

Application of the European Tourism Indicator System (ETIS) in Sibiu County

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Abstract

The European Tourism Indicators System (ETIS) for sustainable destination management is a product of the European Union's Sustainable Development Strategy, which has been formulated with the aim of promoting economic prosperity, social equity, cohesion and environmental protection. The purpose of this paper is to present an analysis of the application of this system of indicators in the case of the Romanian tourist destination Sibiu County, identifying the difficulties and challenges of ETIS implementation and emerging opportunities. We believe that the results of this analysis can provide useful guidelines and suggestions for those who manage this tourist destination, as well as for other tourist destinations who will want to implement the ETIS toolkit or other similar methodologies.

Key words: tourist destination, sustainable tourism, ETIS, Sibiu County

J.E.L. classification: M31, Q21, Z32

1. Introduction

The COVID-19 pandemic has blocked the world in 2020 and continues to devastate it, and reality shows that this crisis will be longer than expected. The tourism sector has been most affected. However, the pandemic drew our attention to the things that matter, social interaction, and the natural environment.

Despite the devastating impact of the COVID-19 pandemic, this global crisis also offers opportunities for the tourism industry to be better prepared for future crises and more resilient by redefining and reshaping operational practices. It also provides the possibility to redesign tourist destinations to meet the new usual standards, to create sustainable destinations, better to live in, and more attractive to visit.

This paper aims to apply the European Tourism Indicator System (ETIS) to a tourist destination in Romania and to identify the difficulties and challenges of an ETIS operationalization procedure and emerging opportunities. Sibiu County was chosen as a case study, being a complex destination and recognized for the opportunities to develop various forms of tourism. The study provides several conclusions and makes some recommendations in support of the implementation of this management tool.

2. Theoretical background

Tourism destinations are the most important part of the tourism system and they represent the essential unit of tourism research (Buhalis, 2000; Pike 2004; Wang & Pizam, 2011). David Bierman (2003) defines the destination as a country, region, or locality that is marketed or markets itself as a place for tourists to visit.

According to the World Tourism Organization, “a tourism destination is a physical space with or without administrative and/or analytical boundaries in which a visitor can spend an overnight. It is the cluster (co-location) of products and services, and of activities and experiences along the tourism value chain and a basic unit of analysis of tourism.” (UNWTO, 2019:14). In other words, the tourist destination is the focal point of tourism.

Sustainable tourism can be defined as that form of tourism developed and maintained in a destination in a way and extent to which it can remain viable indefinitely without degrading or altering the natural environment.

A sustainable tourist destination is one that addresses the opportunities and impacts that tourism has on a society and its cultural and natural heritage in a way that maximizes the benefits of tourism while reducing any negative impact. It is a destination that applies innovation and seeks solutions to challenges such as seasonality, sustainable mobility, and visitor flow management while increasing the opportunity to improve the experience of both visitors and residents. (NECSTouR, 2019).

A responsible tourism strategy can support job creation, social inclusion, the protection of natural and cultural heritage, biodiversity conservation, sustainable livelihood generation, and improved human well-being. During a time when the sector is facing an extraordinary crisis, collective efforts are needed to ensure its long-term viability.

Globally, more and more tourism organizations are trying to find practical solutions for the sustainable development of tourism.

The European Tourism Indicators System for sustainable destinations (ETIS) is a product of the European Union Sustainable Development Strategy, which was created to promote economic prosperity, social equity, cohesion, and environmental protection. The EC launched ETIS in Brussels on 22 February 2013 in its first form. ETIS has been implemented voluntarily in 2 pilot phases since 2013, by over 100 destinations. Following feedback, the EC revised the system in 2016, providing destinations with a fully tested system and a more realistic set of core indicators (EC, 2016)

The ETIS's main aim is to assist local authorities in measuring and monitoring the sustainability of tourism performance at their destinations, providing a simple and easy-to-use comparison tool. It contains 43 basic indicators, to which more secondary indicators can be added according to the specifics of each tourist destination.

