Model of Sustainable Tourism in Slovakia

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Abstract: The increase in international as well as domestic tourist arrivals has been rapid in the recent decades in most countries. Tourism is gradually expanding worldwide, while becoming a major economic sector primarily through income generation and job creation. The provision of tourism services is linked to a clean, undisturbed natural and man-made environment, as well as hospitable residents. Due to the interaction between tourists, local communities and the physical environment, tourism directly or indirectly interferes with its environment. The challenge for the tourism industry in order to prevent its negative impacts is to adapt a positive attitude towards sustainable development. The aim of the paper is to design a model of sustainable tourism, illustrate the DPSIR model, as well as the effects of tourism sustainability factors.

Keywords: tourism, sustainability, sustainable tourism, model of sustainable tourism, tourism sustainability factors, tourism impacts

JEL Classification codes: Z32, Q01

INTRODUCTION

Sustainable development has got into awareness in recent decades, and was initially thought of as a development that seeks to reduce environmental impacts. Gradually, its area of interest has expanded towards the economy, the society and its culture. Sustainable development is currently perceived as a development that preserves the ability of present and future generations to meet their basic living needs while respecting the natural functions of ecosystems. Most institutional and academic experts recognize that sustainability is a prerequisite for further economic growth, as it is based on providing benefits to all stakeholders, and focuses on tackling global challenges including poverty reduction, mitigation of climate change and preservation of scarce resources.

Without applying the basic principles of sustainable development, tourism development can lead to self-destruction due to its negative impact on society and the environment. The challenge for the tourism industry lies therefore in the adaption of a positive attitude towards sustainable development and in incorporating its principles into the tourism policy at international, national and regional level. The form of tourism based on the principles of sustainable development is sustainable tourism, which aims to provide services for the purpose of customer satisfaction while respecting local communities, as well as the authenticity of cultures and the environment. In addition to providing experience for tourists, residents should benefit from tourism as well. Conceptual development and long-term planning are prerequisites for sustainable tourism.
1 LITERATURE REVIEW

The tourism industry is a major contributor to the economic development of many countries (Malik et al., 2016). Thanks to its dynamic growth, it has a unique position in order to positively contribute to tackling the challenges of sustainable development. This is also confirmed by the specific relationship between the consumers in tourism (tourists), local communities, service providers and the physical environment. The close relationship between tourism and sustainable development can be harmful on the one hand, but very positive on the other, in order to tackle the challenges of sustainable development. It is important for all stakeholders in tourism to recognize their responsible role in sustainable development. Tourism has significant means of development in its own right, but it can also destroy its own resources (Mason, 2003).

Tab. 1 Definitions of sustainable tourism

<table>
<thead>
<tr>
<th>Definitions of sustainable tourism</th>
<th>Authors</th>
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<tr>
<td>it meets the needs of the present without compromising the ability of future generations to meet their own needs</td>
<td>WCED (1987)</td>
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<tr>
<td>the prosperity of the current generation is ensured, provided that the prosperity does not diminish in the future</td>
<td>Pearce, D.W.; Warford, J.J. (1993)</td>
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<td>meets the present needs of tourists and reception sites, as well as the economic, social and aesthetic needs of humanity; protects and increases the possibilities of the future; basic ecological processes, biodiversity, cultural integrity of different groups and people will be preserved</td>
<td>UNWTO (1998)</td>
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<td>the economic viability is ensured, but the resources on which the future of tourism depends, will not be underestimated</td>
<td>Swarbrooke, J. (1999)</td>
</tr>
<tr>
<td>it is the development of a territory that will ensure the constant conditions for life, despite the exhaustible sources of energy</td>
<td>Plesník, P. (2010)</td>
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<td>thanks to conceptual development and planning, in the long term, it does not disturb the natural, cultural and social environment, its aim is to protect and preserve the environment in all its aspects, as well as to respect the lifestyle (including the former livelihood) of local people</td>
<td>Zelenka, J.; Pásková, M. (2012)</td>
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<tr>
<td>it is difficult to talk about an unchanging sustainable development, it is necessary to look for opportunities to protect and preserve past and present values even for the future</td>
<td>Novacká (2013)</td>
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a continuous process consisting of interactive environmental, social and economic elements in the market and in society, and is based on planning, implementation, evaluation, control and review


Source: own processing

The definitions of sustainable tourism (Tab. 1) are generally known, but are not uniformly recognized, nor applicable to any host country, which is understandable given the different political, socio-cultural and natural environment of individual destinations. In the absence of a uniform definition, we should draw attention to the characteristics that most internationally active experts in the field of tourism recognize as suitable for the definition of the concept of sustainable tourism.

