# KEY CHALLENGES IN THE IMPLEMENTATION OF SUSTAINABLE TOURISM

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#### Abstract

Purpose – The paper discusses the key issues and challenges in the implementation of sustainable development in the context of tourism, that have been occurred during last two decades.

Methodology – On the basis of the relevant literature, key issues and challenges in implementing the concept of sustainable development of tourism are reviewed. Also, the paper discusses the concept of tourist destinations as complex adaptable systems. In the final part, the significance of the concept of complex adaptable systems for the implementation of sustainable tourism is analyzed, and, consequently, key conclusions are drawn..

Findings – There is a similarity between sustainable tourism, which means such a form of tourism development that can be maintained for an indefinite period, and a concept of complex adaptive systems. Exactly the capability of destinations to adapt to external and internal factors, allows tourism to be maintained for an indefinite period. However, it is questionable whether such a form of tourism that is being developed for an indefinite period of time corresponds to the principles of sustainable development. It seems that 'sustainable tourism' can be achieved in real life, but 'sustainable development in the context of tourism' seems to be a fluid and elusive concept.

Contribution – The paper raises and discusses important and timely issues in the implementation of sustainable development in tourism. Many of these issues have already been the topic of the tourism discourse, but they are used and addressed in a new way in this paper. It is needed to stress the attempt to link sustainable tourism and the theory of complex adaptive systems, which facilitates us to understand the ability of tourism to recover from the events that have occurred in recent period, as well as the ability of certain destinations to maintain popularity and achieve the sustained growth in the long term.

Keywords: tourism, sustainability, management, development, stakeholder

### INTRODUCTION

The UN Conference on Sustainable Development (Rio + 20), held in Rio de Janeiro in June 2012, marked the 20th anniversary of the Rio Conference, 1992, at which the concept of sustainable development gained its full recognition. The summit 'Rio + 20' discussed positive results achieved in the implementation of the concept of sustainable development during the last two decades, and highlighted the major challenges in this field that should be faced in the future. Consequently, it is needed to review the key issues in the implementation of sustainable tourism.

It is familiar that wide acceptance of the concept of sustainable development in many cases is misinterpreted, and very often related to simplistic phrases without accepting its binding implications. Accordingly, there are also some critical views and doubts that concerns the interpretation and implementation of sustainable development. Wilbanks (1994) claims that "sustainable development is, predominantly, not more than just a

slogan or a curtain behind which resources are allocated and decisions were made, regardless if the relevant term is interpreted properly or not". Critical attitude toward sustainable development is expressed in Butler's (1999) opinion as well, who doubts in global support of the concept, noting that the existence of sympathy for the goals of sustainable development cannot guarantee the acceptance of all costs and sacrifices that are necessary to be invested into this concept in real life. Wall and Mathieson (2006) represent the view that sustainable development becomes a form of ideology, philosophy, process and product and that it is often treated as political phrase, depending on the context in which it is used.

# 1. KEY ISSUES IN THE IMPLEMENTATION OF SUSTAINABLE TOURISM

Butler (1999) gave a valid basis for discussion on the related topic, pointing out the distinction between two terms: (a) sustainable development in the context of tourism and (b) sustainable tourism. According to this author, sustainable development, in the context of tourism is defined as tourism that is developed in a certain region in a way that will allow its sustainability for an indefinite period, without damaging the environment, and with the aim to allow the successful development of other activities. On the other hand, sustainable tourism is 'tourism that is developed in such a form that can be maintained for an indefinite period'. Accordingly, one can conclude that tourism on the Côte d'Azur is certainly sustainable: it has been developed since the  $18^{th}$  century and shows no signs of disappearing. However, this understanding of sustainable tourism ignores the fact that tourism might cause significant changes and degradation of natural and socio-cultural environment. In reality, the authentic look of the Côte d'Azur and its ecosystem has changed significantly over the past 150 years (Jovicic, 2014). Despite the presented differences between the two related terms, numerous authors think that sustainable tourism cannot be realized if its development provokes serious damage in environment.