The indicators can be used voluntarily, together, or integrated into existing destination monitoring systems. It is a flexible system.. In accordance with the requirements of the destination, the interested parties in the local community, and the special sustainability challenges facing the destination, the system can be extended or contracted.

To implement the System in a tourist destination, seven steps are required:

1. Increase awareness. Communicate the decision to implement ETIS to as many people as possible, especially local stakeholders.
2. Creating the destination profile. Fill in the form regarding the destination profile, with basic information about geography, tourist facilities, transport links, number of visitors from the destination, etc.
3. Stakeholder working group (SWG) formation. For SVG to succeed, representatives of the private sector and destination management organizations or tourism authorities must play an active role.
4. Establishing roles and responsibilities. Once the SVG is established, there needs to be agreement on the responsibilities of its members and how data collection will take place.
5. Data collection and recording. Data collection should bring together different sources of data in one place to create a detailed profile of the tourism sector of destination.
6. Analysis of results. The GLPI then analyzes the results, sets realistic goals, and decides on a course of action to accomplish them.
7. Formulation of an action plan and strategic management for long-term improvement. After SGV develops an action plan to address immediate priorities, a long-term improvement strategy can be developed.

3. Research methodology

To collect the data needed to measure the core indicators of the "European Tourism Indicators System for sustainable destinations" (ETIS), secondary and direct research were conducted. Direct research was conducted between March and October 2021 and was shown through surveys (questionnaires of locals, visitors, industry, and local authorities) and semi-structured interviews with envoys of the local tourism sector. Interviews were helpful for an expanded view. 1065 people over the age of 18 responded to the survey conducted among the resident population in Sibiu County, thus obtaining a representative sample with an error of 3% and a probability of 95%. Over 945 people over the age of 18 responded to the survey conducted among visitors to Sibiu County. Almost 90% of the respondents were Romanian. The localities of origin of Romanian tourists in Sibiu County who responded to the survey are: Bucharest, Alba Iulia, Cluj, Timisoara, Bacau, Brasov, Deva, Pitesti, Branesti, Constanta, Calan, Urziceni, Caracal, Ploiesti, Alexandria, Timisoara and Targu Jiu. The survey among Sibiu tourism companies took place between April and October 2021. The survey was carried out by e-mail, and the questionnaire was posted on various web pages. Because of the low response rate, telephone calls and questions were conducted at the companies' headquarters. Unfortunately, only 38 companies replied to the questionnaire, which could not be a representative sample. The survey conducted among the public authorities did not receive any answers, being invalidated. The interviews conducted during the study took place between August and September. Representatives of the hospitality industry, NGOs, and cultural service providers participated.

4. Findings

Sibiu County is located in the center of the country, in the southern part of Transylvania. The county seat is Sibiu. According to the National Institute of Statistics, Sibiu County was inhabited on January 1st, 2021, by 400,116 people, of whom 65% lived in urban areas. (INS, 2021).

The tourist heritage of Sibiu County is an intertwining of multiculturalism, picturesque, and tradition. The most important natural resources of Sibiu County are concentrated in the southern area, within the Cindrel, Lotru, and Făgăraș mountain groups. These are joined, among the major natural attractions, by the healing factors of the two spas in the county - Ocna Sibiului and Bazna. The areas of the "Natura 2000" network in the northeast and east of the county (a large part of the surface of the Hârtibaciului and Târnavelor Plateau) are also worth mentioning in terms of natural potential. In terms of anthropic resources, they include the categories: of fortified churches (with a concentration of such attractions in the northern half of the county), folk areas with traditions, gastronomy, and specific crafts, medieval urban architectural ensembles (historic centers of Sibiu, Medias) and to a lesser extent those in Agnita or Dumbrăveni), museums (Astra, Brukenthal, etc.), fortresses, palaces and mansions scattered throughout the county (Brukenthal Summer Palace, Apafi Castle, etc.), as well as several festivals and events (theater, music, folklore, crafts, medieval, sports, etc.). Sibiu County is crossed in the east-west direction by two roads, one road and one railway, of the European Corridor TEN-T Danube Rhine, respectively DN7 and the A1 and Highway 300. A pan-European corridor connects the major urban centers in Sibiu County with Western Europe and Romania. In Sibiu County, the majority of domestic tourists arrive via the national road network. The most important roads that cross the territory of Sibiu County are also two of the most valuable roads in terms of landscape: Transfăgărășan (DN7C) and Transalpina (DN67C). A large part of the international tourists arrive by air, the Sibiu International Airport being their main access route to the county.

