

# Handbook on Tourism Development and Management

Kerri Hayden Collins  
Editor



*Tourism  
and  
Hospitality  
Development  
and  
Management*



**TOURISM AND HOSPITALITY DEVELOPMENT AND MANAGEMENT**

# **HANDBOOK ON TOURISM DEVELOPMENT AND MANAGEMENT**

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**HANDBOOK ON TOURISM  
DEVELOPMENT AND MANAGEMENT**

**KERRI HAYDEN COLLINS  
EDITOR**



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## PREFACE

The fast growth of the tourism industry over the past decades is one of the most remarkable economic phenomena of our time. This handbook discusses several topics on the development of tourism and management. Some of the topics discussed include managing heritage and culture; the challenges climate change arises for tourism destinations; sustainability; rural development through tourism; barriers and drivers to sustainable tourism development; and the role of tourism in the formation of environmental outlook.

Chapter 1 – This chapter discusses the potential for sustainable tourism in a southern Mexican Maya community. The village of Coba is located a few hours from Cancún in the Yucatán Peninsula and is geared towards archaeological and cultural tourism for much of its economic livelihood. The purpose of this chapter is to critically examine the idea of sustainability from both local and external perspectives. The author argues that while sustainable tourism needs to promote indigenous rights and involvement, it should also take into account the wants and needs of visitors, tour agencies, and governmental policies who each stake a claim to the community's archaeological heritage. The authors look at the complexities involved in the successful management of this industry and show how local Maya workers should consider multi-party interests as a means of maintaining local agency and preserving cultural values. The reliance on tourism for both financial profit and ethnic display entails differing ideologies of development, customer service, and cultural awareness which are continuously negotiated, both within and between each party. Maya employees can accommodate them to varying degrees in order to assert long-term control over tourism in their community. Data is based on first-hand interviews, questionnaires, and observations among local workers, tourists, and tour agencies between 2009 and 2013. It contributes to the fields of tourism studies and applied anthropology by conceptualizing viable avenues of interdependency and local management in Cobá and similar locations throughout the world.

Chapter 2 – The fast growth of the tourism industry over the past decades is one of the most remarkable economic phenomena of our time. In a context of global warming, many of the countries or destinations are considering which effects on the demand and the tourism industry can be foreseen and how they should be tackled. In this paper the most relevant studies that have tried to link climate change and tourism from the economic point of view are analyzed. Then, the possible impacts of global warming on the tourism and their contribution to greenhouse gases emission are reviewed as well as the effects that different mitigation measures could have on the tourism industry. Although there has been an increase of knowledge about the perception of stakeholders on climate change and its effects on tourism

activity, the results of this literature review suggest the need to expand the climatic variables included in the analysis, to consult tourist about weather as a travel decision determinant and to regionalize the studies already performed (in special those predicting models), in order to go in deep in the analysis of the interactions between climate change and tourism, but also the necessity to know the consequences of global warming on environment in the sense that it is the most important attraction for the main tourist destinations.

Chapter 3 – At present, sustainability issues attract the attention of academic and professionals around the world. In the tourism industry, this interest is even greater due to the negative impacts such as air and noise pollution, biodiversity loss, waste generation, non-compliance with fundamental labour standards, etc ... that this industry cause because of an unmanaged growth and development. In today's rapidly changing tourism market, the only possibility for tourism companies to compete on the market is through offering distinguished sustainable product and services. Tourism companies should be able to create the tourism product while operating in a sustainable and responsible way. By implementing socially responsible initiatives, tourism companies can contribute to the achievement of sustainable tourism. This study is aimed at exploring the importance of sustainability and corporate social responsibility in the tourism industry.

Chapter 4 – The carrying capacity has a growing interest given that it is closely linked with sustainable tourist development. The justification of the utility of this concept is given by means of efficient methodological proposal. The empirical application is based on studying the psychological carrying capacity of the tourist, that is to say, we verify the tolerance levels of the visitors to the tourist destination with respect to its highest levels of use, which are identified with the tourist season. To this end, the degree of tourism satisfaction is taken into account during distinct times of the year. The opinions are analyzed of those tourists who visit Andalusia (Spain). It is studied the satisfaction of the visitors when the levels of the tourist use are higher. This method can constitute a useful alarm signal for tourism planners, who must complement this work with other assessments of the economic, social and environmental aspects of the tourist destination.

Chapter 5 – This paper examines residents' perceptions on a set of socio-economic, environmental and cultural externalities exerted by the development of cruise tourism. The research involves two ports, Messina and Olbia, located on the two largest Italian islands namely Sicily and Sardinia. The random sample, collected in 2011, is stratified by gender, age and place of residence of the interviewees and contains 1,499 for Messina and 1,208 observations for Olbia. The analysis involves an integrated probabilistic approach where the dependent variable employed is the willingness to support a further investment in the cruise tourism at these two specific destinations. To this aim, a composite framework is used starting with the development of a correspondence analysis to synthesise the residents' perceptions about the externalities, then used as factors within the quantitative estimation. Further explanatory variables are: years of residence, number of family members, distance in kilometres that the resident lives from the port and main tourism attractions, subscription to an association, economic occupation as well as age and gender. The results show that residents have an overall positive attitude towards the development of cruise tourism with respect to some of the social, cultural and economic positive factors, but concern is also raised on the environmental and some negative economic impacts. These findings provide input to local policy makers.

Chapter 6 – The group of over 700 sites of prehistoric Rock art of the Iberian Mediterranean Basin, also known as Levantine art, were collectively declared a World Heritage Site by Unesco in 1998. The sites are in the eastern part of Spain and contain rock art dating to the Upper Paleolithic or (more likely) Mesolithic periods of the Stone Age. It is notable for the number of places included, the largest concentration of such art in Europe. Its name refers to the Mediterranean Basin. However, while some sites are located near the sea, many of them are inland in Aragon and Castile-La Mancha; it is also often referred to as Levantine Art. Valencian Community holds 301 places. Province of Alicante has 130 places. Province of Castellón holds 102 places and province of Valencia holds 69 places. Hunting scenes showing groups of archers shooting arrows at a wide range of animals, following tracks, collecting their prey and gathering honey are just some of the drawings that have endured for thousands of years inside the caves. They are generally found in rocky shelters and their excellent state of preservation and variety (we can identify three styles – Levantine, Macro schematic and Schematic) has allowed us to record and identify the evolution of cave art in the Region of Valencia. The sites around Bicorp (La Canal de Navarrés, Valencia) are home to world-famous examples of this cave art. Millares, Dos Aguas, Quesa, Moixent, Enguera and Navarrés are all located in the Macizo del Caroig mountains as well and they too have the privilege of having archaeological sites with prehistoric paintings that have been declared World Heritage Sites.

In this work the authors try to analyze if these resources could be the basis for creating a sustainable tourism destination that allows the rural development of this area.

Chapter 7 – Tourism Market Research has been an optional subject in the Curricula of the Tourism Diploma in Spanish Higher Education until 2009. The adoption of the European Higher Education Area seems to boost the participation of this subject in the new Tourism Degree in Spain. However, this subject is present in the curricula of less than half of the Spanish universities imparting the Tourism Degree. This subject should have a greater academic participation in Spain due to the transcendence of tourism in this country and the need for training the students and enhancing their interest in tourism research. The term tourism market research is widely accepted by the academic community. However, there is some controversy regarding the use of the terms of market research and commercial research. In some cases, conceptual differences are posed between the two terminologies, while in other cases, a greater equity is advocated. The authors try to understand the basis of these differences, concluding that the two terminologies have their own limitations, so it would be advisable to use a more appropriate and enlightening term.

Chapter 8 – Determining the prices of tourist attractions has always been a thorny issue, given the economic, social, cultural, and even political considerations involved. A delicate balance is also necessary to accommodate the influences of both the demand and supply sides of the market. By constructing a comprehensive regression model, this study inductively proposes and empirically investigates the major determinants of admission fees for tourist attractions. The study also distinguishes the respective impacts of such admission fees on different market segments. The travel reviews on a tourism e-commerce website in China are used as data sources. Research results demonstrate variations in the influences of the indicators of class, authenticity, amenities, accessibility, and discounts on both the admission fees for attractions in general and the major market segments. The findings of this study may shed light on the theoretical implications of the proper pricing of tourist attractions as well as on the improved use of such pricing to optimize value for tourists.

Chapter 9 – This study focuses on various key issues related to the developmental facets of cultural tourism as an alternative cultural policy at the local level. In this context, scope for capitalizing on local cultural capital is seen through the lens of cultural tourism in both the commercial and the not-for-profit aspect, as these contribute decisively to reaping economic, social, cultural and educational benefits, i.e., substantiating sustainable local development.

The management of cultural heritage with a view to capitalizing on it constitutes a cultural challenge, heavily dependent on properly understanding those values which are embedded in the notion of ‘cultural heritage’.

In the context of this case study emphasis was given on the analysis of the ethnographic village of Hollókő and the historical wine region of Tokay, located in northeastern Hungary and listed as UNESCO World Heritage Sites in 1987 and 2002 respectively. It is concluded that cultural tourism is a tool necessary for sustainable development and that its elaborate and sophisticated nature calls for strategic planning and rational sustainable management, as the absence thereof could possibly lead to significant deterioration of cultural heritage and in the long run alter the very identity of a location, as evidenced in particular in the case of Hollókő. Especially for World Heritage sites, the strategic management of cultural tourism and the host community’s active participation become imperative given the rapid development of tourism that World Heritage status brings.

Chapter 10 – Hospitality businesses need to implement a number of strategies so as to compete successfully in today’s tourism market. Among other tools, hoteliers can use information and communication technologies (ICTs) in order to attract more guests, ameliorate service quality, deliver exceptional guest satisfaction and increase revenues, as well as market share. This chapter investigates the needs and ICT tools used by the new tourists when searching, selecting and booking a lodging abroad. Furthermore, it explores what are the success factors on ICT and examines whether the ICT investments enhance competitiveness in the hospitality industry and to what extent. Based on the research findings, strategic proposals are addressed to the hotel managers towards enhancing the competitiveness of their property.

In order to achieve the research goals, the authors conducted two surveys: the first took place in China (which is a priority tourism market for many Mediterranean countries) and the second in Central Macedonia, Greece.

The results reveal that the needs and practices of the Chinese outbound tourists as it concerns the ICT tools are as follows: information about the destination should be in the Chinese language and listed preferably in ‘Baidu’, a superior search engine for Chinese netizens; The majority of the Chinese tourists (88.27%) are using Chinese OTAs (online travel agencies) when searching/booking hotels; The most preferred social media in China are QQ, Weibo and WeChat; Most tourists (51% of the sample) are satisfied when searching and purchasing tourism services from the Internet.

On the other hand, the findings show that the top 5 ICT systems considered the most critical to success for the Greek hotel managers are: guest security systems; website development with booking engine; on-line guest satisfaction evaluation; high-speed/WiFi Internet; and, the property management systems. Furthermore, adequate (more than 5% of annual capital expenditures) and proper investments in new technology systems enhance the hotel competitiveness in terms of efficiency, effectiveness and profitability.

A content analysis and online survey conducted in China, as well as a competitive analysis in the area of ICT and the application of both benchmarking and empirical analysis

for the hotel economic assessment in North Greece, are among the main contributions of this chapter. The findings and proposed analyses can help hotel managers evaluate and compare their property with the competitive set as well as utilize the suggested strategies in order to improve the competitiveness of their property and become more active players in the tourism market.

Chapter 11 – Current research details methodological framework for the land planning of the recreational activities based on ecologic approach. Human impacts on landscapes caused by touristic activities should be in accordance with sustainability level, i.e., without changing natural landscape elements, their function and processes, as well as environmental quality. Region of Štiavnické Bane in Slovakia represents a case study area that is completely under nature and landscape conservation. The methodological framework for the planning of recreational activities is based on the methodology of ecologic carrying capacity which is implemented by the Landscape ecological planning. The main result from this work is suitable tourism activities determined by the ecological approach. Methodological steps include spatial analysis, interpretation, evaluations and propositions which were suggested for recreational activities. The most suitable activities for winter periods are downhill skiing, cross-country skiing and winter tourism. For the summer period the best activities are the following ones: hiking, water sports and recreational activities linked to watering and sport fishing.

The most suitable activities for the year-round period are service facilities and therapeutic recreational facilities. This sum of the activities represents the level of the land using that has not any negative environmental impact.

Chapter 12 – As a small nation, Brunei Darussalam has committed to developing tourism in order to detach itself from being too reliant on oil and gas, which has fuelled its economy since the late 1920s. The country produced the first tourism master plan, while restructuring the tourism authority in 1996, which highlighted the gravity to develop the tourism sector, as well as the potential of its tourism industry in the Southeast Asian region. Nearly two decades later, tourism's contribution to the country's gross domestic product (GDP), employment and investment is still unconvincing, although figures show that they are increasing. Neighbouring developing countries such as Cambodia, Laos and Vietnam have recorded greater percentage contribution to their respective GDPs than Brunei Darussalam's. A new five-year tourism master plan was implemented in 2012 that outlines nature and culture and Islamic tourism as the key areas to be developed. In spite of this, there still exists scepticism about Brunei Darussalam's tourism development. Therefore, this chapter aims to uncover the reasons for tourism's weak contribution and slow growth in Brunei Darussalam, and identify the challenges faced by the country in developing its tourism industry.

Chapter 13 – This study presents insights into the barriers and drivers to sustainable tourism development in Arta, Greece based on residents' perspective. The empirical analysis is based on the estimation of binary logistic regression model. Results, based on statistical analysis, confirm that there are many administrative as well as economic barriers that prevent the development of sustainable tourism in the specific area. The empirical results support that residents' perceptiveness for sustainable development varies over residents with particular demographic characteristics. In particular, the residents recognize that their area is a place where sustainable development can flourish if emphasis is given in the education and information campaigns of the citizens. Finally, this study shows that the most important

parameter for the promotion of sustainable tourism development in the area is not only the local authorities initiatives but as well as the citizens participation.

