BEST PRACTICES IN TOURIST DESTINATIONS’ SUSTAINABLE DEVELOPMENT ASSESSMENT: A LITERATURE REVIEW

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ABSTRACT

This research aims at determining the best practices for tourist destinations sustainability assessment, through literature review and a comparative analysis of previous research selected by relevance and completeness. The methodology applied allowed to identify as best practices the need to undertake an integrated approach to the evaluation, determine the focus areas of improvement, the comparison of individual indicators results with sustainability goals, as well as the determination of the destination overall sustainability state and trends. There were also identified and discussed future research areas in this topic, as well as implications for policy makers and tourist destinations managers.

KEYWORDS: TOURISM. SUSTAINABILITY ASSESSMENT. TOURIST DESTINATIONS. SUSTAINABLE TOURISM DEVELOPMENT.
INTRODUCTION

The complexity of the achievement of sustainability in tourist destinations requires applying management methodologies and tools that constitute a support for policy-making. These should incorporate all the elements that influence sustainability, including their interrelations in order to be a helpful and effective for destination managers.

The aforementioned has led to diverse research on sustainability in tourism and many contributions have been made in terms of approaches, methods and tools to address and evaluate independent variables and dimensions of sustainability. Among the approaches can be mentioned those that undertake an ecological economics (Hughes, 1995; Hunter, 1997; Rueda Palenzuela, 1999; Roe et al, 2014), sociological (Puhakka et al, 2014), cultural (Robinson, 1999), governance, risk management, as well as systemic and synergistic approach based on complexity theory (Clayton and Radcliff, 1996; Parker, 1999; Selin, 1999; Schianetz et al, 2007; Velasco, 2009; Halog and Manik, 2011; Minato and Morinoto, 2011; Drege and Jamal, 2013). These approaches differ in the focus of analysis, but all have conveyed in the need for an integrated approach to tourism sustainability assessment.

In recent studies, one of the most common ways for assessing and measuring sustainability is the use of different lists, models and systems of indicators (Johnston and Tyrrell, 2005; Klein-Vielhauer, 2008; Fonseca, 2009; UNESCO, 2009). Other methods used for evaluating tourism sustainability are environmental impacts assessment, life cycle models assessment, environmental audit, ecological footprint, as well as adaptive environmental assessment (Schianetz et al, 2007).

It can be seen from the diversity of approaches, methods and tools developed for the evaluation of sustainability, that this has become a key element in monitoring
tourism destinations sustainability. Then, it would be helpful for policymakers to have a methodological framework that includes the best practices from the literature on the topic to make better informed decisions.

Therefore, the research question of this study is:

What criteria should be taken into account to assess tourist destinations development sustainability?

From this question the following hypotheses are proposed:

- Hypothesis 1: Stakeholders should be involved in the tourist destination sustainability assessment process to avoid negative tourism development impacts.
- Hypothesis 2: Sustainability assessment of tourist destinations should undertake an integrated approach rather than an individual (economic, environmental, social, institutional) factors approach.

Given the aforementioned, this research purpose is to identify through literature review best practices related to tourist destination sustainability assessment.

THE RESEARCH ON SUSTAINABLE TOURISM DEVELOPMENT

THE CONCEPT OF SUSTAINABLE TOURISM DEVELOPMENT

Despite more than 25 years of academic research and discussion on sustainability in tourism, there is still a number of issues on which there is no agreement. The basic principles of STD have their origin in the Earth Summit of Rio de Janeiro in 1992, celebrated by the United Nations World Commission on Environment and Development. In it was approved a course of action under the name Agenda 21 where the main environmental problems of the planet at that time were identified and a series of strategies to meet development models that preserve the natural resources were set. Sometime after, the tourist sector incorporates these principles to its main directives, as
it is reflected in the Lanzarote Charter for Sustainable Tourism that was issued as a result of the World Conference on Sustainable Tourism in Lanzarote 1995 (Jafari, 1996). At this early stage started the discussion on what should sustainable tourism mean.

**SUSTAINABLE TOURISM AND SUSTAINABLE TOURISM DEVELOPMENT**

In Figure 1 can be seen a summary of some of the concepts of sustainable tourism and STD. It can be noticed throughout the literature on the topic that the terms sustainable tourism and STD are sometimes used interchangeably, but Nelson et al (1993), Hunter (1997) and Sharpley (2000) argue that these are two different concepts since what is sustainable today might not be so in the future.

The analysis of the evolution of these concepts as reflected in figure 1, allows to appreciate that they have moved from viable activity to development model. For example, Butler’s (1993) concept only takes into account the viability of the activity. This can be understood as a tourism development that avoids degradation of the tourism attractive of the area where it happens while being still profitable for investors.
Figure 1. Sustainable tourism and STD Definitions

“Tourism which is in a form which can maintain its viability in an area for an infinite period of time” (Butler 1993)

“Sustainable tourism development meets the needs of the present tourists and host regions while protecting and enhancing the opportunity for the future. It is envisaged as leading to management of all resources in such a way that economic, social and aesthetic needs can be fulfilled, while maintaining cultural integrity essential ecological processes, biological diversity and life support systems” (WTO 1996).