Estimation of carrying capacity is a tool for measuring the impact of tourism development on the area and the environment, and it is, also, considered to be one of the key mechanisms when setting standards in sustainable tourism. Insight into the available literature shows that many authors/ institutions were involved in defining problems of carrying capacity of tourist destinations, particularly considering recreational areas. O'Reilly (1986) offer a similar definition of carrying capacity. Wall and Mathieson (2006) point out that the carrying capacity can be defined as the maximum number of tourists who can stay in a particular area, without unacceptable and irreversible changes to natural environment and other social, cultural and economic structures, and without diminishing the quality of tourist experiences.

Until now, numerous research projects have been made in order to define theoretical approach to carrying capacity but in terms of its practical application, certain difficulties have been detected, related to the use of different mathematical formulas to assess the carrying capacity. Although the concept is very attractive and useful, experience has proved that its practical application often brings the abandonment or replacement of this approach by other concepts such as: limits of acceptable change in

destination, managing systems devoted to visitors etc. Some authors even deny that the sustainability component of tourism development and the concept of carrying capacity are inevitably linked (Butler 1999). According to them, sustainable development should be focused, not on carrying capacity, but on defining borders of a tourist area, before significant decline in the quality of tourist resources and tourist experiences takes place. If those borders are exceeded, it is understandable that there will be certain consequences, like decline in the attractiveness of destinations or changing authenticity of landscapes, and thus the sustainability can be questionable. If oversized usage of a tourist area continues, without taking any corrective actions, it can be expected that any form of tourism in a particular destination may become unsustainable.

Estimation of carrying capacity is closely linked to the need for monitoring the tourism development and defining indicators of sustainable tourism. Indicators, or variables that can be measured and monitored to reveal the changing condition of a particular phenomenon, are means through which existing information can be filtered and new information collected. This new database of essential condensed information makes it easier to recognize trends as well as more immediate threats and to take appropriate actions (Mowforth and Munt, 2009). Indicators provide an insight into the state of a certain phenomenon (e.g. tourism), or a particular aspect of it, at a given point in time, that cannot be the definitive estimation of the state of the related phenomenon. Consequently, indicators measure information which may allow decision-makers to reduce the chances of taking poor decisions unknowingly. While elegant in theory, however, an indicators-based sustainable tourism strategy is complicated by the actual process of selecting, measuring, monitoring and evaluating a viable set of relevant variables.

Given the complex nature of tourism systems, theoretically speaking, there is an infinite number of tourism-related indicators to choose from. Factors that influence the actual selection of working indicators in a particular destination or business include policy relevance, the type of approach to sustainability that is adopted (i.e. weak or strong, minimalist or comprehensive), measurability, financial and other resource constraints, stakeholder interests, level of public support, politics, etc. (Weaver, 2006). Thus, a wealthy beach resort utilizing a comprehensive approach toward sustainability requires an indicator set that overlaps but is generally distinct from the set required by a large, financially constrained inland urban centre where a more minimalist model is followed. An interesting consideration emerges - while the selection process should follow from the definition of sustainability that is adopted, the creation of the indicator set may actually serve in turn to fine-tune this definition (Ryan, 2002).

If we refer to sustainable tourism in a more general sense, it is important to note that the indicator set should be compact, yet comprehensive, so that it is not too time-consuming and expensive to operate but still captures critical information. In addition, individual indicators should be understandable, practical, clearly defined and reproducible (Miller and Twining-Ward, 2006). A useful analogy can be made with statistical sampling, wherein the characteristics of a few hundred carefully selected and surveyed respondents can be considered an accurate representation of a much larger overall population (Bendell and Font, 2004). Similarly, a handful of carefully selected and monitored indicators can accurately depict the condition of an entire tourism system.

