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INDICATORS OF SUSTAINABILITY IN CULTURAL TOURISM

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Abstract

Sustainable development has become one of the most usual concepts mentioned in the business world for last three decades. It was created as the response on negative actions of process of globalization and industrialization. Many international organizations, governments started to emphasize the importance of implementing sustainable development concept in the business which brings together with financial benefits, social and environmental value to the community. Tourism as one of the major country's economic force requires the implementation of sustainable concept to its strategy and operation for long term success. For monitoring the implementation of sustainable tourism development indicators are very important. They warn management on a time for a specific risk so that the corrective actions can be taken. Various authors have identified group of indicators in tourism general. However, those already stated indicators for sustainable tourism development are not sufficient for measuring sustainability in cultural tourism and getting reliable data. This paper attempts to form a group of indicators for measuring sustainability in development of cultural tourism.

Keywords Cultural Tourism, Sustainable Development, Sustainable Indicators:

1. Introduction

During the last century overall progress had been made. Technological, medical, communicational and transportation development have enabled tourism to grow and become tremendously important economy. According to ICOM and WFFM/FMAM tourism is the third largest economy in the world (ICOM and WFFM/FMAM, 2007). Nevertheless, tourism's unplanned growth have brought several negative impact on the natural and socio-cultural environment of many tourist destinations (Domet, 1991; Hall & Lew, 1998; Mowforth & Munt, 1998; Choi & Sirakaya, 2006). Concern about further development of tourism and at the same time further disruption of environment (both ecological and socio-cultural) resulted with global and inclusive concept of sustainability. This relatively new concept of development based on sustainable principles is vague to decision-makers and planners. Recent work of numerous authors (scientists and experts) has been focused on creating and forming understandable and applicable method for measuring sustainability in all stages in tourism industry. This paper focuses on sustainable development of cultural tourism and identifies indicators suitable for cultural tourism.

2. Sustainable tourism and culture tourism

Concept of sustainable development is widely accepted among important tourism organizations, both international and national. The idea of sustainable tourism has been recognized at many international levels, as an approach that should result with environmental, social and economical benefits to all types of tourism (Lazano-Oyola et al., 2012). WTO has defined sustainable tourism as “tourism that takes full account of its current and future economic, social and environmental impacts, addressing the needs of visitors, the industry, the environment and host communities,, (WTO, 2005). Managing tourism based on sustainable principles ensures long term life quality for local community as well as to the quality of visitor's experience (Bramwell & Lane, 1993; Hall & Lew, 1988; Stabler, 1997; Choi & Sirakaya, 2006). Tourist destinations and activities should be planned, prepared and experienced in the way that they do not do any harm to local community and their culture, environment and ecosystem while still being profitable. Former studies has shown that multiple benefits arising from the social, cultural and environmental aspects of tourism including renovated recreational facilities, a wider offering of leisure activities, a cleaner community appearance, better preservation of historical buildings and other cultural assets add a value for better quality of life in general (Gursoy et al., 2002; Jurowski et al., 1997; Madrigal, 1995; McCool & Martin, 1994; Perdue et al., 1990; Ross, 1992; Choi & Murray, 2010). World Tourism Organization (WTO) has created instructions for implementing principles of sustainability in all types of tourism by means of the sustainable tourism development guidelines and management practices. Those principles can be used and are applicable in all forms of tourism at any destination, including mass tourism and all kinds of tourism (Sharareh & Badaruddin, 2013).

According to Sharareh & Badaruddin there is a universal agreement in the tourism industry that cultural tourism is an incredibly difficult thing to define and there seems to be little agreement on what actually constitutes cultural tourism (Sharareh & Badaruddin, 2013, 32). Richards has defined cultural tourism as movement of persons to cultural attractions away from their normal place of residence, with the intention to gather new information and experience to satisfy their cultural needs (Richards, 2011). Cultural tourism is very important component of tourism industry (Shararh & Badaruddin, 2013). The amount of different assets, facilities and people involved in cultural tourism activities shows significance of cultural tourism in tourism industry. Cultural tourism combines “classic” tourist products such as accommodation, restaurants and entertainment with cultural heritage products such as museums, performances, galleries etc. Cultural and heritage assets are delicate in context of socio-cultural attitude of local community and thus consent between tourism planners/managers and local community must be carefully obtained. Moreover, cultural and heritage assets are often physically fragile and need to be handled with caution. In that sense, presentation and carrying capacity should be carefully planned and monitored. In addition the intangible cultural heritage may also be threatened if the development of tourism gives priority to the satisfaction of tourists but harms the maintenance of traditional values in the municipality (Coccosis, 2008). Balance between consuming and safeguarding cultural products is essential. It is necessary to obtain sustainable cultural tourism development for continuous benefit for cultural tourist, national governments, private sector and local communities.