“Sustainable tourism development is a process of qualitative change derived from political will that, with the essential involvement of local population, adapts the institutional and legal frameworks as well as the planning and management tools to a tourism development based on the equilibrium between the preservation of the natural and cultural patrimony, the economic viability of tourism and the social equity of development.” (Vera et al 2001)

“Sustainable tourism is about managing tourism’s impacts on the environment, communities, and the future economy to make sure that the effects are positive rather than negative for the benefit of future generations. It is a management approach that is relevant to all types of tourism, regardless of whether it takes place in cities, towns, countryside or the coast.” (English Tourism Council 2002)

“Sustainable tourism is conceived as a development model with emphasis in the economy that, at the same time, is based in local culture, natural resources and cultural patrimony, being responsibility of the host community and the tourist in first place, as well as of the entrepreneurs and public administration, in a way that all together work to formulate strategic plans under an approach of sustainable tourism development, prioritizing the creation of ethical or behavioural codes for every stakeholder involved” (Cardoso 2007)

Source: Author based in similar by White et al (2006a).

UNWTO (1996) includes as key elements of that viability the satisfaction of tourists needs and the role hosts communities play in that regard. The environmental, socio-cultural and economic impacts of tourism in a host community, as outlined in the previous section, are deeply interlinked and can produce beneficial synergies or inverse
relationships between these three areas of impact. Also, it can be the cause of divergent opinions among the groups of individuals in the community about what is beneficial or prejudicial in relation to tourism (García Rosell and Mäkinen, 2013). As reflected in the studies by Cohen (1982) and other authors (Rosenbaum and Wong, 2007; Marzuki, 2009; Deery et al, 2012; Zadel and Bogdan, 2013; Sharphey, 2014) the way in which local culture is incorporated to the tourists’ experience or the way the tourist activity affects in general the life of the community can constitute a reason for friction, and even provoke the rejection of tourism.

In the concept developed by the UNWTO (1996), sustainable tourism began to be conceived as an approach to resources management that guarantees the satisfaction of current and future generation’s needs, keeping the environment’s integrity which accords with the English Tourism Council (2002). At the same time, when the sustainability condition is added to tourism development, this can be understood as a process of qualitative change as stated by Vera et al (2001). In this process, political will plays a fundamental role in order to achieve the sustainability objectives that must be attained despite the particular interests of any stakeholder. A judicial and political framework should become a regulator in this regard.

Since the beginning of the 2000 decade, sustainable tourism is seen as a development model in which stakeholders are better identified as host community, tourism entrepreneurs and other related organisation owners, and public administration. At the same time, natural, historic, cultural and patrimonial resources are preserved while guaranteeing the satisfaction of the needs of the different stakeholders. This way, sustainable tourism as a model, implies an ethical change in all stakeholders (Castro, 2005; Cardoso, 2007; Jamal and Camargo, 2014).

Figure 1 can also be helpful to realize that these two concepts have points in common that have provoked the discussion about their differences. Despite their evolution, from viable activity to development model, all the authors in figure 1 appear to concur in the interpretation of STD as a process that guarantees the equilibrium between environmental preservation or improvement, respect for the socio-cultural authenticity of host communities of the destination where the activity takes place and
economic viability as well as the satisfaction of the needs of tourists and the improvement of the quality of life of host communities as a result of sharing the benefits from tourism development, preserving at the same time the possibilities of future generations to obtain similar gain.

It can be said that the main difference between sustainable tourism and STD lies in sustainable tourism being an achievable state in a moment in time while STD includes the capacity of the tourist destination to adapt to the evolving needs of its stakeholders and conditions of its environment.

**IMPLICATIONS OF THE SUSTAINABLE TOURISM DEVELOPMENT CONCEPT**

The concept of STD has implications for the integral management and organisation of tourism given the need to act according to the principles of STD. These principles derived from the concept of STD include the interaction of the economic, socio-cultural and environmental dimensions of development, all supported in the satisfaction of stakeholders needs. This has also implications for policies and management related to other activities, which is a topic that has been little researched in the study of tourism sustainability (Moscardo and Murphy, 2014). These related activities might not be touristic but impact the development of tourism as for example supplier industries such as agriculture (Pillay and Rogerson, 2013). This implies the need for a participative approach to STD.

The literature identifies three main dimensions of sustainability (economic, social and environmental) although several authors have included other ones as cultural (Márquez y Cuétara, 2007; Crespo, 2011), political-institutional (Márquez y Cuétara, 2007; Yasarata et al, 2009), spatial (van den Berg and Verbruggen, 1998) and technological (Fortuny et al, 2008; Crespo, 2011). Over the years the social dimension has been united with the cultural one and now is treated as socio-cultural. Despite the variety in dimensions proposed, all can be summarized in the three main ones.

The inclusion of the political–institutional dimension is an indicative of the relevance of the political will required in order to enforce the guidelines and strategies
that could lead to sustainability in tourism. There is evidence in international and national organisations’ policies that governments understand the need for a sustainability approach in tourism as reflected in the policies of the Association of Caribbean States (AEC by its name in Spanish) (2006), Organisation for Economic Co-operation and Development (OECD) (2011), European Commission (2014) and the international survey conducted by GlobeScan and SustainAbility in 2014 on this topic. Nevertheless, there can be noticed a lack of feedback evidence of policies and plans implemented in regards to sustainability which has been reflected in the works of several authors (Lai et al, 2006; Hall, 2013; Penny Wan, 2013; GlobeScan and SustainAbility, 2014). Some of the reasons for this are related to three problems that are essential to solve in order to achieve sustainability:

1. Difficulty to set the guidelines to achieve the equilibrium between the divergent interests of the different stakeholders (private and public organisations, nongovernmental organisations, tour operators, airlines, media, policymakers, trade unions, associations, host communities in general, tourists) that change and evolve over time;

2. The problem of determining the sacrifice, also known as willingness to pay (Donilcar and Juvan, 2014; Saenz-de-Miera and Rosselló, 2014; Whitelaw et al, 2014), that present generations will be willing to do in order to guarantee the wellbeing of future ones; and

3. The intrinsic unsustainability of nowadays tourism development models based in consumption patterns incompatibles with the principles of sustainability.

