

SUSTAINABLE TOURISM: ANTECEDENT DIMENSIONS AND FUTURE AGENDA

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Abstract

This study attempts to provide basic understanding of tourism and sustainability based on the existing literature and provides research agenda for future work based on existing gaps. In the contemporary era, tourism is a fascinating aspect of our lives along with a lot of interrelated industries and complexed relationships. The literature indicates that antecedent dimensions of sustainable tourism (environmental, socio-cultural, and economic dimensions) are common and prevalent, however, this study invites to depart from the traditional dimensions and suggest to include two new dimensions of sustainability (infrastructural and technological dimensions). The study also suggests the assessment and validation criteria including structural equation modelling (SEM) in the development of sustainability indicators. These findings will be helpful to move towards developing comprehensive and exhaustive set of indicators by future researchers.

Keywords: antecedent dimensions, future agenda, sustainable tourism

1 INTRODUCTION

The travel and tourism is a fascinating industry with globally dynamic growth. The management and business of tourism is related with the organization of journeys and catering of the needs at the tourist destinations (Holloway & Taylor, 2006). Until first half of the twentieth century, professional approach was not adopted towards tourism industry, the expansion of 1960s and 1970s enticed the world to adopt the tourism seriously as a discipline and industry, therefore the era after 1950s to twenty-first century is considered as the era of popular tourism (Holloway & Taylor, 2006). Available data showed a growth of international tourist arrivals is even outstanding from 1980s with the continued rising trend till the present time. Moreover, there were 25 million international tourist arrivals in 1950, but this figure was exceeded by 1300 million in the year 2017 (WTO, 2018). However, at the same time the tourism industry is a very complex field with multiple stakeholders and interrelated industries such as airlines, hotels, natural areas and attractions etc. This dynamic branch requires cooperation among private sector, public sector, and all other stakeholders to sustain in the long-run (Tučková & Jurigová, 2014). The role of tourism is undeniable due to its capacity of having cultural representation, jobs creation, economic growth and development. Globally, 10 percent of world jobs are due to tourism industry. Furthermore, the share of tourism industry is 10.4 percent of world's GDP (World Travel & Tourism Council, 2019).

The development of the tourism industry and recognition as a discipline is quite in line with the growth of tourism. The growth of tourism in the 1950s also contributed in the recognition of the value of leisure activities as policymakers and scholars began to recognize the emerging significance of tourism. Hence, the prior investigations also helped in the development of the concept of tourism as a field of study with the recognized impacts on economies, communities and environments (Robinson, Luck & Smith, 2013).

As indicated above, this widespread travelling also caused some problems with reference to environmental damage, socio-cultural issues and economic impacts. Therefore, future sustainability and competitiveness have received much attention and is an issue of considerable

debate over the last two decades. Some of the impacts of tourism are positive such as enhancing understanding across cultures, however, the resulting pollution and harm to the environment due to irresponsible behaviour of tourists is enormous and alarming (Patterson, 2016). That is why the concept of sustainable tourism has got considerable attention by researchers and policy makers. This concept of sustainable tourism emerged in 1980s that refers to the low impact on environment and local culture while helping to generate future employment for local people, tourism companies and tourists themselves. It establishes a balance between the conserving biodiversity whilst maximizes the positive contribution of tourism to biodiversity conservation and thus to poverty reduction and the achievement of common goals towards sustainable development.

The tourism industry which is basically the part of service industry share the characteristics, such as intangibility, heterogeneity, inseparability, perishability, and lack of ownership (Robinson, Luck & Smith, 2013). Therefore; the state of industry, competitiveness and stakeholder's behaviour matter a lot for sustainability and long-term growth. In order to tackle these issues and come up with sustainability and competitiveness, there is need to understand sustainable tourism in a better way. An exhaustive approach should be adopted and the concept should be peeped from a wider theoretical lens to cover wider spectrum affecting the tourism sustainable. This research put efforts to address these issues and fill the research gaps related to the exhaustiveness and comprehensiveness of sustainable tourism, with some suggestions for future research.

2 LITERVIEW REVIEW

2.1 Tourism and Sustainability

Tourism has played its role in the countries' GDP and employment, economic growth and development, socio-cultural understanding and sometime in environment conservation policies. However, the widespread traveling caused many problems, like degradation of environment, harm to the social life, and low involvement of local residents in the tourism business. These issues emerged the debate and gave birth to the concept of sustainable tourism in 1980s. From that time, the concept and issue of sustainable tourism is in debate with respect to theory and practice.

