Implementation of Sustainable Tourism Concept by the Tourists Visiting National Parks

Elżbieta SZYMAŃSKA1,
Bialystok University of Technology, Poland

Abstract: The aim of the article is to analyze tourists’ attitudes and behavior in the national parks, in terms of the principles and criteria of sustainable tourism. The problem is the lack of sustainable behavior of tourists visiting the national parks. The article consists of four basic parts. The idea of sustainable tourism as a “subsystem” of sustainable development and the theoretical model of sustainable tourist are the main goals and principles described in the first part. The second part contains a presentation of the place of research and a methodology of survey performed in 2009 and 2010 on a group of 769 tourists that visited the national parks in northeastern Poland. In the last two parts, the tourist model consistent with the concept of sustainable tourism is compared with the market realities observed in the course of the empirical survey performed in the national parks. The results show that the concept of sustainable tourism is not sufficiently understood by tourists. Thus, the rules of this form of tourism are not properly observed by them. This requires, above all, an educational effort carried out over a number of years.

Key words: sustainable development, sustainable tourism, tourist, environment, national park.

1. Introduction
The idea of sustainable tourism is part of the general concept of sustainable development (Bramwell, 2004). The concept of sustainable tourism should be understood as the manner of organization and functioning of the tourism sector as a whole, with a hierarchic character, serving to achieve satisfactory social and economic objectives without diminishing the value of tourist and natural resources. At the same time, sustainable tourism is integrated with other fields of human activity.

The problem described in the article is the lack of sustainable behavior of tourists visiting the national parks. The aim of the article is to analyze the attitudes of tourists in terms of the principles and criteria of sustainable development. Here, the following research problems can be indicated:

1 Corresponding author: Elżbieta SZYMAŃSKA, E-mail: elaszymanska@wp.pl
Initial submission: August 2012; Revised submission: December 2012; Final acceptance: March 2013
- How should an ideal tourist behave in accordance with the concept of sustainable development?
- How do tourists assess the concept of sustainable development?
- What is the real behavior of visiting tourists at the destination?

The point of departure for the implementation of the assumed objective is to design the tourist model in the context of sustainable tourism so that it can be compared with the results of an empirical survey.

The basic methods applied in the research include literature analysis, the questionnaire method and Pearson’s chi-squared test for independence. In designing the tourist model and survey questionnaire, we made use of selected indicators, which were proposed by World Tourism Organization (WTO, 2004) for examining tourists’ behavior and for comparing it with the proposed model.

The results of the research make it possible for the findings to be extrapolated to other tourism areas. At the same time, they should provide the basis for the assessment and possible verification of the assumptions adopted, as well as for the implementation of objectives in regional and local tourism development programs.

2. The essence of sustainable tourism and model of sustainable tourist

Sustainable tourism has been defined in very different ways. There is no doubt that this concept was based on the definition of responsible tourism formulated in 1965 by W. Hetzer [W. Hetzer, 1965]. Initially, it was called alternative tourism, soft tourism and environmentally sensible tourism (Durydiwka, Kowalczyk, Kulczyk, 2010). Coccossis (1996) distinguishes at least three interpretations of sustainable tourism each of them focusing on different benefits: economic, natural and social ones. Some authors simply believe that its promotional value is the main reason for which this concept is used (Cohen 2002; Lansing; De Vries 2007). Others criticize the concept of sustainable tourism, considering it to be unreal and taking the position that a broader look should be taken at tourism, beyond the principle of sustainability, since “it is a time to seek a new paradigm to replace it” (Sharpley, 2009). The extreme assessments included the statements that the concept of sustainable development were undergoing a crisis (Diamantis, Ladkin 1999) and that there were no successfully implemented projects (Butler 1998) Reflections concerning the problems encountered in defining sustainable tourism can be traced in the literature (Borkowska-Niszczota, Dobrzański, Kiryluk, Szymańska, 2010).

Out of many the definitions, the one proposed by R. Butler (Butler 1993) was used in this paper. He believes that sustainable development is the tourism which is developed in a given area on such a scale and in such a manner that it remains viable for a long time and does not disturb or degrade the (social and physical) environment in which it
functions to such a degree that it would threaten the development of other activities and processes.