Chapter 14 – The paper discusses features of tourism as a special sphere of activities focused on the formation of environmental outlook. Tourism specifics related to environment conservation becomes evident in its features as a segment of economy and in peculiarities of territory development. Tourism as a multipurpose type of natural resource use, successfully combined with other types of economic activities, requires various features of natural complexes, often polar. Tourism is shown not to cause direct removal and use of natural resources. On the contrary, the support of quantitative and qualitative parameters of these resources is considered the basis for industry development. Tourism, which main resource is natural complexes, is extremely interested in their conservation. Strategically tourism interrelation with nature and its protection is regarded as nature protection for tourism; nature protection through tourism; nature protection from tourism. Environmental tourism is the main type of tourism, which determines the value of natural recreational resources as an important condition of their functioning. A highly specialized environmental tourism and ecological properties of tourism in general are distinguish. Definitions of environmental tourism and its specifics in countries of different development are briefly analyzed. Various macro-regions of the world have different opportunities and prospects for tourism development in general and for environmental tourism in particular. World ecological community concluded that the optimum for the ecological well-being of a country is to conserve 10-15% of its area. These figures should be taken with great caution, because for regions located in high latitudes, where natural complexes are most sensitive to human impacts, they do not correspond to reality. Due to ambiguity of definitions and requirements for environmental tourism, there are some opinions on “not harmless theoretical enthusiasm about ecological tourism” in Russia.

*Chapter 1*

**MANAGING HERITAGE AND CULTURE:  
THE GOAL OF SUSTAINABLE TOURISM  
IN A YUCATEC MAYA VILLAGE**

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**ABSTRACT**

This chapter discusses the potential for sustainable tourism in a southern Mexican Maya community. The village of Cobá is located a few hours from Cancún in the Yucatán Peninsula and is geared towards archaeological and cultural tourism for much of its economic livelihood. The purpose of this chapter is to critically examine the idea of sustainability from both local and external perspectives. I argue that while sustainable tourism needs to promote indigenous rights and involvement, it should also take into account the wants and needs of visitors, tour agencies, and governmental policies who each stake a claim to the community's archaeological heritage. I look at the complexities involved in the successful management of this industry and show how local Maya workers should consider multi-party interests as a means of maintaining local agency and preserving cultural values. The reliance on tourism for both financial profit and ethnic display entails differing ideologies of development, customer service, and cultural awareness which are continuously negotiated, both within and between each party. Maya employees can accommodate them to varying degrees in order to assert long-term control over tourism in their community. Data is based on first-hand interviews, questionnaires, and observations among local workers, tourists, and tour agencies between 2009 and 2013. It contributes to the fields of tourism studies and applied anthropology by conceptualizing viable avenues of interdependency and local management in Cobá and similar locations throughout the world.

**INTRODUCTION**

Located in the state of Quintana Roo, Cancún is one of the most popular tourist destinations throughout Mexico. Its creation over forty years ago has dramatically impacted

much of the Yucatán Peninsula, especially along the coastal Riviera Maya. This area begins just south of Cancún and includes the rapidly-developing cities of Playa del Carmen and Tulum. Cruise ships traveling between Playa and the island of Cozumel leave several times a day, drawing guests who visit the surrounding areas to the region. Moreover, weekly boat trips between Houston-Mérida (the Yucatecan capital) and Tampa-Cancún offer American tourists to the opportunity to make short visits to various locations of the peninsula throughout the year. Ecological and cultural theme parks such as Xcaret and Xel-Ha, located between Playa del Carmen and Tulum, provide several avenues of entertainment for both Mexican and international tourists. Maya archaeological sites and *cenotes* (swimmable freshwater sinkholes formed from collapsed limestone bedrock) also abound throughout the peninsula, complementing the “sun, sea, and sand” tourism that characterizes the area. The impacts of coastal development in the region stretch south to the Belize border (Walker, 2009).

In addition to Cancún’s popularity and subsequent impact throughout Quintana Roo, the states of Yucatán and Campeche are increasingly exposed to global tourism in other respects. The Yucatecan capital city of Mérida provides a gateway to nearby archaeological zones and beaches on the northern part of the peninsula. Ancient Mayan sites such as Chichén Itzá and Uxmal are easily accessible by car or bus, and enjoy international notoriety by historians and tourists alike. The development of both sites has resulted in new hotels, restaurants, and shops that generate local employment in surrounding towns. Chichén Itzá alone is the second-most visited site in Mexico (Secretaria de Turismo, 2006) and was named a UNESCO World Heritage Site in 1988 (Breglia, 2005: 386). The modern town of Cobá is adjacent to the archaeological site of its namesake in the Mexican state of Quintana Roo. It is forty-five minutes inland from the coastal town of Tulum (its municipal capital) and roughly one hour from Chichén Itzá and the colonial city of Valladolid in Yucatán.

This chapter specifically discusses the potential for sustainable tourism in this location. Given Cobá’s position as a small, relatively underdeveloped, and locally-controlled tourist destination, my objective is to take a multifaceted approach to conceptualizing sustainability. This takes into account both local and external needs which are continuously negotiated on a daily basis. I argue that long-term local power is viable if community members concede to the interests of various parties in certain respects without necessarily losing their cultural values or social bonds. My data combine ethnographic research in the form of interviews, questionnaires, and observations with academic literature and personal dialogues among scholars working in the same region.

The results elucidate some of the successes, misunderstandings, and conflicts that arise through cross-cultural encounters between local workers, tourists, agencies, and the government. These pertain to differing ideologies of development, customer service, and cultural awareness, both within and between each party. By understanding the needs of each group and acknowledging the complexities involved in fully satisfying them, I show how the Maya can make certain accommodations that will allow them to maintain a sense of local agency and control over this industry in the future. The following section summarizes current models and ethnographic perspectives on sustainability and community-based tourism.



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## SUSTAINABILITY AND COMMUNITY-BASED TOURISM

Tourism as an industry encourages the circulation of peoples, ideas, and capital throughout the world (Salazar, 2010: 3). While many seek the luxury and escape of everyday life through beaches and resorts, they also search for a sense of “otherness” when traveling to different destinations. Visitors to indigenous communities in particular often hope to learn more about local culture and interact with “authentic” representatives of the past, albeit in a commercialized form (van den Berghe, 1995; Chambers, 2000; Greenwood, 1989; Urry, 1990, 1995; Nash, 1997; MacCannell, 1976; Hinch, 2004). MacCannell (1973:10) explains that tourists often “desire to have a deeper involvement with their host culture to some degree, as it is a basic component of their motivation to travel.” Urry’s (2002) notion of the “tourist gaze” provides a framework for understanding how the spatial proximity of local populations to famous sites, such as the Maya ruins, shapes their nature of interaction with visitors. Accordingly, people “gaze upon” ideal and authentic representations of what they expect from guidebooks and other media (Urry, 2002:78), as it is up to tour guides, companies, and locals to fulfill this need in different ways.

The United Nations World Tourism Organization defines sustainable tourism as an industry 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” (2005: 11). Community-based tourism is one facet of sustainability, focusing on a bottom-up approach to touristic planning and development, particularly in smaller communities (Gossling and Hall, 2005: 36). This concept arose in the 1970s as a response to the negative effects of mass tourism, as it promotes local participation, self-management, and equal distribution of benefits among its members (Hall and Lew, 2009; Cater, 1993). While the concept of community-based tourism ideally caters to the marketing and control of indigenous history and culture, several scholars examine the complexities involved in implementing it as a viable component of sustainability between hosts and guests. A lack of professional training among locals, external financial and ideological control over community management, menial job opportunities, the absence of multi-party collaborations, and differential access to resources among village citizens are some critical issues challenging long-term sustainability (Zapata et al., 2011; Butcher, 2008). Many times, the novelty of interacting with the exotic “other” featured in books and advertisements often caters to the desires of tourists, agencies, and private corporations, putting the interests of hosts as a second priority.

On the other hand, tourism itself allows for a continuous negotiation of power relations. It simultaneously can reinforce political and economic hierarchies while providing new outlets for cultural assertion and representation (Hall, 2010). Given this multifaceted context for understanding community-based sustainability, scholars have proposed models for implementing this concept in tourism studies. For example, Ryan (2005: 4) asserts that any type of ‘alternative’ tourism should not simply reinforce stereotypical images of a host group, but provide a means of increasing local power, self-advancement, and dialogue between different parties. Jamal, Camargo, and Wilson (2013) add that sustainability needs a comprehensive theoretical and practical framework centering on justice and care that further acknowledges the structural complexities of colonialism, racism, and imperialism in shaping both micro- and macro-level interactions throughout space and time. Once this framework is

developed, scholars can better measure sustainability through a series of assessments and indicators reflecting its level of success.

Okazaki (2008) synthesizes these factors by proposing a community-based tourism (CBT) model which integrates the theories of ‘ladder of citizen participation,’ power redistribution, collaboration processes, and social capital creation. The first theory, developed by Arnstein (1969), identifies various levels of community participation and provides steps required to increase involvement. Similarly, Jamal and Getz (1995, 1999) promote multi-party collaboration as integral to sustainable tourism, even though they acknowledge that power discrepancies and conflicts are bound to occur in the process. Facilitators can then play a pivotal role in building constructive dialogue and respectful interrelationships among participants. Finally, social capital refers to “the norms and networks that enable people to act collectively” (Sato, 2001: 12, Woolcock and Narayan, 2000: 226). These include both internal and external ties that serve to strengthen overall satisfaction with community-based tourism. The CBT model, therefore, incorporates each theory and takes into account the local/outside and horizontal/vertical relationships involved in this process. Ideally, the promotion of community participation facilitates power redistribution, which in turn depends on collaboration. Social capital is then gradually established among stakeholders in a synergistic manner. While the demographics, conditions, participants, and overall characteristics of each particular area may differ, this model helps conceptualize the steps and stages needed to enact community-based sustainable tourism.

Public fascination with both ancient ruins and contemporary indigenous populations serves as a context for examining sustainability within the Maya region of Latin America. Several scholars have studied the diverse role of community-centered involvement in ecological, archaeological, and cultural-based tourist settings throughout the Yucatán Peninsula over the past few decades (Bascopé, 2004; Kray, 1998; Mendoza-Ramos and Prideaux, 2012; Taylor, 2012). Many villages have received some type of financial aid and support for tourism development from various sources, such as NGOs, government agencies, and private donors.

In Carballo-Sandoval’s (1999) research, he describes the potential for sustainable ecotourism in three towns throughout the state of Quintana Roo. Members of each village recognize the economic and social benefits that this industry has brought them and express a strong interest in participating more actively on a local level. The challenge, however, lies in the fact that the communities, regional tourism authorities, the private sector, and NGOs are not working together on a consistent basis due to disorganization and conflicting interests. A lack of communication, support, advice, and training are major obstacles to the full involvement of Maya populations in developing their towns. Martín and Martín González (2008) propose a small-scale model of locally developed and managed tourism in the Yucatán Peninsula that relies on the parties mentioned above, in addition to scholars and the tourists themselves, in an interdependent manner. Multi-group participation would entail training, investment, coordinated planning, and patience which would place community members as the central focus of involvement. The following section builds on these concepts and models through its focus on Cobá as a specific case-study for community-based tourism development in southern Mexico.

## COBA: HISTORY AND TOURISM

Cobá is located in the state of Quintana Roo in Mexico's Yucatán Peninsula. It was a notable Maya city-state that flourished in the Classic and Post-Classic periods starting around 600 AD. Archaeologists estimate that around 50,000 people lived there before its final decline nearly 700 years later (Folan, Kintz, and Fletcher, 1983). Abandoned for centuries, it was resettled by a small number of Yucatec-Mayan families from the neighboring state of Yucatán in the 1940s for the purposes of *chicle* (gum resin) production and *milpa* (cornfield) agriculture (Kintz, 1990). They established a residential community just outside of the archaeological site situated around one of the few lakes in the region. An *ejido* (a political and economic system of communal land ownership) was formally established in the early 1970s. Today, it remains a largely kin-based town through descent and marriage ties.

The majority of citizens are bilingual in Yucatec and Spanish and grew up in Cobá for most or all of their lives. The modern town consists of around 1,300 inhabitants (INEGI, 2010). One hundred and thirty two of these citizens are *ejidatarios* who serve as the local governing body in Cobá. They include descendants of the early families in the village, as membership is passed down through subsequent generations of kin. Participants meet each month and oversee the daily affairs within the town. In addition to maintaining a visible *ejido* presence internally, Cobá is also politically situated within the broader county lines of Tulum, as subsequent regional, national, and international spheres of influence impact the area to various degrees. This is particularly true with respect to tourism developments throughout the Yucatán Peninsula. This industry began in Cobá during the early 1970s in response to Cancún's world-wide success as a major tourist attraction. Its archeological zone and adjacent village attracted tourists wanting to experience Mayan culture from both historical and modern perspectives. The town has witnessed a steady increase in international tourism with each subsequent decade. Nearly every inhabitant has some connection to this industry, either directly or through family members who work in the field. Roughly 400,000 tourists visit Cobá every year (Mendoza-Ramos and Prideaux, 2012). There are currently two main hotels, an internet café, ATM, and several restaurants, shops, and stores that are situated on the northern part of the lake as one enters the town from a paved intersection connecting the village with the rest of the peninsula. The residential parts are interspersed around both sides of the lake, even though tourists normally do not venture to the southern side except for group-sponsored activities and to swim in *cenotes* (sinkholes) a few kilometers outside of the village. Figure 1 below is a sign of the town and archaeological zone, taken by the author. The main entrance is at the top of the map, the ruins are on the right, and the rest of the village is on the bottom part, all surrounding Lake Cobá.

Many local Maya stay in the village and participate in tourism through various professions. These include tour guiding, working in restaurants, shops, hotels, and the internet café, serving as taxi-drivers, and shuttling tourists throughout the archaeological zone on large tricycles. Moreover, several families display their homes to tour agency groups interested in seeing a modern Maya ways of life. Even though tourism forms the backbone of Cobá's modern economy, the town itself remains relatively small-scale in terms of mass development and urbanization. Its indigenous character and natural appeal of being next to the tropical forest attract visitors who want a break from the more commercialized centers along the coast and in larger sites. So far, the *ejido* retains significant control over local

business ventures and how Cobá is run on a daily basis. Figure 2 below is an aerial view of the tourist section in Cobá, courtesy of the author. One can see the top of a ruin situated just inside the archaeological site.



Figure 1. A sign of the town and archaeological zone. The main entrance is at the top of the map, the ruins are on the right, and the rest of the village is on the bottom part, all surrounding Lake Cobá.