There is evidence in the literature of the difficulty to get to agreements in a participative process. For example, the construction of a new airport can be beneficial for the destination in general but it will cause noise and the decrease of the value of properties in the area. In this case neighbours associations and trade unions in the case of particular enterprises affected have to be taken into account for the decision making process. There is also the issue of the cost of a consultation process. For example in the study conducted by Brent Ritchie (1999), it was carried out a consensus building process for policy making in the Banff-Bow Valley in Canada. This showed that it was
required a 2.4 million of American dollars to carry out the study and consult with all stakeholders. This funding is not always available and other solutions or methodologies have to be adopted to guarantee the active participation of all parts.

The second element mentioned appears because, even when is true that there is no economic development or sustainability without profitability, is also true that sustainable development diminishes profitability in the short-run (Muñoz, 2005). This has been addressed as the willingness to pay problem in sustainability studies and is strongly related to the first problem to solve. As an example, the studies of Gössling (2000), Kasim et al (2013) and Hjalager and Johansen (2013) describe that even though surveys consistently show that tourists claim they would be prepared to pay a premium for ‘responsible’ or environmentally-sound tourism experiences, research demonstrates that, for a majority of tourists (in the UK at least), price is the most important factor when purchasing a holiday (Sharpley, 2012, cited in Sharpley 2014). This is also related to the third problem that is supported by a growing demand for cheaper flights (O’Connell, 2014) when aviation is responsible for almost 3% of GHG emissions to the atmosphere (Prats, 2008; Aguiar, 2009; ITIC 2013). In these circumstances the political will and its influence in the other factors will play a determining role as a strategy for the achievement of the objectives that lead to sustainable development (Troitiño, 1998; Swarbrooke, 2005; Márquez y Cuétara, 2007; Fonseca, 2009). At the same time it can be noticed a gap between academic research and management practices in this regard. Some authors have concluded that this is because of two main reasons: according to practitioners the instruments developed by academics in order to measure and assess sustainability in destinations are difficult to use and understand (Swarbrooke, 2005); and at the same time there is the belief among academics that practitioners do not agree in the information required to sustainably manage a tourist destination.

It can be said that the STD concept sets out the problem of how destination’s managers can meet tourism sustainable development principles while dealing with its implications. These implications are the need to find a proper balance among sustainability dimensions, to find consensus among stakeholders’ diverging interests, to cut consultation costs and to deal with the intrinsic unsustainability of consumption
patterns in tourism demand. These implications were the starting point of the identification of several issues related to STD assessment and how it has been conducted to cope with STD implications.

THE ASSESSMENT OF THE SUSTAINABILITY OF TOURIST DESTINATIONS DEVELOPMENT

TOOLS, METHODS, AND MODELS FOR ASSESSING THE SUSTAINABILITY OF TOURIST DESTINATIONS

The studies focused on the assessment of tourism development sustainability have been determined by the creation of tools, methods and models of analysis. These, in order to provide an accurate and comprehensive analysis of the destination for policymakers and practitioners should integrate the elements identified in the literature in relation to this topic explored in the last section. These elements can be summarized as the following:

- Integrated approach;
- Equilibrium determination or analysis;
- Set and analyse the complex relations among indicators;
- Analyse results against sustainability goals;
- Determine overall sustainability;
- Determine what should be the focus of the improvement;
- Provide a trend analysis to evaluate destination adaptability to changing conditions.

These will be analysed against the different tools, methods and models for sustainability assessment to identify their advantages and disadvantages as reflected in Figure 2.
Figure 2. Analysis of tools, methods and models for tourism development sustainability assessment in relation with the estate of the art of STD

<table>
<thead>
<tr>
<th>Tools/METHODS</th>
<th>Integrated</th>
<th>Equilibrium</th>
<th>Set complex</th>
<th>Compare results</th>
<th>Determine focus of improvement</th>
<th>Determine overall sustainability</th>
<th>Trend analysis</th>
</tr>
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<td>No</td>
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<td>No</td>
</tr>
<tr>
<td>Composite Indicators</td>
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<td>No</td>
<td>Causal</td>
<td>No</td>
<td>Yes</td>
<td>No</td>
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</tr>
<tr>
<td>DPSIR</td>
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<td>No</td>
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<td>Environmental Audit</td>
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<td>Yes</td>
<td>No</td>
<td>No</td>
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<tr>
<td>Ecological Footprint Analysis</td>
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<td>Yes</td>
<td>Yes</td>
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<td>No</td>
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<tr>
<td>Multicriteria Adaptive Environmental Assessment</td>
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<td>No</td>
<td>No</td>
<td>Yes</td>
<td>No</td>
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<tr>
<td>System of Environmental and Economic Accounts</td>
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<tr>
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<td>No</td>
<td>Yes</td>
<td>Yes</td>
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<td>No</td>
</tr>
<tr>
<td>Dashboard of sustainability</td>
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<td>No</td>
<td>Yes</td>
<td>Yes</td>
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<td>No</td>
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<tr>
<td>Barometer of Sustainability</td>
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<td>No</td>
<td>Yes</td>
<td>Yes</td>
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</table>

Source: Author.

