

Guest editorial

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Innovations in sustainable tourism research

Introduction

Sustainable tourism is an adaptive paradigm, borrowed from the parental concept of sustainable development (Hunter, 1997; Tosun, 2001). Sustainable development was made popular following the publication of the book "Our Common Future" by the World Commission on the Environment and Development (WCED) in 1987, where it is defined as "development which meets the needs of the present without compromising the ability of future generations to meet their own needs" (p. 42). This definition embeds two aspects. The first component relates to the meaning of development and the conditions necessary for sustainability (Miltin, 1992). In this context, development implies a process that raises the standard of living of people, relating not only to increasing the wealth of individuals but also to changing behaviors, aspirations and the different ways in which people view the world around them (Bartelmus, 1986; Hall, 2019). Therefore, development is not only concerned with institutional and economic changes but it also involves broader concerns such as quality of life, poverty reduction and prosperity (Hall, 2019). The second component of sustainable development takes a futuristic perspective of the term development. Thus, sustainable development embeds the following principles. First, any forms of development should be considered as a long term strategy and that policies aiming at achieving only short term gains should be rejected. Second, sustainable development focuses on inter and intra-generation balance of welfare. Third, the term applies to any countries, regardless of the type of development taking place, the level of development, and the socio-cultural and political conditions, although policies supporting sustainable tourism should be place-specific (Nunkoo and Gursoy, 2012; Nunkoo et al., 2010; Tosun, 2001).

Since the diffusion of the principles of sustainable development in tourism studies, the term has influenced the ways in which tourism research is carried out and how governments and other organizations plan for and manage tourism development (Nunkoo, 2017), such that it is now considered as a dominant paradigm in tourism research (Bramwell and Lane, 2011; Ruhanen et al., 2015). Systematic reviews, journal editorials and commentaries on this topic suggest that sustainable tourism research covers a broad range of topics such as those related to climate change, ecotourism and other alternative forms of tourism, social responsibility and ethics, sustainable mass tourism, climate change, community involvement, tourism impacts, visitor behaviors and attitudes, responsible tourism, rural tourism, heritage and cultural tourism and travel and transport (Bramwell and Lane, 2011; Gross and Grimm, 2018; Hashemkhani Zolfani et al., 2015; Holden, 2018; Lu and Nepal, 2009; Ruhanen et al., 2015; Ruhanen et al., 2018). Sustainable tourism research also relies on a variety of approaches such as case study, empirical study, critical and systematic reviews, theory building and testing, development of new concepts and historical perspectives to advance knowledge (Font et al., 2019; Ruhanen et al., 2015).

Informed by the triple bottom line of sustainability, researchers, governments and practitioners consider sustainable tourism as a way to increase the positive outcomes from development while, at the same time, to mitigate the adverse consequences of the industry on the environment, the society and the economy. The proliferation of knowledge on sustainable tourism through numerous journal articles, books and consultancy reports has contributed to improved outcomes for societies

and the tourism industry (Bramwell and Lane, 2011; Font et al., 2019). Innovation in the research is seen as key to improving the beneficial outcomes of sustainable tourism. As Bramwell and Lane (2011) argue, “sustainable tourism is becoming more innovative at identifying ways to secure positive benefits, in addition to the established approaches of regulation and development control” (p. 1). Like Bramwell and Lane (2011), we argue that for sustainable tourism research to be impactful, innovation in the research process is vital.

Innovation in sustainable tourism. As advocated by Schumpeter (1934), the father of the economic theory of innovation, innovation is the critical dimension of economic change and “a creative destruction.” He describes an innovation as:

An application and implementation of a new idea or a new application of an existing idea that results either in a new kind of product, or a new and better process for producing an existing product” (Divisekera and Nguyen, 2018, p. 158).

Innovation is inherent to any research field that has reached maturity (Hjalager, 2002). It is important to note that sustainable tourism as an innovative concept and innovation within sustainable tourism research are two distinct concepts (Bramwell and Lane, 2011). Here, the debate relates more to innovation within sustainable tourism research and less to sustainable tourism as an innovative concept, although they are inter-connected and one has implications for the other. In this article, we draw on Schumpeter’s (1934) work to define innovation in sustainable tourism research as:

An application and implementation of a new research idea or process or a new application of an existing research idea or process that results either in a new kind of tourism product and service, or a new and better approach that enhances the outcomes of sustainable tourism.