Figure 2. An aerial view of the tourist section in Cobá. The top of a ruin situated just inside the archaeological site.

The ruins are technically owned by the National Institute of Anthropology and History (INAH), even though the community manages other elements of tourism for the most part. These include charging fees for parking and the *cenotes*, hiring local tricyclists to take guests between different monuments in the archaeological zone, and sharing the profits of certain stores and restaurants among the *ejidatarios*. The funds from other stores, restaurants, and professions remain in the hands of individual owners, even though kin ties help mitigate discrepancies in monetary profits among community members. Externally-run businesses (such as a zip-line and night show) also operate in agreement with the *ejidatarios*. For the most part, the people of Cobá exert a significant amount of control with respect to the daily activities surrounding the tourist industry. There are future plans to open a day-spa, have horse rides through the ruins, and increase development throughout the town to a certain extent, but the *ejido* continues to be, and hopes to remain, a palpable source of power within the community.

## METHODS

Ethnographic data for this article is based on over fourteen combined months of fieldwork conducted in Cobá throughout much of 2009 and the summers of 2010, 2012, and 2013. I moved there in January of 2009 for dissertation research focusing on local perceptions of tourism. I stayed through mid-December and returned briefly in subsequent years to finalize my data collection. Due to the nature of my study, my primary informants were Maya workers in Cobá. They included local tour guides, waiters, and shopkeepers, spanning 18-60 years in age. While most employees in each profession tended to range from their early 20s to late 40s, there were a few outliers included which provided a broader perspective of tourism across generations. I focused on 30 total participants (24 males and 6 females, due to the greater tendency of men to work in the public sphere), conducting structured interviews with each individual and observing them on several occasions at work. I conducted them in Spanish and Yucatec during various times of the day, depending on the subjects' convenience, and they tended to last 30 to 40 minutes. Questions pertained to ideologies of development, opinions of tourists, and the types of cultural elements that they want to share with the public. Answers were organized according to the independent variables of gender, age, and profession. The observations entailed me accompanying local guides on their tours, sitting for hours a day in stores, restaurants, and the archaeological zone, and quietly taking notes to discern daily patterns of tourism management in the village. I coded that data at the end of each day in a qualitative manner based on salient themes that paralleled the interview questions. Having known most of the subjects for several years prior to conducting this project, they were already familiar with my presence in town and research topics of interest. Each person signed an Informed Consent Form and I compensated them with private English lessons or monetary means in exchange for their participation.

Although my dissertation largely examined tourism from a local perspective, I did study the tourists themselves and inquired about their thoughts on this industry. As an accompaniment to my own personal daily observations, the primary method of data collection with this group consisted of 50 individual questionnaires among American and European (and to a smaller extent, Hispanic and Canadian) visitors, most of whom ranged between 20-40

years of age. The majority of them were in small groups containing both males and females, even though individual differences in nationality, age, and gender differed slightly with each questionnaire. I approached tourists in and around the archaeological zone and asked them if they were willing to answer a few quick questions about their experience in Cobá. Many were obliging and enjoyed speaking to me briefly as they exited the ruins, ate lunch, looked in stores, and rested in chairs after their tours. I inquired about their opinions of town, their knowledge of Maya history and culture prior to their trip, their interest level in learning more about this group in the future, and whether they had any suggestions for improving tourism in Cobá. Similar to the local interviews, I organized my data quantitatively by cross-checking the independent and dependent variables and looking at patterns that arose with the combined questionnaires. Due to the more rigid nature of several tourists to stay on a time schedule and the fact that they did not know me personally, I felt that a questionnaire was the best method to gather general assessments without requiring the time and personal connections needed of a full-fledged interview. Hence, this was why I chose to study a greater number of tourists than locals, albeit for a shorter period of time.

Much of my formal data stem from the locals and tourists themselves, even though I supplemented the information with two other parties as well. The first one consisted of external tour guides who regularly brought groups to Cobá for several hours during the day. They primarily worked for the ecological and archaeological-focused agency, *Altournative*, which offers day-trip packages from the coastal Riviera Maya to indigenous communities and ecological sites throughout the peninsula. I became friends with several guides over the course of my stay in Cobá and periodically spoke to them about their perspectives on the tourism industry. We had informal yet prolonged conversations over meals, sitting outside the archaeological zone, and during social gatherings to which I was often invited. I also accompanied them on over twenty guided tours in the archaeological zone to get a first-hand perspective on narration and tourists' reactions to the site. My final group with whom I collected additional information entailed a handful of Americans who have worked and lived in Cobá for the past several decades, either as researchers, English teachers, or physicians. We often met for dinners or at events within the community to share our experiences of working in town, both professionally and personally. I qualitatively organized the information gathered from both the tour agencies and Americans (in addition to my own personal observations of each party) by coding my notes according to the general themes and explanations pertaining to development, customer service, and cultural awareness. The following section examines the results pertaining to these topics from local, tourist, agency, personal, and scholarly perspectives, respectively. I conclude each theme with suggestions for improvement based on general findings and observations from this ethnographic fieldwork experience.

## FINDINGS

### Tourism Development in Cobá

One distinct feature of Cobá is that it boasts of having the highest pyramid (*Nojoch Mul*) in the Yucatán Peninsula, serving as one of the few ruins that tourists can still climb in the

region. This is a major attraction for those wanting to gain an aerial experience of the site. One can view the vast lowland jungle of the eastern Yucatán Peninsula after a mile-long hike through the archaeological zone. In addition, Cobá's relatively underdeveloped location helps distinguish it from the more commercialized destinations such as Chichén Itzá, Tulum, and Uxmal. Based on my interviews with local employees, over two-thirds had always stayed in Cobá to live and work rather than migrate to larger cities. Some said that they would like to live elsewhere for more job opportunities, but most were hesitant to move away. They felt that Playa del Carmen and Cancún were too developed and focused solely on tourism. Crime, expenses, and a lack of social ties were the main deterrents from them leaving their hometown.

Most of my participants in particular described Cobá as being tranquil and were more comfortable with its pace of life. In a similar vein, many wanted, and expected, the town to grow and develop to a certain extent in the future, but also hoped to limit the number of strangers living there in order to prevent crime, drug problems, the construction of large business corporations, and power struggles. While frictions, conflicts, and delinquency existed in town, they were mediated by the fact that everyone knew each other. This enabled them to resolve disputes on a relatively small-scale basis among friends and family members who had lived in Cobá over the past several decades. Similarly, all but three individuals were in favor of having tourists spend a longer time in the area after the ruins close in the early evening. They wanted them to learn more about the village and local culture, yet did not want to lose the kin ties and local influence that characterize the town. The others were not necessarily opposed to prolonged tourist visits, but they felt that Cobá offered very little to guests in the evenings. Visitors would likely become bored and want more activity found elsewhere.

Most of the tourists who visited Cobá were American, Canadian, European, Latin American, and Mexican nationals. Some came individually and would occasionally spend a night or two in one of the local hotels. Many, however, came in vans or large buses associated with a particular tour agency. The majority of tour groups originated in Playa del Carmen or Tulum, as guests came for several hours and returned to their resorts in the evening in buses or vans. In addition to visiting the archaeological zone, many swam in the nearby *cenotes*, ate lunch, shopped, and visited local homes during their stay in town. When I asked tourists what they thought of Cobá, all but one of the fifty questionnaire participants had positive opinions of the area. The exception was an American male in his early twenties who preferred Tulum to Cobá given its location on the ocean. The others characterized the village as fascinating, interesting, impressive, authentic, natural, rustic, and in a beautiful jungle.

Nine participants of varying nationalities and ages lamented the fact that it wasn't as excavated as other sites, that some of the hieroglyphics were faded, and that the site needed more general information for those tourists without a guide. Nevertheless, many appreciated its distinctive characteristics from the more developed, mass tourism-oriented destinations in the region. No one suggested that Cobá should necessarily grow to the extent as Chichén Itzá or Tulum. Rather, a few improvements in site maintenance were the only drawbacks in the tourists' descriptions of the archaeological zone. Those tourists who do stay the night in town normally like the fact that Cobá is quiet and tranquil in the evenings. They walk around the lake, sit outside their hotel, and enjoy the village surroundings and scenery. While they may miss certain conveniences of a larger city, they do not necessarily want it to lose its natural appeal and become an urbanized center.

Based on personal observations and conversations with friends and scholars, the *ejido* itself has been unofficially able to collect parking and bicycle rental fees from guests, sell tickets to the *cenotes*, and have a more lenient zoning enforcement of business locations. While governmental laws have been relatively lax so far, the potential for future tourism development in Cobá will likely entail greater involvement of various outside parties who try to profit from this industry. This may place greater emphasis on hiring employees trained in business management, having better linguistic abilities, and enforcing more stringent zoning and parking rules that comply with national standards of employment. This scenario does not necessarily mean that indigenous workers will automatically lose political, economic, social, or even spatial control over their stake in tourism. What it does imply is a greater sense of accountability and standard of growth that meets the needs of tourists, private corporations, and government regulations alike, especially if Cobá attains the mass-appeal status of Tulum or Chichén Itzá in the future.

One American English teacher living in town told me on a number of occasions that there are many “cracks” in how the local *ejido* runs tourism. These have been largely overlooked as of now, but once businesses and government officials realize that more profits are to be made with further development, the situation may change for the worse among *ejido* members. The threat of sanctions and financial incentives to sell off more and more lands would significantly decrease local control over the industry if these issues remain unresolved. At the same point, many of these tensions stem from different sources, including the locals themselves. Some of the more experienced employees have made the same critiques of their friends and family members with respect to informal and questionable management practices in Cobá. In general, debates surrounding daily tourism management are multi-sided and more complex than binary frictions between indigenous hosts and their guests. They span intra- and intercultural spheres of conflict, along with differing notions of ideologies and practices on a daily basis. On the surface, however, Cobá seems to maintain a successful balance between community management, relatively small-scale growth, and tourist satisfaction as of now. Neither group necessarily wants or needs the town to develop into a large city, but sustainability will depend on slight modifications in how the Maya negotiate these developmental interests in the future.

One suggestion for sustainable development is increased communication between locals, government officials, scholars, and tourists to promote greater cultural awareness. I heard both Maya citizens and visitors to Cobá mention the idea of a community museum on several occasions. In particular, some of the local men complained about not knowing what the archaeologists (funded by INAH) were doing in the site. All they received were news saying that certain monuments were blocked off or prohibited for tourists to climb (such as *Nojoch Mul*) for specific periods of time for the sake of governmental and scholarly interest in learning more about ancient Cobá. They were not sure what they were taking out of the site or where they were going afterwards. They felt that a local museum focusing on both the ancient and modern Maya culture that would generate more income for the community, keep the archaeological materials on local property, and help foster more direct interactions between academics, tourists, and townspeople. For example, Ardren (2002) observes how joint collaborations between archaeologists and indigenous citizens in the state of Yucatán allow the Maya to take a more active role in conveying their contemporary culture with reference to the ruins symbolizing their ancient past. This mutual dependency would serve to “reverse the power imbalance present in Western academic control of Maya culture” (380) by educating



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locals of their own history and sharing their present-day ways of life with others. This is just one potential avenue for community growth which could have a positive effect on multiparty interests in the future.

## **Customer Service and Hospitality**

With respect to local views on hospitality and feelings towards tourists, I asked the employees about their opinions of various types of people who visit Cobá on a daily basis. These largely pertained to whether they perceived general differences in the treatment and demeanor of different nationalities. The majority of participants viewed Americans and Canadians more favorably than other nationalities. They felt that these groups were friendlier, tipped better, were less argumentative about prices, and more respectful in general. The Spaniards and Italians (and to a lesser extent, French) were seen as pushy, more demanding, and more inclined to bargain for lower prices. For example, one male waiter mumbled “*jach codos*” (“very stingy”) to his co-worker after an Italian groups finished their lunch and left very little for a tip afterwards. Some viewed the Germans as being cold and less friendly, while a small percentage felt that all the tourists were the same. Even though they shared a common language, many felt that the Spanish and Mexican tourists in particular tended to be less respectful of the ancient and contemporary culture than Americans. English-speaking tourists were also more patient about linguistic difficulties and were more inclined to make conversation with the locals than other groups. Exceptions always existed on an individual basis, even though these answers reflect general thoughts of servicing a myriad of nationalities in Cobá from the employees’ perspectives.

From the tourists’ perspectives, thirty seven respondents had specific suggestions for improving local customer service and the overall tourism experience in Cobá. The most common suggestion, reported fourteen times by varying nationalities, sexes, and ages, was to include more information about the archaeological zone and ancient Maya in the form of maps and identifications. The notable ruins had a brief explanation in English, Spanish, and Yucatec, even though several others were vaguely marked, if at all. The tourists found it frustrating to learn about them without an accompanied guide. The other significant area of concern was a lack of (or unclear) advertising throughout the town, along with the fact that some guides were not completely proficient in foreign languages when leading tours. This made communication difficult at times, especially when tourists may hear different interpretations of the ancient Maya at each archaeological zone. Other smaller suggestions included having reenactments and reconstructions, more safety ropes on *Nojoch Mul*, more water and trash cans available, maintaining longer business hours, and even to limit development and over-commercialization of the area. Only thirteen felt that everything was fine during their visit in town and believed that things should stay the way they were. On the other hand, some tourists praised the fact that they can rent bikes in the site and that Cobá was more rustic/‘authentic’ than other well-known locations.

During my informal conversations with a variety of tourists, foreign residents in Cobá, and locals alike, many critiqued certain elements of how tourism is managed within the community. For example, some visitors and American friends have complained that the restaurants in town provide little variety from one place to the next. They all tend to offer the same foods without taking into account the diverse culinary interests of international guests.

This was most apparent in the evenings, since many of the larger restaurants had pre-set arrangements to provide a diverse buffet or plate lunch to tour groups in the afternoon. Moreover, only a few restaurants are open in the evenings, making dinner options quite limited for anyone staying overnight in Cobá. I also heard other tourists complain about the slow service in some of the restaurants, which could be due to broader cultural differences in conceptualizing “timely” service between Latin American and American cultures, and not just among Cobá’s employees.

