

Implementing SDGs for Sustainable Tourism Development

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Please cite this paper as:

Crovella, T., Bhuiyan, M.A., Pontrandolfo, A., Lagioia, G. and Paiano, A., 2022. Implementing SDGs for Sustainable Tourism Development. In: R. Pamfilie, V. Dinu, C. Vasiliu, D. Pleşea, L. Tăchiciu eds. 2022. *8th BASIQ International Conference on New Trends in Sustainable Business and Consumption*. Graz, Austria, 25-27 May 2022. Bucharest: ASE, pp.649-655.

DOI: 10.24818/BASIQ/2022/08/086

Abstract

Tourism plays a key role in development and in the economy redistribution, but also generates negative effects. Its impact concerns environmental pollution, increased demand for fossil fuels and energy intensity (Katircioglu, 2014). In the year 2015 there was a strategic turning point for global development and tourism, as governments of many countries have adopted the Sustainable Development Goals (SDGs) in their national development policies. The SDGs correspond to the 17 Sustainable Development Goals of the 2030 Agenda. This research provides some indicators connected with the assessment of the sustainability of the tourism sector in some targets of 8 and 12 SDGs. This study aims to identify effects and opportunities for tourism industry on the economy at global level starting from an analysis in terms implementation of some sustainability tools in tourism industry at country level. Thus, we covered a structured methodological path that consists of an overview of the implementation of the measurement standards, particularly referring Tourism Satellite Accounts (TSA) and System of Environmental-Economic Accounting (SEEA). This assessment, based on international standards, ensures the international comparability of values between countries and time periods. The results show that the tourism industry is receiving particular attention from countries, but there is a need for greater awareness at local level in the communication of the instruments implemented and the levels of sustainability achieved. This framework aims to become a structured instrument for private and public stakeholder who analyze tourism according to the three dimensions of sustainability (economic, social and environmental).

Keywords

Tourism, Sustainability, SDGs, TSA, SEEA.

DOI: 10.24818/BASIQ/2022/08/086

Introduction

The Sustainable Development Goals (SDGs) correspond to an interdependent structure of 17 goals and 169 targets (Figure no. 1) ratified in September 2015 by 193 countries under ONU in the Resolution 70/1 (UN, 2022). The aims of this indicators are to measure the progress globally towards for a long-term sustainable and inclusive development, focusing on inclusivity, shared prosperity and shared responsibility (ONU, 2015).

According to 2030 Agenda, ONU countries “are also determined to promote sustainable tourism, to tackle water scarcity and water pollution, to strengthen cooperation on desertification, dust storms, land degradation and drought and to promote resilience and disaster risk reduction”.

For this reason, Goal 8 “Promote sustained, inclusive and sustainable economic growth, full and productive employment and decent work for all” contains 8.9 target that aims to “devise and implement policies to promote sustainable tourism that creates jobs and promotes local culture and products”.

Instead, Goal 12 with the caption “Ensuring sustainable consumption and production models” and the target 12.b provides the implementation of tools to monitor the impacts recorded by tourism in terms of job creation and promotion of culture and local products (ONU, 2015).

With the income growth in some developing countries, tourism has achieved surprising growth despite the global economic crisis (Wang, 2014), net of the blockade recorded in this pandemic period due to Covid-Sars 19.

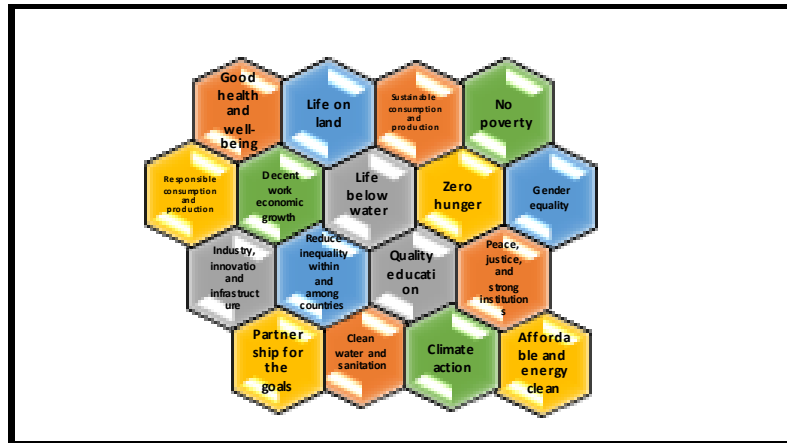


Figure no. 1. Interdependent view of the Sustainable development Goals (SDGs) of Agenda 2030
Source: Authors' elaboration on data United Nation (2017)

Therefore, this paper deals with the framework for measuring sustainable tourism development using some indicators and their potential application in some global destinations.