An indicator set should incorporate variables that describe the condition, viability and potential influence of the system itself (e.g. number of tourists, annual growth, units of accommodation, percentage of labour force employed in tourism) as well as those that show the effects of the target system on the viability of other systems (e.g. levels of water pollution and greenhouse gas emissions produced by tourism activities). Especially in situations where a comprehensive sustainability approach is taken, it is additionally important to include indicators that measure the overall condition of external systems (e.g. percentage of overall labour force unemployed, per capita GDP), since problems in these areas could have direct consequences for tourism whether or not the latter significantly contributes to those values. These types of indicators are combined to capture the internal and external dimensions of a tourism system (Weaver, 2006).

Shortly after the Rio Conference in 1992, it turned out that the optimal alignment of heterogeneous goals of sustainable tourism (economic profits, preserving the social integrity of local communities, the affirmation of cultural identity of the receptive areas, environmental protection and satisfaction of tourists) is in reality like the attempt to square the circle. Due to problems of implementation of the concept of sustainable tourism, some authors (Tribe, 2009; Fenell, 2005) invite for another interpretation of this concept. Taking into account the fact that the objectives of a sustainable development can be equally difficult to implement, because of the conflicting interests of the participants in the tourist economy, the emphasis should be placed on the adoption of norms and principles, particularly the ethical, which would be respected by all stakeholders in tourism. This means that the concept of sustainable tourism requires a fundamental change in the ethical interests among all stakeholders in tourism industry, from those who create the tourism supply to the final consumers. If such consensus is reached and contemplated as a precondition for action, and if it becomes a key component in the decision making process, it can be expected that positive results and the development of tourism on a sustainable basis will appear.

Modern theorists of tourism (Tribe, 2009; Fenell, 2005; Holden, 2009) are trying to define the concept of ethical tourism. The essence of these and similar definitions lies in the fact that the ethical tourism is the tourism that incorporates the principles of ethics, and that allows to all the stakeholders (public sector, direct holders of supply, tourists, residents of the receptive areas) to distinguish between good and wrong components of their behavior. Similar point of view is shared by Macbeth (2005), who claims that application of a new 'ethical paradigm' imposes a need for careful examination and evaluation of the morality of all decisions related to policy, planning, and management in tourism.

The necessity for moralization of modern tourism is supported by the following arguments, represented by Butcher (2007): the moralization of tourism is ecological imperative because it turned out that oversized development of mass tourism produces significant damage to the natural and socio-cultural environment. As opposed, sustainable tourism must take into account the protection of natural and cultural environment. Another important point, mentioned by the author, is that ethical tourism brings positive effects on tourists - they can gain awareness and respect for other people, communities and other ways of life, while developing a critical review of their own community, where they originate from.

The key challenge for planning sustainable tourism development, nevertheless, which never seems to emerge, is the limitation of the human perception of time. It is extremely difficult to keep a long-term time-horizon in mind in our day-to-day behaviour, and in our short-term and even long-term decision making (Lew, 2010). There are several problems with this approach. First, the same problem can (and will) change over time. Problems are part of a larger system of influences, which are themselves influenced by external, usually unpredictable, forces. Second, the change is rarely linear. While we can hope that a linear regression formula of past data points will project in the same way into the future, we can never really know this. Third, human perception is inherently time-horizon limited. We can make a good prediction of the impacts of most of our actions only over a short time period – for example, from one day to one month.

# 2. TOURISM DESTINATIONS AS COMPLEX ADAPTIVE SYSTEMS

Complex adaptive systems are called adaptive because the constituent components of a system adapt to events around them (Levin, 2003; Lewin, 1999). A key feature of adaptive systems is that they form structures that somehow maintain their integrity in the face of continuing change. The concept of a complex adaptive system is based on the notion that its elements are connected by diverse non-linear relationships, and that reactions to the external environment are not predictable. (Baggio, 2013).