**INDICATORS AS TOOLS FOR SUSTAINABILITY ASSESSMENT**

An indicator can be the simplest way of reducing a large amount of data while maintaining the essential information. According to Robert (2010) indicators must allow a concise, understandable and scientifically valid reading of the phenomenon being studied. The identification and assessment of indicators can be used to show the specific cause / effect relationships and the relationship among different dimensions of sustainability. In addition, indicators can also reveal the impacts resulting from tourism activities. These complexities have affected the determination of objective and subjective indicators for the evaluation or measurement of sustainable development. Veenhoven (2001) stated that the combination of objective and subjective indicators can
mitigate the weaknesses of each type, providing a better and more accurate information for the decision making process.

Although the UNWTO states that indicators chosen in each destination should be few, there are infinite lists of indicators that have emerged to evaluate this phenomenon (Paesler, 2007, cited in Klein-Vielhauer, 2008; UNWTO, 2005; White et al, 2006b). The final selection of indicators affects its main objective, which is to support decision making, so the selection criteria should be based on the specifications of the variables given the characteristics of the area to which they will be applied in addition to the interests of stakeholders (Klein-Vielhauer, 2008). Instead of the formal integration of different groups of indicators, actors must cooperate in the preparation of the measurement criteria that may impact on others.

The sole analysis of indicators systems can provide a description of the state of the destination given the parameters of evaluation determined, but do not allow more complex analysis. Another trend in tourism sustainability assessment is the determination of indicator systems from which sustainability indexes or composite indicators (Márquez and Cuétara, 2007; Pulido and Sánchez, 2009) are obtained.

**METHODS OF INDICATORS ANALYSIS**

For the creation of indexes, after identifying and measuring qualitative and quantitatively each proposed indicator for the given tourist destination, it’s elaborated a hierarchical structure for sustainable development assessment, with an approach based in a multi-criteria linear additive model (White et al, 2006a). These elements are considered relevant because they relate weighting or importance of key areas and indicators associated with each of the dimensions proposed for the study. The creation of indexes allows to have an idea about how sustainable is the tourist destination, in general and by dimensions.

Also, and closely associated with the development of indexes is the construction of composite indicators (Blancas et al, 2010; Pérez et al, 2009). Composite indicators are characterized by simplifying their understanding, reducing the initial number of
indicators with the least loss of information. Also can be used to make comparisons between different areas and allow evaluation of their behaviour over time. The construction of composite indicators is carried out by selection and alternative techniques, such as Principal Component Analysis (PCA) and the Synthetic Indicator of Distance aggregation.

As mentioned above, the selection of indicators to be used for analysis, creating indexes or composite indicators is determined by the particularities of each destination and how data is collected therein (Ko, 2005; UNWTO, 2005). For country destinations sometimes indicators are not measured the same way in all regions, as in the case of beach resorts and city destinations, or do not have homogeneity between indicators measured at regional and national level. Another element to consider is the determination of the parameters of the evaluation, which must be thoroughly analysed by the stakeholders, which must reach a consensus according to their interests. This brings as a problem that comparisons cannot be made between destinations in which sustainability has been evaluated in different ways but composite indicators are a solution for this problem. Nevertheless these methods only provide an overall analysis of whether a destination is sustainable or not. Beyond the definition of tools to analyse sustainability, appears the specific problem of the models to be used in order to explain relationships that happen among indicators. A deeper analysis is then needed for which several models have been developed based in the use of indicators.

MODELS OF SUSTAINABILITY ASSESSMENT

White et al (2006a) refer that the term ‘framework’ can be confusing. It is used to describe both a process that leads to select indicators and a model for the conceptualisation of the approach to sustainability that underpins criteria. The development of conceptual models of analysis allows the coherent and consistent selection of sustainability indicators (White et al, 2006a; Olalla – Tárraga, 2006). Also models constitute a way to systematize and structure the identification and selection of
elements and issues relevant to be monitored because of the interrelationships within the components and principles related to the concept of sustainability.

Schianetz et al (2007) considered seven assessment methods designed to implement, improve and monitor specific concepts of sustainable development in tourism destinations: Indicators of Sustainability, Environmental Impact Assessment, Life Cycle Assessment (LCA), Environmental Audit, Ecological Footprint Analysis and Multicriteria Adaptive Environmental Assessment. These authors conclude that the indicators are the most used in the past and likely to remain so in the future, but preferably in combination with other tools. As can be seen most of these models have an ecological or environmental approach to sustainability which is not congruent with the current integrated approach to sustainability assessment. In the particular case of LCA, it provides a trend analysis of the destination behaviour but needs to be used with another model in order to provide a more comprehensive analysis on what determines sustainability or not (Filimonau et al, 2014).

In the case of models as processes for selecting indicators there is the analytical-theoretical model system-environment in which the interdependence between the environment and the tourism system is articulated, while indicating the transfer of information between the system and the environment (Rueda, 1999). This model has the disadvantage of not stating whether the destination is sustainable or not, or what should be done from an integrated perspective for the achievement of sustainability.

Another of the models developed for the assessment of sustainability is the System of Environmental and Economic Accounts (SEEA) created by Bartelmus (1997, cited in White et al 2006a). In this, the connections between the supply and exploitation of environmental and economic assets allow to set the conceptual link between indicators. This provokes the appearance of problems related to the commensurability of indicators and discussion about whether to use qualitative or quantitative measurements. Also as a disadvantage is the partial instead of integrated approach to sustainability assessment.