It aims to provide also an empirical note that focuses the interdependence relationship between tourism and sustainable development, in order to observe the effects of tourism on the policies adopted by countries and included in the SDGs (United Nation, 2017).

1. Review of the scientific literature

Globally, the positive economic effect of the development of the tourism sector has also been confirmed by other recent studies. Other authors, on the other hand, have highlighted the lack of a univocal approach to assess the impact of the development of entrepreneurial innovation in the tourism sector with respect to the macro indicators of the countries, especially in terms of achieving sustainability objectives (Azivov, 2021).

Therefore, a mission of the SDGs is to support the economic, social and sustainable growth of territorially balanced regions such as Romania and other Eastern European countries, for example, in order to reduce the economic and social disparities between the regions of Eastern Europe (Manole and Tache, 2015).

Finally, seven years after the Declaration of the United Nations 2030 Agenda, tourism still does not have sustainable and open-source management criteria that allow them to “walk the talk” to contribute to the SDGs (Rubio-Mozos, Garcia-Muina and Fuentes-Moraleda, 2020).

However, the positive contribution of tourism to sustainable development and mitigation of potential negative effects in the economy can be exploited by activating strong partnerships and decisive action by all actors in the supply chain in line with the 2030 Agenda. It should not be forgotten that the sustainable development of tourism is commonly measurable using sustainable development indicators (Gucik and Marcis, 2018). To analyze the application of the frameworks to measure the role of tourism, in some studies the Delphi method is used, which makes use of a panel of experts. On this basis, the last study analyzed the objectives that focus attention on the creation of decent employment, economic growth (O8) and gender equality (O5).

In the existing literature there are only a few studies (about forty) aimed at estimating the ability of countries and, especially of emerging ones, to implement every tool associated with the sustainable development goals, also demonstrating how they are achieving the levels envisaged in these goals (State et al., 2019).

2. Research methodology

Considering that the UNWTO (2022) elaborated the values of two indicators of the SDGs, we have analyzed the implementation of the indicator 12.b.1 (Figure no. 3) in the world countries, “Implementation of standard accounting tools to monitor the economic and environmental sustainability of tourism”.

Starting from Goal 8 “Promote sustained, inclusive and sustainable economic growth, full and productive employment and decent work for all”, with the Target 8.9 (Figure no. 2), that invites “By 2030, devise and implement policies to promote sustainable tourism that creates jobs and promotes local culture and products”, the Indicator 8.9.1 is based on Tourism direct GDP indicator, measured in proportion of total GDP and in growth rate of a given country.

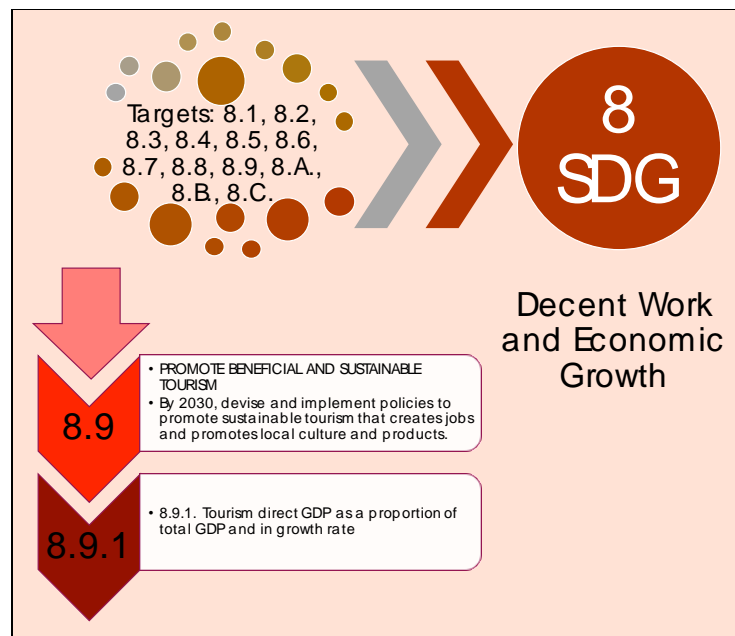


Figure no. 2. Targets and indicators of 8 SDG
Source: Authors' elaboration on data SDGs (2021)

Furthermore, the indicator 12.b.1 (Table no. 3) focused the “Implementation of standard accounting tools to monitor the economic and environmental aspects of tourism sustainability” (UNWTO, 2021) and covers the implementation of standards for measuring the environmental aspects of tourism.