The theory of complex adaptive systems facilitates our understanding of the ability of tourism to recover from the natural and man-made events that have occurred in recent period (e.g., the energy crisis between 1967-1979, the threat of bird flu, the Indian Ocean tsunami and seaquake in 2004, the recovery from the global economic crisis in 2008, and the swine flu outbreak in 2009 among others) as well as the ability of certain destinations to maintain great popularity and tourist demand in the long term. Non-linear relationships between the components, self-organizing dynamics, and other characteristics of complex adaptive systems (Scot et al., 2008; Levin, 2003; see also Baggio & Sainaghi, 2011; Haugland et al., 2011; Baggio, 2013), have enabled many destinations to achieve the sustained growth in the second part of 20<sup>th</sup> century in the face of drastic external changes.

It seems that there is a similarity between sustainable tourism, which means such a form of tourism development that can be maintained for an indefinite period, and a concept of complex adaptive systems. Exactly the capability of destinations to adapt to external and internal factors, allows tourism to be maintained for an indefinite period. However, it is questionable whether such a form of tourism that is being developed for an indefinite period of time corresponds to the principles of sustainable development. A destination as a complex system consists of groups of various and networked stakeholders who have their own partial interests and goals (which should be harmonized and integrated into the common goals of a destination as a whole), but, also, those stakeholders are characterized by varying degrees of ability to adapt to internal and external factors. A destination includes many different stakeholders connected by diverse relationships that are often non-linear. The response of the

stakeholders to external and internal inputs may be unpredictable as well as the outcomes of their behaviour (Haugland et al., 2011).

For instance, if there is not enough snow during the winter season in a certain destination in a high mountain, not all hotels will suffer the same damage, because they will not behave in the same way in these circumstances. The hotels with a more flexible pricing policy, greater volume of services within the hotel facilities, and focused on segments of demand that are not fans of winter sports activities, will survive on the market, despite unfavorable weather conditions for tourism economy. This means that this destination, if there is enough stakeholders capable of successfully operating in adverse conditions, will survive on the market, but the level of its development as a whole will be at a lower level, compared to the seasons during which weather conditions between its stakeholders. Also, the lack of natural snow increases the making of artificial snow, which can lead to conflicts between tourism companies and organizations that advocate for a strict protection of the environment, and are opposed to the creation of artificial snow, because of its adverse effects on the vegetation.

Porter (1998) claims that the high local rivalry is necessary as a competitive advantage for tourism industry, since it stimulates the local companies to innovate and improve themselves. How ever, a high degree of rivalry between stakeholders in a certain destination may cause a situation in which partial interests take precedence over the achievement of common destination objectives. In crisis situations - e.g. if a stagnation phase lasts for a longer period, or in the case of severe adverse effects of political and economic factors - partial interests of stakeholders may gain an even greater dominance, in relation to common destination objectives.

# **3.** COMPATIBILITY BETWEEN SUSTAINABLE TOURISM AND A CONCEPT OF COMPLEX ADAPTIVE SYSTEMS

There is no doubt that in the future a significant number of tourism destinations will face serious global challenges which may adversely affect their profitability, such as climate change, etc. A deepening knowledge of the structure of a tourism destination's network, with an emphasis on the study of non-linear relationships between tourism components and self-organizing dynamics could contribute to the reduction of possible negative effects of future development. But, the reduction of possible negative effects does not mean that the development of tourism takes place in accordance with the principles (environmental, socio-cultural and economic) of sustainable development.

The achievement of optimal satisfaction of all stakeholders, as a key prerequisite for sustainable development in the context of tourism, is a 'squaring the circle': due to the extremely heterogeneous structure of tourism activity, optimal satisfaction of some stakeholders, can cause deep dissatisfaction with the other stakeholders. The stakeholders in a certain destination are, at the same time, the competitors aiming to animate the same or similar segments of tourist demand, but, also, they are collaborators who should jointly participate in the development of integrated destination product. However, the practice shows that partial interests may take precedence over the achievement of common destination objectives, which has a negative impact on the cooperation between stakeholders. Such a sequence of events reduces the effects of creative synergy between the activities undertaken by stakeholders in a certain destination.