Aside from the two small hotels in the village, one internet cafe (which has a limited number of computers that sometimes run very slowly), and the handful of restaurants open, there is little else to offer guests in town during the evenings. A few also complained about some of the workers’ lack of linguistic skills in these locations. While tour groups can use a bilingual guide to facilitate interaction during the day, individual tourists occasionally have difficulty communicating with their hosts in English (or other foreign languages) beyond the basic formalities. These tensions, along with not always adhering to hours of operation in the smaller businesses, can potentially lead to greater conflicts with increased tourism in the future. I recall one evening in which a French couple was standing outside the internet café in town. They needed to send an important email to their family back home, so they went to the café which should have been open. After several minutes, someone living next door said that the owners closed it down early to attend a local temple revival. No one else was available to assist them with the computers. The tourists then mumbled to themselves about the inefficiency of customer service and walked away dissatisfied with that experience.

There have been other complaints about the activities surrounding the archaeological site itself. For instance, the local guides provide 45 and 90-minute tours of the site. Most tourists opt for the first choice, which only covers the first group of ruins at the front of the entrance. The guides, therefore, try to cover much information in a relatively short amount of time, leaving little room for a more in-depth explanation of their history and culture. Oftentimes, they recite the same themes in a monotonous and tightly-scheduled manner from one group to the next. Tourists are then left to their own devices to explore the rest of the site without further interactions with the guides. I observed an occasion in which one local guide limited the number of questions from a large group in order to adhere to the 45-minute tour schedule. One woman later mumbled to herself, “would it have killed him [the guide] to take an extra five minutes and clarify things for us? It’s not like this place is bustling with people.” This incident occurred shortly after the Swine Flu epidemic in 2009, as business was still picking up slowly in Cobá. From the woman’s perspective, that particular guide seemed to be more interested in completing the tour and collecting his money rather than putting any extra effort into satisfying his guests.

In terms of the “cookie-cutter” tours offered by locals, the same feature holds true for outside guides who have set time schedules with which to adhere. They may have slightly more flexibility in terms of topical discussions and time limits, but I observed several occasions in which tourists felt rushed from the ruins, stores, and restaurants in order to travel to another destination for further activities. Consequently, both tour agency guides and local employees, and even tourists themselves, frequently complained about the hurried nature of their tour schedules. They felt that a greater amount of time allotted to shop, eat, and tour the ruins would result in more financial profits for Cobá’s citizens, in addition to being a more fulfilling experience of learning about ancient and modern Maya history. Moreover, a few of the external guides even complained about some of their co-workers who have limited

historical knowledge of the area and give false information to their guests. They also became upset when those same individuals did not give their group the full time allotted to see the ruins, since they wanted to return from work early.

These observations demonstrate the complexities involved in satisfying multi-party interests and needs. There is no easy-fix solution to please each individual in every party. For example, some tourists like the fact that Cobá's eateries are largely geared towards local tastes. They also appreciate the immersive experience of walking in town without any special attention given to them, such as providing internet service or speaking a foreign language. Others enjoy the structured nature of tours and feel that their allotted time is more than sufficient to explore the ruins and look around the area. Governmental laws within the zone (such as hours of operation and accessibility of information to different monuments) further control tourism management in the village. As a whole, Cobá's small-town charm and archaeological splendor attract tourists from all over the world who want to experience Maya culture from both historical and modern perspectives. Local employees, tourists, and agencies report a positive experience in their daily interactions with each other for the most part. These observations do not necessarily reflect extreme flaws in customer service, but rather, minor cracks which may become more problematic if Cobá continues to grow in the future. A greater emphasis on punctuality and linguistic preparation, catering to diverse needs in town, and being slightly more flexible when guiding tourists would at least help promote sustainable practices in the long run.

One possible solution is for the *ejido* to hold periodic meetings or small workshops dealing with tourism management within the community. They could bring in experienced guides from larger cities (or from Cobá itself) to explain the business aspect of tourism in terms of how to advertise, punctuality, customer service, and improving language skills. Many workers were anxious for me to teach them various words and phrases pertaining to their profession, but did not have the discipline to adhere to a fixed class schedule with a private tutor. Some of the multilingual citizens and foreign residents may be able to host informal language sessions to answer any of the workers' questions. I noticed that most employees preferred to have specific, pre-set questions translated on a periodic basis rather than sitting through formalized grammar sessions every week. Another possible idea would be to hold monthly meetings between the *ejidatarios* and INAH representatives to increase identification within the archaeological zone. They could also exchange a greater amount of information regarding Cobá's ancient heritage for both cultural and scholarly benefit within the context of tourism. These suggestions stem from my personal experiences and discussions with locals, foreign residents, and scholars alike. By complying with both national and international standards of employment, native Yucatec speakers would have better skills to promote their language and culture while managing tourism in the years to come. Overall, increased dialogue between parties and better training methods for local workers would help serve as a foundation for meeting multi-party interests on a long-term basis.

## Cultural Awareness

The local guides were available for individual tourists and for tour agencies that specifically hired them to show their guests around the ruins. Guests had the option of choosing either a 45-minute or 1 ½ hour-long tour. The first one entailed a detailed

explanation of the first part of the archaeological zone, while the latter included a guided introduction to the entire site. Visitors were able to remain in the site as long as they wanted after the tour portion ended, unless they were with an agency and had to leave by a certain time. Given international interest in learning about the ancient Maya, I asked local employees about their thoughts on spreading contemporary cultural awareness to their guests. I was curious as to whether or not certain items, practices, or ceremonies were “off-limits” to outsiders in terms of what they wanted to share with them.

Based on my observations, workers were enthusiastic about showing off their culture in a tourist context, including having them visit local homes for brief periods throughout the day. It was also common to see a handful of tourists walking around town in the evening and witnessing sporting events, church services, and other gatherings, albeit from a distance. Even though strangers rarely participated in these events, local citizens did not seem to mind their presence within the more ‘private’ realm of community interaction outside of the archaeological zone. If the employees were willing to show these elements for public viewing, did they expect monetary compensation in return? Were visitors always equated with economic profit? Overall, I was interested in the extent to which subjects were willing to have tourists involved in their lives beyond the formal work context.

All but three of the participants said that they had nothing to hide in terms of cultural exchange with tourists. Some were more emphatic than others by actually encouraging guests to see their lives beyond the work realm. They wanted to share and teach their culture to visitors, even though they admitted that there are not many ceremonies to show anymore. A few said that they wouldn’t mind showing their daily lives to interested tourists, though some older people and members of other smaller villages may be more hesitant to do so. The three people who wanted to keep certain elements private were all male (two guides and a shopkeeper) and in their twenties and thirties. Two said that the annual *Cha-Chaac* rain ceremony deserves respect and should not be put on display for outsiders. Although few people still conduct this ritual in Cobá, it was still viewed as a sacred type of event that existed apart from public consumption. The other male said that shamans should also be respected by not putting them on display for outsiders. Nevertheless, everyone liked the idea of tourists visiting Mayan homes during the day in order to better understand how they live. In addition to monetary profit, almost every subject seemed genuinely interested in conveying their culture for educational and social purposes. They gladly took pictures with guests, taught them useful Yucatecan phrases, recommended places to visit in the region, and sometimes maintained prolonged contact with tourists through email and Facebook.

From the tourists perspectives, nearly forty directly reported to me that they knew nothing or very little about the Maya, either historically or in the present-day. Many were traveling to the region for the first time and read little (if anything) prior to visiting the archaeological site. The rest gave vague answers, such as “they lost a lot of their old culture” or “they are nice, hardworking people,” while only five admitted to having any significant knowledge of them. Most of these tended to be Mexican or American and at least in their thirties. Despite the lack of knowledge among many tourists, everyone wished to learn more about them, especially their contemporary culture. Specific areas of interest included their kinship and marriage customs, dietary patterns, spiritual beliefs, connection to the ancient Maya, the status of Mayan-language education in schools, their opinions of tourism and their own culture, knowledge of nature, and their level of integration with Mexican culture. On a related note, over half of the tourists reported being aware that Yucatec Mayan was still

widely spoken and were interested in learning at least a few basic phrases of the language. Those who were either unaware or uninterested in learning Yucatec nevertheless felt that it was important for the Maya to preserve as an integral part of their culture.

From my personal observations, most of the tourists were respectful of the local ancient history and culture. Some were more informed of the area and had traveled to the region before. Others were less familiar with it, even though instances of overt disrespect towards the Maya were relatively rare. The only time in which I observed negative reactions was when tour guides discussed sacrificial and warfare practices among the ancient Maya. Tourists' reactions included eye-rolling and making snide comments, even though only one person actually considered the contemporary Maya barbaric for having these practices in the past. I recall one Spanish tourist saying "ay, por favor!" ("oh, please! [stop]") upon hearing of these ancient rituals. The guides did their best to explain the reasoning behind these rituals, as some guests were more objective in their views than others. For example, I recall one Mexico City-born guide emphasizing how the Maya were not the only civilization to practice sacrifice, self-mutilation, or ritualistic warfare, as these were characteristic of many societies in the past.

Moreover, he did his best to clarify popular assumptions that the Maya sites were homogenous throughout the region, or similar to those of Egypt. He distinguished between the Classic-era ruins, which had circular bases, and those of the Post-Classic that had square bases. The size and angle of ball courts also differed between the time periods. Finally, he stated that while the Egyptians buried their kings and queens inside the pyramids, this practice was relatively uncommon among the Maya. The term "pyramid" is actually a misnomer when referring to the Maya temples. They are technically "pyramidal bases," since their steps were on the outside and used for ritual purposes externally. On the other hand, the "true" pyramids of Egypt were for internal use only. While the majority of tourists were interested in what the guides had to say about ancient Cobá, some younger ones displayed apathy during the tours. They talked among themselves, complained of the heat and long walks, texted on their cell phones, displayed public affection with their significant others, and seemed more interested in recreational activities than a history lesson. Occasionally, I would hear tourists say "what's the name of this place again?" and "where are we exactly?" during the tours or when eating lunch with their group. A handful were oblivious to the fact that the Maya were still alive today, as in the case of an American teenager who said "didn't all the Maya die a long time ago?" when I explained my research to his family. This was certainly not the norm, however, as most of the tourists were aware that the contemporary Maya still lived in Cobá.

In terms of tourists' perceptions of contemporary culture and language outside of the archaeological zone, I noticed that they acted very interested in seeing how the Maya live and were polite to their hosts. Many asked the tour guides several questions about ancient and modern cultural practices and marveled at their archaeological achievements. With storekeepers, tourists often inquired into the significance of goods while admiring the artwork of jewelry, blankets, hammocks, and handcrafts. Some were interested in their origins and how they were made, while others were simply drawn to their aesthetic value, regardless of their cultural significance. In the restaurants, guests praised the food and were respectful to the waiters. Some became impatient when the service was a bit slow and were hesitant to tip at times, but were pleased overall with the quality provided. Many tourists made attempts to speak Spanish with their hosts, even though others assumed they would speak English,

French, Italian, or German. A few automatically spoke to the workers in English, such as “how much is this?” and “where’s the bathroom?” without making much effort to accommodate to local speech.

Nevertheless, several visitors were curious about the Mayan language, especially when hearing me speak it with local friends and workers. They were impressed with my language skills and most were eager to practice a few words when employees taught it to them. Finally, I commonly heard tourists discuss the development of the region, both with locals and among each other. Most were ones who had visited the area before. They were surprised at how much change has occurred over the past few decades and had mixed opinions of it. Many talked about timeshares and resorts, but also lamented on the ecological destruction and other changes that have taken place at the same time. They expressed the importance of linguistic and cultural preservation and were aware that locals, government officials, private companies, and tourists alike played a role in shaping developmental patterns in the future. Given the tourists’ interests in learning more about the contemporary Maya, local employees can make a more pronounced effort in providing additional insight about their culture to them. Some suggestions may be to have longer house visits that allow visitors more direct interaction with hosts. They could ask questions, tour the homestead, and hear Maya perspectives on their distant ancestors and contemporary way of life in the modern Mexican nation. As stated earlier, a community museum focusing on both the ancient and contemporary Maya would further promote a more in-depth understanding of this group in their daily encounters with tourists. A greater emphasis on Maya cultural awareness could provide a more fulfilling educational experience for tourists, encourage more communication between indigenous citizens, government agencies, and scholars, and also highlight the importance of local agency in managing sustainable tourism within the region.

## CONCLUSION

In conclusion, I have examined the potential for sustainable tourism in the Maya village of Cobá, Mexico. Given the town’s archaeological and modern cultural heritage, local employees depend on this industry for much of their livelihood in this kin-based community. I argued for a multi-faceted approach that takes into account the needs of both indigenous citizens, tourists, tour agencies, and the government for tourism to succeed in the long run. While Maya workers exert a significant amount of control over international involvement in Cobá, they also act within a myriad of external interests on a daily basis. For the most part, local tactics of negotiating development, customer service, and cultural awareness have been generally successful. The appeal of both the ancient site and modern town lies in its small-scale excavation and ambiance in comparison to other larger locations in the region. Various parties recognize this, as my ethnographic data reflect a strong overlap in mutual dependency, expectations, and characteristics of Cobá as a notable Maya tourist destination. For example, neither locals, tourists, nor agencies want the area to grow to the same extent as Chichén Itzá and lose its natural charm. Moreover, INAH officials have excavated only a small portion of the area and have let Cobá’s *ejidatarios* manage much of this industry in town so far. Both local citizens and visitors also revealed a mutual interest in learning about each other’s

cultures without necessarily hoping to make drastic changes to their nature of interactions throughout the day.

Nevertheless, there are elements of local management which may become problematic for long-term tourism sustainability in Cobá. These entail multi-party conflicts based on the wants and needs of various members who claim a stake in this location. For instance, increased government involvement in future excavations and expansion of the archaeological zone may threaten the local *ejido* power structure if tourism continues to grow in the years ahead. This could encroach on the community's proximity to the site and involvement in activities within its boundaries. It also would lead to a greater accountability to comply with national standards of fee collection, hospitality, and linguistic qualifications in order for the Maya to retain control over this industry in their town. From the tourists' perspectives, many were frustrated at the lack of information provided in the ruins and wanted to know more about the Maya than just a superficial glimpse into their culture, as is characteristic of many organized tours. Yet, tour agencies have fixed schedules with which they have to adhere and cannot always accommodate the needs of individual visitors on their end either. This chapter elucidated the complexities involved in satisfying multi-party interests, as there is no "quick fix" solution to please everyone involved in tourism. A myriad of ideologies and experiences exist between and within each group in their daily encounters with one another.