3. Indicators of sustainability in tourism

Developing sustainable tourism and/or redirecting development of tourism towards sustainable is multilevel and comprehensive task. Tourism industry involves the interplay of tourists, business, agencies and the environment in which tourism occurs, is overly complex to be observed totally comprehended. As a result managers, planners and analytics use selected pieces of information – indicators – to monitor the system (Smolčić Jurdana, 2004, 380). Sustainable tourism indicators are defined as the set of measures that provide the necessary information to better understand the links between the impact of tourism on the cultural and natural setting in which this take place and on which it is strongly dependent (WTO, 1996). Several authors and organizations tried to define numerous indicators for sustainability in tourism (Smith, 1995; Miller, 2001; Manning, 1999). Various authors attempted to define system of sustainable indicators for tourism. Most of systems have been created for evaluation developing destinations or presentation a theoretical definition of the indicators system (Innes & Booher, 2000; Bell & Morse, 2001; Dhakal & Imura, 2003; Blancas et al., 2011; Butler, 1999; Castellani & Sala, 2010). The main problem arises in selecting the right indicators and using them. Choosing the right set of indicators is the most important step in planning and managing sustainable development. Unsuitable set of indicators or too many indicators either will show inaccurate state or will provide the unreliable data. Either way, sustainability will not be measured and necessary actions will not be taken. According to Tanguay in literature can be find 768 different indicators of sustainable tourism (Tanguay et al., 2013). Gunn suggests the guidelines for a planning approach to sustainable tourism and points out the importance of indicators in the process of planning sustainable tourism (Gunn, 1994).

The WTO provides set of core indicators of value to managers and planners of tourism destinations as following (WTO, 1996):

- Site protection
- Stress
- Use intensity
- Social impact
- Development control
- Waste management
- Planning process
- Critical ecosystems
- Consumer satisfaction
- Local satisfaction
- Tourism contribution to local economy

Those core indicators should be included in planning and managing sustainable tourism in every type of tourism in every destination. More specific indicators should be derived from the core indicators in the way they meet the need for information thus required actions could be taken. Only when the indicators are used properly they are accomplishing theirs purpose.

Diverse and specific indicators which are based on interdisciplinary approach for tourism and are unified worldwide, make a base for analysis, research and management of sustainable development in tourism (Blažević et al., 2013).

4. Indicators in cultural tourism

In order to measure and monitor effects of cultural tourism both on environmental and socio-cultural dimension, planners and managers require reliable data, which can be gained by using the right indicators. As previously mentioned, there is great number of usable indicators. The hardest part of the process is choosing which ones to monitor. WTO recommended criteria for indicators of sustainable development of destination. Those guidelines are part of general framework for developing group of indicators suitable for cultural tourism. They are grouped by three dimensions of sustainable development: social, economic and environmental (WTO, 2004). European Association of Historic Towns and Regions pointed out the principles of sustainable cultural development as following (Sharareh & Badaruddin, 2013):

- Attention to climate changes as a critical and uncomplimentary global issue i.e. trying to reduce carbon mission
- Attention to intrinsic value to the cultural heritage of historic towns and cities
- Showing respect and admiration to reality and truth, exceptional qualities, rights and beliefs of local cultures and support approaches to cultural tourism
- Cultural tourism as economically important activity should contribute to an overall schedules and agendas of sustainable development
- Preserving and conserving cultural heritage assets and contribute to achieving this
- Pay attention to the needs of local communities and host community should be getting involved in development and planning
- Justice and fairness are crucial to long term sustainability and cultural tourism should provide benefits equitably to the local communities
- Efficient and effective management requires well organized action and all local stakeholders including local government and politics, local group of people and businesses, must be involved in the development of cultural tourism
- Cultural tourism must react and respond to the lacking things of visitor and help to achieving a high quality visitor experience
- The impact of tourism should be assessed according to the value of consumers and producers
- The management and development of cultural tourism should be responsive to change.