In this context, the UNWTO also collects information on the total number of relevant accounts from the Economic and Environmental Accounting System (SEEA) being compiled for the reporting year.

The SEEA accounts analyzed are water flows, energy flows, greenhouse gas emissions and solid waste accounts. Hence, we made observations for Indicator 12.b.1, concerning the implementation of standard accounting tools to monitor the economic and environmental aspects of tourism by world countries in the period 2016-2019 UNSTATS (2022). The queries system regarded data from the Tourism Satellite Account tables and Economic and Environmental Accounts System tables.

Particularly, scores from 0 to 7 were given to the economic aspect of tourism sustainability, where 0 corresponds to no implementation and 1 to 7 to the kind of Tourism Satellite Accounts (TSA) adopted (UNWTO, 2010). As regards to the environmental issue of the tourism sustainability, scores are in the range 0-4, where 4 indicates that all SEEA accounts considered and above mentioned are filled in for the reporting year (UNSTATS, 2022).

3. Results and discussion

We recognized 613 observations for the Indicator 12.b.1, concerning the period 2016-2019 UNSTATS (2022), focusing the different types of accounting models adopted by 156 different world countries. In the “TSA account” columns we have provided data on the evolution of virtuous countries (Table no. 1), over four years and in terms of the sustainability tools implemented. The aim is to monitor the sustainability issue associated with the tourism sector globally from an economic point of view.

For the Tourism Satellite Account (TSA) we provided an evaluation in terms of kind of TSA considered by a single country in Table 4. However, in 2019, 78% of 156 countries analyzed that haven't communicated the adoption of TSA and 89% of these that haven't considered information for Economic and Environmental Accounts System (SEEA).

The countries that consider this indicator are Australia, Belarus, Bermuda, Botswana, Brunei Darussalam, Canada, Colombia, Costa Rica, Czechia, Denmark, Ecuador, Guam, Hungary, Japan, Jordanian, Lithuania, Kazakhstan, Malaysia, Luxembourg, Philippines, Portugal, Puerto Rico, Qatar, Romania, Slovakia, South Africa, Spain, Thailand, Uganda, United Kingdom and USA.

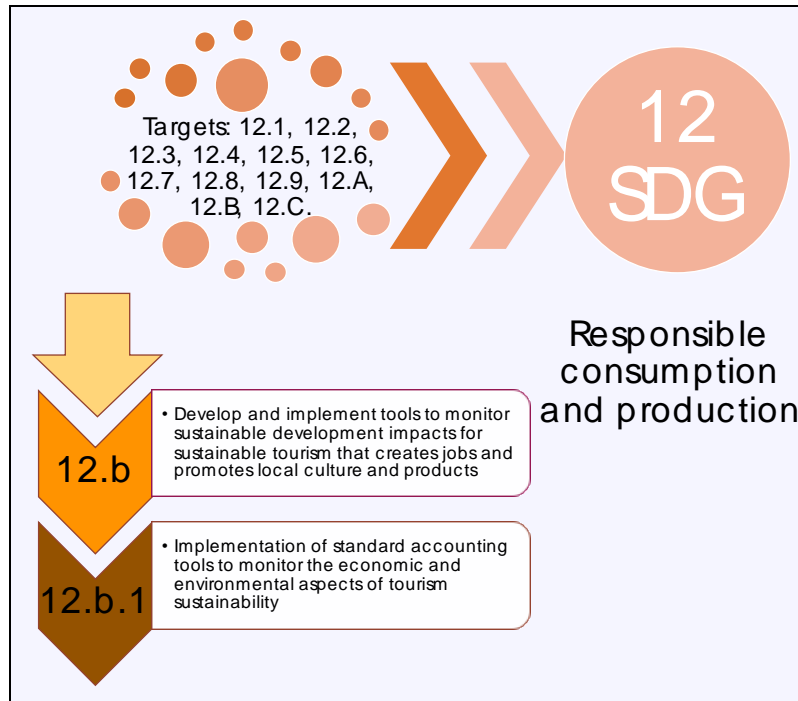


Figure no. 3. Targets and indicators of 12 SDG
Source: Authors' elaboration on data SDGs (2021).