While the Maya cannot control every variable of this industry, I demonstrated how these employees can make certain accommodations and adjustments that both cater to external needs and help maintain internal power structures within Cobá. The town's placement next to the archaeological zone, along with its continued *ejido* presence, help promote a significant degree of local agency in tourism management. This situation provides a foundation for understanding their incorporation in the global economy without necessarily losing their cultural values, as both ethnographic and applied models for sustainable tourism easily connect to this situation. Future research projects in Cobá will incorporate cultural and applied anthropological approaches to promote tourism sustainability among its local citizens. These include the advocacy of a community museum, increased foreign language resources in town, and an emphasis on greater communication between locals, tourists, agencies, and government representatives alike. Overall, this chapter contributes to anthropology and tourism studies by critically examining sustainability in connection with local participation in the global community, both in Cobá and similar locations throughout the world.

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*Chapter 2*

# TOURISM AND CLIMATE CHANGE: CHALLENGES FOR TOURISM DESTINATIONS

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## ABSTRACT

The fast growth of the tourism industry over the past decades is one of the most remarkable economic phenomena of our time. In a context of global warming, many of the countries or destinations are considering which effects on the demand and the tourism industry can be foreseen and how they should be tackled. In this paper the most relevant studies that have tried to link climate change and tourism from the economic point of view are analyzed. Then, the possible impacts of global warming on the tourism and their contribution to greenhouse gases emission are reviewed as well as the effects that different mitigation measures could have on the tourism industry. Although there has been an increase of knowledge about the perception of stakeholders on climate change and its effects on tourism activity, the results of this literature review suggest the need to expand the climatic variables included in the analysis, to consult tourist about weather as a travel decision determinant and to regionalize the studies already performed (in special those predicting models), in order to go in deep in the analysis of the interactions between climate change and tourism, but also the necessity to know the consequences of global warming on environment in the sense that it is the most important attraction for the main tourist destinations.

**Keywords:** Tourism; climate change; economic impact; tourist demand

## 1. INTRODUCTION

According to the United Nations World Tourism Organization (UNWTO), a total of US\$1,159 billion (€873 billion) in international tourism receipts from expenditure were generated by 1087 million international tourism arrivals in 2013, increased up by 5% in both

variables (receipts and arrivals) compared with 2012 (UNWTO, 2014a). The World Travel and Tourism Council (WTTC) reported that in 2013 travel and tourism total contribution rose to 9.5% of global gross domestic product (GDP) estimated in US\$7 trillion, generating nearly 266 million jobs (1 in 11 jobs worldwide), 4.4% of global investment and 5.4% of world exports (WTTC, 2014). Therefore tourism is considered one of the world's largest and fastest-growing industries, and despite the world economic crisis it is achieving the highest numbers ever recorded.

At the same time, climate change is an issue of global growing significance, and investigating potential changes in climatic attractiveness for major destinations is becoming a key matter (Amelung and Nicholls, 2014) to be considered in tourism development and management. Favorable weather conditions have always been a key factor to explain the development of most tourist destinations, especially for those specialized in the “sun, sea and sand” segment, which continues to dominate the international tourism scene (Aguiló, Alegre and Sard, 2005). In any case, it should be noted that not only the sun and beach tourism is affected by weather conditions, being necessary to target other segments even more sensitive to possible global warming such as winter tourism areas. It is known that tourism is clearly and closely dependent on, and susceptible, to climatic conditions (Hernandez and Ryan, 2011).

In line with the effects of climate on tourism, the consequences can be evaluated from two aspects: taking into account the effects on demand (usually measured in terms of number of tourists or number of nights) or on the economic impact sector, using in the latter case, some measures of value. Moreover, the effects of global warming can be analyzed by taking into consideration only the climatic variables involved or extended to the evaluation of the impact of indirect effects, both from the environmental point of view (sea level rise, changes in tree cover, disappearance of beaches, etc.) and policy (introduction of taxes or measures to reduce emissions of greenhouse gases). While the focus of research is mainly centered on how climate change will impact on tourism and how destinations can adapt, considerable attention has also been paid to tourism's role as a contributor to greenhouse gas emissions and how these can be mitigated (Becken, 2013).

In this context, the analysis of the interrelationships between climate change and tourism has taken into consideration, first, the assessment of climate change impacts on tourism (Section 2), and, second, how tourism contributes to global warming, as an activity that generates greenhouse gases worldwide (Section 3). In this case, studies have focused mainly on analyzing the contribution of air transport, tourism sector considered main source of emissions. Subsequently, we study what could be the future research lines in the field of climate change and tourism in the coming years (Section 4). The main conclusions of the literature review are presented in the last section (Section 5).

## **2. THE EFFECTS OF CLIMATE CHANGE ON TOURISM**

Studies analyzing the impact of climate change on tourism have developed and applied different methodologies depending on the objectives, available data and/or assumptions. This section presents the results obtained for those studies published in the latter years, concerning to the direct and indirect effects of climate change on tourism.

## 2.1. Changes in Weather Suitability for Tourism Activities at Destination

In assessing the effects of climate change on tourism, the temperature has been presented as the climate variable most used and as an index of perception that determines, ultimately, the decisions of international tourists to travel (Bosello et al., 2004; Berritella et al., 2006; Bigano et al., 2006c) including in interregional studies based on a discrete choice model (Bujosa and Rosselló, 2011 and 2013). From the methodologies and assumptions about changes in temperature, the effects that climate change may bring on tourism have begun to take shape.

From the point of view of outbound tourism, warmer weather is expected originally to deter people from cold countries (currently, the most important in terms of generating international tourism) to travel abroad. Maddison (2001), Lise and Tol (2002) and Hamilton (2004) showed how the levels of British, Dutch and German tourist decrease their visits to hot countries where these exceed the optimum temperature calculated in their own studies. Maddison (2001) inferred that British tourists are attracted to visit countries with a maximum daily average of 30.7 °C. Lise and Tol (2002) conclude that an average temperature of 21 °C in summer is ideal for most international tourists from countries belonging to the Organization for Economic Cooperation and Development (OECD). Meanwhile, Bigano, Hamilton and Tol (2005) estimate that optimum vacation destination has an average annual temperature of 16.2°C, and Hamilton (2004) shows that for German tourists the optimum temperature in summer time is 24°C.

Taking into account that temperature is not the only climatic variable that determines the suitability of weather for tourist visiting a destination; it has become necessary to incorporate other climatic variables, in the analysis performed. De Freitas (1990) considered three aspects of climate that climate suitability assessment for tourism should take into account (thermal, physical and aesthetic aspects).

Tourism Climate Indexes (TCI) started with Mieczkowski (1985) as a weighted average of seven climatic variables (including various measures of temperature and humidity, precipitation, sunshine, and wind speed) have been used trying to identify conditions of comfort of tourist creating different composites of climatic variables based on the experience and judgments of the authors (Braun et al., 1999; Amelung and Viner, 2006; Matzarakis and Amelung, 2008; Amelung, Nicholls and Viner, 2007; Amelung and Nicholls, 2008), evolving to more specific and empirically adjusted indexes oriented in one specific segment of tourism (“sun, sea and sand tourism”, considered the major one in terms of international visitors) like the Beach Climate Index (Morgan et al., 2000; Moreno and Amelung, 2009; Hein, Metzger and Moreno, 2009). Most recently, Méndez-Lázaro et al. (2014) performed a study in Puerto Rico trying to establish a TCI and relate it to hotel occupancy rates, finding a significant association between them, and Amelung and Nicholls (2014) TCI scores were constructed, with two climate change scenarios considered, to five popular destinations of Australia (Brisbane, Cairns, Melbourne, Perth and Sidney). A finding common to the different approaches of quantitative methodologies assessing effects of climate change on tourism is the non-linear relationship existing between tourism and climate, thus, revealing ultimately the existence of optimal climatic conditions for tourism (Cárdenas y Rosselló, 2008; Rosselló, 2014).

## 2.2. Shifts in Visitation Patterns

Even though China has become the highest country spender since year 2012 with an International Tourism Expenditure of US\$ 128.6 billion in 2013 (with a surprising increase of 26.08% over the previous year), Germany and United Kingdom (UK) have been in the top 10 of the list for many years, keeping Germany its position as the second highest spender per capita world-wide with US\$ 1,063, just beaten by Australia (UNWTO, 2013; UNWTO 2014b). Studies related to changes in tourism flows related to climate change have been centered in UK and Germany because their economic importance for the Mediterranean countries and their authors being mainly related to European universities focused on the consideration of weather variability in the origin country as a key motivation (push) factor in the tourism travel decision.

Considering the upcoming changing weather conditions it becomes important to study the effect of climate change on tourism related to the substitutability and redistribution between domestic tourism and international tourism flows, and use this information in the medium and long term planning at major tourism destinations. In this line Agnew and Palutikof (2001) found a negative relationship between temperature and tourist outbounds (of UK, The Netherlands, Germany and Italy) while wetter conditions encouraged to take holidays abroad during the same and following year. For arrivals, the relationship with temperature is considered positive, in the same way that more dry and sunny conditions were associated with the increase in arrivals. Meanwhile domestic tourism had a positive relationship with temperature and negative for the case of precipitation. Bigano, Hamilton and Tol (2006) found that it is expected that international tourist arrivals fall due to global warming in favor of domestic tourism related to tourists from Germany and the United Kingdom.

The redistribution of tourism flows is analyzed in Hamilton et al. (2005a, b), Bigano et al. (2006a) Hamilton and Tol (2007) and Rosselló and Santana-Gallego (2014) using simulation models of the flow of tourists between more than two hundred countries and generating climate change scenarios of tourist departures and arrivals. Results show how, in the medium to long term, tourism will grow in absolute terms but this increase will be smaller than population and income changes and not homogeneously distributed, being higher for colder countries and lower for warmer ones.

Using time series analysis, Rosselló, Riera and Cárdenas (2011), demonstrated how higher temperatures will imply a change in the optimal holidaying weather conditions and, consequently, negatively affect British outbound flows, commonly destined to coastal areas of the southern Europe. Because of the non-linear relationship introduced in the model by the heat wave variable, it was shown that the effect of temperature warming on British tourist flows will not be homogeneous throughout the year, showing the highest impact during summer months and the lowest one during springtime. Related to extreme weather events, Subak et al. (2000) explained an increase in domestic tourism (e.g., bed occupancy rates and number of trips) within the UK due to the anomalously hot summer of 1995, and Bigano et al. (2005) considered the effect on tourism of extreme weather conditions in four countries.

In any case, the effects of global warming on tourism are expected to affect not only the levels of tourism but also the distribution throughout the year (seasonality). Thus, seasonality of tourist flows may change due to warmer conditions in the sense that the summer season is to see widespread, with more number of months with more suitable conditions for outdoor activities, but also currently popular destinations in the Mediterranean could become too hot

for tourists during the warmer summer months (Giles and Perry, 1998; Maddison, 2001; Bigano, Hamilton and Tol, 2005) observing a lengthening and flattening of the flows of British tourists who go to Spain and Greece, two of its most popular destinations. Along the same lines Perry (2006) notes that due to the expected temperature changes in the UK, the appeal of the Mediterranean coastal zone for UK holidaymakers will be higher in the spring and fall than during the summer itself.

At this point it is relevant to analyze whether climate change will be responsible for smoothing the seasonal cycle of international tourism. In this regard it is worth mentioning that along with improved weather conditions during spring and summer in the Mediterranean countries, the aging of the European population (the largest tourist generating region of the world) could play in favor of extending the high season (Amelung and Viner, 2006). Therefore, destination planning should consider that accommodation and tourist attraction would be open longer during the year, needing more employees than in the actual holiday season, but expecting lower occupancy rates throughout.

### **2.3. The Winter Tourism Case**

The effects of climate change on tourism not only will affect the segment of “sun, sea and sand” destinations. Certain segments such as winter and high-mountain slopes tourism could show themselves particularly vulnerable to a context of climate change. It is not so surprising that the impact of climate change on mountain tourism or related to the snow sports has been extensively studied in the context of the literature on climate change and tourism, focusing on the likely depleted conditions of the facilities slopes, the need for better technologies to increase the amount of snow available, the need to build facilities at higher altitudes, amplify the supply of tourism products and activities less snow-dependent (König and Abegg, 1997; König, 1999; Harrison, Winterbottom and Sheppard, 1999; Breiling and Charamza, 1999; Elsasser and Messerli, 2001; Elsasser and Bürki, 2002; Bürki, Elsasser and Abegg, 2003; Scott, McBoyle and Mills, 2003; Harrison, Winterbottom and Johnson, 2005; Hall and Highmans, 2005; Bürki et al., 2005; Moen and Fredman, 2007). In any case, some authors have also sought to highlight the positive side for warm countries with higher altitudes, who could benefit from seeing their increased attraction (Amelung and Viner, 2004; Bigano, Hamilton and Tol, 2006). The literature related to winter tourism shows mainly downhill skiing, but other activities dependent on snow are also mentioned by the authors as the use of snowmobiles, snowboarding or skiing (Scott, Dawson and Jones, 2008). Either way, the consequences of climate change on the ski industry have been conducted from two perspectives: from the supply side and from the demand side.

From the point of view of supply, analysis of climate change on winter tourism has made reference to the effects on the conditions in ski areas. König and Abegg (1997) evaluated the impact of climate change in the Swiss Alps by studying anomalous conditions (snow deficient) of three winters that took place in the late eighties. They noted that, assuming that the ski areas with adequate snow would be of 1200 to 1500 meters above sea level, with the conditions that were experienced at that time 85% of the areas would have enough snow, but this number would be reduced to 63% with a temperature of 2°C higher. Breiling and Charamza (1999) in turn, estimated a multiple regression model in order to model the relationship between snow, temperature and precipitation in 13 resorts. Subsequently, through a stage of

change in temperature and precipitation, a new depth of snow cover was calculated. From these results show that at higher altitudes they are less vulnerable to global warming and that at low altitudes the depth of snow cover may be reduced in large percentages.

Simulations of the ski season have been raised by Scott, McBoyle and Mills (2003) and Moen and Fredman (2007) using time series data. The results of Scott, McBoyle and Mills (2003) demonstrate the importance of using artificial snow as a measure of short-term climate adaptation warning that further developments could lead to thresholds where those investments would be economically unviable.