Our macro-justification for innovation in sustainable tourism research draws from the European Commission’s principle that innovation is the “only answer” to tackle contemporary societal and environmental challenges (European Commission, 2011, p. 3) and from the Lund Declaration that innovation is necessary to tackle the grand challenges that are pre-requisites for sustained economic growth. In this case, the idea is to steer the innovation process toward societal beneficial objectives (Von Schomberg, 2013), a process commonly referred to as social innovation (Mulgan et al., 2007). Social innovation evokes a thought process of how innovation improves human life. Emergent needs or long-standing inefficiencies in communities are the opportunities that social innovators seek to address by providing innovative solutions that have the power to bring about a revolution (Austin et al., 2006).

Tourism has often been criticized for its adverse impacts on the environment and society, resulting in system-level inefficiencies. To overcome the negative impacts, innovation in sustainable tourism implies targeting individual welfare or community welfare by generating employment and improving a participative culture (Pol and Ville, 2009). Societal welfare is the key focus of social innovation that aims at “improving the quality and quantity of life” (Pol and Ville, 2009, p. 9). In this sense, any innovation in sustainable tourism research should lead to such processes, products and services that improve the well-being of individuals, without having much detrimental consequences for the environment and the society, while at the same time ensuring sustained economic growth. For

example, innovation studies in sustainable tourism can explain the circumstance under which environmentally and socially compatible tourism production and consumption practices occur or do not occur, and how such practices can be implemented effectively in the tourism development process. Fortunately enough, tourism research has successfully embraced innovative practices at par with other economic sectors (Hjalager, 2010). For instance, while alternative tourism such as nature-based tourism and eco-tourism were once considered rhetoric for sustainable tourism as opposed to mass tourism, they are now characterized as unrealistic and incomplete, with unrealized expectations (Weaver, 2014). Sustainable mass tourism or enlightened mass tourism is now seen as more realistic for destinations and as the “emergent and desired state of contemporary tourism” (Weaver, 2012, p. 1030).

The collection of papers in the special issue. Informed by the above debates, the aim of this special issue of *Tourism Review* is to further the innovation agenda in sustainable tourism research. It brings together papers that were presented at the Building Excellence in Sustainable Tourism Education Network's (BEST EN) XVII Think Tank, hosted by the International Center for Sustainable Tourism Research of the University of Mauritius from June 14-17, 2017. To ensure a more diverse collection of articles on sustainable tourism, the call for papers was disseminated to the wider research community. While many interesting and thought-provoking manuscripts were submitted for publication consideration, space limitations prevented the guest editors from accepting a number of potentially relevant contributions. The issue comprises 12 articles authored by scholars from diverse educational and research backgrounds and varied geographical locations while ensuring an adequate representation of female authors. The heterogeneity in the authors' characteristics has led to a collection that reflects adequately the diverse research topics, theoretical underpinnings, and methodologies used by various scholars world-wide to research sustainable tourism. We position each article in the light of compelling theoretical and empirical arguments, enabling us to situate the special issue in light of the broader literature in sustainable tourism.

A review of past research efforts in the form of critiques and systematic reviews of existing concepts provides a basis for identifying areas of innovation by creating a solid foundation for advancing knowledge theoretically and methodologically and by uncovering areas that requires further research. Since the emergence of the term sustainable tourism in the 1980s, it has been a constant source of debates, discourses and criticisms among researchers (Bramwell et al., 2017). In the first paper, Lisa Ruhanen, Char-lee Moyle and Brent Moyle explain how the concept of sustainable tourism has evolved since it was introduced in tourism studies. They note that while early studies on sustainable tourism were descriptive, research has advanced beyond a narrow-based view of environmental issues to addressing sustainable tourism from a holistic perspective, in line with the triple bottom line principle of sustainable development (Bramwell, 2007). Other specific innovations in research on sustainable tourism relate to climate change, visitor management, protected area management, social responsibility and ethics, governance, public trust and over tourism, among others.

Residents' attitudes to tourism is among the most studied topics and is perhaps one that has undergone considerable innovation in terms of problem and analytical framing, theory, methodology, and context (Muler Gonzalez et al., 2018; Nunkoo et al., 2013). Arghavan Hadinejad, Brent Moyle, Noel Scott, Anna Kralj and Robin Nunkoo review journal articles on residents' attitudes to tourism published between 2011 and 2017 in the *Annals of Tourism Research*, *Tourism Management*, *Journal of Travel Research* and *Journal of Sustainable Tourism*. Arghavan and her co-authors demonstrate that research in this area has progressed from being atheoretical to theoretically informed, followed by empirical testing using advanced statistical techniques. The

review concludes with innovative suggestions for future research such as the use of theories such as the elaboration likelihood model or heuristic-systematic and the cognitive appraisal theory and methods such as electro-dermal analysis or facial electromyography to investigate residents' attitudes to tourism.