Implementation of sustainable development in the context of tourism will undoubtedly be one of the key topics of a discourse in scholar circles in the future. Moralization of tourism and the adoption of ethical attitudes among stakeholders, can be a significant step towards reasonable solution (Fennel, 2009; Tribe, 2009). How ever, the absence of ethics leads us to the conclusion that we can discuss 'sustainable tourism', having in mind that tourism destinations have characteristics of complex adaptive systems enabling them to achieve the sustained growth in the long term, but 'sustainable development in the context of tourism' resembles a remote target that is difficult to reach.

Taking into account the consequences of 'wildcard' events in a resent period (terrorist attacks, intensive outbreak of pandemic diseases, oil shocks, regional armed conflicts), and existing trends affecting contemporary tourism and the business environment, such as (Coles and Hall, 2008): population aging in developed countries, the increase of urbanization at the global level, global environmental changes like global warming, etc., which have disturbed a tourism activity at the global level; it seems that the chances for the implementation of concept of sustainable development in the context of tourism, are really minimal. In contrast, a concept of tourism destinations as complex adaptive systems indicates that sustainable tourism can be achieved, as confirmed by the practice of tourism development. In spite of the many challenges the world faced in 2015 (the war in Syria, the tensions between NATO countries and Russia, the migrant crisis in Europe, the gradual slowdown of economic activity in China, etc.), international tourist arrivals grew by 4.4% in 2015, i.e. 1.0 percentage point higher than the rate of global economic growth in the same year (IMF, 2016; UNWTO, 2016). Evidently, tourism destinations as complex adaptive systems form structures that somehow maintain their integrity in the face of continuing change of external and internal factors.

### 4. CONCLUSION

The achievement of optimal satisfaction of all stakeholders, is the key issue in sustainable development of tourism. On the other hand, the achievement of optimal satisfaction of all stakeholders, in a general sense, is a "squaring the circle": due to the extremely heterogeneous structure of tourism activity, optimal satisfaction of some stakeholders, can cause deep dissatisfaction with the other stakeholders. The stakeholders in a certain destination are, at the same time, the competitors aiming to animate the same or similar segments of tourist demand, but, also, they are collaborators who should jointly participate in the development of integrated destination product. However, the practice shows that partial interests often take precedence over the achievement of common destination objectives, which has a negative impact on the cooperation between stakeholders. It is evident that the

heterogeneous structure of tourism as a complex geo-spatial and socio-economic phenomenon generates numerous challenges that impede implementation of the concept of sustainable development.

Understanding tourism destinations as a complex adaptive systems is attractive to tourism scholars because of its comprehensive and in-depth approach. Comprehensive studies of the structure of such networks have significantly contributed to the creation of high quality theoretical basis for the adoption of appropriate management decisions which will make such networks more efficient. There is no doubt that in the future a significant number of tourism destinations will face serious global challenges which may adversely affect their profitability, such as climate change or increased energy costs. A deepening knowledge of the structure of a tourism destination's network, with an emphasis on the study of non-linear relationships between tourism components and self-organizing dynamics, could contribute to the reduction of possible negative effects of future development. Therefore, concept of a tourism destination as a complex adaptive system is, so far, the highest level of evolution of the systemic approach to tourism destinations, much negative of destinations, which increases under the influence of internal and external factors.

Taking into account the conflicting interests of the participants in the tourist economy, sustainable development in the context of tourism, i.e. development of tourism which is fully based on the principles of sustainable development, resembles a remote target that is difficult to reach. How ever, sustainable tourism, meaning tourism that is developed in such a form that can be maintained for an indefinite period, is evidently possible, as confirmed by the practice of tourism development: tourism in many regions has been developing in such a form that can be maintained for an indefinite period. A concept of tourism destinations as complex adaptive systems, also, indicates that sustainable tourism can be achieved. This concept implies the capability of destinations to adapt to external and internal factors, which allows tourism to be maintained for an indefinite period. However, it is questionable whether such a form of tourism that is being developed for an indefinite period of time corresponds to the principles of sustainable development. It seems that we can discuss 'sustainable tourism', but 'sustainable development in the context of tourism' seems to be a fluid and elusive concept.

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