In addition to doubts about the definition of the concept itself, even greater difficulties can be encountered when identifying the model of a tourist consistent with the principles of sustainable tourism. A tourist is defined as a person who travels to a different locality outside of his place of permanent residence for a period not exceeding 12 months, where the purpose of travel is not to take a permanent job at the visited locality and who uses an accommodation there for at least one night” (The Act on Tourism Services, 1997).

The concept of sustainable tourism should comprise all the activities carried out within the framework of tourism economy, which would be ecologically allowable, economically viable and socially desirable – from the point of view of tourism companies and local communities. For the properly satisfying the accessible tourism market, a more sophisticated understanding of accessible destination experiences is needed by hotels and tourism operators (Darcy, Cameron & Pegg, 2010).

The participation, in the system of sustainable tourism, should consist in “equilibrium of the forces of the triangle”, composed of three groups of entities: tourist companies, tourists and inhabitants of the tourist destination (Bramwell, 2011; Niemczyk, 2008). In addition to sectorial companies and non-governmental tourism organizations, successive stakeholders include the inhabitants of a tourist destination and tourists arriving at this destination. Different concepts of sustainable tourism are presented considering changes in demand caused by the new tourist needs, but the tourists’ and visitors’ attitudes are seldom analyzed (Niezgoda 2006). The object of the Author’s research was the implementation of the concept of sustainable tourism by tourists, which seems to be fundamental for the implementation of the concept of sustainable tourism.

In the relevant literature, many tourist models can be distinguished. The pattern of two basic tourist models constituting two opposite extremes should be considered the basic one; specifically, a tourist oriented on many intensive cognitive and entertainment experiences and a tourist who wishes tranquility and a quiet contact with nature. It should be assumed that most tourists fall somewhere between these two extremes, Table 1)

The table presents selected tourist models and their different behavior. A number of processes in which a tourist can become engaged are listed. M. Bassand (2002) distinguishes four basic tourist types, which are characteristic of many nationalities. K. Przeclawski (1996) distinguishes tourist types seeking to know nature, culture and inhabitants, also indicating the main preferences of the particular tourist groups. E. Cohen has proposed a division of tourists into four basic groups, where the criterion is
the depth of contact with the visited environment, the tourist’s involvement in the preparations and the very organisation of the trip.

Table 1. Selected tourist models in the relevant literature

<table>
<thead>
<tr>
<th>Author</th>
<th>Tourist models</th>
<th>Source</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>- a tourist oriented on cognition and contact with works of art and cultural goods (<em>le connaisseur</em>),</td>
<td></td>
</tr>
<tr>
<td></td>
<td>- a tourist oriented on contact with nature (<em>le solitaire</em>),</td>
<td></td>
</tr>
<tr>
<td></td>
<td>- a tourist oriented on “ticking off” as many sites as possible but in a very superficial manner (<em>le voyeur</em>).</td>
<td></td>
</tr>
<tr>
<td>K. Przecławski</td>
<td>- a tourist as a cognitive type (oriented on coming in contact with culture or people, or nature),</td>
<td><em>Człowiek a turystyka, Zarys socjologii turystyki</em> (Man and tourism. An outline of the sociology of tourism – in Polish), K. Przecławski (ed.), ALBIS, 1996.</td>
</tr>
<tr>
<td></td>
<td>- an integrative tourist – oriented on contact with the group,</td>
<td></td>
</tr>
<tr>
<td></td>
<td>- a task-oriented tourist – seeking to carry out specific activities,</td>
<td></td>
</tr>
<tr>
<td></td>
<td>- an entertainment-oriented tourist,</td>
<td></td>
</tr>
<tr>
<td></td>
<td>- a recreation-oriented tourist (active tourism),</td>
<td></td>
</tr>
<tr>
<td></td>
<td>- a contemplative tourist,</td>
<td></td>
</tr>
<tr>
<td></td>
<td>- a health-oriented tourist – seeking to take care of his health.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>- an individual mass tourist, who travels alone,</td>
<td></td>
</tr>
<tr>
<td></td>
<td>- a tourist seeking to explore the environment, an individual tourist, used to comfort (<em>explorer</em>),</td>
<td></td>
</tr>
<tr>
<td></td>
<td>- an individual tourist who fully integrates with the culture of the visited environment (<em>drifter</em>).</td>
<td></td>
</tr>
</tbody>
</table>

Source: Elaborated on the basis of the sources cited in the table.