In 1995, WTO (World Tourism Organization) played its leadership role in the field of sustainable tourism, by establishing a task force and 11 core indicators have been identified by the WTO process for sustainable tourism management which includes site protection, stress, use intensity, social impact, development control, waste management, planning process, critical ecosystems, consumer satisfaction, local satisfaction and tourism contribution to local economy. However, these WTO indicators are 'demand driven' and are helpful for managers to make decisions of practical nature.

Much of the literature discusses the issue of tourism as well as its sustainability along with related concerns. For example, Blancas, Lozano-Oyola, and González (2015) presented analytical tools to address the two key issues, which European Commission considers to provide a better base of socio-economic knowledge and improved image as quality sustainable tourism destinations of European areas. They defined a system of sustainable tourism indicators and obtained a composite indicator having weights as well as sustainable tourism country brand ranking. While Ziaabadi et al. (2017) determined the sustainability and indicators of sustainable tourism by using a composite indicator and a linear programming model. They explored that situation for sustainable tourism is not appropriate and environmental health is even having

lowest level of sustainability as compared to social and economic aspect. So the issue of sustainability in tourism should be considered seriously and more attention should be paid.

In the same way, Lee and Hsieh (2016) identified indicators of sustainable tourism. They explored key dimensions and indicators by using fuzzy Delphi method and examined weights by using the analytic hierarchy process. The process revealed 141 indicators for sustainable tourism. Based on stakeholder theory and environmental impact theory for incorporating stakeholder's roles in assessment of sustainable tourism, they examined indicators and came with the need to foster stakeholder involvement as well as better planning for sustainable tourism.

There was the need to analyse residents' perceptions about sustainable tourism initiatives so Boley, McGehee, and Hammett (2017) examined the sustainable tourism initiatives with respect to residents' perceptions across three US counties and found uniformly high levels of importance towards sustainability but these residents have varied perceptions of performance. They also have discussed methodological and theoretical considerations and showed importance performance analysis (IPA) within social exchange theory as well as oliver's expectancy-disconfirmation paradigm. To analyse the sustainability achievement at destination level, a study of Ng et al. (2017) evaluated the sustainability achievement of Tioman Island by using sustainable Ecotourism Indicator system (SEIS) which considers sustainability if stakeholders make a positive contribution to one another. They carried out the study by designing three versions of questionnaire and found Tioman Island potentially sustainable with 58.89%.

Dedeke (2017) explored the creation of a sustainable tourism business in the Amazon forest. He found that the process proposed by actor-network theory (ANT) have been followed and form principal actor the ability of learning new thing, capacity to adapt changes and participation of experts plays role in success. Analysing in a different way, Dvarskas (2017) described one approach for connecting recreational visitor behaviour with an ecological model that captures the negative effect of increased visitors upon the environment. He came with the conclusion that the resilience of a tourist destination plays important role in sustainability because of increasing tourist numbers. He has also given directions for future work such as additional model components, refinement of the relationships and its application in additional areas.

Although tourism is a source of revenue and growth yet adverse impacts are much concerning issue for its sustainability, the same issue addressed by Paramati, Shahbaz, and Alam (2017) and they investigated the impact of tourism on economic growth and emission of carbon dioxide in eastern and western EU countries. They found that there is relationship among the variables and tourism stimulates economic growth in both western and eastern EU countries. Interestingly, they found that tourism increases CO₂ emissions in eastern countries but reduces in western countries of EU and it only depends on the sustainable tourism policies and good management. One country-focused study of Brendehaug (2017) is good to analyse policy shift of Norwegian government and he examined how sustainability can be integrated in tourism planning due to the shift of Norwegian government from sector approach to integration approach. By applying the integration of environmental policy concept, they showed that sustainable tourism is partially integrated with three issues that Norway has weak structure for policy integration and sustainable tourism integration is stimulated by bottom-up integration and national horizontal integration as well as they found no evidence for this shift for sustainable tourism from sector approach to integration approach.

The exploratory study conducted by Romolini, Fissi, and Gori (2017) to analyse the phenomenon of albergo diffuse (AD) model and found that considerable investment is required

for structural renovation and greatest importance of sustainability and stakeholder relations as well as they identified that Italian Ads are small but considers communications, marketing policy and use of digital technology.

