

Tourism Sustainability Index to a Roadmap of Sustainable Tourism in São Miguel, Azores

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Abstract

Nowadays tourism has been growing exponentially all over the world and the Azores Archipelago is no exception to this phenomenon, especially the island of São Miguel. With this rapid and strong growth of tourism, everyone can unmistakably see that the increase of touristic pressure on the current tourism resources contributes to their degradation and overload, making the management of mechanisms a necessity in the insurance of both the quality of the touristic experience and the longevity of the resources. Consequently, the present dissertation will take a major focus on a proposal for a general tourism sustainability index, since there is a gap in the literature review it was not available in an insular context. Firstly, a Benchmarking of several EarthCheck-certified tourist destinations was carried out, so that the actions present in each action plan could be taken to understand how they stood out from one another. Next, the general sustainability index was carried out through the M-MACBETH, which included a set of indicators. Using this index, the evolution of the Azores from 2016 to 2020 and how it ranks in relation to other tourist destinations were analyzed.

Based on the evaluation of the Azores through the sustainability index, it was observed that there was an improvement of the same from the year 2016 to the year 2019 and that the Azores stands out in relation to other tourist destinations. With this, a set of guidelines was proposed to be implemented in the Azores in order to further improve the performance of the sustainability index.

Keywords: Sustainability, Tourism sustainability, Multicriteria Analysis

1. Introduction

In Portugal, tourism has been increasing in a vast manner over the last nine years, and the Azores has also been affected by this phenomenon, even more the island of São Miguel. The liberalization of airspace in the Azores in 2015 made the allowance for new airlines to enter the Portuguese territory, and the possibility of new routes being taken, thus improving the growth of tourism in the archipelago (Pinto, 2021).

The increase in touristic flow in recent years represents not only an increase in economic flow in the Azores but also a constant concern in the adoption of standards and measures that enhance and preserve tourist environments. By managing tourist intensification, massification can be preserved.

The Azores have a huge variety of natural, historical, and cultural resources that make them a privileged territory, which is why they have invested in initiatives focused on the

protection and prevention of the environmental, social and economic resources. Following this, in 2019, São Miguel became the first archipelago in the world to be certified as sustainable touristic destination through a process accompanied by EarthCheck, an entity accredited by the GSTC (Global Sustainable Tourism Council). São Miguel is the main island of the Azores, possessing the largest number and diversity of tourism resources and infrastructures, greater accommodation capacity, and therefore this island can more easily meet any demand (Regional Directorate of Tourism, 2019).

The degradation and increased significant pressure on the natural and touristic resources due to the increase in touristic flows is one of the biggest challenges of sustainable tourism, leading to negative impacts that, if not minimized and mitigated, could be very damaging for the future of tourism of the biggest island in the Azores. With this, management mechanisms are a necessity to guarantee the quality of the tourism experience, the longevity of the resources, and the reduction of negative impacts. These mechanisms include not only the environmental component, but also the social and economic part, which are fundamental for a sustainable long-term tourism development. Therefore, this paper aims to contribute to the optimal management of the continuous growth of tourism in the Azores, in particular São Miguel island, through the creation of instruments that make it possible to monitor and create a review of the set of measures and actions that would potentially contribute to the practice of more sustainable activities in this highly touristic destination.

2. State of the Art

The tourism sector is the branch of the economy with the highest growth rate, bringing, therefore, innumerable economic and social benefits (Kostić et al., 2018). However, this large growth has created a negative environmental impact from the overexploitation of natural resources, leading to their degradation and lapidation, excessive consumption of water and electricity, and the destruction of natural habitats (Pan et al., 2018).

In order to achieve sustainable tourism, it is necessary to plan and develop it, that is, it is necessary to have the means to achieve the desired end.

Through the literature studied it was possible to reach some conclusions on this subject. Firstly, sustainable tourism development is that which meets the needs of tourists and tourist destinations in the present, while protecting and increasing opportunities for the future. It is a guiding principle for managing all resources in a way that meets economic, social, and aesthetically pleasing needs without undermining the maintenance of cultural integrity, essential ecological processes, biodiversity, and life-supporting systems (UNWTO, 1998 in Kostić et al., 2018).