Meanwhile Moen and Fredman (2007) found that the consequences of climate change will result in patterns of shorter snow coverage periods, higher temperatures and more precipitation in the winter. Recently, simulations have been performed for winter tourism destinations (Berghammer and Schmude, 2014) in order to develop and apply a parameter that enables to assess the future development of ski seasons, showing a decrease of opening days from 2011 to 2060 in the investigated alpine ski area in general and a trend to an intra-seasonal postponing of optimal ski days, labelled the 'Christmas–Easter shift'.

On the demand side analysis of winter tourism and climate change, studies have primarily analyzed how skiers and high mountains tourist will respond to the effects of global warming. Surveys conducted by König (1998) and Behringer, Burki and Fuhrer (2000), in which scenarios with little natural snow coverage arise, it is evident that the decrease on the desire to practice these types of sports should be very low while athletes are highly likely to change destination.

All this suggests that for regions heavily dependent on winter tourism the effects of climate change may be important (Scott and McBoyle, 2007). Related to winter tourism, recently Tranos and Davoudi (2014) have done an identification of the regions whose winter sport tourism is likely to be significantly affected by climate change, and becomes important to note that climate change will put further pressure on the sensitive environment of high mountains (Ahmad Dar et al., 2014).

## **2.4. Other Indirect Impacts**

It should be recognized that the environmental effects of climate change on tourism should not be limited to the evaluation of the direct impacts of climate variables but also could be analyzed by the indirect impacts associated with global warming such as rising sea levels or water scarcity. In this line, the increased sea level may involve the disappearance of small islands, and regarding all coastal areas beach erosion, damage to tourism infrastructure located near the sea or saltwater intrusion are problems commonly pointed out (Tekken, Costa and Kropp, 2013).

Maddison (2001) analyzed the change in flows of British tourists to Seychelles, considering that an increase in sea level that implies the total disappearance of the destination. Meanwhile Bigano et al. (2006b), using data from Hoozemans (1993) evaluated the loss of land assuming the absence of protection establishing a coastal scene of rising sea level.



### 3. TOURISM CONTRIBUTION TO CLIMATE CHANGE

From a global perspective, tourism contributes to changes in coverage and land use, energy use, biotic exchange and extinction of wild species, spread of diseases and change in the perception and understanding of the environment (Gössling, 2002; Nicholls, 2006). However, it is in the use of energy where the most important contribution of tourism to the emissions of carbon dioxide (CO<sub>2</sub>) and other greenhouse gases that contribute directly to global warming is found, due to the extensive use of fossil fuels. These issues are particularly related to transportation (travel to, from and at the place of destination) and to a lesser extent to the accommodation, activities and tourist attractions (Becken, Simmons and Frampton, 2003). Within the transportation, air transport is in the spotlight because their emissions are released into the upper troposphere and lower stratosphere, which is cause a greater impact on climate change (Gössling and Peeters, 2007).

In this regard, it is noted that air transport is the major responsible for tourism's contribution to climate change, estimating its contribution, compared with the rest of tourism activities, between 94% and 70% according to the studies considered (Gössling, 2002; Becken, Simmons and Frampton, 2003). Despite these data, emissions from aviation are not so far under international regulations on emissions (Olsthoorn, 2001) due to the international nature of aviation and the long history of special treatments that have characterized the use of fuels in international transportation (Becken, 2007).

Gössling et al. (2005) studied the eco-efficiency of tourism and concluded that global tourism is not necessarily more environmentally beneficial than other economic activities, as often highlighted the tourism industry itself. Previously, Gössling et al. (2002) had used the concept of ecological footprint analysis (EFA) as a methodological framework for assessing the sustainability of tourism in the Seychelles archipelago, showing that the success of that tourism destination was based on a strong hidden ecological consumption (exported to other countries) needed to maintain the system, with special emphasis on the use of international air transport and its effects on global warming. Meanwhile, Dwyer et al. (2010) have attempted to describe tourism environmental footprint in Australia through production and expenditure-based approaches, emphasizing that the measurement of tourism's carbon footprint has relevance for any destination and can be achieved by the use of data from the Tourism Satellite Accounts (TSA). Most recently, Filimonau et al. (2011) considered that previous approaches assessing tourism sustainability were inaccurate and unreliable and argued that the life cycle assessment (LCA) methodology is a more promising tool for tourism climate impact assessment, accounting for both, direct and indirect environmental impacts.

Beyond the actual quantification of the contribution of tourism to the generation of greenhouse gases, the analysis of this contribution has been carried out extensively in the context of perception in order to understand which would be the strengths and weaknesses of the proposed adaptive and mitigation measures in the tourism sector. Thus Gössling et al. (2006) evaluated the knowledge of tourists to their own contribution to environmental problems related to tourism, with particular emphasis on climate change. The results show that most visitors to Zanzibar, Tanzania, are unaware of the consequences of their travel and they related environmental problems associated with tourism to local, visible, immediate and understandable problems.

In the same line, Böhler et al. (2006) conducted various interviews to German residents showing that individuals are not able to recognize the environmental impact on their behavior during the holidays. Becken (2007) meanwhile, explored the knowledge of tourists and their awareness of the impact of aviation on climate, their sense of personal responsibility and their reactions to policies on climate change, finding that tourists visiting New Zealand have little knowledge about how air travel contributes on global climate change. In this sense all results appeared so far point to the unwillingness of tourists to accept adaptation measures and mitigation of emissions of greenhouse gases in the sector. Moreover, studies on environmental behavioral change identified a significant gap between awareness and action, even suggesting that the most aware individuals are unlikely to change their behaviors with respect to travel and tourism activities (McKercher et al., 2010).

Indeed, with the real effects and the study of the perceptions, a third group of papers appears in the literature in order to assess the impact on the tourism industry of those measures of emissions reductions. The study of adaptation measures include the use of regenerative energies in tourist facilities (Bode, Hapke and Zisler, 2003) and the effects of mitigation measures such as taxes on carbon emissions (Tol, 2007; Mayor and Tol, 2007; Yeoman et al., 2007; Aguiló, Palmer and Rosselló, 2012; Bakhat and Rosselló, 2013) and compensation for emissions (Gössling, 2000; Böhler et al., 2006; Gössling et al., 2007).

In any case, as recommended by economic theory, for highly uncertain polluting actions (such as emissions of greenhouse gases) a tax option is preferable to a cap-and-trade regulation (Pizer, 1999) so the effects of different taxes on the industry has become a major subject of research (Tol, 2007; Mayor and Tol, 2007; Yeoman et al., 2007). The results seem to show that for a substantial reduction in carbon dioxide emissions resulting from international aviation, a very high tax on fuel is required (Tol, 2007). On the other hand, taxes on carbon emissions have encountered numerous difficulties in its implementation in the tourism industry that lacks on an alternative transportation system would over in a smaller volume of tourists to the destination (Yeoman et al., 2007).

As for the compensation measures, Gössling (2000) suggests reforestation programs to reduce the accumulation of carbon in the atmosphere. But these programs are not sufficient to offset the impact of changes in the composition of stratospheric gas and air chemistry, also related to emissions from air traffic. The opportunity to offset the environmental damage caused by mobility during the holidays could be a strategy for cases where a trip cannot be avoided or when a change in the mode of transportation is impossible, but, above all, as suggested by Böhler et al. (2006), a compensation program must be accompanied by measures to a change in behavior during the trip. In this line, Gössling et al. (2007) conclude that it is unclear whether voluntary compensation measures will make a significant contribution to the goal of a more sustainable tourism. If these measures are not presented as temporary or complementary strategies, it may be that individuals are not compelled to finally change their behavior and destinations would enter a state of irreversible environmental and economic degradation.

Thus, it is considered that from an ecological perspective the air travel should be discouraged (Gössling et al., 2002) and domestic tourism and visitation of destinations geographically closer should be promoted (Becken, 2002). However, we must be aware that the establishment of policies related to limitations on destinations usually are widely rejected (Becken, 2007). As noted by Gössling et al. (2007), an optimal approach would be to

combine mandatory measures (such as setting limits on emissions related to aviation) with voluntary carbon offset schemes.

### **3.1. Perceptions of Stakeholders and Tourist about the Impacts of Climate Change in the Tourism Industry**

Studies on the perception of stakeholders (considered by authors as tourism experts) on climate change and the impacts of this on tourism have been realized by Becken (2007), Heuchele et al. (2014), March, Saurí and Llundés, 2014; March, Saurí and Olcina, 2014), remarking the perceived high vulnerability of winter tourism areas compared with summer tourism destinations. Attempts to understand the perception of tourism leaders about the risks from climate change have been made by Shakeela and Becken (2014) concluding that local tourism stakeholders are not immediately concerned, and adaptation measures are woefully inadequate to cope with future climate risks. Turton et al. (2010) concluded that while most stakeholders take climate change seriously, perceived uncertainties discourage investment in climate change adaptation. Some stakeholders considered beyond their capacity to adapt to climate change (Roman, Lynch, and Dominey-Howes, 2010), but it is considered that the ability to successfully adapt to new climatic conditions will depend heavily upon their recognition and reaction to climate change as an issue, adoption of a proactive stance, organizational flexibility and mobility of their capital resources (Amelung and Nicholls, 2014).

Becken (2007) studies tourists' knowledge and awareness of aviation's impact on the climate, their sense of personal responsibility and their reactions to specific climate change policies. These perceptions are an input for voluntary or regulatory proposals, as a means of reducing emissions from air travel, especially those long hauls. Similarly, Huebner (2012) pointed out that in terms of climate change-related to the traveler, social and environmental issues are both weakly perceived and do not appear influential when making potential travel decisions, and that cannot be confirmed that perceived risk is necessary link to the loss of a destination's perceived attractiveness. Travelers although understanding travel's link to climate change, do not intent to avoid long-haul travel.

There is a requirement to examine the determinants of these strategies in organizations, such as the knowledge, motivation and awareness of key stakeholders in the tourism sector, as well as the effectiveness and results of the strategies (Hernández and Ryan, 2011). A study performed in Finland by Kietäväinen and Tuulentie (2013) concluded that climate issues are dealt with in an abstract manner, concentrating on the view points of markets and industry, while ecological justification is lacking, and lacks urgency. Operational instructions are not provided for the entrepreneurs and it threatens the sector future.

## **4. FUTURE RESEARCH LINES**

Although the literature on climate change already enjoys certain tradition in the natural sciences, despite the obvious interrelationships between tourism and climate, there are few major journals in the field of tourism that have analyzed this relationship. The published

literature to date has indicated some interesting topics and a continuous increase of publications in the matter, but in some cases it seems evident a need of deeper level of understanding. Thus, it should be noted that most studies have assumed that the relationship between climate and tourism demand is stable over time when it appears that climate sensitivity may have increased in recent years due to increased awareness of consumers to the effects of weather. This hypothesis should be contrasted especially in studies using time series and include reasonably long series of daily data.

Spatially, international visitors tend to concentrate in relatively few destinations (Amelung and Nicholls, 2014). Studies at a regional level have been undertaken by Endler, Oehler and Matzarakis (2010) for Black Forest in Germany, Soboll and Dingeldey (2012) for German and Austrian Alpine Areas, Soboll and Klier (2012) for the Bavarian region of Germany, Pham, Simmons and Spurr (2010) and Amelung and Nicholls (2014) for Australia, but the increasing development of regional scale models appears to be necessary if one takes into account the forecasts of climate change are not homogeneous for all countries traditionally considered in models of tourism demand, which would enhance the information available for decision making, both public and private. In this sense the introduction of discrete choice models to incorporate the different stages of consumer decision will probably be a line of advance in the coming years. Pham, Simmons and Spurr (2010) used a Computable General Equilibrium Model (CGEM) finding out that firstly, the economic impact of tourism will further exacerbate the adverse effect of climate change on incomes, and secondly, climate change-induced tourism impacts are not evenly distributed across regions in the economy.

The re-distribution of tourist flows over time should be contrasted by estimating quantitative demand models of time series (Waqas and Rosselló, 2014). Thus, the notes made by the literature on a possible easing of seasonal patterns could try to be related to the redistribution of tourist demand among seasons already evidenced in some of the traditional “sun, sea and sand” destinations. In any case, these studies should take into account other factors that may also influence these changes in seasonal patterns.

Traditionally, the literature has considered the weather as a factor of attraction for tourists (pull factor), trying to show mainly relations among climatic variables and demand destinations. However, it has to be recognized that the climate, from the point of view of origin, can also become a motivation (push factor) and it is not clear the sense it can play (positive or negative) (Amelung, Nicholls and Viner, 2007; Hamilton, Madisson and Tol, 2005a). Rosselló-Nadal, Font-Riera and Cárdenas (2011) have analyzed weather variability as a push factor of tourist outbound flows from UK, showing that higher temperatures will reduce travels abroad. Ridderstaat et al. (2014) estimated fluctuations in tourism demand from the United States and Venezuela to Aruba, taking weather as a pull and push seasonal factors, finding them relevant in determining the season variations in tourism demand from both countries. It can be thought than abnormally cooler climate during the months previous to the summer in major tourism generating countries would stimulate travel bookings to warmer destinations. However, it also can be the other way around. Studies that rely in time series analysis, performed with country-based data, would be an important source of understanding for those pull and push factors of weather.

Existing approaches are limited in their scale and application and fail to adequately address the diversity and complexity of tourism environmental impacts. The most critical situation is in the area of the indirect environmental contribution, also arising from the

tourism supply chain industries (Filimonau et al., 2011). It is expected that more holistic approaches will appear as data improves and that economic techniques comply based on lessons learned from existing studies.

Another breakthrough in the field of art will be on a more precise definition of the most important variables considered by tourists when making their travel decisions. The use of temperature almost exclusively as climate indicator is nothing more than a simplification of reality and future work should result in getting more accurate indicators by developing indexes or consideration of multiple variables that could come into the models above certain thresholds. Along the same line, would be desirable that the implications of environmental change due to global warming more relevant to tourism (level of sea, beaches erosion, extreme weather events) global warming were introduced to the models performed as the same information becomes known more available and accurately.