Considering three dimensions of sustainability, there are three parties possibly affected by negative impacts of cultural tourism. Indicators should be sufficient and adequate for each one of them. Referring to available literature and findings of the various surveys (WTO, 1996; WTO, 2004; EARTH, 2006; Blackstock et al., 2006; Blancas et al., 2010; Blancas et al., 2011; Lozano et al., 2009; Mauerhofer, 2008; Paracchini et al., 2011; Tanguay et al., 2010; Choi & Sirakaya, 2010; Smolčić Jurdana, 2004; Blažević et al., 2013; Payne, 1993; Miller, 2011; Manning, 1999) core groups of indicators of sustainability in cultural tourism is presented in Figure 1., Figure 2. and Figure 3.

Figure 1. *Indicators for the social dimension are:*

Main aspects	Sustainable issues/indicators
Socio-cultural effects of tourism on host community	Capacity of transport services Capacity of financial services
Local public safety	Tourist satisfaction with safety of the destination Protected cultural heritage
Conservation of cultural heritage	Heritage use intensity Protection of cultural traditions
Social carrying capacity of the destination	Social carrying capacity
Safeguarding cultural identity of local community	Authentic presentation of cultural heritage Cultural education
Quality of life in general	Level of satisfaction with community life in general Effects on available income

Figure 2. *Indicators for the economic dimension are:*

Main aspects	Sustainable issues
Economic benefits of cultural tourism for the host community and destination	Volume of tourism demand Length of stay Tourism expenditures on museums, entertainment and excursions Employment generated by the service sector Investment in service sector
Sustaining tourist satisfaction	Tourist satisfaction with price – quality relationship Tourist demand faithfulness Satisfaction with the visit to cultural sites of the destination
Cultural facilities	Cultural establishment of the destination
Institutional regulation	Laws and regulations in regard with culture Non-profit responds to cultural tourism Government and private cultural organizations Funds
Seasonality of tourism activity	Seasonality of tourism demand
Tourism related transport	Access to the destination by different transportation mode Transportation in the destination
Cultural routes	Number of cultural routes that includes destination in their itinerary Quality of cultural routes regarding to tourist and cultural aspect

Figure 3. *Indicators for the environmental dimension are:*

Main aspects	Sustainable issues/indicators
Protection of the natural ecosystem	Protection of valuable natural assets
Energy management	Energy Renewable energy
Water availability and management	Water use Water saving
Wastewater treatment	Treatment Treatment installations Water production
Waste management	Recycled waste (glass)
Atmospheric pollution	Noise pollution Pollutant emissions
Management of the visual impact of facilities and infrastructure	Impact of construction Erosion Landscape conservation Impact of the road network
Intensity of use	Intensity of tourist use Land use
Environmental management	Environmental managers

Social dimension of sustainable cultural tourism should ensure benefits for both local community and local culture, tangible and intangible. Carefully monitoring effects of cultural tourism using these indicators could signal possible threats to cultural identity of host community, cultural heritage itself and well-being of local population (Kim et al., 2013).

Economy of cultural tourism is sustainable when the economic needs of local community are met with economic possibilities of cultural tourists. It can be accomplished with high quality cultural tourist product, including cultural part (cultural routes, museums, galleries), tourist part (accommodation, transportation, entertainment) and institutional preconditions for developing cultural tourism at the destination (laws, regulations, public rates and state subsidies).

Environmental sustainability can be achieved by respecting capacity of ecosystem and recognizing possible threats to it. Protection of the natural ecosystem should include energy management, water management, waste management, and management of atmospheric pollution, visible impact of facilities and infrastructure and especially intensity of usage. These tools could facilitate the identification and prevention of problems, help in decision making process and establish corrective measures when they are necessary.

5. Conclusion

Sustainable development is over-all accepted approach. Tourism industry while at the same time requires beauty of nature, authentic culture and cleanness of destinations; it distorts it with its activities. By observing the given problem, scientists and experts have discovered the solution.