The concept of sustainable tourism development involves an economic, social, environmental, and cultural balance without deteriorating and depleting the resources on which it is based (Angelevska-Najdeska & Rakicevik, 2012). Therefore, to achieve the sustainable development of tourism it is necessary to limit, reduce or balance the concentration of tourists through the diversification of tourist products and the development of annual tourism (Kostić et al., 2018).

The evaluation of the progress of sustainable tourism development cannot be foreseen without the use of appropriate indicators (Miller, 2001 in Kostić et al., 2018). Sustainable tourism indicators are composed of measurable and monitorable variables that help detect changes in the state of a specific phenomenon. They represent tools for gathering up-to-date information that can be filtered, facilitating the identification of trends and threats, and allowing the necessary measures be taken (Angelevska-Najdeska & Rakicevik, 2012). Through the literature reviewed it is possible to note that most of the articles studied only discuss the dimensions that should be addressed in the development of sustainable tourism, however, they do not mention specific indicators in the assessment of sustainable tourism, being, therefore, more theoretical articles and not so practical. Only three articles and one thesis used specific management tools to calculate the impact of tourism, in the others only sustainability indicators were used or were tackled by a theoretical aspect where no model or indicator was applied to assess the sustainability of destination tourism.

Shu-Yuan Pan (2018) focused on establishing a comprehensive performance evaluation (CPE) program, more specifically the Statistical Framework for Measuring Sustainable Tourism (MST), developed by the UNWTO, supported by the United Nations Statistics Division, that is important in balancing economic growth and environmental protection, and are an essential component for achieving sustainable tourism.

The tourism Carrying Capacity Index (TCCI) was addressed by Akrivi Leka (2021) using the Pressure-State-Response (PSR) framework as a base that focuses primarily on environmental and manmade decisions. The carrying capacity

was also used by Inês Carvalho (2022) in her thesis "Calculating Tourism Cargo Capacity in Mainland Portugal: Optimization Model for Identifying Sustainable Futures".

Maria Mancini (2022), in her article "Ecological Footprint and Tourism: Developing and monitoring the sustainability of ecotourism packages in Mediterranean Protected Areas" presented the analysis of a customized version of Ecological Footprint accounting in order to evaluate its usefulness as an analytical tool that quantitatively analyzes the environmental pressures associated with ecotourism packages developed in Protected Areas of the Mediterranean Region.

The Sustainable Tourism Development Index (TSDI) was then found. This is an index that combines earth observation data with statistical data in order to assess the sustainability of a geographical region and its correlation with the development of tourism activities, thus helping to improve the region's strategy and drive sustainable decision-making for the future of tourism (Murmuration Sas, 2021).

With this, it was concluded that a general tourism sustainability index composed of a set of indicators in an island context had not been carried out. As such, this paper will be based on the construction of a general management tool applicable to any touristic destination. For that, Multicriteria Decision Support Methodology (MMAD) will be used, with the MACBETH method (Measuring Attractiveness by a Category-Based Evaluation Technique) through the M-MACBETH decision support system.

3. Methodology

The methodology proposed in this paper is composed of three steps: (1) Benchmarking, (2)

Multicriteria Analysis, and (3) Guidelines Proposal.

Benchmarking is understood as a process of searching for the best operational and management practices and their adaptation leads to improved performance (Saleem et al., 2021). In the context of this paper, benchmarking will be applied to five sustainable destinations, five including the Azores, to extract the best practices used by them. The Benchmarking process consists of five steps: (1) Choice of the material under study; (2) Choice of the indicators under analysis; (3) Collection of data; (4) Analysis and comparison of information; (5) Survey of high and low points; (Benetti, n.d.). In the first step, taking into account that for the realization of the Benchmarking would be necessary the action plan of each destination, a search was made of which destinations certified by EarthCheck made available the sustainability action plan. In this way, only five action plans were found, together with the Azores, and so these were the destinations chosen for the Benchmarking. In steps 2 and 3, a summary of all actions was made for each key performance area of each destination, and then a comparison between them in step 4.