Regarding of tourism contribution on climate change, efforts should be directed to the assessment of impacts on the tourism foreseeable international regulations on air transport which probably will be imposed in the short or medium term. In recent years there has been a consensus on the importance of the contribution of air transport to the generation of greenhouse gases. Given the current dependence of the sector to this mean of transport, will be of crucial importance to assess the impact of certain environmental regulations in the tourism sector. Tourism industry has also serious need of data and quantitative studies that could provide more understanding on how climate will modify tourism demand (Bujosa and Rosselló, 2013), considering actual reactive nature of tourism research versus the development of greater predictive capacity and theory generation (Hall, 2010).

It has become necessary to give priority to the identification and adoption of appropriate adaptation strategies (Amelung and Nicholls, 2014) in a national, regional and local scale, especially when small and medium entrepreneurs (SME) have not yet internalize risks arising from climate change, and tourist are not willing to change its behaviors and preferences easily.

Predicting models and other related studies on the climate change and tourism interaction should be reassessed in the coming years due to the release of Fifth Assessment Report (AR5) of the Intergovernmental Panel of Climate Change (IPCC, 2013). The use of scenarios should be discussed taking into account that studies already performed are based on the Fourth Assessment Report (AR4) (IPCC, 2007) and have used conservatives scenarios, using A1B and B1 (Rosselló, Riera and Cárdenas, 2011), A1F1 and B1 (Bujosa and Rosselló, 2013), and B1A and A1F (Amelung and Nicholls, 2014). Likewise, it is expected that calls made by the UNTWO to respond to global climate change can guide the actions not only of governments, international organizations, industry, consumers, scientific community, but also the destinations and its operational planning.

## CONCLUSION

Despite the complexity of tourism and climate change interactions, the literature appeared so far allows distinction between two areas of study: the effects of climate change on tourism and the analysis of tourism as emitting greenhouse gases activity. In both cases, it has been shown that despite the economic outlook in the analysis of these interrelations the scientific

community is providing new information on the topic. The interdisciplinary nature of both, tourism and climate change, requires inputs from many other areas of knowledge.

The literature review has shown the pioneered development and application of different methodologies in the context of assessing the impacts of climate change on tourism. Thus, different versions of discrete choice models, general equilibrium models and time series have appeared with reference to tourism demand and introducing climate determinants in their assessments. Using temperature as the main indicator, the results show the sensitivity of the global tourism to the expected increase in temperatures, being possible to anticipate a possible substitution of international to domestic tourism. In any case, the results of the literature highlight the need to study the spatial perspective in more detail.

As regards to the contribution of tourism to the generation of greenhouse gases, the literature agrees in pointing out that airline industry is its principal source. Meanwhile, there is little awareness detected on tourist regarding to their responsibility in contributing to climate change, which together with the positive promotion by the industry (considering tourism as a low carbon activity) reverts to a great difficulty to impose corrective regulations.

Tourism requires special attention from the economic analysis because it has a set of characteristics that differ markedly from other productive sectors. The interrelationships between tourism and climate change are at an incipient stage of development, but motivated by the increasing awareness related to global warming. However it will be essential a more detailed study of the effects of climate change on the main assets that make up nowadays conception of tourism to more accurately design medium and long-term policy and operational measures.

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*Chapter 3*

## **SUSTAINABILITY: A COMPETITIVE ADVANTAGE IN THE TOURISM INDUSTRY**

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### **ABSTRACT**

At present, sustainability issues attract the attention of academic and professionals around the world. In the tourism industry, this interest is even greater due to the negative impacts such as air and noise pollution, biodiversity loss, waste generation, non-compliance with fundamental labour standards, etc ... that this industry cause because of an unmanaged growth and development. In today's rapidly changing tourism market, the only possibility for tourism companies to compete on the market is through offering distinguished sustainable product and services. Tourism companies should be able to create the tourism product while operating in a sustainable and responsible way. By implementing socially responsible initiatives, tourism companies can contribute to the achievement of sustainable tourism. This study is aimed at exploring the importance of sustainability and corporate social responsibility in the tourism industry.

### **1. INTRODUCTION**

With more than one billion international arrivals recorded in 2013 tourism is a major global activity that has grown by 25% in the past 20 years (WTO, 2013). Predicted growth rates remain high and, although global and regional patterns have fluctuated from year to year (most recently owing to fears over terrorism, health crises and natural disasters), tourism has shown a strong and rapid ability to recover. More and more people have the desire and means

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to travel and the World Tourism Organization is predicting over 1.500 million international arrivals by 2020 (WTO, 2014).

However, tourism has major impacts on the natural environment and on the well-being and culture of host populations (e.g., global warming, environmental degradation, habitat destruction, air and water pollution, resources depletion, non-compliance with fundamental labor standards, growth of prostitution ...). However, there is also an increasing appreciation of the potential role of tourism in addressing world poverty and other social problems, by bringing sources of income to some of the poorest communities. That is why the concept of sustainable development (or sustainability) in the tourism industry has become widely accepted as the way to get a better future for this sector.

Tourism can play a significant role in sustainable development. As the World Tourism Organization suggests: "*sustainable tourism is not a discrete or special form of tourism. Rather, all forms of tourism should strive to be more sustainable*" (WTO, 2005, pp. 2). However, making tourism more sustainable is not just about controlling and managing its negative impacts. This industry has a great potential to benefit local communities, both economically and socially, and to raise awareness and support for conservation of the environment. Within this sector economic development and environmental protection should not be seen as opposing forces. They should be pursued hand in hand as aspirations that can (and should) be mutually reinforcing.

With regard to this, a number of different stakeholders can benefit from sustainable tourism. First, tourism companies, while seeking long term profitability they should be concerned about their corporate image and reputation, the relationship with their staff and their impact on the global environment. Secondly, local communities are seeking increased prosperity but without exploitation or damage to their quality of life. Thirdly, environmental groups are concerned about the harmful impacts of tourism but also see this industry as a valuable source of income for conservation. Finally, tourists are seeking for a high quality experience in safe and attractive environments. This collective is becoming more and more aware of the impacts of their travelling.

The tourism industry has a special influence to contribute to sustainability and the challenges it presents. Firstly, it is mainly because of the dynamism and growth of this sector and the major contribution that it makes to the economies of many countries and local destinations. Secondly, it is because tourism is an activity which involves a special relationship between visitors (consumers), the businesses, the natural environment and the local communities. This special relationship arises because "*the consumer of tourism travels to the producer and the product*" (WTO, 2005, pp. 9). According to the United Nations Environment Programme, this leads to three major aspects of the relationship between tourism and sustainable development:

- *Interaction*: The nature of tourism, as a service industry that is based on delivering an experience of new places, means that it involves a considerable amount of interaction between visitors, host and local communities and their local environments.
- *Dependency*: Much of tourism is based on visitors seeking to experience undamaged and clean environments, attractive natural areas and genuine historic and cultural traditions. Therefore, this industry highly depends on these attributes. This close

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relationship creates a sensitive context, whereby tourism can be both very damaging but also very positive for sustainability.

- *Awareness*: The tourism industry makes people, both visitors and hosts, become more conscious of environmental issues and differences between nations and cultures. This situation can affect attitudes and concerns for sustainable development issues not only during the travel experience but throughout people's lives.

On the positive side, tourism can:

- 1) Provide a growing source of opportunities for enterprise development and employment creation as well as stimulating investment and support for local services,
- 2) bring tangible economic value to natural and social-cultural resources (this can result in direct income from visitor spending for their conservation and an increase in support for conservation from local communities), and
- 3) be a force for inter-cultural understanding and peace.

On the contrary, tourism industry can:

- 1) Place pressure on fragile ecosystems causing degradation of the natural environment and disruption to wildlife,
- 2) exert considerable pressure on host communities and lead to dislocation of traditional societies,
- 3) compete for the use of scarce resources (e.g., land and water),
- 4) be a significant contributor to local and global pollution,
- 5) be a vulnerable and unstable source of income since it is often very sensitive to actual or perceived changes to the environmental and social conditions of destinations.

Tourism companies that address economic, social and environmental issues and are aware of the potential for both harm and benefit can control the forces resulting from the sector's growth in a positive direction. For tourism, the acceptance of this responsibility should be stimulated by a strong component of self-interest since any harm that is caused to the natural, cultural or social environments of destinations can lead to their destruction or loss of value as a tourism product.

The structure of this chapter is as follows. A literature review about the roots of the sustainable development concept is presented as well as a description about the suitability of this approach to generate competitive advantages in the tourism sector. Secondly, the component dimensions of sustainable development are listed in order to identify specific areas of action for managers. Thirdly, it is emphasized the importance for tourism companies to develop a responsible behaviour by describing the negative and positive impacts of this industry in each of the three domains previously identified. To conclude, some key challenges for more sustainable tourism as well as an agenda to implement sustainable tourism are presented.

**Table 1. International events centred on sustainability development in the tourism sector**

Year	Event
1980	World Conservation Strategy
1980	Manila Declaration on World Tourism
1985	Tourism Bill of Rights and Tourist Code
1987	Report of the World Commission on Environment and Development: Our common future
1989	The Hague Declaration on Tourism
1992	Rio Declaration on Environment and Development
1995	The Charter for Sustainable Tourism
1996	Agenda 21 for the Travel and Tourism Industry
1997	Declaration on Biological Diversity and Sustainable Tourism
1997	Calviá Declaration on Tourism and Sustainable Development in the Mediterranean
1997	Manila Declaration on the Social Impact of Tourism
1999	Decisions of the General Assembly and the Commission on Sustainable Development
1999	Global Code of Ethics for Tourism
2000	Principles for the implementation of sustainable tourism
2001	Quebec Declaration on Ecotourism
2001	Plan of Implementation of the World Summit on Sustainable Development
2002	Johannesburg Summit on Sustainable Development
2003	Convention on Biological Diversity, Guidelines on Biodiversity and Tourism Development
2003	Djerba Declaration on Tourism and Climate Change
2008	Climate Change and Tourism
2009	Copenhagen Climate Change Conference
2012	Conference on Sustainable Development of Tourism in Islands
2012	International Conference on Tourism, Climate Change and Sustainability
2013	International Conference: Sustainability issues and challenges in tourism
2014	Ecotourism and Sustainable Tourism Conference

Source: Compiled by authors.

## 2. THE CONCEPT OF SUSTAINABLE DEVELOPMENT

Sustainable development (or sustainability) is a polysemic concept, which encompasses not only ecological and environmental issues, as one may initially think, but a sheer plurality of different dimensions. According to Muñoz (2006), the term sustainability acts as an:

- Ethical principle, by taking the conservation of the environment and natural resources into account for future generations.
- Economic principle, as resources are employed according to their ability to be generated.



- Legal principle, as human beings have the fundamental right to an adequate environment, which corresponds to countries' international commitment to upkeep the ecosystems and ecological processes that are essential for the biosphere.
- Socio-political analysis model, given that it integrates environmental factors into each and every sector policy.

The popularisation of the concept of sustainable development (hereinafter SD) is due to the report entitled *Our Common Future* or the *Brundtland Report*, written in 1987 by the United Nations World Commission on Environment and Development, which is chaired by Gro Harlem Brundtland. In this report, she proposes this definition: “*Sustainable development is development that satisfies present needs without compromising the capacity of future generations to satisfy their own needs*”. Since that time, the idea of SD has spread greatly and is widely supported in the international community, as it offers a vision of the future that confronts the progressive problems of environmental degradation and the unequal distribution of resources. Proof of this interest can be seen in the different international declarations signed in recent years centring on SD in the tourist arena (Table 1).

**Table 2. Conceptions of sustainable development**

	Position A	Position B	Position C	Position D
What must be sustained?	Total capital (human and natural)	Critical natural capital	Irreversible natural capital	Significance units
Why?	Human welfare (material)	Human welfare (material and aesthetic)	Human welfare (material and aesthetic) and obligations towards nature.	Obligations towards nature.
Main objects of interest	1, 2, 3, 4	1, 2, 3, 4,	1, 2, 5, 6	1, 2, 5, 6
Secondary objects of interest	-	5, 6	3, 4	3, 3
Substitutability between human and natural capital	Considerable	No between human capital and critical natural capital	No between human capital and irreversible natural capital	Avoid discussion of substitutability

Source: Dobson (1996).

1 = Human needs of present generations.

2 = Human needs of future generation.

3 = Human aspirations of present generations.

4 = Human aspirations of future generations.

5 = No-human needs of present generations.

6 = No-human needs of future generations.

As the idea of SD has been gradually shaped and developed, new definitions of the concept have appeared. Several definitions have been proposed, emphasising different aspects such as sustaining natural resources, sustaining consumption levels, achieving the

sustainability of all resources (human, physical, environmental, exhaustible ... ), seeking the integrity of nature's cycles, processes and rhythms and sustaining production levels. However, a basic distinction between weak sustainability and strong sustainability have been relatively accepted, particularly in the field of Economics, as well as a classification with the additional subdivisions of very weak sustainability and very strong sustainability (Pearce and Atkinso, 1993; Turner et al., 1994).

The advocates of strong sustainability espouse that nature has inherent value in and of itself and provides us with functions that cannot be replaced by human-made capital. These core functions for life are called critical natural capital. The notion of strong sustainability is defined as the capacity of human economy to maintain this critical natural capital. For example, the items below are considered essential and their functions irreplaceable: living species (stocks of natural capital that self-reproduce) and the ozone layer. This stance is considered preservationist and involves economic growth with zero population growth. In the strongest case of sustainability, an ecocentric vision is advocated, given that the ecosphere is considered not only the support of the human economy, but also the support for all physical production of all other populations, ecosystems and biophysical processes. In turn, the defenders of weak sustainability define it as the maintenance of all natural and human capital. This posture is based on the belief that nature has an instrumental value for humans and that depleting environmental resources and services can be offset by investments in new technologies and replacement mechanisms. The characteristics that define each of these terms are (Turner et al., 1994):

- *Very weak sustainability*: Anthropocentric and utilitarian vision, growth oriented to exploitation of resources, natural resources are used at an economically optimal rate through free markets with no operational restrictions to satisfy the choices of individual consumers, a possible infinite replacement between natural and human capital, continuous wellbeing ensured through economic growth and technological innovations.
- *Weak sustainability*: Anthropocentric and utilitarian vision, resource conservation, concern about the distribution of development costs and benefits via inter- and intra-generational equity, rejection of the infinite replacement of natural and human resources with the acknowledgement of some resources as critical (ozone layer and some ecosystems), disassociation from the negative impacts of economic growth.
- *Strong sustainability*: Perspective of ecosystems, resource conservation, recognition of the primary value of maintaining the functional integrity of ecosystems above a secondary value through the use of human resources, adherence to inter- and intra-generational equity, important disassociation along with the belief in an embryonic economy as the consequence of the norms of natural assets, zero economic and population growth.
- *Very strong sustainability*: Bioethical and ecocentric vision, resource conservation, where the use of natural resources is minimal, natural rights and the intrinsic value of nature encompasses non-human organisms and even abiotic elements under a literal interpretation of Gaianism, anti-economic growth and reduction of the population.