It seems that the typology proposed by Bassand (1968) is most adequate for considering the tourist model in the context of sustainable tourism; he offered the basis for the creation of subsequent concepts, e.g. the one proposed by K. Przecławski. In accordance with the latter concept, the exemplary tourist model, consistent with the concept of sustainable tourism, is the cognitive tourist type, who is oriented on coming in contact with nature, culture and people (1996).
3. Methodology of research

The basic methods applied in the research include the questionnaire method and Pearson’s chi-squared test for independence with using Statistic 2009 Program.

One of peripheral areas of the European Union was selected for the research; specifically, the region of northeastern Poland, which is a socially and economically backward region, with a low living standard. But among its few riches are the well-preserved nature and the cultural values, which create opportunities for its development based on sustainable tourism. The areas with natural values selected for the research were the following: Augustów Lake District, Rajgród Lake District, Suwałki Lake District, Białowieża National Park, Biebrza National Park, Narew National Park and Bug River Valley. The research was carried out from June to September 2009 and from June to September 2010. It was assumed that at least 50 tourists would be polled in each of these areas. Given the intense tourist traffic in the summer season, it was possible to use a random selection, by selecting every fifth person for the survey. The tourists were polled on beaches, at accommodation sites, on pedestrian and cycling tracks and at museums. Ultimately, a total of 769 respondents took part in the survey. In addition to the personal information characterizing the respondents, the survey questionnaire contained 37 questions. From these, for the purposes of the present publication, eight key research areas were selected. They included six single-choice questions and two multiple-choice questions with the possibility of adding one’s own proposal (a half-open cafeteria).

The exemplary tourist model consistent with the theory of sustainable development is characterized by the knowledge of the objectives and principles of sustainable tourism involving the respect for all the four orders (Environmental, economic, social and spatial). In the light of the idea of sustainable tourism, based on selected indicators proposed by the World Tourism Organization (WTO, 2004), a tourist should be characterized by the following features:

- when shopping on a daily basis he pays attention to the environmental aspects,
- he takes active measures for his place of residence to protect the environment,
- he knows and understands the ideas of sustainable tourism,
- the aim of his travel is to rest in accordance with the idea of sustainable tourism,
- when choosing the accommodation he applies the criteria based on the idea of sustainable tourism,
- he prefers forms of recreation which are environment-friendly and support the regional development, instead of impeding it,
- he takes care of the cleanliness of the natural environment,
- he behaves in a manner consistent with idea of sustainable tourism,
- he discerns mistakes in the behavior of other tourists and visitors,
- he discerns the impact of tourism on the state of the natural environment,
he discerns and assesses the quality of the particular elements of the environment,
he discerns the threats for the environment,
he is satisfied with the ability to participate in the implementation of the idea of sustainable tourism.

Those indicators were used in the questionnaire.

Later on in this study, the above model will be compared with the results of an empirical survey. However, due to the editing restrictions and requirements, only those features of the “sustainable” tourist that the author considers most important are presented.