Finally, in step 5, the high and low points of each destination were gathered.

Multicriteria Decision Support Methodology (MMAD) will be performed, using the MACBETH method with the M-MACBETH decision support system. The MACBETH approach is a process comprising three main phases: i) Structuring, ii) Evaluation and iii) Testing (Bana e Costa et al., 2008), as shown in figure 1. Before the start of these phases, a group of experts, in this case in the area of tourism sustainability on the island of São

Miguel should be chosen as Decision Makers (DM).

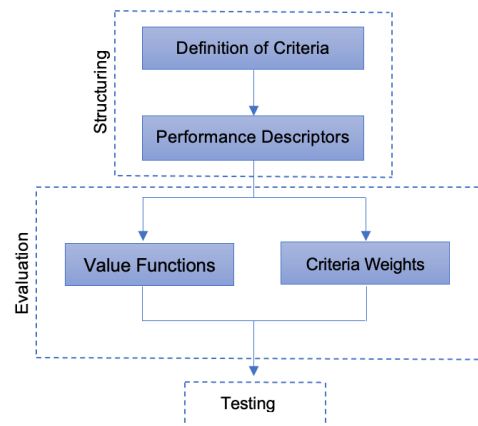


Figure 1: Stages of Multicriteria Analysis

The Structuring phase consists of two stages, the first is the definition of the assessment criteria, identification of the DM's views, and selection rejection criteria, to determine the non-acceptable alternatives, and the definition of criteria to assess the attractiveness of the alternatives (Bana e Costa et al., 2008). In this case, the evaluation criteria are the sustainability indicators identified in the Benchmarking Assessment Report, an annual report made by EarthCheck to manage the evolution of the touristic destination in some sustainability indicators. With the definition of objectives and criteria, the value tree is conducted. The second step focuses on the association of a performance descriptor to each of the assessment criteria. The performance descriptor of a criterion is a scale of admissible performance levels ordered by decreasing order of activity, allowing the measurement of the degree of satisfaction that each alternative provides in a given criterion (Beinat & Costa, 2005). In each descriptor, it is necessary to define reference levels of intrinsic value.

The definition of the value functions and the determination of the weighting coefficients is carried out in the evaluation phase. Using the M-MACBETH software, the value function for

each of the criteria is elaborated. These are made based on the judgments expressed by the Decision Maker regarding the attractiveness differences between every two levels of performance in each one of the criteria. Decision Maker qualitatively evaluates, through the semantic MACBETH scale (Very Weak, Weak, Moderate, Strong, Very Strong, and Extreme), the attractiveness between two performance levels at a time. Next, the judgment matrix is filled in so that the triangular upper portion of the matrix is complete. After checking the consistency of the judgments in question, M-MACBETH suggests a numeric scale compatible with the absolute judgments of the DM and assigns a score or value to each performance level.

To determine the weights of the criteria, it is necessary to ask the DM to order the swing of moving from the base level to the target level in each criterion, according to its attractiveness. Following, there needs to be qualitative judgment by the DM of the attractiveness of these swings by filling in the last column of the judgment matrix, and the difference in attractiveness between each pair of swings. After verifying the consistency of the judgments under study, the software proposes a weight for each criterion.

In the Testing phase, sensitivity analyses are carried out on the results obtained by the model which will result in a recommendation on the decision to be taken.

The last step is the creation of a set of guidelines, taking into account the information gathered in the Benchmarking and the results of the multicriteria analysis carried out in the previous stage. Firstly, in the multicriteria analysis, it was observed which tourism sustainability indicators are critical (negative

evolution) and the ones that have not been improving their performance over the years in the Azores, being these the ones that need improvement. Finally, the existing actions in the Azores for each of the Key Performance Areas in which these indicators are included were observed and compared to the actions of the other destinations so that relevant actions and projects could be added. When the actions of the destinations in the first step were not sufficient, the collection of actions from other tourist destinations was carried out.