Develop tourism which is based on sustainable principles. In order to ease the process of sustainable planning and monitor its development, indicators were created. As presented, indicators are numerous and suitable for general approach in tourism development. These general indicators are not always adequate and sufficient for managing tourism development. As the mass tourism is declining and specific types of tourism are growing, there is a need to create a specific group of indicators for each type of tourism in order to monitor and maintain its sustainability. Cultural tourism is significant part of tourism industry and therefore it is important to construct a platform on which sustainable cultural tourism could grow. Social sustainability should be ensured by including community stakeholders while planning and managing development of cultural tourism (Moseley, 2002; Pearce et al., 1996; Choi & Sirakaya, 2006). Environmental sustainability should be ensured by respecting the carrying capacity of ecosystem and reducing all types of the pollution. Economic sustainability should be achieved with high quality of cultural tourist product. This paper recommends group of indicators for planning and measuring achieved sustainability in the cultural tourism. For each dimension of sustainability main aspects are suggested with its core sustainable issues or indicators. Sustainable development of cultural tourism includes socio-cultural effects of tourism on host community, local public safety, social carrying capacity of the local community, conservation of cultural heritage, safeguarding cultural identity of local community and quality of life in general. Environmental sustainability of cultural tourism succeeds via protection of the natural ecosystem, effective energy, waste and environmental management, water availability and management, wastewater treatment, controlling atmospheric pollution and appropriate management of the visual impact of facilities and infrastructure. Furthermore economic dimension of sustainability is achieved by considering economic benefits of cultural tourism for the host community and destination, sustaining tourist satisfaction, acceptable seasonality of tourism activity, designed cultural routes and cultural facilities, planned proper tourism related transport and efficient institutional regulation. Further research should focus on determination of each indicator separately and detecting threatening levels of impact of cultural tourism. In addition, corrective measures should be recommended.

References

- Bell, S., & Morse, S. (2001). Breaking through glass ceiling: who really cares about sustainability indicators? *Local Environment*, 14 (1): 291-309.
- Blackstock, K. L. et al. (2006). *Indicators and Sustainable Tourism: Summary of Interview Findings*. The Macaulay Institute, Craigiebuckler, Aberdeen, AB15 8QH
- Blancas, F. J. et al. (2011). How to use sustainability indicators for tourism planning: The case of rural tourism in Andalusia (Spain). *Science of the Total Environment*, 412(413): 28-45.
- Blancas, F. J. et al. (2010). Goal programming synthetic indicators: an application for sustainable tourism in Andalusian coastal countries. *Ecol. Econ.* Vol. 69, No.11, 2158-2172.
- Blažević, B. et al. (2013). Analitička podloga upravljanja održivim turizmom. *Ekonomski pregled*.64 (2):143-158.
- Bramwell, B. & Lane, B. (1993). Sustainable tourism: An evolving global approach. *Journal of Sustainable Tourism*,1(1):1-5.
- Butler, R. W. (1999). Sustainable tourism: A state-of-the-art-review. *Tourism Geographies*, Vol.1(1): 7-25.