1.1 Dimensions of sustainable tourism

The concept of sustainable tourism includes the dimension of economic, social, cultural and environmental capital in relation to the goals of sustainable development (Hall, 2000; Ivars, 2001). The goal of sustainable tourism is to find a balance between economic growth, social progress and the preservation of the environment (Camus et al., 2012).

The economic dimension of sustainable tourism is based on ensuring viable economic operations, which provide a fairly distributed socio-economic benefit to all stakeholders including stable employment, employment opportunities and social services for the host communities, also contributing to poverty alleviation (UNWTO, 2017). According to Hutmannová (2011), the aim of economic sustainability of tourism is to ensure long-term economic prosperity for the host community, in particular by supporting local tourism businesses and creating jobs for residents. Many authors assume that the tourism's primary impacts on the economy are increasing employment, generating income, stimulating investments and raising living standards (Ritchie, 1984; Lickorish, 1991; Tribe, 1999; Kubičková et al., 2017). Job creation is perceived as one of the largest direct benefits of the tourism industry (Mathieson & Wall, 1992; Lickorish, 1991; Mason, 2003; Frechtling, 2013; Kumar et al., 2015; Krošlaková & Kubičková, 2015). According to Kumar et al. (2015), tourism also contributes to job creation indirectly in secondary and tertiary sectors, such as construction and banking. Budeanu (2005) on the other hand refers to the fact that the majority of jobs in tourism is seasonal, offering low wages, without guarantee of future employment or the provision of adequate social and health care for workers. There is often lacking work experience, and many skills and experience gained by employees are not recognized. The negative economic impact of tourism according to UNEP (2017) is also the migration of labour to popular destinations, which is also a problem in social and cultural terms. The attractiveness of the tourism industry distracts employees from other economic sectors in the region, which negatively affects employment in other sectors of the economy (Budeanu, 2005).

The aim of social and cultural dimensions of sustainable tourism is to secure the exchange of cultural values between residents and tourists, preserve local traditions and the authenticity of communities, as well as to protect the tangible and intangible cultural heritage of the destination (Camus et al., 2012). Various authors have agreed on the definition of social and cultural sustainability as a concept that aims to maintain the stability of social and cultural systems while reducing the contradiction with the requirements of the tourism industry (Bahaire and White, 1999; Cottrell et al., 2004). Maintaining and promoting the culture and identity of local communities is an important challenge for sustainable tourism, otherwise they may disappear (Griswold, 2004; Hitchcock, 1999; Santos and Buzinde, 2007). Social
sustainability lies primarily in the development of the local society, the social approach to tourism business employees, as well as in the social responsibility of regions, associations and tourism businesses (Novacká et al., 2013). Concerning the definition of the interaction between tourism and local culture, a number of authors are referring to tourism as a destroyer of the authenticity of cultures and a source of local identity degradation (Greenwood, 1978; Hitchcock, 1999; Mellinger, 1994; Oakes, 1993; Turner a Ash, 1975). International tourism is therefore perceived as an enemy of the local culture and identity, transforming authenticity into artificiality. On the other hand, Mellinger (1994) suggests that tourists prefer unique cultures, and authors such as Buzinde, Santos and Smith (2006) emphasize the need to preserve local identity, supporting alternatives to mass tourism.

The environment plays a key role in the tourism industry. It was only in the last decade of the twentieth century that it has been perceived as an attraction, or an environment that gave space to tourism activities (Holden, 2000). According to UNWTO data, approximately 75% of tourism products are linked to the natural environment, so an environmentally unburnt environment is a prerequisite for tourism supply (Plesník, 2009). The goal of the environmental dimension of sustainable tourism is to preserve the natural environment by reducing greenhouse gas emissions, eliminating air and water pollution and avoiding the degradation of plant and animal species, deforestation, desertification, as well as the depletion of natural resources (Camus et al., 2012). Pigram (1990) emphasizes the importance of sustainable tourism as a viable tool for economic development and environmental prosperity, including environmental education of stakeholders. Lane (1994) refers to environmental sustainability as an important tool for supporting rural development and conservation. The assessment of the tourism’s impact on the environment is particularly demanding due to the existence of a strong link between the tourism industry and the physical environment (Fodranová et al., 2015). The nature is protected in order to sell tourism products, on the other hand, however, the impacts of tourism on the environment are obvious (Puczko and Rátz, 2001). According to Mason (2003), there is an increasing conflict between tourism activities and the conservation of natural habitats.