Innovation is not limited to creativity; it extends to implementation that requires social interaction. Therefore, collaboration becomes an important element of social innovation, in the sense that social innovation always takes a cooperative approach (Ziegler, 2017). Stakeholders partnering together to fight a social problem offers a holistic solution to a problem. In this sense, collaboration between universities and the industry is essential for innovation to take place, as it facilitates knowledge sharing between institutions (Hjalager, 2002, 2010; Martínez-Pérez et al., 2019). Universities have a prominent role in knowledge transfer that supports innovation (Bekkers and Freitas, 2008; Brescia et al., 2016). However, researchers have expressed concerns about the missing link between the production of tourism research and its use by the industry (Hjalager, 2002, 2010; Frechtling, 2004; Xiao and Smith, 2007). In the third article, Yukari Higuchi and Yasuhiro Yamanaka explore the potential value of research-based evidence in destination management in Kamikawa, Japan. Using action research, the contributors examine the direct intervention of university researchers in tourism practices in Hokkaido, Japan. The paper articulates how the outcomes of structured knowledge creation are able to fundamentally change the long-held presumptions of local stakeholders about their destination. Reinforcing the need for collaboration between academic institutions and the tourism industry, Yukari and Yasuhiro explain how knowledge is used to aid decision-making and the formulation of new tourism strategies.

Inherent to social innovation in sustainable tourism is the change occurring at a systemic level. Systemic level change challenges the status quo and brings about transformation by introducing new products, processes, or services. Because the change operates at the institutional level, building legitimacy becomes important. Third party audits and certifications have been recognized as legitimacy building tools. Having its origin in the manufacturing sector, environmental certification is regarded as an important indicator of sustainable tourism (Font, 2002; Klein and Dodds, 2018; Rivera, 2002). It reflects a movement from the command and control approach to environmental policy that involves mandatory regulations to voluntary mechanisms for managing the environment. Anna Spencely reviews the current status of certification and certified hotels on the African continent, and discusses the implications for mainstreaming sustainable tourism on the continent. The study identifies nine African certification programs and nine international certification programs operating in Africa and reveals that the African and international certification programs have certified at least 715 accommodation facilities in 19 African countries, against their environmental, social and economic criteria. Given the benefits that environmental certification programs provide to participants, Anna provides a number of practical implications such as promoting program and their returns on investment more broadly and the market advantage for certified accommodation. Environmental certification promotes innovation (Liao et al., 2018) and as such, any research endeavor along this line is laudable for sustainable tourism.

The climate change impacts on tourism and the contributions of tourism to climate change has been the subject of several studies and debates in the literature (Hall et al., 2015; Hoogendoorn and Fitchett, 2018). In fact, studies on climate change and tourism reflect an innovative research endeavor in sustainable tourism research (Bramwell and Lane, 2011; Ruhanen et al., 2015). Three articles in this special issue relate to climate change and related topics. Furthering the current debates on the impacts of climate change and tourism, Boopen Seetana, and Sheereen Fauzel assess empirically the relationship between climate change and tourist arrivals using a data set for

18 small island developing states for the period 1989 to 2016. The study results indicate a significant relationship between climate change and tourism demand as well as a bi-directional causality between the two variables.

Roopanand Mahadew and Krishnee Adnarain Appadoo's article focuses on climate change adaptation and mitigation measures for Mauritius, an island where there is a dire need for climate change research. Informed by the United National Environmental Program's framework, the article assesses the extent to which Mauritius has structured its adaptation to and mitigation of the climate change. The paper highlights the significant weakness with respect to the structure of mitigation policies and joins other studies that stress on the need for well-designed policies to combat climate change (Gössling and Hall, 2008; Peeters and Dubois, 2010; Moyle et al., 2018; Weaver, 2011). Low carbon tourism provides new opportunities for destinations (Cai and Wang, 2010; Tang et al., 2011; Zha et al., 2018). The article by Machima Thongdejsri and Vilas Nitivattananon investigates the impact-assessment procedure of low-carbon tourism program implemented in a world heritage city and develops specific indicators toward sustainability. The study comes up with a list of indicators to measure the sustainability of local carbon tourism. Studies that offer policies and strategies to mitigate the contributions of tourism to climate change reflect an important innovation in sustainable tourism research (Smith et al., 2010).