Other models that can be included in this category are specific and simple impact studies that reflect the impact of tourism in the economy, society, culture or
environment. The advantage of these models is that issues related to tourism can be studied in depth. The main disadvantage is related to the impossibility to evaluate the contribution of each indicator to general sustainability taking into consideration the non-lineal relations between indicators.

Among the most common frameworks of analysis is the Pressure State Response (PSR), developed by Friend and Rapport (1979). This framework, introduced in all OECD countries, is based on the concept of causality which states:

(...) human activities exert pressures on the environment and change quality and the amount of natural resources. Society responds to these changes through environmental, economic and sectoral policies. The latter creates a loop of pressure from human activities. In general, these steps are part of a cycle of environmental policy that includes the perception of the problem, policy, and monitoring and evaluating them. (OECD 1994 cited in Rueda 1999, p. 12).

The model, according to Rueda (1999), considers the need to develop three types of indicators to address each of the issues, or socially relevant policy areas. The same author states that the utility of this model is its adaptability to the steps of a framework of any decisions and is common to the thinking of decision-makers and the scientific community. The simplicity of the linear relationships between indicators hides more complex relationships that happen within ecosystems and relationships that exist between these and other systems, such as social or economic. Ceron and Dubois (2003) criticize this model arguing that is based on a simplistic view of causal links.

The model PSR was extended by the European Environment Agency (EEA) to show the interconnections between driving forces (identified as economic and social factors or trends), pressure, state, impact and responses (DPSIR). Social and economic trends draw attention to elements that are not closely related to the environment, but need to be measured in order to understand the evolution of the activity in question and elements related to sustainable development. This model allows differentiating the direct effects of the pressures of the impacts on communities to make the distinction between state and impact.
There are also graphical models such as AMOeba (Ten Brink, 2000) and the "Barometer of Sustainability" (Prescott–Allen, 2001) which represents the Human Wellbeing Index and Ecosystem Wellbeing Index (OECD, 2002; Olalla–Tárraga, 2006). Another model of this type is the "Dashboard of Sustainability", which is based on a visual approach to identify patterns in indicators (Mayer, 2008). Colour indicators are presented according to the state of the system, where the predominance of elements in the red zone indicates that the system requires immediate attention.

It can be learned from this section that no current methodology of sustainability assessment in tourism integrates all the elements described in the literature related to the concept of STD. Therefore, it is important to determine the best practices in STD assessment in order to produce instruments that can be really helpful for policymakers. The methodology to employ in order to achieve this objective will be described in the next section.

**RESEARCH METHODOLOGICAL PROCEDURE**

THE METHODOLOGY FOLLOWED TO ACHIEVE THE OBJECTIVE WAS CONDUCTED IN 3 PHASES AND IS BASED ON SECONDARY INFORMATION

**LITERATURE REVIEW**

The analysis and synthesis of literature contributed to gather secondary information for a chronological analysis of the trends (main issues, approaches, methods) as well as evolving and recurrent problems of the topic. This helped determining the most important general theoretical elements to take into account when assessing STD. Nevertheless, no methodology complies with all the elements identified in the literature; it is needed to identify in methodologies that comply with several of these guidelines the best practices attainable given the current state of research. This can constitute a baseline for the development of future methodologies.
COMPARATIVE ANALYSIS

The second phase was a comparative analysis between international experiences in the assessment of STD. The comparison and contrast analysis of case studies was used to identify, understand and adopt best practices within the methodological process in studies that measure STD in destinations. The selected studies for the comparison had to comply with 3 requirements. The first one was its pertinence, i.e. that it determined a level of sustainability of the studied destination. The second criterion was relevance. This was done taking as a measure if the results of the study had been published in international scientific journals. Finally, the third requirement consisted of completeness, meaning that the articles reflected as completely as possible the methodological process followed for arriving to the needed conclusions. Only those that had taken a comprehensive or integrated approach to sustainability dimensions for the evaluation were chosen, which is consistent with the definition of STD adopted for this research.

Having determined these requirements, the first step was the identification of the studies about the evaluation of sustainability of tourist destinations published in scientific journals in the period 2005 – 2014. This period was chosen because permits to realize an up to date analysis and is also when most current methodologies developed according to the literature review. It was obtained a listing of international publications on the subject that allowed determining the articles that complied with the requirements in order to be able to select a representative sample for the comparative analysis. The search was only done in this two languages considering that the main scientific journals about tourism have editions in English, while in second place are published in Spanish (Perelló, 2012). To obtain the list, a search of scientific articles containing all keywords assessment, sustainable development and tourism destination was conducted, identifying the ones that complied with the above requirements.

Finally 12 cases were selected for the comparative analysis, which constituted the totality of the ones assessing sustainability of international tourist destinations during the period 2005 to 2014 and were in compliance with the established requirements.
Within the chosen scientific research papers there was no distinction from type of destination (coastal, rural and city). Inclusion of different types of destination allowed to determine if there were differences in the methodological process undertaken so that could yield particular results in this regard.

The points to be compared within the methodological process were:

1. Evaluation process;
2. Evaluation approach;
3. Method of identifying indicators to assess;
4. Methods for data collection and selection;
5. Methods and techniques of assessment and data analysis;
6. Form of determining the level of sustainability;
7. Participants in the evaluation; and
8. Results.

These elements were adapted from previous studies of Bell and Morse (1999) and Ko (2005) on this topic. In 2005 it was published a study by Ko, who built a conceptual framework for sustainability assessment in tourism. This framework became a consultation document for the development of tourism development sustainability assessment methodologies cited and used by many authors over the years (Viljoen, 2007; Castellani and Sala, 2010; Cernat and Gourdon, 2012; Perez and Nel-lo, 2013; Moscardo and Murphy, 2014). This is an indicative that the methodological approach of Ko for determining the tourism destination sustainability assessment guidelines proved to be effective. In a third phase a frequency analysis by element allowed determining points of consensus and disagreement among the methodologies.