According to INS, in 2021, there are over 300 tourist reception units and 10549 accommodations in the county (INS, 2021). The majority of tourist accommodations are located in Sibiu, where 38% of them are located, followed by Căliște (8%), Ocna Sibiului (5%), Rășinari (4.7%), and Cârțișoara (4.4%).

The network of structures with public catering functions (bars, wineries, restaurants) inventoried has over 200 units, almost half located in Sibiu; the concentration areas identified for these structures are identical to those highlighted in the case of accommodation structures (<http://turism.gov.ro/web/autorizare-turism>).

According to the National Institute of Statistics (INS, 2021), there were 5.5 thousand people employed in hotels and restaurants in this county in 2020, representing 2.9% of the total employed population. Entertainment, cultural, and recreational activities employed 2.2 thousand people or 1.2% of the total employed population of Sibiu County.

Sibiu is among Romania's top ten most visited counties.

The average length of stay of tourists in Sibiu County has remained relatively unchanged for the past five years, being about 1.6 to 1.7 days. This indicates the transit and/ or city break character of the destination.

In general, Sibiu County can be considered attractive primarily as a cultural destination, the architectural heritage, and events being the most promoted. However, the valuable natural resources of this destination, which can be the basis for the development of both "classic" and niche forms of tourism, should not be neglected either.

The European Tourism Indicators System (ETIS) specifically concerns the durability of tourist destinations. The current study evaluated 43 basic indicators for analyzing the sustainability of the "Sibiu County" destination. These indicators were divided into four sections that refer to destination management, the economic value of tourism, socio-cultural impact, and environmental impact (see Table no.1)

Table no 1 Sibiu County destination indicators

Section	Criteria	Indicator Reference	Indicator	Sibiu County results
A. Destination management	A.1. Sustainable Tourism Management in Tourism Enterprises	A.1.1	Percentage of tourism enterprises/establishments in the destination using a voluntary certification/labelling for environmental/quality/sustainability and/or Corporate Social Responsibility measures	n/a
	A.2. Customer Satisfaction	A.2.1	Percentage of tourists and same day visitors that are satisfied with their overall experience in the destination	79%
		A.2.2	Percentage of repeat/return visitors (within 5 years)	53%
B. Economic value	B.1. Tourism Flow (volume & value) at the Destination	B.1.1	Number of tourist nights per month	Oct.2020 – 38499 Nov. 2020 – 16829 Dec. 2020 – 24247 Ian. 2021 – 37313 Feb. 2021 – 38361 Mar. 2021 – 27827 Apr. 2021 – 28320 Mai 2021 – 41455 Iun. 2021 – 5345 Iul. 2021 – 107845 Aug. 2021 – 137722 Sept 2021 - 90046
		B.1.2	Number of same day visitors per month	n/a
		B.1.3	Relative contribution of tourism to the destination's economy (% GDP)	n/a
		B.1.4	Daily spending per overnight tourist	On average 585 RON/day
		B.1.5	Daily spending per same day visitor	n/a