Furthermore, in terms of Economic and Environmental Accounts System (SEEA), we provided an evaluation at the level of water consumption, energy use, GHG emissions and solid waste.

This analysis highlights that there are still few tools implemented to assess the impacts on tourism in terms of water consumption, energy, GHG emissions and solid waste produced. It is pointed out that not all countries with TSA also have SEEA too because awareness of environmental impacts is lower than that of economic accounting.

Generally, in most cases, the countries confirmed the same TSA in the 4 years analyzed (e.g. Australia, Colombia and Salvador). Whilst, over the years, some countries (e.g. Australia, Colombia and Germany) changed the associated information of SEEA, demonstrating a slight evolution in this sense.

Other countries, like Sierra Leone, on the other hand, are careful with sustainability information and have not adopted TSA, or Switzerland which focused only on economic data.

The significance of TSA is revealed by the fact that they are included in the national bank account structure, which provides a consolidated view of the government's cash resources. SEEA, on the contrary, is an indicator that organizes environmental and economic data in an integrated way to produce useful information for defining public policies for sustainability.

However, there is a large negative impact of tourism development on host communities (Sheng and Tsui, 2009; Wise, 2016). The investor advantage in tourism may outweigh the interest of communities and some public works may respond more to the needs of tourists than to local residents (Al Haija, 2011)

Table no. 1. Accounting tools implemented in the different virtuous countries of the world

Geographical area	ACCOUNT TSA				ACCOUNT SEEA			
	2016	2017	2018	2019	2016	2017	2018	2019
Antigua and Barbuda	1	1	1	1	0	0	0	0
Argentina	6	6	6	6	1	1	1	1
Australia	7	7	7	7	4	4	3	3
Austria	6	6	6	0	2	2	1	0
Bahrain	0	7	7	0	0	0	0	0
Belarus	7	0	7	0	1	1	1	1
Belgium	6	0	0	0	2	2	2	0
Bermuda	7	7	7	7	0	0	0	0
Bhutan	0	0	0	3	0	0	0	0
Botswana	7	0	0	0	0	0	0	0
Brazil	3	3	3	3	1	1	0	0
Brunei Darussalam	7	0	0	-	0	0	0	-
Bulgaria	4	4	0	0	2	2	2	0
Canada	7	7	7	7	2	2	0	0
Chile	5	5	5	5	0	0	0	0
China, Hong Kong	5	5	5	2	1	1	1	1
China, Macao	4	4	0	-	0	0	0	-
Colombia	7	7	7	7	4	4	3	0
Costa Rica	7	7	0	0	2	2	0	0
Croatia	6	0	0	0	4	4	4	3
Cyprus	0	0	0	0	2	2	2	0
Czechia	7	7	7	7	2	2	2	0
Denmark	7	7	7	0	4	4	3	1
Ecuador	7	0	0	0	0	0	0	0
El Salvador	5	5	5	5	0	0	0	0
Estonia	0	0	0	0	2	2	2	0
Fiji	0	0	0	0	3	3	3	3
Finland	5	5	5	0	2	2	2	0
France	3	3	3	0	4	3	1	0
Germany	0	0	0	0	3	2	2	0
Greece	0	0	0	0	1	2	0	0
Guam	7	0	0	0	0	0	0	0
Guatemala	0	0	0	0	4	4	4	-
Honduras	6	6	6	-	0	0	0	-
Hungary	7	7	0	0	2	2	2	0
Iceland	5	5	5	3	2	2	2	0
Indonesia	6	6	6	6	2	2	2	0
Ireland	0	0	0	0	2	2	2	0
Israel	5	5	5	0	0	1	0	0
Italy	0	7	0	0	2	2	0	0
Jamaica	4	4	4	0	0	0	0	0
Japan	7	7	7	0	0	0	0	0
Jordan	7	0	0	0	0	0	0	0
Kazakhstan	7	7	7	0	2	2	2	0
Lao People's Democratic Republic	2	2	2	2	0	0	0	0
Latvia	5	5	0	0	2	2	2	2
Lithuania	7	7	7	0	2	2	2	0
Luxembourg	7	0	0	0	3	3	3	0
Malaysia	7	7	7	7	0	0	0	0
Maldives	1	1	1	-	0	0	0	-
Malta	0	0	0	0	2	2	2	0
Martinique	1	1	1	1	0	0	0	0
Mauritius	0	7	0	0	0	0	0	0
Mexico	7	7	7	7	3	3	3	3
Monaco	0	0	0	0	4	4	4	3
Mongolia	0	0	0	0	1	0	0	0
Morocco	6	6	6	6	0	0	0	0
Mozambique	6	6	6	6	0	0	0	0
Myanmar	1	1	1	1	0	0	0	0
Namibia	2	2	0	0	0	0	0	0
Netherlands	5	5	5	5	4	4	4	1
New Zealand	6	6	6	4	1	1	1	0
Norway	6	6	6	0	2	2	2	2
Oman	6	6	6	6	0	0	0	0
Palau	2	2	2	-	2	0	0	-
Philippines	7	7	7	7	1	1	1	1