- Castellani, V., Sala, S. (2010). Sustainable performance index for tourism policy development. *Tourism Management*, 31(6): 871-880.
- Choi, H. C. & Murray, I. (2010). Resident's attitudes toward sustainable community tourism. *Journal of Sustainable Tourism*. 18(4): 575-594.
- Choi, H. C., Sirakaya, E. (2006). Sustainability indicators for managing community based tourism. *Tourism Management*. 27 (6): 1274-1289.
- Coccosis, H., 2008. Cultural heritage, local resources and sustainable tourism. *Int. J. Serv. Technol.Manage*. 10(1): 8-14.
- Dhakal, S & Imura, H. (2003). Policy-based indicators system: emerging debates and lessons, *Local Environment*. 8, 113-119.
- Eber, S. (1992). Beyond the green horizon: principles for sustainable tourism. World Wide Fund for Nature (WWF).
- Gunn, C. A. (1994). *Tourism Planning: Basics, Concepts, Cases*, Taylor & Francis, Washington, DC
- Gursoy, D., Jurovski, C. & Uysal, M. (2002). Resident attitudes: A structural modeling approach. *Annals of Tourism Research*. 29(1): 79-105.
- Hall, C. M., & Lew, A. A. (1998). The geography of sustainable tourism development: Introduction. In C. M. Hall & A. A. Lew (Eds.), *Sustainable tourism: Geographical perspectives*, 1-24. New York, NY: Addison Wesley Longman Ltd.
- ICOM and WFFM/FMAM, 2007. Declaration of the International Council of Museums (ICOM) and the World Federation of Friends of Museums (WFFM) for Worldwide Sustainable Cultural Tourism www.icom.museums/fileadmin/user_upload/pdf/Statements/ENG/tourism2007.eng.pdf (accessed 13.7.2014).
- Innes, J. E., Booher, D. E., (2000) Indicators for sustainable communities: a strategy building on complexity theory and distributed intelligence, *Plan Theor Pract*. 1,173-185
- Jurovski, C., Uysal, M. & Williams, D. R. (1997). A theoretical analysis of host community resident reactions to tourism. *Journal of Travel Research*. 36(2):, 3-11.
- Lazano-Oyola, M. et al. (2012). Sustainable tourism indicators as planning tools in cultural destinations. *Ecological Indicators*. 18, 659-675.
- Madrigal, R. (1995). Residents perception and the role of government. *Annals of Tourism Research*. 22(1): 86-102.
- Manning, T. (1999). Indicators of tourism sustainability. *Tourism Management*. 20, 179-181.
- Mauerhofer, V. (2008). 3-D sustainability: an approach for priority setting in situation of conflicting interests towards a sustainable development. *Ecol. Econ*. 64: 496-506.
- McCool, S. F., Martin, S. R. (1994). Community attachment and attitudes toward tourism development. *Journal of Travel Research*. 32(2): 29-34.
- Miller, G. (2011). The Development of Indicators for Sustainable Tourism – Results of a Delphi Survey of Tourism Researches. *Tourism Management*. 22, 351-362.
- Mowfirth, A., & Munt, I. (1998). *Tourism & sustainability: New tourism in the third world*, London, UK: Routledge
- Moseley, M. J. (2002). *Sustainable rural development: The role of community involvement & local partnership*. NATO Advanced Research Workshop, Krakow, Poland, November 2002.

- Paracchini, M. L. et al. (2011). An Aggregation framework to link indicators associated with multifunctional land use to the stakeholder evaluation of policy options. *Ecological Indicators*. 11,124-139
- Payne, R. (1993). Sustainable tourism: suggested indicators and monitoring techniques. *Tourism and Sustainable Development: Monitoring, Planning and Managing*. Department of Geography, University of Waterloo, Canada, 249-254.
- Pearce, T. et al. (1996). *Understanding & managing the tourist-community relationship*. London, UK: Elsevier
- Perdue, P. R., Long, P. T. & Allen, L. (1990). Resident support for tourism development. *Annals of Tourism Research*. 17(4): 586-599.
- Richards, G. (2011). Cultural tourism trends in Europe: a context for the development of Cultural Routes. *Khovanova-Rubicondo, K. (ed.) Impact of European Cultural Routes on SMEs innovation and competitiveness*. Strassburg: Council of Europe Publishing, 21-39.
- Ross, G. F., (1992). Resident perception of the impact of tourism on an Australian city. *Journal of Travel Research*. 30(3):13-17
- Sharareh, A. D. & Badaruddin, M. (2013). Local Perception of Tourism Development: A Conceptual Framework for the Sustainable Cultural Tourism. *Journal of Management and Sustainability*. 3(2): 31-39.
- Smith, S. L. J., (1995). *Tourism Analysis: a Handbook*, 2nd edition. Essex: Addison Wesley Longman.
- Smolčić Jurdana, D. (2004). Indicators of sustainability in tourism, *New Trends in Tourism and Hospitality*, 379-388.
- Stabler, M J. (Ed.). (1997). *Tourism & sustainability: Principles to practice*. New York, NY: Cab International
- The European Association of Historic Towns and Regions (2006.) Sustainable cultural tourism in historic towns and cities. United Kingdom.
- UNWTO, Making Tourism More Sustainable - A Guide for Policy Makers, *UNEP and UNWTO*, 2005, 11-12 <http://dtxqtq4w60xqpw.cloudfront.net/sites/all/files/docpdf/sustainability.pdf> (accessed 16.7.2014).
- World Tourism Organization, 2004. *Indicators of Sustainable Development for Tourism Destinations. A Guidebook*. World Tourism Organization, Madrid
- World Tourism Organization. (1996). *What Tourism Managers Need to Know: A practical Guide to the Development and Use of Indicators of Sustainable Tourism*. Madrid: WTO