4. Results

Through the Benchmarking elaborated in Figure 2 was possible to observe which are the actions of each of the destinations and also to compare them with each other taking into consideration each Key Performance Area.

Indicator	Target	Current	Best Practice	Other Destinations	Actions	Weight	Score	Rank	Comments
...
...
...
...
...

Figure 2: Benchmarking Summary

Taking into account the actions addressed by the Azores, it was observed that it is well positioned among the other destinations, with similar measures and often innovative actions. The multi-criteria analysis was carried out on two levels. First, an analysis of the evolution of tourism sustainability from 2016 to 2020 was carried out for the Azores and then the position of the Azores about other touristic destinations was evaluated.

To carry out these two evaluations, the group of decision-makers was first defined and met once. The group is made up of three specialists in tourism sustainability, Carolina Maçanita,

Coordinator of the Tourism Destination Sustainability Structure, Azores DMO, Rui Pereira former Adjunct to the Office of the Regional Secretary for Energy, Environment and Tourism, and finally, Rui Apresentação former Adjunct to the Office of the Regional Secretary for Energy, Environment and Tourism and now the current SATA (*Serviço Açoriano de Transportes Aéreos*) representative at the Observatório do Turismo dos Açores (OTA).

The criteria chosen were taken from the Benchmarking evaluation report that is carried out annually by EarthCheck, taking into account a set of indicators presented in it. Thirty indicators are present in this report, however, for the Multicriteria assessment only twenty were chosen, these being the criteria that the group of decision-makers considered most relevant for this assessment (Earthcheck, 2015b).

The indicator measurements in the EarthCheck report are assessed by directly evaluating destination performance against a measure that reflects the key activity of the destination, taking into account the type of impact. These activity measures are "Person Years (PY)" and "Total Destination Area (ha)". A Person-Year is equivalent to 365 full person-days, incorporating the resident population and guests. Guests can be characterised as "Guest Nights" or "Day Guests", the latter being a guest who arrives and departs on the same day. A "Guest Night" is counted as one person-day and a "Guest Day" as one-third person-day (Earthcheck, 2015a). Given that the indicators in the Benchmarking Assessment Report were calculated this way, the input of the indicator values into M-MACBETH will also be in this unit. The indicators chosen for this multicriteria analysis are: Energy Consumption (GJ/Person

Year); Greenhouse Gas Emissions (t CO₂-e / Person Year); Indirect Emissions (t CO₂-e / Person Year); Potable Water Consumption (kL/ PersonYear); Waste Send to Landfill (m³ / PersonYear); Recycled / Reused / Composted Waste (%); Waste Sent for incineration (L/ Person Year); Nitrous Oxides Produced (kg/PersonYear/Hectare); Sulphur Dioxide Produced (kg/PersonYear/Hectare); Particulate Matter Produced (kg/PersonYear/Hectare); Water Samples Passed (%); Habitat Conservation Area (%); Green Space (%); Homicide Rate (%); Theft Rate (TR) (%); Assault Rate (%); Significant Site Maintenance Fund (%); Unemployment Rate (%); Sustainability Policy; Accredited Operations (%).

After defining the indicators, Figure 3 shows the value tree, organized with criteria nodes in red and non-criteria nodes in blue.

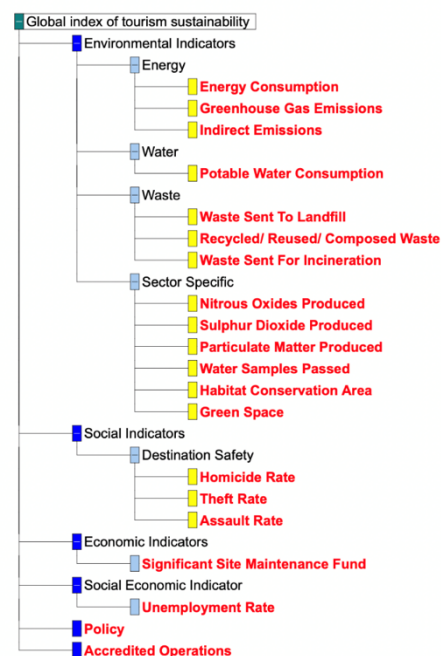


Figure 3: Value Tree

Once all the criteria has been defined, it is necessary to quantify all the options for all criteria in the years of 2016 to 2020. Each year

will be assessed as an alternative so that sustainability evolution can be evaluated.