4. The implementation of the concept of sustainable tourism in the light of an empirical survey

The aim of the research carried out by the author was to show the deviations of the real tourists from the presented model of a sustainable tourist. Somewhat similar research was done by Niemczyk (2008). The purpose of that research was to confirm, inter alia, the thesis that with their knowledge and behavior the students of tourism-related faculties favored the sustainable development of tourism. The research was carried out in May 2008 in Cracow on 400 students. The purpose-selected research sample consisted of 200 students of engineering faculties and 200 students of tourism-related faculties. The students found it fairly easy to identify tourists’ behavior that they regarded as most sensitive. The elements of tourists’ behavior that irritated them included the lack of respect for nature and the disposal of waste around, i.e. in general terms, uncultured behavior. Respondents also indicated tourists’ recklessness (their inadequate preparedness for mountain trips, their breach of the ban on entering closed routes etc.). Similar conclusions can be drawn from the research on tourists’ behavior in the Peruvian Amazon, where the authors distinguished three typologies of tourists visiting three Amazonian lodges in Peru, differing by several socio-economic and cultural factors, and by their motivations (Torres-SoveroGonzalez, Martin-Lopez, Kirkby, 2012.). Only one type of tourists shows a positive relation between their overall satisfaction and ecological features, which they called “true ecotourists”. In order to evaluate the tourists’ behavior, the authors used, inter alia, the following measures: native guide, local guide, group size, activity time length, cultural activity, forest succession, mammal index, bird index and others. The results obtained by A. Niemczyk and C. Torres-Sovero et al. can be compared with those shown in Figure 5, which presents the evaluation of tourists’ behavior inconsistent with the idea of sustainable tourism. The research presented below takes into account the following issues: tourists’ self-assessment concerning environmental awareness, tourists’ measures to protect the environment, the assessment of the importance of the richness and cleanness of the environment, the assessment of the importance of the richness and cleanness of the
natural environment in the course of a travel and tourists’ self-assessment concerning their environment-friendly behavior at the tourist destination. These issues were summed up with an assessment of the impact of tourism on the natural environment. Tourists’ behavior may depend on their education level and the permanent place of their residence; therefore, respondents were polled in these two areas. On the basis of the personal data that the respondents agreed to provide anonymously, the following information was compiled concerning the education level and the permanent place of residence of the respondents. The largest group of respondents mostly had secondary education – 54%, including general secondary education - 31% (237 persons) and vocational secondary education - 23% (174 persons). It was followed by 296 persons (38.5%) with higher education, while a small number of respondents had primary and gymnasium education – 53 persons (7%) and 9 persons (1.2%) did not answer this question.

The scope of knowledge concerning sustainable tourism and tourists’ behavior may vary depending on the permanent place of residence. Figure 1 shows the results of research in this scope.

![Figure 1. The permanent place of residence of the respondents](image)

Source: Own study based on the survey performed.

Most respondents live in urban areas (79%), including their largest number living in a town/city with 20,000 to 100,000 inhabitants, i.e. 161 persons (21%), 19% of respondents live in rural areas (145 persons), while the respondents in the smallest group live in a city with more than 500,000 inhabitants, i.e. 11% (82 persons).

As the environmental awareness grows among tourists and local inhabitants, an increasingly greater care of the environment can be seen. An increasingly large number of tourists attribute significance to environmental protection and expect the same from tourism entities. The environmental awareness is one of the factors that determine the choice of the place of recreation. Indeed, at present, not only the standard of the
tourism infrastructure and services, but also, or perhaps first of all, the quality of the environment is important (Kurek, 2003)

The environmental self-awareness of the respondents, consisting in their knowledge of the effects of human impacts on the environment and their attempts to limit their own impacts on the environment, should first be assessed.

![Figure 2. Tourists’ self-assessment concerning environmental awareness](image)

*Source: Own study based on the survey performed.*

The results shown in the Figure 2 indicate that 26% (202 persons) of the respondents considered themselves environmentally aware persons, the largest group of respondents believed that they were rather aware (63%, i.e. 485 persons), while 40 (5%) persons thought that they were rather unaware. 15 persons (2%) considered themselves environmentally aware. The other 27 (4%) persons refused to answer the question. No dependence was found between the education level and the permanent place of residence and a tourist’s self-assessment concerning environmental awareness. The measures taken by tourists to protect the environment seem to be very important for the implementation of the idea of sustainable tourism; here, the respondents were able to give their own proposal or choose many options from the 9 alternatives proposed. The overwhelming majority took measures to protect the environment 604 (79%), but 165 respondents (21.5%) did not take any measures for this purpose. The largest group of respondents 58% (442 persons) saved water and energy, reducing the threat for the natural environment, while 425 persons (55%) segregated waste. More than 18% (142 persons) paid attention in the course of shopping if products have been made considering environmental protection. Many respondents did not use their car or limited its use (13.8%), whereas the other activities, such as the membership in an environmental rights organization, the participation in environmental protests, volunteer work, were considered of slight significance, since they were indicated by less than 5% of respondents.