Furthermore, small and medium sized tourism enterprises can play their role in sustainability, a study focusing this conducted by Coles et al. (2017), they analysed about environmental resources and costs in business model of small and medium sized tourism enterprises. They reported that economic and environmental performance in case of sustainable tourism discourse is overlooked. They stressed with strong evidences that in environmental management by SMTE's contemporary approaches should consider the current and changing conditions to form business models. In another such type of study, Borden, Coles and Shaw (2017) investigated the initiatives of small and medium sized enterprises and their impacts on the guest experience. By interviewing 16 SMTE managers and 408 guests, cluster analysis result showed that in water use segments one cluster focused to increase return on investment while guests reported that these initiatives are not operationally viable. They found that two initiatives suggested by managers are viable and appropriate.

The above-mentioned literature indicates the current status and importance of sustainable tourism as the three aspects of sustainable tourism must be in a good balance for future growth and sustainability of tourism. The better understanding of sustainable tourism, determination of sustainability, different factors and indicators and better practices in this regard can play the vital role for the future sustainability of tourism.

2.2 Global initiatives and Sustainable Tourism

There is a dire need for integration in support of global initiatives, and United Nations' 2030 agenda for sustainable development is at top for the consideration of tourism and sustainability. In 2015, the General Assembly of United Nations adopted the 2030 agenda and its 17 sustainable development goals to end poverty, protect the planet and ensure prosperity for all. Tourism is included in the sustainable development goals (SDGs) in the introduction, as well as a target in Goal 8 (promote sustained, inclusive and sustainable economic growth, full and productive employment and decent work for all), in Goal 12 (sustainable consumption and production patterns), and Goal 14 (conserve and sustainable use of the oceans, seas and marine resources). So, the key role of sustainable tourism is explicitly mentioned in three of the 17 sustainable development goals. The 10-Year Framework of Programs (10-YFP) on sustainable consumption and production patterns is also at the forefront, which is a global commitment to accelerate the shift towards sustainable consumption and production in both developed and developing countries, adopted in 2012 at the World Summit on sustainable development (General Assembly of United Nations, 2015).

The 20 indicators proposed by Eurostat (directorate-general of European Commission) in 2006 are also worthwhile to mention, covering economic, environmental and social domains however are intended to be applied at regional level only (European Commission, 2007). The OECD workshop in 2010, also showed concern by highlighting three major challenges for sustainable tourism which are climate change, resource conservation and social cohesion and these issues requires attention at the regional and well as national level (OECD, 2010).

The European Tourism Indicator System (ETIS) launched by the European Commission, has defined 43 core indicators and has been trailed in NECSTouR regions (Network of European Regions for Sustainable and Competitive Tourism) and other destinations are very encouraging as an example of best practice (European Commission, 2016).

2.3 Indicators of Sustainable Tourism

The concept of sustainable tourism needs good and clear indicators for measurability and assessing the impacts of tourism. In tourism planning, policies and management, sustainable development is a prevailing paradigm (Bianchi, 2004; Bramwell & Lane, 1993). The sustainability of tourism is more than just physical environment and covers different aspects (Bramwell & Lane, 2008; Holden, 2003). At the same time Sustainable tourism is a controversial concept (Liu, 2003; Sharpley, 2009) but indicators are important to measure the impacts of tourism (Wheeller, 1993). Therefore, the formulation of indicators is necessary for practices and research of sustainable tourism. Indicators provide essential information regarding sustainable tourism and an operative framework with policy relevance (Hezri & Dovers, 2006).

The focus on the use of indicators is increasing to assess the level of sustainability since United Nations Earth Summit of 1992 and as a result international organizations suggested different indicators from time to time (Rebollo & Baidal, 2003). The main purpose of all such efforts is to keep the growth of tourism in limits (Holden, 2016; Hunter, 1995). The literature refers indicators as a necessary tool to measure sustainability by monitoring development in the tourism sector (Castellani & Sala, 2010; Crabtree & Bayfield, 1998; Dahl, 1995; Gahin, Veleva, & Hart, 2003; Smeets & Weterings, 1999; Valentin & Spangenberg, 2000) and communicating the knowledge in the form of reliable data on tourism (Blackstock et al., 2006; Blancas et al., 2010; Roberts & Tribe, 2008; Sanchez & Pulido, 2008; WTO, 1995).

