the management of resource depletion**

% of resource depletion	society			Total	school			Total
	Moderately	Very	Extremely		Moderately	Very	Extremely	
Not at all	50,0%		50,0%	100%	50,0%	50,0%		100%
Slightly		66,7%	33,3%	100%	33,3%		66,7%	100%
Moderately		33,3%	66,7%	100%			100,0%	100%
Extremely	4,3%		95,7%	100%	4,3%	8,7%	87,0%	100%

*Data source: author's processing*

From Table 1, we can see that over 90% of the respondents who believe that tourist activities lead to an increased level of resource depletion, also believe that society could have a high impact on reducing environmental degradation. At the same time, 66.7% of the respondents who appreciate that tourist activities have little influence on the depletion of resources, also believe that society has a significant impact on diminishing environmental degradation.

Furthermore, the results in Table 1 indicate that all respondents who believe that tourist activities lead to moderate resource depletion also believe that school could have a great impact on reducing environmental degradation. More than 4% of respondents who appreciate that tourist activities have a significant influence on resource depletion also think that school has a moderate impact on diminishing environmental degradation.

**Another objective** of the study was to find out the opinion of the interviewed tourists on how to manage the problem of waste multiplication as a result of tourist activities. Table 2 presents two solutions: selective waste collection and re-use/recycling.

According to the results in Table 2, all respondents who believe that tourist activities lead to a high degree of waste multiplication agreed that a solution would be selective waste collection. Also, 50% of respondents who consider that tourist activities

have much influence on the multiplication of waste agree that selective collection of waste is a solution.

**Table 2. Respondents' opinion on how waste could be managed**

% of waste multiplication	selective waste collection			Total	re-use / recycling			Total
	Disagree	Agree	Strongly agree		Disagree	Agree	Strongly agree	
Slightly			100,0%	100%			100,0%	100%
Moderately		33,3%	66,7%	100%		33,3%	66,7%	100%
Very		50,0%	50,0%	100%			100,0%	100%
Extremely			100,0%	100%	4,0%		96,0%	100%

*Data source: author's processing*

Table 2 highlights that more than 60% of respondents who believe that tourist activities have a moderate level of waste multiplication also agree that a solution would be to reuse materials whenever possible to reduce environmental degradation. At the same time, 4% of the respondents who believe that tourist activities contribute significantly to the multiplication of waste also disagree that the reuse of materials any time is needed is a solution.

In what follows, we tried to establish what kind of connection exists between the involvement of society in the education of tourists and the selective waste collection as an environmental protection action. To analyse this relationship, we performed a logistic regression model in which we used *t71\_dummy* as dependent variable based on the *t71* variable (the importance of the society in the education of tourists) as follows: codes 1 (not at all), 2 (slightly), 3 (moderately) 6 (do not know) have been converted to 0, and 4 (very) and 5 (strongly) have been converted to 1. The independent variable in the logistic model was *t114*, selective waste collection.

**Table 3. Coefficients of logistic regression**

	B	S.E.	Wald	df	Sig.	Exp(B)
Step 1 <sup>a</sup> <i>t114</i>	-3,332	1,742	3,658	1	,056	,036
Constant	3,332	1,018	10,721	1	,001	28,000

*Data source: author's processing*

Table 3 shows the results of the econometric modeling between variable *t114* (selective waste collection) and *t71\_dummy* (the importance of society in the education of tourists). With a 5% risk, we can conclude that the model predicted between *t71\_dummy* (society's involvement in the education of tourists) and *t114* (selective waste selection as an environmental action) is a valid model. As a result of Omnibus (Sig = 0.006) < ( $\alpha = 0.05$ ), and Hosmer and Lemeshow (Sig = 1)  $\geq$  ( $\alpha = 0.05$ ) tests we can state that collective waste selection significantly influences the decision of the respondents to consider whether the society is or not an essential factor in educating tourists concerning environmental protection.

## Conclusions

The relationship between tourism and environment is one of mutual inter-conditioning; a clean and unaltered environment cannot exist without the practice of quality tourism.

Tourism is primarily based on the use of tourist resources, and the level and intensity of its exploitation produce in time and space several negative effects on the natural environment. Among the negative effects, we can list the following: the depletion of natural resources, the multiplication of waste and the destruction of biodiversity, water resources, land degradation, air pollution, water pollution.

The analysis results show that much of the research assumptions were validated and verified. The surveyed tourists think that tourist activities are responsible for the depletion of natural resources and the multiplication of waste. At the same time, tourists believe that school and society should be involved in educating tourists to reduce the degradation of the environment. The proportion of respondents indicating a large, and very large involvement of society in education of tourists is higher than the proportion of respondents indicating a low or moderate involvement in the education of tourists. Selective waste collection influences the decision of respondents to consider whether the society is or not an important factor in educating tourists on environmental protection. In other words, **everyone should be interested and informed about environmental issues and how they can get involved in protecting it.**

In conclusion, we consider that in this study we managed to identify the attitude and behaviour of the interviewed tourists in relation to the environment, but also the respondents' vision regarding the education of tourists in order to reduce the environmental degradation.

Applying the questionnaire **on a larger sample is a future** direction of research in order to highlight the tourists' perception of environmental issues in tourist activities. In the questionnaire, some aspects have not been considered in this study. These aspects are related to environmental issues versus other issues; the worst environmental problems; negative effects on the environment; transport as a cause of pollution; tourist attention to tourist activity performed in nature; the most important environmental factor; the reason for choosing the tourist destination; the ecological hotel and its importance. In the future, these issues will make the subject of a more in-depth analysis of the environmental issue in tourist activities.

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