The subsequent questions concerned sustainable tourism, in particular the knowledge of this concept and the assessment of the knowledge concerning this idea. Respondents were offered alternative answers “yes” or “no”. More than half the
respondents 468 (61%) did not know this concept, 283 (37%) knew this concept, while 2% did not give any answers.

One of the most important aspects of sustainable tourism is the richness and cleanness of the natural environment at the place where tourists stay. In the light of the research on tourists’ preferences (Jedlińska 2004) an increasing number of persons avoid polluted and excessively congested areas as the place of their rest, and more and more persons respect nature and historic sites. The proposed answers were ordered on a five-point scale from “very important” to unimportant”. The results are shown in Figure 3.

Figure 3. The assessment of the importance of the richness and cleanness of the natural environment in the course of a travel
Source: Own study based on the survey performed.

The overwhelming majority, i.e. 671 respondents (88%), believed that the richness and cleanness of the natural environment were very important or important for tourism, 73 tourists (9%) considered them to be moderately important, while 16 persons (2%) regarded them as hardly important. Three persons considered it unimportant and six persons did not give any answer. The research demonstrated that there was a significant dependence between the permanent place of residence and the assessment of the importance of the richness and cleanness of the natural environment in the course of a travel: the bigger the town/city of residence was, the greater the need for contact with a clean environment.

These results are in contradiction with the results obtained in the next survey. Respondents were offered 11 alternative answers, with a multiple-choice opportunity to indicate any other possible behavior inconsistent with the idea of sustainable tourism.
From the answers given it follows that almost every third tourist (223 persons - 31%) never happened to behave in an incorrect manner, while among the others, 28.3% (198 persons) were noisy and 19.7% (138 respondents) happened to throw waste in places not meant for it or leave the tracks and enter protected areas. Few tourists - 164 (23.5%) attributed importance to energy consumption, while 177 (25.3%) paid no attention to the water consumption level at the place where they rested. The respondents least frequently bought souvenirs produced using protected species (2.1%), whereas the other activities occurred less often than for every tenth person.

The last research area taken into account was the assessment of the impact of tourism on the state of the natural environment at the present place of rest. Respondents were offered answers on a five-point scale including assessments from “absolutely favorable” to “unfavorable”. The results are shown in Figure 5.

Most respondents 54% indicated the rather favorable (414 persons) and absolutely favorable (102 persons, 13%) impact of tourism on the state of the natural environment at the place of rest. At the other extreme, there were 26 persons (3%) who strongly indicated the adverse impact of tourism on the state of the natural environment, 90
respondents (12%) believed that tourism had no effect on the state of the environment, while 132 (17%) thought that tourism had a rather unfavorable impact on the environment. Four persons gave no answer. The respondents’ opinions were not affected by either their education level, or their permanent place of residence.

![Figure 5. The impact of the tourism development on the state of the natural environment](image)

*Source: Own study based on the survey performed.*

In general, it seems that despite the low level of the respondents’ knowledge concerning the concept of sustainable tourism and their behavior that was often inconsistent with the idea of sustainable tourism, the ideas generally coincided with the tourists’ expectations, while tourism itself was in most cases positively assessed in the context of the concept in question.

### 5. The comparative analysis of the tourist model against the results of an empirical survey – the conclusions

In order to achieve the objective that the Author set at the outset, it is necessary to compare the designed tourist model that is optimal from the point of view of the concept of sustainable tourism, with the results of an empirical survey carried out on a group of tourists, (Table 2).