The first work on tourism in terms of sustainability and indicators development is of the International Federation of Tour Operators under the project of the European Community Models of Sustainable Tourism in the year 1994 (Hughes, 1994). Then, the guidelines of indicators provided by World Tourism Organization in 1995 as well as an updated version in 2005 which is being regarded as a very helpful guidebook for researchers and the relevant stakeholders (WTO, 1995; WTO, 2004). Furthermore, the indicators developed by German Federal Environment Agency in 2001, the headline indicators by English Tourism Council in 2002 as well as national indicators by French Institute for Environment are worthwhile to mention in the tourism literature. These indicators and such other country-specific indicators developed by other researchers are providing a guideline for sustainability monitoring and measurement in the tourism industry. However, these indicators are not without problems as these varies with the stakeholder needs and place and the type of dimension under consideration and indicators should follow certain characteristics for convenience, to make them effective and user-friendly. Despite these developments, still there is less consensus of the issue of sustainability, its exact meaning and components (Bell & Morse, 2008; Tsaor & Wang, 2007; Weaver & Lawton, 1999) while some consider it unachievable target and immeasurable goal (Ko, 2005) so logical assessment methodologies are much needed for higher validity and reliability to build and increase confidence on the results for decision making due to the dynamic and unpredictable nature of the tourism industry (Asmelash & Kumar, 2019). Sustainability of tourism does not refer a single form but all the aspects related to the tourism industry should be sustainable (Sedai, 2006) and tools developed to assess the impacts are not adequate as well (Asmelash & Kumar, 2019) which hinders the practical assessment of sustainability (Choi & Sirakaya, 2005; Ko, 2005). In addition, the assessment of tourism sustainability with real cases is also not well-developed (Ko, 2005; Cernat & Gourdon, 2012, Choi & Sirakaya, 2005) and despite having a lot of indicators in the literature, a very few have been practically implicated and evaluated (Reihanian et al., 2015; Blancas et al., 2010; Rebollo & Baidal, 2003; Lee & Hsieh, 2016). Although Ko (2005) developed a comprehensive methodology for the assessment of sustainable tourism yet a very few scholars followed this model. A practical model has also been developed for the assessment of sustainable tourism in

Iran (Mahdavi, Parishan & Hasar, 2013). Most past studies focused on the traditional dimensions of the sustainable tourism, i.e., economic, socio-cultural, and environmental (Dubois, 2005; Schianetz & Kavanagh, 2008) or some added also institutional sustainability.

Despite this existing literature on tourism and sustainability with considerable work on the level of organization and academia, their use has been hampered by technical and conceptual difficulties (Torres-Delgado, 2014; Ceron & Dubois, 2003; Vila, Costa & Rovira, 2010). Similarly, a single set of indicators cannot be used for every destination, as there is no consensus among scholars (Cernat & Gourdon, 2012; Fernández & Rivero, 2009). Therefore, careful assessment is also needed for higher validity and reliability to ensure robustness and this assessment has been overlooked in the majority of previous studies (Reihanian et al., 2015), while some authors such as Choi & Sirakaya (2005), and Ap & Crompton (1998) considered these issues and recommended the application of Structural Equation Modeling (SEM). This study will consider such aspects for higher robustness by using SEM. Furthermore, Asmelash & Kumar (2019) departed from the traditional three dimensions of sustainable tourism and considered institutional sustainability. However, total variance explained is of moderate level (49.008%) so these authors suggested including some additional dimension of sustainability, such as infrastructural sustainability and technological sustainability along with respective indicators to improve the total variance explained. Therefore, these studies will fulfil the said research gap by introducing two new dimensions of sustainable tourism along with respective indicators in an attempt to improve and moving towards exhaustive approach.

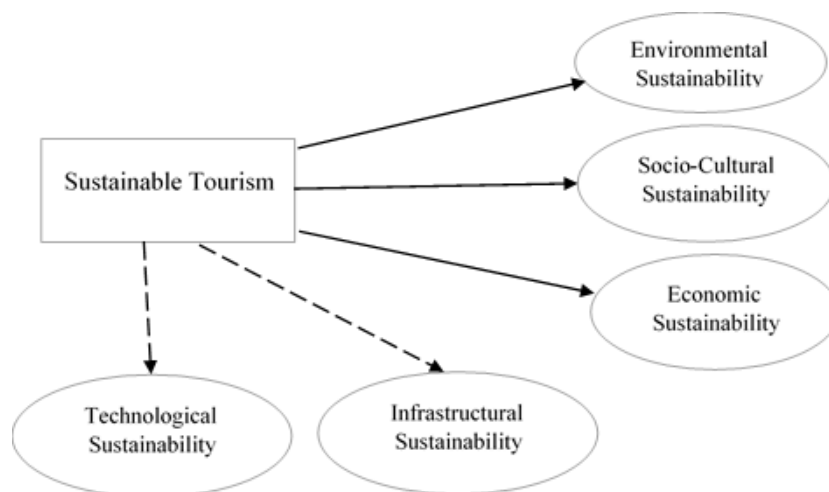


Fig. 1 – Traditional Versus Suggested New Dimensions of Sustainable Tourism. Source: own research