2 METHODOLOGY

As a basis for the determination of the indicators of sustainable tourism categorized by the economic, social, cultural and physical environment served the already existing indicators, specifically the indicators of sustainable tourism according to the UNWTO and the ETIS – European Tourism Indicators System, as well as several models of sustainable tourism such as the DIT-Achiev Model for Sustainable Tourism (Morrissey et al., 2010) and the Framework Model (Klein-Vielhauser, 2008). Subsequently, the indicators were modified and determined in a way enabling their evaluation at the regional level.

The set of indicators of sustainable tourism has been selected for the model of sustainable tourism in Slovakia based on their importance for monitoring critical areas in tourism in the destination. The significance of the indicators was evaluated by tourism experts in Slovakia at the national and regional level by the Delphi method, which consists in questioning experts using a questionnaire usually in two to three stages in order to achieve convergence of expert opinion and a certain consensus in the perception of relevant issues. The survey was attended by 8 experts from the field of tourism in the first round and 7 experts in the second round:

- Ing. Rastislav Sekerák from the Department of Strategy and Analysis, Tourism Section at the Ministry of Transport, Construction and Regional Development of the Slovak Republic,
- Mgr. Marek Harbul’ák, general manager of the Union of Hotels and Restaurants in Slovakia,
The questionnaires were compiled using Adobe Acrobat and were sent to the email address of the experts. The survey was conducted in two rounds. Each expert, independently of the others, filled out the questionnaire and sent it back to the evaluation. Subsequently, the questionnaires were distributed in a second round in which respondents could, but did not have to reassess their opinions and replies to modify them. In the second round of the survey, the questionnaire contained the median values which were evaluated based on the results of the first round, and the experts tilted to the median values in their assessments, thus achieving the consensus in their opinion. The indicators of sustainable tourism were evaluated by assigning points of 1 (least significant indicator) to 10 (most significant indicator). The experts were able to express their opinion on the importance of evaluating individual indicators in Slovakia in the 'Arguments' section of the questionnaire. They could also design their own indicators which should be, in their opinion, evaluated in Slovakia by also determining their significance.

The indicators of sustainable tourism were evaluated by the calculation of the median values based on the points given by the tourism experts after both rounds of the survey. We have selected only those indicators for the model of sustainable tourism in Slovakia, which, after evaluating the median values, have reached 8 points in the second round of the survey. The indicators were then adjusted on the basis of the expert arguments specified in the questionnaire. The proposed model of sustainable tourism in Slovakia was subsequently depicted in the form of a scheme. We further elaborated the indicators of the proposed model in the form of the DPSIR model (Jurado et al., 2011), which consists of introducing the five stages of tourism development in the destination. Based on the proposed model of sustainable tourism in Slovakia, we also outlined the effects of sustainable tourism factors in the destination.

### 3 RESULTS AND DISCUSSION

The model of sustainable tourism in Slovakia was designed in order to monitor key areas in tourism in terms of sustainability through evaluating quantitative and qualitative indicators. The proposed model of sustainable tourism in Slovakia consists of 36 indicators divided into four dimensions of sustainable tourism, which are the economic, social, cultural and environmental dimension. The aforementioned dimensions are further subdivided into categories of sustainable tourism by the areas of research. The economic dimension includes 9 indicators, grouped into the following categories: the flow of revenue and expenditure in the destination, the performance of tourism businesses, the number of employees and their quality, and the supply chain in tourism. The seven indicators of the social dimension are categorized by the impact of tourism on the local community, satisfaction with tourism and the safety of tourists. The cultural dimension of the proposed model focuses on the local cultural and historical monuments, culture of the local community, as well as on the employment in culture, including 6 indicators. 14 environmental indicators are categorized by
air pollution, waste management, sewage treatment, water management, energy management and landscape and biodiversity protection (Fig. 1).

Stakeholders in tourism can use the model in order to monitor the weaknesses of the tourism industry in any region of Slovakia, with indicators tailored to the specific needs of the selected region.

Fig. 1 Model of sustainable tourism in Slovakia

Source: own processing
3.1 DPSIR model

The indicators of the proposed model of sustainable tourism in Slovakia were also illustrated by the DPSIR model (Jurado et al., 2011), which consists of the five stages of tourism development in the destination, namely: driving force, pressure, state, impact and response (Fig. 2).

Fig. 2 DPSIR model

The tourism development in the destination is a driving force which transforms the economy, society and the environment. Visitors and tourists at a destination can extensively use the individual means of transport in order to travel to the destination. However, this action has negative consequences in the long run directly in terms of increasing greenhouse gas emissions and indirectly by contributing to the climate change. An increased number of tourists may jeopardize the satisfaction of locals with tourism in the destination in the absence of a proper management.