There are five options corresponding to the years 2016, 2017, 2018, 2019 and 2020. Each option is filled with the respective values for each criterion in the table of performances. After filling in the table of performances, the options for each criterion were peer-assessed by the group of decision makers using the M-MACBETH qualitative semantic scale. Finally, the last step is the attribution of weights to the criteria. For this, it is first necessary to rank the criteria in descending order of attractiveness in relation to the importance that the criteria have when preserving the destination with the evolution of the touristic flow for the group of decision-makers. Lastly, the judgment matrix is also filled in using the M-MACBETH qualitative semantic scale comparing each pair of criteria. The software scores each criterion based on the filling of the matrix and calculates the scale of weights. Through Figure 4 it is possible to extract the order of preference of the options in relation to the overall value, which in this case is the overall sustainability index.

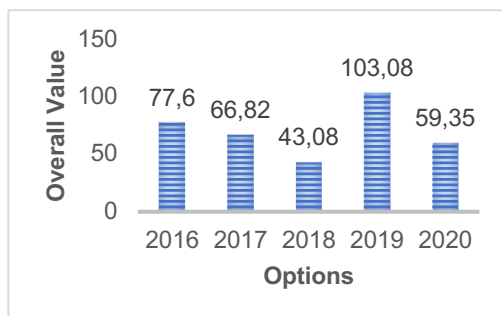


Figure 4: Overall Values of each option

Figure 4 represents the evolution of the sustainability index of the Azores Autonomous Region. Note that the year 2019, even being the year of the highest tourist inflow, is also the year with the highest sustainability index, since it obtained a higher overall performance of the sustainability indices studied. This order is

logical and can be explained through the following paragraph: 2016 was the first year in which an increase in the number of tourists started to be noticed, therefore being a year in which, in the beginning, there was no great negative impact and therefore it has a better overall sustainability index, placing it in position two. The years 2017, and 2018 were critical years because they were the years in which the measurements for sustainable tourism were still being designed by the government of the Azores. As there were no procedures implemented yet. The implementation of the procedures only took place in 2019, the general sustainability index decreased with the growth of tourism in those years. In 2019 improvements have already been observed.

The year 2020 is in the penultimate position, as it was a very atypical year because of the pandemic, in which no tourist activity was in its normalcy, the number of tourists dropped abruptly, and the fixed population spent most of their time at home. With all this, this year cannot be compared to any of the others because it did not suffer a normal evolution. After everything said above, it is possible to say that the overall tourism sustainability index has been improving over the years, as soon as measures are implemented and put into practice, improvements in the overall sustainability index are being noticed.

In the second part of this analysis, it was evaluated how the Azores positioned itself in relation to other destinations in the year of 2019. This was the year chosen because it was the most recent year, with exception of 2020. To this end, the Benchmarking destinations that provided the Benchmarking Assessment Report, Baião and Nuuk, were chosen because it is from there that the values of the indicators

to be inserted into M-MACBETH are taken, as it was done in the first part. The destination Snaefellsnes, Iceland, was also added, even though it was one of the destinations where the action plan was unknown. However, the Benchmarking Assessment Report was found and so it was one of the destinations used in the comparison of the Azores with the other destinations to make the analysis richer.

After filling in the performance table, the options for each criterion were evaluated terms of quality in the same way as in the previous analysis, as well as assigning weights to the criteria. The judgment matrix also remained the same taking into account the indicators presented. Following this, it is possible to extract the order of preference of the options in relation to the global sustainability index calculated through M-MACBETH, i.e. it is possible to observe that the Azores ranks first with 108.65 points, Baião second with 36.01, Snaefellsnes third with 7.29 and, finally, Nuuk with -85.38 points.