Note: Continuous lines indicate traditional dimensions, dashed lines indicate new dimensions.

3 RESEARCH METHODOLOGY

Depending upon the previous literature review and research gaps found, there could be future studies addressing the aforementioned areas of concern with the following research methodology to develop indicators for addressing and measuring sustainable tourism. Even today, especially in the developing countries, the tourism business is not following the contemporary way of action in providing quality services with less dissemination of information among tourism stakeholders to achieve sustainability. Therefore, to be exhaustive in the indicator selection, both qualitative (expert judgement) and quantitative (survey) methods. The study is expected to be carried out in the selected cities of Pakistan (Islamabad, Lahore, and Faisalabad), and have suggestion to be carried out in other locations for developing indicators suitable to the local environment, by adopting the following steps.

Step 1: Indicators development procedure

The list of indicators can be prepared by the careful examination of previous studies as well as by conducting semi-structured interviews. It is obvious that the list of indicators might end up with more indicators than required and recommended by WTO (2004) and Sors (2001). So, the Delphi method can be used to reduce the number of indicators by including experts of the relevant field. In Delphi method, the panel of experts will include the tourism professors, and heads of the tourism department for benefitting from their expert opinion and professional approach.

Step 2: Purification of the indicator development

The purification of the indicators can be done by conducting a pilot study to receive relevant feedback and avoid any ambiguity related to the research instrument (Choi & Sirakaya, 2005). For this purpose, the questionnaire can be distributed to 300 respondents including local residents, tourists and tourism experts, by the way of convenient sampling method with the request to rate the indicators on Likert scale (anchored at 1 = strongly disagree, 2 = disagree, 3 = neutral, 4 = agree, and 5 = strongly agree). As this study has the recommendations for the use of structural equation modelling (SEM), therefore, the sample size 300 is adequate enough for such type of analysis, and this sample size is even more than the recommended sample size of 200 (Kline, 2013; Byrne, 2010; Iacobucci, 2010).

Step 3: Verification of the indicator development

The verification of the indicator development can be done by the total variance explained (TVE) and this TVE is considered better to be more than 60 percent. Further, the reliability of the indicators can be analysed by the value of Cronbach's alpha as well as sample adequacy by the Kaiser-Meyer-Olkin (KMO).

Step 4: Assessment and validation of the indicator development

The assessment of indicators is important to see the multivariate normality and this is quite common by using Q-Q plot as well as the multicollinearity by the value of determinant. Furthermore, the validation of the indicators can be done by checking for internal reliability, composite reliability and validity analysis (convergent validity, discriminant validity, and content validity) through confirmatory factor analysis.

4 CONCLUSION, IMPLICATIONS, AND FUTURE STUDIES

The purpose of this study was to provide basic understanding of sustainable tourism by reviewing the literature to familiarize with the current status of tourism in terms of sustainability. In addition, the study considers contemporary focus of research, and possibility of future research on sustainability, by offering suggestions for capturing the exhaustive picture in measuring sustainable tourism. The study found that conventional approach towards sustainable tourism came up with three dimensions (environmental, socio-cultural, and economic dimensions). These three dimensions have their impacts on tourism, which might be positive or negative. By considering all such factors, the literature suggests some indicators to mitigate such impacts and create a balance for long-term sustainability. However, this study suggests departing from the traditional stand and invites to include some more dimensions of sustainability including infrastructural sustainability and technological sustainability along with the suggested assessment and validation approach. The collected indicators (for traditional dimensions, as well as new dimensions) from the literature will help to formulate list used in the Delphi method for reaching at the level of agreement and consensus. Hence, the future studies should consider these important issues and develop new indicators. These indicators are

of multidisciplinary nature and therefore the selection and choice of indicators should be done with care and future researchers should be cautious in this regard whilst suggesting indicators related to the new dimensions.

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