The presence of tourists can result in a pressure on the environment, for example in the form of waste generated as a result of tourists' consumption in the destination. Many
accommodation facilities and tourist attractions are located in a severely disturbed environment or in a protected area. These facilities should, therefore, increase their focus on maintaining the quality of the environment in the destination, if they expect tourists to arrive in the future.

The current state of the social environment in the destination can be expressed through the indicators of the satisfaction of tourists with the services provided in connection with tourism and the safety of the destination, as well as the satisfaction of the residents with tourism.

The positive impacts of tourism on the destination include tax revenues resulting from the accommodation of tourists, which pretend revenues to the municipal budget, also expenses of overnight visitors and accommodated tourists in the destination, which are revenues of tourism enterprises, as well as municipalities. An important positive impact of tourism in the destination is the creation of jobs for the local community, because the sector does not employ only university-educated residents, but also graduates of secondary vocational schools. A prerequisite of a developed tourism industry is, among other factors, a high quality infrastructure, which also benefits local people. Tourists' behaviour cannot influence only the quality of residents' lives, but also their traditional culture. However, this impact is not necessarily negative, because thanks to tourism many events are organized with an aim to preserve traditional values in the region.

Driving forces, environmental pressures, current status, as well as the impacts of tourism trigger a response from tourism businesses, residents and municipalities. This response should contribute to the sustainability of the destination. Tourism businesses can focus on waste, water and energy efficiency in their work, they can devote to waste water treatment, as well as promote the conservation and preservation of local biodiversity and landscape. The municipality as a unit of territorial self-government can allocate funds for the restoration of cultural and historical monuments, and it can also endeavour to register national cultural monuments, which pretend an attraction for tourists. The municipality, as well as locals can participate in organizing events to preserve local customs and traditions.

### 3.2 Effects of tourism sustainability factors in the destination

Based on the proposed model of sustainable tourism in Slovakia, we have illustrated the effects of the tourism sustainability factors in the destination (Fig. 3), which may be positive or negative, and act either on the destination as such, or on individual subjects in tourism, namely tourists, residents and tourism businesses. Based on the tourism sustainability factors, we have pointed out the link between residents, tourists and tourism businesses in the destination. The green arrows indicate positive, the red, on the contrary, negative impacts of individual factors on the destination, respectively on subjects in tourism. Yellow arrows indicate that the effects of factors may be both positive and negative, depending on the situation in the particular destination.

The positive and negative effects of tourism sustainability factors indicate different guidelines for actors in the destination, in accordance with the principles of sustainable tourism. Attention should be paid to the factors behind the red arrows in the destination, and the negative impacts of tourism sustainability factors on the destination, such as transport, seasonality and the location of businesses and tourist attractions in disturbed or protected areas, should be permanently reduced or eliminated. The effects of the tourism sustainability factors behind the yellow arrows can be both positive and negative. For this reason, the tourism management of the destination should ensure in particular the satisfaction of tourists and residents, as well as the safety of tourists, and should minimize the impact of the tourists' presence in the destination on the traditional culture of residents.
The tourism sustainability factors behind the green arrows should be strengthened in the destination in order to:

- ensure the satisfaction of tourists with tourism services in order to return to the destination and realize expenses at the destination,
- provide benefits to local residents by their employment in tourism, as well as local entrepreneurs by selling local products and services to tourists,
- maintain and preserve cultural heritage,
- organize events to revive or preserve the traditional cultural values of residents,
- protect the environment, for which should be responsible mainly the tourism businesses in the destination, through activities such as climate change mitigation, waste sorting and recycling, using recycled water, reducing water consumption, waste water treatment, using renewable energy sources and promoting the protection and preservation of local biodiversity and landscape.

CONCLUSION

Tourism is a globally evolving industry, the number of tourists is increasing every year. The expansion of the tourism industry while respecting the principles of sustainable development can make a positive contribution to the development of the destinations around the world, both in economic, social, cultural and environmental terms. However, the absence of planning in the tourism industry can lead directly or indirectly to the degradation of individual destinations. It is therefore in the interest of the industry to generate revenue, especially for
local communities, ensure the satisfaction of tourists and residents, as well as preserve scarce resources and contribute to the attractiveness of tourism destinations.

In connection with the promotion of sustainable tourism practices, it is necessary to identify the positive and negative impacts of the industry and monitor the development of these impacts in the destinations through indicators. Many destinations are threatened precisely because of the lack of attention paid to eliminating or mitigating the negative impacts of tourism. The determination and, subsequently, the evaluation of indicators can be effective tools in order to ensure sustainable tourism in the destination. Indicators serve to uncover critical areas that need to draw attention by managing territorial development, they are also useful by predicting the future development of destinations, or by controlling the results of management measures.

REFERENCES