BEST PRACTICES IDENTIFICATION

In the literature there is no agreement on what to consider a best practice and these are regularly determined by subjective and case specific analysis. For this research best practices are considered as elements within the methodological process of case
studies that were in concordance with the concept of STD and the literature on this theme.

RESEARCH RESULTS AND DISCUSSION

COMPARATIVE ANALYSIS OF PREVIOUS RESEARCH

The results of the comparative analysis are described below following the order of the elements compared as related in the previous section.

METHODOLOGY FOLLOWED FOR THE EVALUATION PROCESS

70% of the compared articles agree on 5 key steps for evaluating the sustainability of destinations:

1. Determining the tourist destination’s sustainability objectives
2. Identifying the dimensions and indicators for evaluation.
3. Determining the sustainability rating scale.
4. Data collection and analysis of indicators.
5. Defining the levels of sustainability of the destination.
Figure 3: Main steps for sustainability assessment

This basic process involves the research team carrying out the assessment, which in most cases consists of academic or specialized consultants. In addition, they also invite the destination stakeholders’ representatives that include the host community, NGOs, owners of state and private institutions, the press and other tourism managers. These actors set the sustainability objectives based on general stakeholder’s needs. The rest of the steps will be analysed in more depth in the following subsections. It was analysed whether there were differences in the process of assessing the sustainability of different types of tourist destinations; however it was found that the actual differences lay in the indicators analysed, not in the steps for the study.
DIMENSIONS OR EVALUATED ELEMENTS

As can be seen in Figure 4, 100% of cases agree on the need to address the economic and environmental dimensions, while 91,7% of cases evaluates the social dimension. However the results are inconclusive as to other dimensions studied by some researchers such as destination quality (Ko, 2005), political-institutional (Márquez and Cuétara, 2007; Mascarenhas, 2010; Coelho 2010), cultural (Ko, 2005; Márquez and Cuétara, 2007), tourism infrastructure and attractions (Cernat and Gourdon, 2007). This is due to research teams usually including these dimensions in the 3 mentioned first.

Figure 4: Dimensions evaluated to analyse the sustainability of tourist destinations in scientific articles.

METHODS OF DEFINING INDICATORS TO ASSESS

Three main methods for defining the indicators to assess were identified as can be seen in Figure 5.
Figure 5: Methods of defining indicators to assess

- Stakeholders Consultation 25%
- Literature review 58.3%
- Both 16.7%

Method for identifying the indicators for the assessment

Source: Author.

1. Literature review (58.3% of cases): Use of all indicators related in the literature on the subject, especially the list issued by the UNWTO (2007). These are adapted and used depending on adjustment to the conditions of the destination and at the discretion of the investigators. Indicators to be measured are chosen based on previous studies according to its explanatory power, relevance, its clarity when being interpreted and their ability to establish future comparisons.

2. Definition of indicators according to the tourist destinations’ stakeholders criteria (25% of cases): To achieve this goal workshops are held by the research groups with stakeholders (12 to 30 people from local government, development agencies, NGOs, business owners and associations, professional associations, trade unions, universities, the press, etc.). Indicators that meet the objectives of the local administration, master plans and impact analysis reports are chosen. The selected indicators are those that allow assessing the conditions affecting, at the discretion of the parties, the balance that must be the basis of sustainability.

3. Both methods together (16.7% of cases): First, is made a literature review to identify the indicators that have been measured in previous experiences and then stakeholders define, based on those predetermined indicators, which best
describe the dimensions of the system, taking into account the hierarchy of problems to which they respond.

The indicator system finally used and their number will depend on their importance to the destinations’ management and planning, the availability of data, their explanatory power and significance to measure the sustainability of the tourism destination development, their clarity for being interpreted, predictive ability and if they offered the ability to draw comparisons between destinations, comparability over time and across regions.

SOURCES OF DATA COLLECTION

As can be seen in figure 6, the main data sources in 75% of cases are local or regional publications on social, economic, environmental and tourism indicators, while the remaining 25% demand other information obtained from interviews, stakeholders consultation, as well as direct observation.

Figure 6: Sources of data collection to assess the sustainability of tourist destinations in scientific articles

Source: Author.
METHODS AND TECHNIQUES OF ASSESSMENT AND DATA ANALYSIS

There is no consensus as to the methods and techniques of data analysis, though there seems to be a trend since last decade to seek methods that take into account the complex relationships that exist between indicators.

The methods used are non-causal, benchmarking tools for sustainable tourism chain, causality methods as the Pressure - State - Response, analysis of indicators through the development of indexes related to the three dimensions of sustainability using Principal Component Analysis (PCA) and Analytic Hierarchy Process (AHP). Other methods or techniques that have been applied are the Data Envelopment Analysis (DEA), the analysis of Complex Adaptive Systems (CAS) and the development of sustainable development indexes.

METHODS OF DETERMINING THE LEVEL OF SUSTAINABILITY

There are 4 main ways in which the levels of sustainability were determined as can be seen in Figure 7.