With this analysis, it can be concluded that the Azores, in terms of tourism sustainability, is the destination with the best performance, and therefore other destinations should look to their practices as an example to follow. Nevertheless, there are actions practiced by other destinations that the Azores does not contemplate, and, therefore, it would be interesting to include some of these actions in the Azorean action plan to be able to further improve the archipelago's performance.

Finally, in order to create a set of suggestions regarding tourism sustainability actions for the island of São Miguel, the percentage of overnight stays on the island was calculated in relation to the rest of the Autonomous region of the Azores (RAA) so as to understand to what

extent can São Miguel Island contribute to the value of the indicators presented before. Taking into account the percentage of almost 70% of overnight stays on the island, it can be assumed that São Miguel has a large weight in the value of the indicators. For this reason, if a set of measures are applied to the island of São Miguel with the purpose of an improvement in the general index of tourism sustainability there will be, not only an improvement on the island of São Miguel but also in the rest of the autonomous region of the Azores. In table 1 all the indicators studied previously are represented, the indicators in green are those in which the evolution from 2016 to 2019 was declared as positive, the indicators in yellow were stable and those in red underwent a negative evolution, i.e. a worsening of the value of the indicators. Taking into account this assessment, the yellow and red indicators are those that need improvement.

Table 1: Categorization of indicators by evolution

Indicators with good progress	Indicators with no progress	Negative evolution of indicators
Unemployment rate; Homicide rate; Indirect Emissions; Recycled/Reused/Composed Waste; Accredited Operations; Potable Water Consumption; Waste Sent to Landfill; Maintenance Fund; Water Samples Passed; Policy	Habitat Conservation Area; Green Space; Theft Rate	Sulphur Dioxide Produced; Nitrous Oxide Produced; Particulate Matter Produced; Greenhouse Gas Produced; Energy Consumption; Assault Rate; Waste Sent for Incineration

In order to understand what actions and measures can be applied in order to improve the above mentioned indicators, the document "Sustainability Action Plan 2019-2030" for the autonomous region of the Azores was used. After observing the existing actions, it is concluded that the actions present in the action plan start from 2019 and, in that way, it is normal that their effect is not felt in the results of the multi-criteria analysis which in turn are until 2020, this being an atypical year due to COVID-19. For this reason, it is advisable to continue the practice and implementation of the previously existing actions. Furthermore, it is

important that other actions from the benchmarking carried out previously and other actions considered relevant to improve the indicators are added in order to improve the sustainability of tourism on the island of São Miguel. Table 2 demonstrates the actions that should be added to the Azores Action Plan, taking into account the indicators that did not undergo a positive evolution.