The remaining articles focus on the sustainability of specific forms of tourism. Richard Butler discusses the contributions of golf tourism to the sustainability in St. Andrews, Scotland. Researches have generally viewed golf tourism skeptically by questioning its contribution to sustainable tourism because of its natural resource intensive nature (López -Bonilla, and López -Bonilla, 2016; Markwick, 2000; Pleumarom, 1992; Scott et al., 2018). Using a qualitative assessment of impacts and archival materials, Richard explains how golf tourism has been integrated in the overall development strategy of St. Andrews, resulting in a number of positive consequences for the town. Although conclusions from a single case study are limited contextually, Richard's article demonstrates that implications can be drawn from case studies that reflect situations that exist in other destinations.

Several countries benefit enormously from wildlife tourism (Buckley and Mossaz, 2018; Reynolds and Braithwaite, 2001). The rapid development of this sector reflects the growing need of the tourists to be in close contact with nature and a growing concern for the conservation and preservation of natural resources (Arbieu et al., 2018; Reynolds and Braithwaite, 2001). Furthering the sustainability debates of wildlife tourism, Giovanna Bertella innovatively uses an ecofeminist perspective to question the anthropocentric assumption underlying wildlife tourism. Giovanna concludes by advocating the use of the concept of entangled empathy as potentially relevant for re-thinking about sustainability in wildlife tourism.

Building local capacity serves as a mechanism for social innovation, as it targets working with the marginalized to enable them to help themselves (Alvord et al., 2004). This approach is based on the participatory principle and takes place at the community level. From a sustainability perspective, slum tourism should aim at improving the life of slum residents (that essentially amounts to building local capacity), while empathizing the outsiders to the lifestyle of the slum-dwellers. Recent years have seen increasing academic interests in slum tourism as evidenced by the various journal articles and books published on this topic (Frenzel, and Koens, 2012; Frenzel et al., 2015; Meschkank, 2011; Von Schuckmann et al., 2018). Irma Booyens and Christian Rogerson explore the sustainability of slum tourism and investigates the ways to reconfigure extant forms of slum tourism into more sustainable alternatives that emphasize combatting poverty through generating economic opportunities and upgrading slum spaces. Creative participatory experiences, creative spaces and creative cultural events are seen as pathways to improve the sustainability of slum tourism by the

researchers. Along similar lines, Kar Yee Chong and Ann Selvaranee Balasingam investigate the strategies for preservation and conservation of heritage sites in Southeast Asia. The research provides empirical evidence of the economic and socioeconomic contributions of heritage tourism to the Southeastern regions of Asia and considers useful strategies to preserve and conserve heritage sites in the region.

Behavioral studies have played a vital role in sustainable tourism research, many of which focus on understanding tourists' behaviors (Cheng and Wu, 2015; Chiu et al., 2014; Dodds et al., 2018; Han et al., 2018; Lee, 2011). Informed by the psychology literature, behavioral studies as a component of sustainable tourism research have undergone several innovations in terms of theory and methodology. The premise rests on the fact that psychology plays an influential role in the management of sustainability. Psychologists conceptualize and analyze environmental problems as socio-economic problems and thus provide policymakers with the required tools that promote sustainable behavior (Schmuck and Vlek, 2003). Viraiyan Teeroovengadum adopts a psychological approach to sustainable tourism by investigating eco-tourism behaviors in Mauritius. The study reports that stronger environmental identity leads to a more positive ecotourism attitude, greater interest toward ecotourism and a higher willingness to pay a premium. Interestingly, the research confirms the mediating effects of ecotourism attitude and ecotourism interest. The study contributes to the limited research on tourist behaviors in island economies where the adverse consequences of tourism are more severe than other destinations (Parra-López and Martínez-González, 2018).

Conclusion

Sustainable tourism research has undergone several innovations during the past three decades. Despite more than 30 years of discussions of tourism and sustainability in academic and government documents, recent reviews suggest that there is considerable room for improvement in the practice of sustainable tourism (Ruhanen et al., 2015; Ruhanen et al., 2018). While the collection of articles in this special issue is not enough do to justice to this topic, it is our hope that the various articles have contributed to constructive discourses, debates and critiques useful for advancing innovative research in sustainable tourism. However, a challenge still remains. While much progress has been made in innovation sustainable tourism research, the extent to which it has influenced real world changes is difficult to ascertain (Bramwell and Lane, 2011; Hall, 2019). We advocate that innovations in sustainable tourism research require

(1) a broadening of the problem framing that involves a clear definition of the purpose and outcomes of the research activity and a clear understanding of the "object" of innovation; and (2) a broadening of the analytical framing to include the economic, social, cultural, political and technological factors that shape innovation processes. Of course, these should be accompanied by a broadening of the research approaches and theoretical underpinnings we use to research sustainable tourism issues. Innovative research should go beyond the dominant paradigms for sustainable tourism.

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