Figure 7: Methods of determining the level of sustainability in scientific articles

<table>
<thead>
<tr>
<th>Form of determining the level of sustainability</th>
</tr>
</thead>
<tbody>
<tr>
<td>According to predetermined ranges</td>
</tr>
<tr>
<td>According to set objectives</td>
</tr>
<tr>
<td>Indicators and Indexes performance according to a referential sustainability level</td>
</tr>
<tr>
<td>Comparative posicion according to results of other destinations (ranking)</td>
</tr>
</tbody>
</table>

Source: Author.
1. The determination of a position within a list of destinations that have been similarly evaluated (33.3% of cases). This gives an idea of what destination is more sustainable than another but within the destination does not give a real idea of what is needed to reach the desired level of sustainability.

2. The determination of a level of sustainability based on predefined ranges according to the levels achieved by the sustainability indexes calculated (33.3% of cases).

3. Determining the conditions under which the destination is compared to the achievement of the proposed objectives of sustainability (16.7% of cases).

4. The identification of the position of the destination with respect to a reference level of sustainability predetermined by the research group (16.7% of cases).

As objectives are set in the first phase, in the 91.7% of the cases there are determined the scales for indicators’ evaluation or degrees of sustainability. This could be done by scaling indicators’ values and making sustainability assessment maps like the Biogram of Sustainability (Márquez and Cuétara, 2007) or the AMOEBA (Ko, 2005) and evaluating the behaviour of the destination towards sustainability or not, through trend analysis (Yu et al, 2010). It has also been used the PCA to identify synthetic indexes joint with a distance analysis which allows a better interpretation of the results in relation to a reference situation, the indicator data standardization and then the analysis of results according to the above-determined scale.

**PARTICIPANTS IN THE EVALUATION PROCESS**

The evaluation process usually involves the research group integrated mostly of academics in a 100% of cases. This usually undertakes the assessment with the participation of stakeholders (50% of cases) and tourists in the least of cases (Figure 8). Nevertheless in 41.7% of cases the research group did the evaluation independently (Figure 8).
Figure 8. Participants in the process of assessing sustainability

![Participants in the assessment process](image)

Source: Author.

**MAIN RESULTS**

The sustainability assessment is performed in order to obtain relevant information about the destination development and management. The results achieved by the studies analysed are divergent but can be summarized as:

- Determination of the current state of the destination with regard to regional objectives.

- Determination of the sustainability level of the destination in question.

- Indicators’ system representing the problem in question and concrete proposals on what changes must be made to really alter for better or worse the system, in order to contribute to the decision-making process necessary to achieve sustainability.

- The state of the destination is determined in terms of the sustainability of each dimension, plus an index that allows comparison between locations once the methodology is widespread.
These results, their implications for policymakers and the way they inform literature will be discussed in the next section.

BEST PRACTICES IN TOURIST DESTINATIONS SUSTAINABILITY ASSESSMENT

The findings outlined in the previous section compared with the elements identified in the literature review, allow to determine the best practices in STD assessment. Also, this analysis is helpful to identify the key areas of development in this topic and some elements to inform the literature. Table 1 integrates these elements in order for the reader to better comprehend the analysis made.

Table 1. Comparison among theoretical requisites for STD assessment and consensus areas in successful empirical experiences in STD assessment

<table>
<thead>
<tr>
<th>Theoretical requisites for STD assessment</th>
<th>Elements to inform the literature on STD Assessment methodologies</th>
<th>Consensus areas in successful empirical experiences in STD assessment</th>
</tr>
</thead>
<tbody>
<tr>
<td>Integrated approach</td>
<td>Identify sustainability indicators based on literature review and sustainability objectives</td>
<td>Identify sustainability indicators based on literature review and sustainability objectives</td>
</tr>
<tr>
<td>Determine the focus of improvement</td>
<td>Main data sources should be public data and official statistics reports</td>
<td>Main data sources should be public data and official statistics reports</td>
</tr>
<tr>
<td>Compare results with sustainability goals</td>
<td>Scale indicators values to identify levels of sustainability by indicators</td>
<td>Scale indicators values to identify levels of sustainability by indicators</td>
</tr>
<tr>
<td>Determine overall sustainability</td>
<td>Research should be undertaken by a research group (academics) and a representation of the destination’s stakeholders</td>
<td>Research should be undertaken by a research group (academics) and a representation of the destination’s stakeholders</td>
</tr>
<tr>
<td>Trend analysis</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Set complex relations among indicators</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Equilibrium determination</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Source: Author.
infrastructure is an interesting advance to the creation of more native evaluation models.

To perform analysis by indicators allows to determine the main focus of improvement in the destination and the comparison with the individual indicators’ goal values sets an idea of the magnitude of the change to achieve the desired target. This is key for policymakers to better determine plans and implementation strategies for STD.

Overall tourism sustainability value gives the possibility to present a fast general idea of the condition of the tourist destination but this, according to the lessons from the compared studies, means nothing unless there is a scale or goal value to achieve. This is one of the best ways to present results to general public. This should be done by generating an index and supported by composite indicators of the evaluated sustainability dimensions. Trend analysis of the sustainability index behaviour is what should give an idea of whether the development of the tourist destination is sustainable or not.

The elements that were not addressed in the compared articles can be set as areas of development of future research on STD assessment. Even though complex analysis systems and General Equilibrium Models can be useful in setting the complex relations among indicators and describing an equilibrium point, their application in STD assessment has been limited, to be conservative. On the other hand the elements that were identified in the comparative analysis, should inform the literature in this topic.

To identify indicators based on literature review and sustainability objectives allows to produce an adjusted indicators system according to the tourism destination characteristics. Literature can be a useful guideline to identify destination type specific indicators.