Table 2: Action to be added to the action plan of the Azores

Actions to be added	Source	How the indicators are affected	Indicators affected
Changing public lighting to LED	Baiko and Matjevo	LED lamps are more efficient: consume less energy and therefore reduce the Energy Consumption Indicator	
Implement energy efficiency measures specifically for hotels and restaurants	Baiko	It was noted that there was a lack of actions directly related to energy efficiency in hotels and restaurants and therefore, implementing this action will improve their energy efficiency, reducing energy consumption	
Model Energy Solutions (MES) Project: Project initiated by the World Tourism Organization (UNWTO), which provides information, technical support and training to small and medium-sized enterprises in the tourism and accommodation sector. One tool provided to businesses under this project is the e-booklet which provides an assessment of the current energy situation and recommends suitable renewable energy and energy efficiency technologies. This supports businesses and tourist destinations adapt to changing climate conditions, the elimination of greenhouse gas emissions and use of renewable energy resources and technologies.	(UNWTO, n.d)	The aim is to increase energy efficiency and the use of renewable energies by reducing energy consumption and the production of greenhouse gases, nitrous oxide, sulphur dioxide and Particulate Matter.	Energy Consumption; Greenhouse Gases; Nitrous Oxide; Sulphur dioxide; Particulate Matter Produced.
Water and energy consumption management and monitoring software	Matjevo	Monitor energy consumption in order to reduce energy consumption.	
Electricification of the rent-a-car, taxi fleet and Collective tour vans		Reducing energy consumption and the production of greenhouse gases, nitrous oxide, sulphur dioxide and particulate matter.	
Calculation of the carbon footprint of each member and the possibility of compensation.	Matjevo	Encourage the reduction of the carbon footprint of each passenger, in order to decrease the emission of greenhouse gases.	
Carbon Neutral Programme: Programme that aims to neutralise greenhouse gas emissions emitted by the local tourist community through the acquisition of green credits or carbon credits in international markets, specifically purchased from sustainable construction and reforestation projects for forests and jungles in Mexico supported by the United Nations	Hualto	Neutralise greenhouse gas emissions	Greenhouse Gases.
Improving the island's public transport network by creating tourist routes, increasing the number of buses and better managing the bus fleet		Contribute to the increased use of public transport in order to reduce greenhouse gas emissions.	
Bio-waste selective collection system	Matjevo	Reduce the volume of waste sent for incineration, promote recycling which will consequently reduce the production of greenhouse gases, nitrous oxides, sulphur dioxide and particulate matter	Waste Sent for incineration; Nitrous Oxide; Sulphur dioxide; Particulate Matter Produced.
3 Bin system	Ritved Island		
Improve education and income opportunities	Naak		
Measures to reinforce security in the areas of greatest concern			
Education on security issues for the various stakeholders involved		Promote education and training of the locals in order to reduce crime (assault rate and theft rate)	Assault Rate; Theft Rate
Improvement of the communication between tourism authorities and the community			
Sustainable visitor capacity assessment	Ritved Island		
Creation of a plan to monitor capacity of tourism resources in real time		Prevent and delay the degradation of tourism resources which will contribute to the increase of the Habitat Conservation Area and percentage of green space	Habitat Conservation Area; Green Space
Limiting the visiting capacity of tourism resources			

With the implementation of these new actions, the previously mentioned indicators that needed improvement are effectively enhanced, thus improving the overall tourism sustainability index of the region.

5. Conclusion

Tourism in Portugal has been increasing intensely over the last nine years, and the Azores has also been associated with this growth. In this dissertation, the evolution of tourism in Portugal and in the Azores was studied. Since 2019, the Azores' sensitivity for tourism sustainability has been very crucial and taken into account since the time that the Azores were certified as a sustainable touristic destination by EarthCheck. For this certification to continue to exist, the monitoring measures,

the action plans, the evaluation of the progression of sustainability among many more tools are deeply necessary. With this, an extensive literature review was conducted, and through it, it was examined that sustainable tourism management tools exist and are deeply needed, but not in the context of a general tourism sustainability index in an insular context. With this, the objective of this dissertation was achieved. A support decision analysis was carried out using M-MACBETH, and a general tourism sustainability index was developed. The development of the general sustainability index is an enhanced value both for the Azores and for other tourist destinations since it is an easy and quick tool to use. The creation of this index also assists in the monitoring of the indicators to be improved, in order to add actions specifically related to it. For future research, specific indicators are vital when it comes to tourism, in which the Benchmarking Assessment Report does not account for. These indicators are essential for there to be an addition to the overall sustainability index in order to allow a more complete and realistic analysis of the reality lived on each destination. The transparency of information given by the different destinations is crucial and essential so that there can be a broader and more complex comparison between destinations. It is equally focal that studies about the sustainability of tourist destinations cover not only environmental but also social and economic indicators. For this indicator to be taken forward by the Azores, it is suggested the occurrence and realization of a study and analysis held by the Azores Tourism Observatory, in order to continue the work carried out in this thesis.

To conclude, sustainability is an extensive process and therefore requires strong monitoring, planning, and evaluation using various indicators, both more general and more specific when it comes to tourism.

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