Virtuous countries

	Geographical area	ACCOUNT TSA				ACCOUNT SEEA			
		2016	2017	2018	2019	2016	2017	2018	2019
Virtuous countries	Poland	0	0	0	0	4	2	3	0
	Portugal	7	7	2	0	2	2	2	0
	Puerto Rico	7	7	7	6	0	0	0	0
	Qatar	7	7	7	0	0	0	0	0
	Romania	7	7	0	0	2	2	1	0
	Russian Federation	0	0	0	0	2	2	1	0
	Samoa	0	0	0	0	2	1	0	0
	Serbia	0	0	0	0	1	1	1	0
	Sierra Leone	3	0	0	0	4	4	4	4
	Slovakia	7	7	0	0	2	2	2	0
	Slovenia	0	7	0	0	2	2	2	0
	South Africa	7	7	7	0	2	1	0	0
	Spain	7	4	4	0	3	3	3	1
	State of Palestine	4	4	4	0	0	0	0	0
	Sweden	5	6	6	6	2	2	2	1
	Switzerland	0	0	0	0	2	2	2	0
	Thailand	7	7	7	7	0	0	0	0
	Togo	0	0	0	0	0	4	0	4
	Turkey	0	0	0	0	2	2	2	0
	Uganda	7	0	0	0	0	0	0	0
	United Kingdom and Northern Ireland	7	7	0	0	2	2	2	0
	United States of America	7	7	7	0	0	0	0	0
	Uruguay	5	5	5	5	0	0	0	0
	Uzbekistan	3	3	3	3	0	0	0	0
	Vietnam	5	5	5	5	0	0	0	0

Notes: *nature of data: Country data; *reporting type: Global and from 0 to 7= Tables of account
Source: Authors' elaboration on data UNSTATS, 2022

Conclusion, future, and practical implication

The results suggest that, in general, the 27 EU member countries show better values for the sustainability indicators associated with employment and the wage gap. This study urges for improved tourism research to provide greater support for sustainability policies and businesses. Through this interdisciplinary approach, a replicable analytical methodology was provided to judge different objectives and criteria for making decisions in sustainable tourism development and achieving the sustainability levels contained in the SDGs.

This study also provides an alternative way to address the problems of (non) sustainability useful for formulating future tourism policies, better management of tourist destinations for tourism stability and sustainable development. Per capita GDP highlights economic growth, and it is also the main trigger for tourism. It is also necessary to raise awareness of the sustainability of tourism businesses and public administrations with the aim of reviving stable and decent employment, reducing the current wage and gender gap.

The role of well-developed countries is significant because these territories attract tourists and generate significant profits from tourism development. However, these countries also generate a high volume of CO₂ emissions, ecological risks, pollution that affect local communities and tourism development.

This critical information sheds light on future growth in tourism relative to the national greenhouse gas inventory and establishes the required mitigation trajectory for destinations to move onto a sustainable emissions pathway.

Furthermore, if political measures are not put in place to also reduce the incidence of conflicts, economic growth in these countries could suffer setbacks and affect the achievement of the SDGs.

In conclusion, through this study, we invite governments and public decision makers to pursue possible technological installations to further increase the use of renewable energy and the use of green services in their tourism sector. Finally, the study supports reflective community participation, according to a bottom-up approach, along with national and local institutional changes in order to achieve a significant impact on the performance of community-based partnerships.

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