	B.2. Tourism Enterprise(s) Performance	B.2.1	Average length of stay of tourists (nights)	1,7	
		B.2.2	Occupancy rate in commercial accommodation establishments per month and average for the year	24,77% on average	
	B.3. Quantity and Quality of Employment	B.3.1	Direct tourism employment as percentage of total employment in the destination	2,88%	
		B.3.2	Percentage of jobs in tourism that are seasonal	n/a	
	B.4. Tourism Supply Chain	B.4.1	Percentage of locally produced food, drink, goods and services sourced by the destinations tourism enterprises	n/a	
	C. Social and Cultural Impact	C.1. Community/Social Impact	C.1.1	Number of tourists per 100 residents	3,65
			C.1.2	Percentage of residents who are satisfied with tourism in the destination (per month/season)	67%
C.1.3			Number of beds available in commercial accommodation establishment per 100 residents	2,63	
C.1.4			Number of second homes per 100 homes	n/a	
C.2. Health and Safety		C.2.1	Percentage of tourists who register a complaint with the police	n/a	
C.3. Gender Equality		C.3.1	Percentage of men and women employed in the tourism sector	55% men; 45% women	
		C.3.2	Percentage of tourism enterprises where the general manager position is held by a woman	n/a	
C.4. Inclusion/Accessibility		C.4.1	Percentage of rooms in commercial accommodation establishments accessible for people with disabilities	n/a	
		C.4.2	Percentage of commercial accommodation establishments participating in recognised accessibility information schemes	n/a	
		C.4.3	Percentage of public transport that is accessible to people with disabilities and with specific access requirements	n/a	
		C.4.4	Percentage of tourist attractions that are accessible to people with disabilities and/or participating in recognised accessibility information schemes	n/a	
C.5. Protecting and Enhancing Cultural Heritage, Local Identity and cultural Assets		C.5.1	Percentage of residents that are satisfied with the impacts of tourism on destination's identity	n/a	
		C.5.2	Percentage of the destination's events that are focused on traditional/local culture and heritage	n/a	

D. Environmental Impact	D.1. Reducing Transport Impact	D.1.1	Percentage of tourists and same day visitors using different modes of transport to arrive at the destination	Car – 79%; Bus -12% Train - 4% Motorcycle - 3% Airplane – 1% Bicycle 1%
		D.1.2	Percentage of tourists and same day visitors using local/soft mobility/public transport services to get around the destination	58%
		D.1.3	Average travel (km) by tourists and same day visitors from home to the destination	525 km.
		D.1.4	Average carbon footprint of tourists and same day visitors travelling from home to the destination	n/a
	D.2. Climate Change	D.2.1	Percentage of tourism enterprises involved in climate change mitigation schemes— such as: CO2 offset, low energy systems, etc.—and “adaptation” responses and actions	n/a
		D.2.2	Percentage of tourism accommodation and attraction infrastructure located in “vulnerable zones”	n/a
	D.3. Solid Waste Management	D.3.1	Waste production per tourist night compared to general population waste production per person (kilos)	n/a
		D.3.2	Percentage of tourism enterprises separating different types of waste	n/a
		D.3.3	Percentage of total waste recycled per tourist compared to total waste recycled per resident per year	n/a
	D.4. Water Management	D.4.1	Percentage of sewage from the destination treated at least at secondary level prior to discharge	n/a
	D.5. Water Management	D.5.1	Water consumption per tourist night compared to general population water consumption per resident night	n/a
		D.5.2	Percentage of tourism enterprises taking actions to reduce water consumption	n/a
		D.5.3	Percentage of tourism enterprises using recycled water	n/a
	D.6. Energy Usage	D.6.1	Energy consumption per tourist night compared to general population energy consumption per resident night	n/a
		D.6.2	Percentage of tourism enterprises that take actions to reduce energy consumption	n/a

		D.6.3	Percentage of annual amount of energy consumed from renewable sources (Mwh) compared to overall energy consumption at destination level per year	n/a
	Landscape and Biodiversity Management	D.7.1	Percentage of local enterprises in the tourism sector actively supporting protection, conservation, and management of local biodiversity and landscapes.	n/a

Source: authors' contribution

The results in the table above show that the application of the European Tourism Indicators System needs to be applied at the level of the destination "Sibiu County" but under the conditions of establishing a local coordinator and creating a relevant SWG. Our simulation encountered a number of difficulties in collecting and measuring several indicators. Some indicators are unreliable due to missing data (generally those related to the environment, which indicates a problem in monitoring the impact of various human and economic activities on the environment). Out of the total of 43 basic indicators, only 16 could be measured accurately, ie 37%.