Comparing the traits of the tourists who are consistent with the concept of sustainable tourism, one can note a large discrepancy between theory and practice. This discrepancy concerns primarily the knowledge concerning sustainable tourism, the awareness of the richness and cleanness of the tourist destinations, and – first of all – the measures to protect the environment.

The scientific importance of the research consists in enhancing the knowledge concerning the real implementation of the concept of sustainable development and the degree of sustainability of tourism. The research was performed in the case of a
selected peripheral region of the European Union, which is relatively poor, but has exceptional natural values.

Table 2. The comparative analysis of the exemplary tourist model (in the light of the idea of sustainable tourism) against the results of an empirical survey

<table>
<thead>
<tr>
<th>An ideal tourist in accordance with the assumed model</th>
<th>Results of an empirical survey</th>
</tr>
</thead>
<tbody>
<tr>
<td>He is environmentally aware</td>
<td>Environmental awareness is demonstrated by 72% of respondents.</td>
</tr>
<tr>
<td>He takes measures to protect the environment, saves water and energy, pays attention to what he buys and segregates waste</td>
<td>58% save water and energy, 55% of respondents segregate waste, 18% check when shopping whether products have been manufactured in a manner considering environmental protection, 14% do not use a private car or limit its use.</td>
</tr>
<tr>
<td>He knows the concept of sustainable tourism</td>
<td>This concept is unknown for 61% of respondents</td>
</tr>
<tr>
<td>He is aware that cleanliness and richness of the environment are important for tourist traffic</td>
<td>87% of respondents believe that the cleanliness and richness of the environment are important for their rest</td>
</tr>
<tr>
<td>He behaves in a manner suitable for the place: he does not make noise, he does not throw waste, he does not leave the designated tracks, he does not pick up mushrooms and ground flora fruit in forbidden places, he pays attention to water and energy consumption, he does not pursue forbidden forms of tourism, he does not light fires in places and conditions posing a fire risk, he does not buy souvenirs produced using protected species</td>
<td>31% of respondents recognize that they always behave correctly (in accordance with the principles of sustainable tourism), while the others happen, at the tourist destination, to: make noise (28%), leave tracks (20%), throw waste in places not meant for it (20%), pay no attention to the consumption of water (25%) and electricity (23%) at the accommodation</td>
</tr>
<tr>
<td>He believes that tourism has a positive impact on the natural environment</td>
<td>67% of respondents indicate a positive impact of tourism on the natural environment</td>
</tr>
</tbody>
</table>

Source: Own study based on the survey performed.

It can bring an important contribution to the identification and understanding of the potential for the development of sustainable tourism in these areas and the assessment of tourists’ behavior consistent with this idea. The aim of the article was to attempt to design a tourist model in the context of the idea of sustainable tourism and to compare it with the actual tourists’ behavior in the selected research area. This objective has been achieved.

At the end of the research, the following conclusions can be drawn:

- A real tourist behaves at the tourist destination in a way which greatly deviates from the optimum model;
Most tourists (61%) did not know the term sustainable tourism, as only 37% said that they had heard of this concept;

Most respondents (67%) believe that tourism has a positive impact on the natural environment;

87% respondents state that the cleanliness and richness of the environment are important for their rest;

In their daily life, 79% of respondents follow the principles of sustainable development by saving water and energy (58%), segregating waste (55%) or checking when shopping whether products have been produced considering environmental protection (18%);

The respondents’ opinion was in a certain contradiction with their real environment-friendly behavior, since 89% of them thought that they were environmentally aware;

Despite insufficient resources of knowledge concerning sustainable tourism, the environment and environmental protection, tourists try to act in a manner that interferes as little as possible with the state of the natural environment.

It seems that it would be difficult to show in practice an ideal tourist whose behavior would be consistent with the model assumed; however, efforts should be made by enhancing tourists’ awareness to continuously improve their behavior so as to bring it, as much as possible, to the optimal behavior. The implementation of the concept of sustainable development requires the establishment of general rules that could be applied by all the entities of the tourism economy, including self-government authorities, organizations and tourism companies.

The presented results can be helpful in the performance of further research on the idea of sustainable tourism and the practical possibilities of implementing its principles.

References