The use of public and official statistics solves one key problem: the monetary and time cost of interviews and/or surveys. It also carries the problem of the homogeneity and availability of data within a destination, so it should be carefully determined what indicators and how to measure them to avoid these problems.

The role different stakeholders’ play in the sustainability assessment is an interesting finding. It has been determined that STD assessment should be carried out
by academics in close relation to tourism destination stakeholders. There is a movement to incorporate their participation in determining indicator’s ideal values as a way to better assess indicators’ sustainability levels.

It can be said that not much has changed since the studies of Ko (2005) only the methods of data analysis have changed to provide a more comprehensive and, at the same time, complex explanation of the phenomenon. This has a dual effect since it contributes to better inform policymakers but at the same time difficult the possibility of regularly applying these methodologies because it is complicated for state departments that are the ones needing this information.

This section has allowed to learn that there can be identified several best practices of STD assessment among the methodologies applied in the period 2005-2014. Although, tourism system equilibrium determination and methodologies that set complex relations among indicators are elements on which the research related to this topic needs to focus to comply with the STD concept. Also it helped to identify the relevant role stakeholders are playing in this matter.

FINAL CONCLUSIONS AND RECOMMENDATIONS

Current tourism development rates require a sustainability approach in destinations’ management to reduce the negative impacts of tourism and maximize the good ones. Given the complexity of the interactions of factors in achieving sustainability, it is important to produce methodologies of assessment based on best practices in the topic that can better inform policymakers.

ST is a goal to achieve determined by stakeholders’ needs and the equilibrium among the sustainability dimensions. STD then is the capacity of the destination to adapt to the changing needs of stakeholders and the conditions of the environment. Therefore, a bottom –up approach is in order for policymaking in tourism for achieving sustainability.

There is a lack of evidence suggesting that studies assessing the sustainability of tourist destinations have been done with regularity. Nevertheless, there is evidence
signifying that, in most cases, this topic is more a concern of academics and international organisations, than policy makers in countries, although they reflect their preoccupation for sustainability in most their policies (Fáilte Ireland 2013). Then, it cannot be known if destinations are moving towards or away from sustainable development. This suggests that, even when there are several international organisations giving financial support for sustainable development initiatives (European Comission, 2013), there is at country and destination levels a lack of real commitment to achieving this goal. The reasons for this behaviour could be motive for another research.

No current methodology of sustainability assessment in tourism integrates all the elements described in the literature related to the concept of STD. It was found that best practices in STD assessment are:

- To undertake an integrated approach;
- Determine the focus of improvement;
- Compare results with sustainability goals;
- Determine overall sustainability; and
- To produce a trend analysis.

An integrated perspective should take into account the evolution of stakeholders’ needs in balance with environmental preservation, and considers them as a goal to achieve.

The methods of data analysis to use should be those that allow establishing and studying the complex relationships that occur among indicators, determining sustainable levels according to predefined objectives regarding the sustainability of target ranges, and where participants in the evaluation process are the stakeholders of the destination and the research group.

To better help policy makers understanding the results from an assessment process it is better to present results in three different levels of synthesis (by indicators, sensitivity analysis and general) using graphical representations.
Nevertheless it was also found that, tourism system equilibrium determination and methodologies that set complex relations among indicators are elements on which the research related to this topic needs to focus in the future to comply with the STD concept. Also, other findings of this research that can inform the literature are that:

- Sustainability indicators should be scaled for evaluation purposes;
- Sustainability indicators should be chosen based on literature review and destination’s sustainability objectives;
- Main data sources for the research should be public data and official statistics reports; and
- Research should be undertaken by a research group and a representation of the destination’s stakeholders.

It was confirmed an integrated approach is the more suitable for STD assessment. It was also established that stakeholders play a key role in the assessment process because their needs are the base for the sustainability objectives that are to be evaluated and at the same time constitute a major data source for the analysis. There is evidence suggesting that given the complex relations between indicators there should be performed a sensitivity analysis for prioritizing actions and establishing the contribution or weight of each indicator to general sustainability of the destination.

The roles that should play stakeholders in STD assessment have direct implications for policymakers and academics. For policymakers it is recommendable to rely in the academy in order to produce and systematize a methodology of STD assessment that would better inform the planning and management of STD. For academics in particular it is recommended to follow the best practices identified in this research. It is also recommendable for future STD evaluators, to review sustainability goals systematically given the changes in needs of stakeholders.
LAS MEJORES PRÁCTICAS EN LA EVALUACIÓN DE LA SOSTENIBILIDAD DEL DESARROLLO DE DESTINOS TURÍSTICOS: UNA REVISIÓN BIBLIOGRÁFICA

RESUMEN

Esta investigación tiene como objetivo determinar las mejores prácticas en la evaluación de la sostenibilidad de destinos turísticos, a través de la revisión bibliográfica y un análisis comparativo de investigaciones anteriores sobre el tema abordado, las cuales fueron seleccionadas por relevancia y completitud. La metodología aplicada permitió identificar como mejores prácticas la necesidad de tener un enfoque integral para la evaluación, determinar las áreas en la que debe centrarse la mejora, la comparación de los resultados con los objetivos de los indicadores individuales de sostenibilidad, así como la determinación del estado de la sostenibilidad general del destino y sus tendencias. También fueron identificadas las áreas de investigación futura en este tema, así como las implicaciones para los gestores de los destinos turísticos.

PALABRAS CLAVE: TURISMO. EVALUACIÓN DE LA SOSTENIBILIDAD. DESTINOS TURÍSTICOS. DESARROLLO DEL TURISMO SOSTENIBLE.

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