The results obtained from data collection and measurement of indicators revealed the following aspects:

Tourism businesses should be encouraged and supported to obtain sustainability labels so that they can be included in a recognition system for sustainability. In the current conditions, it is recommended that the entire destination or at least some micro destinations from Sibiu County apply to obtain a safety label (health). Regarding the flow of visitors, given the particular situation caused by the COVID-19 pandemic, a rigorous analysis could not be made, especially on the seasonality. However, there has been a return to tourism with the relaxation of national health security measures by increasing the number of tourists since July. The number of tourists nights and the number of same day visitors should be continuously monitored. In terms of business performance, there is too short a tourist stay coupled with a low occupancy rate. Therefore, it is imperative to make efforts to monitor and find out the causes. In addition, solutions to attract visitors for longer periods of time need to be stepped up and found. There is a positive impact of tourism on the local community, measured by both the locals' satisfaction and the stress caused by tourism. Nevertheless, decision-makers must pay close attention to any change in the level of satisfaction from locals with the tourist activity and take the necessary measures as soon as possible, always consulting the local community. The indicators related to the protection and improvement of the cultural heritage and the local identity obtained equal values: 55%. This fact indicates that the level of satisfaction in Sibiu County with regard to the impact of tourism on local culture is reflected in the level of tourism activity in that county. Due to a lack of data for measuring the related indicators, the impact of tourist activity in Sibiu County on the environment cannot be assessed.

5. Conclusions

The key challenges highlighted by the application of ETIS in the case of Sibiu County regarding the development of sustainable tourism are: participation in certification/environmental labeling/quality/sustainability systems and/or CSR; increasing the attractiveness of the destination; addressing the impact of tourist transport; minimizing resource use and waste production; the protection and efficient use of the natural and cultural heritage; accessible tourism; the use of tourism as a tool in the sustainable development of the county.

The key benefits for Sibiu County in the implementation of the ETIS are: providing relevant information for decision making; streamlining risk management; prioritizing action projects; comparative performance evaluation; improving the relationship with the local community;

improving the cooperation of all stakeholders; improving visitor experiences; reducing costs and increasing profits; increasing the value per visitor, etc.

Overall, the experience of simulating the application of the European Tuism Indicator System in the case of Sibiu County offered us perspectives on several critical issues. First of all, it is difficult to get statistics at the local level. Often, statistical data is not available in the public reports of the County Council or in official statistics or other public documents. This is a significant limitation that reduces the efficiency of the system for management purposes. It is essential that accurate and reliable indicators be used in the System to plan local policies. But direct and secondary research require a significant investment of resources to obtain data over the long term (years). For this reason, sources of funding should be identified. The role of the local coordinator is also crucial. To be effective, it must be able to get together and have an certain effect on interested parties, accessing important data (or being able to access it via someone else), and to have a certain level of management authority.

The selection of relevant indicators must be a flexible process and appropriate to the particularities of each destination. As part of this process, the stakeholders' requirements must be considered, and there must be available information that addresses their needs, as well as a periodicity and availability of such data. There are also times when additional indicators are required when the available ones are insufficient, in concordance with the requirements of the destination. Furthermore, the indicator system should promote the development of a methodology to facilitate the efficient use of indicators. SWG can analyze the results once the destination dataset is complete, identify realistic benchmarks or targets, and determine which of the issues raised by the System is a priority for the destination and their priority order.

Using a simple and widely recognized system of indicators provide a means of comparing experiences in different destinations. Comparability is an essential precondition in support of best practices at local, regional, national, and international levels. By evaluating the system of indicators, best practices can be implemented to support both public and private planning efforts.

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