**Table 3. Multiple levels of corporate sustainability**

Level	Orientation	Definition	Motivation behind sustainability	Criteria for decision making
Red	Pre-CS*	At this level there is basically no ambition for CS. However, some steps labeled as CS might be initiated if forced from outside (e.g., through legislation or a buyers' strike).	The awareness that CS could increase personal power (e.g., through reputation improvement).	The impact of the decision on personal power.
Blue	Compliance-driven CS	CS at this level consists of providing welfare to society, within the limits of regulations from the rightful authorities. Firms might respond to charity and stewardship considerations.	A sense of moral duty (e.g., regarding charity or stewardship): CS is perceived as a duty or correct behaviour.	The decision should be taken by the correct authority according to the proper procedures and in line with the basic purpose.
Orange	Profit-driven CS	CS at this level consists of the integration of social, ethical and ecological aspects into business operations and decision-making, provided it contributes to the financial bottom line.	CS is promoted when it is thought to contribute to personal success and the financial bottom line.	Financial criterium: Shortest "pay out Period", highest expected profit, return on investment or shareholder value.
Green	Caring CS	CS consists of balancing economic, social and ecological concerns, which are all important in themselves. CS initiatives go beyond legal compliance and beyond profit considerations.	Personal values and beliefs of top-management and all participants that social and environmental care are important.	People, planet, and maybe profit. Taken after consensus or at least with consent of all relevant stakeholders.
Yellow	Sinergistic CS	Search well-balanced and functional solutions to create economic, social and environmental value from synergies with all relevant stakeholders.	Sustainability is important <i>per se</i> as it is the inevitable direction of progress	Balanced, functional decision, taking into account all available expertise and considerations with long term view perspective.
Turquoise	Holistic CS	CS is fully integrated and embedded in every aspect of the organization, aimed at contributing to the quality and continuation of life of every being and entity, now and in the future.	Conviction that sustainability on a worldwide scale is the only alternative, since all beings and phenomena are mutually interdependent. Each person or organization has a universal responsibility towards all other beings.	In line with and in favour of holistic interests for survival of life on the planet.

Source: van Marrewijk and Werre (2003).

\* CS= Corporate sustainability.

As an alternative to the classification suggested by Turner et al. (1994), we find the one developed by Dobson (1996), who conducted an analysis of the bibliography related to environmental sustainability and sustainable development, reaching a typology with regard to the issues outlined explicitly and implicitly therein. Table 1 shows the different conceptions of SD according to this author. Table 2 displays four conceptions of SD characterised by different outlooks to the four basic questions to which a sustainability theory must respond: *What must be sustained? Why? What are the objects of interest? and What is the degree of substitutability between human and natural capital?* Many points of controversy have arisen in the detailed study on the SD concept (Hunter, 1997). They have been interwoven in a widespread debate on how to obtain equity in accessing natural resources while creating human wellbeing, and in the distribution of costs and social, economic and environmental benefits, which are derived from the use of resources (Fox, 1994).

Equity aims to satisfy current basic human needs - *intra-generational equity* - and future ones - *inter-generational equity* -, which involves preventing development that maintains, creates or extends spatial or time differences in human wellbeing (Hunter, 1997). The main elements considered in the interpretation of SD are set out below: the role of economic growth in promoting human wellbeing, the impact and importance of human population growth, the effective existence of environmental limits on growth, the substitutability of natural resources (capital) and capital created by man through economic growth and technological innovation, the different interpretation of criticality of several components of base natural resources and, consequently, their power of substitution, the capacity of technologies, including management methods, such as environmental impact assessments and environmental audits, to uncouple economic growth from its undesired secondary effects, the meaning of the value attributed to the natural world and the rights of non-human species and, lastly, the degree to which a perspective of the system (ecosystem) should be adopted and the importance of maintaining the functional integrity of ecosystems.

An attempt to concretely relate Corporate Social Responsibility (CSR) and SD was undertaken by van Marrewijk (2003). He based it on the proposal by Panapanaan et al. (2003) to break down the aspects of sustainability into responsibility issues that directly concern companies, thus developing a corporate sustainability (CS) model, in which he differentiated five levels of ambition. His model established that there are no characteristics of CS or CSR, but instead that each level has its own characteristics stemming from their intrinsic motivation (to this author, the terms CSR and CS are practically synonymous, although he sees a subtle distinction, which is their association with the principles of agency and communion, respectively). According to the authors, no generic model therefore exists for implementing corporate sustainability. Each of them must select their own ambition and focus on their own sustainability issues, aligning them with their targets and corporate strategy, as a type of response to the circumstances in which each company operates (van Marrewijk and Werre, 2003).

The levels of van Marrewijk's model (2003), its characteristics and criteria for decision taking are depicted in Table 3:

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## Sustainability Dimensions

As we already set out, the conception of SD has evolved beyond natural capital, taking other aspects of human development into account. The concept has included economic, social and environmental considerations of sustainability, the idea of all society's sectors participating in taking decisions and differentiating the responsibilities of poor and rich countries (Meadowcroft, 2000). Three issues tend to be distinguished in SD (Linnanen and Panapanaan, 2002; Wempe and Kaptein, 2002; Ayuso and Fullana, 2002; van Marrewijk, 2003; van Marrewijk and Werre, 2003; Panwar et al., 2006):

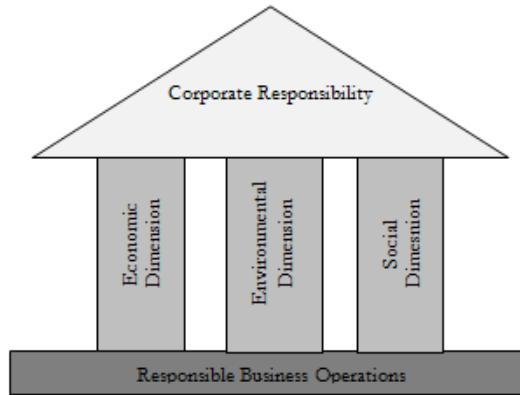
- *Environmental sustainability*, which must ensure that development is compatible with the maintenance of essential ecological processes, biological diversity and natural resources
- *Social and cultural sustainability*, which must ensure that sustainable development increases the individuals' control over their lives, is compatible with people's values and culture and maintains and strengthens communities' identities
- *Economic sustainability*, which must ensure that development is economically efficient, benefits all agents in the affected region and the resources are managed so that they are conserved for future generations

The factors involved in CSR can be identified from the conceptual model provided by the SD model (Linnanen and Panapanaan, 2002; Wempe and Kaptein, 2002; van Marrewijk, 2003; van Marrewijk and Werre, 2003; Panwar et al., 2006). Figure 1 summarises the different conceptions of CSR, according to the approaches in the sustainable development model. All of them are founded on the "*triple bottom line*", which was broken down by Panwar et al. (2006) into its respective dimensions.

To properly illustrate the model and its dimensions, the definitions of each of them proposed by the World Tourism Organisation (WTO, 2005) are presented below. The economic dimension is based on ensuring viable long-term economic activity, which provides correctly-distributed socioeconomic benefits for all agents. The social dimension refers to respecting the sociocultural authenticity of the host communities, conserving their architectural and living cultural assets and their traditional values, and contributing to intercultural understanding and tolerance. Lastly, the environmental dimension refers to optimally using environmental resources, which are a core element in tourist development, protecting essential ecological processes and helping conserve natural resources and biological diversity.

In previous models, the authors reinforced the conception of CSR as a multidimensional construct, placing equal emphasis on economic, social and environmental issues. As mentioned, this focus is closely connected to another concept: "*The Triple Bottom Line*" (Elkington, 1998) (Figure 2), through which the standard prosperity line (utility) should be parallel to the lines of the planet (environment) and people (society). This perspective emphasises the need to adopt ideas of corporate ethics and the importance of stakeholders, above and beyond that of the owners, investors and shareholders (Schmidheiny et al., 1997). Fundamental aspects of SD, such as respect for the individual and society, along with environmental conservation, frequently refer to this triple prosperity line, which encompasses

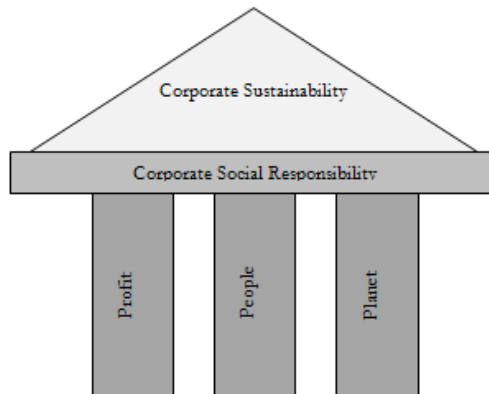
social and environment returns, as well as economic ones. In this regard, the company's actions toward sustainable development can be separated into the different spheres depicted in Figure 2.



Source: Panwar et al. (2006).

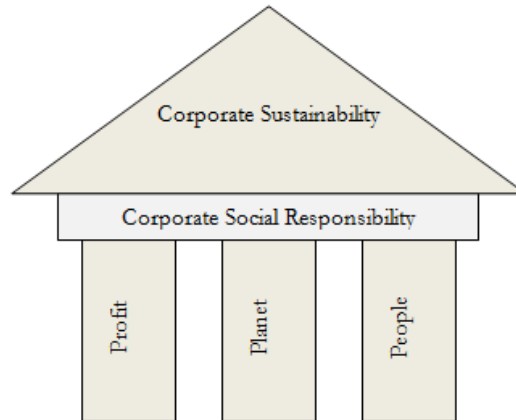


Source: Linnanen and Panapanaan (2002).



Source: Wempe and Kaptein (2002).

Figure 1. CSR conceptions based on the sustainable development focus.



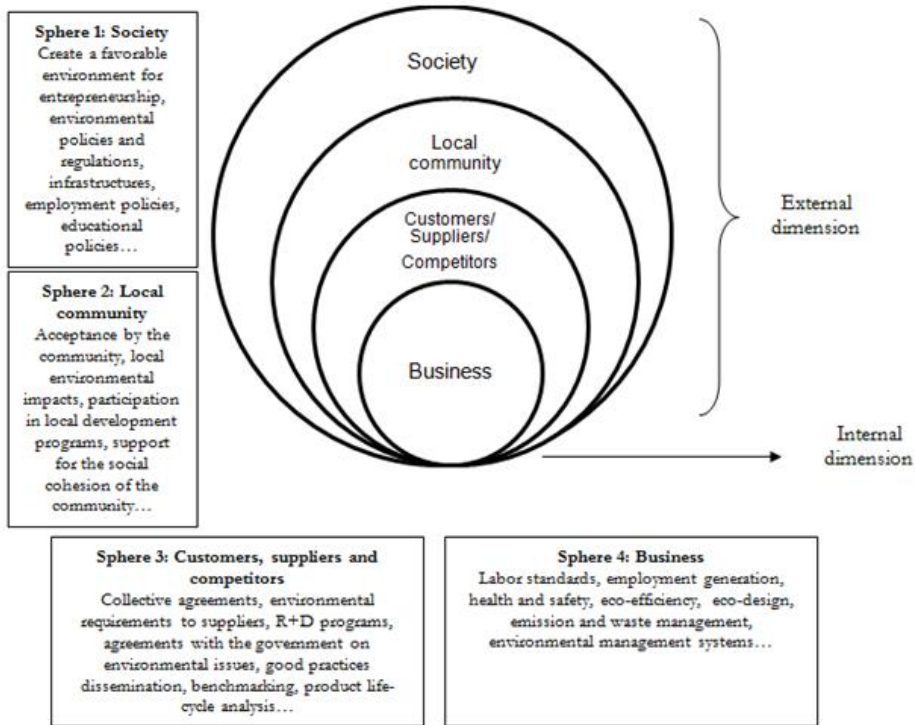
Source: Elkington (1998).

Figure 2. The Triple Bottom Line.

According to Olabe (2002) (Figure 3), sustainability-oriented companies conceive of their long-term actions as interrelated spheres of influence and scopes of action. In the smallest sphere (*Sphere 4*), companies have decision-taking power and their control over it is total. The next sphere (*Sphere 3*) contains all companies with which an intense business relationship is maintained. In the next sphere (*Sphere 2*), companies project their influence and participate in the local community in which they do business. And, in the last sphere (*Sphere 1*), companies interact with society at large. In this sphere, the values are expressed through which society formulates its aspirations toward a better quality of life and they are transferred to the other spheres mentioned.

From another perspective, but still employing the spheres identified in Figure 3, the European Commission Green Paper (2001), distinguishes two dimensions of CSR: the internal dimension, equivalent to the company sphere, and the external dimension, made up of the rest of the spheres. In the internal dimension, socially responsible practices primarily affect the employees in matters referring, on the one hand, to managing human resources, health and safety in the workplace and, on the other, the internal dimension also includes the management of the natural resources used in production.

However, and as mentioned, corporate social responsibility from the perspective of sustainable development extends from companies' perimeters outward to the environment and society, including a wide range of agents and partners (commercial partners, suppliers, consumers, public authorities, non-governmental organisations ...). As anticipated, this perspective emphasises stakeholders' importance, above and beyond that of owners, investors and shareholders (Schmidheiny et al., 1997). Many authors support these focuses, particularly in the tourist scenario on which this work is centred. Henderson (2007, pp. 231) states that owing to the typical characteristics of tourism, an extra dimension should be added to CSR and sustainability: *"society is part of the product and companies have responsibilities with the societies and environments where they develop their activities. For this reason, it is probable that tourist service consumers are more sensitive to the adoption of CSR executed by companies in this activity sector. Even more so, if we recall that this trend has been supported by consumers' tastes, the environment movement, public organisations and demands for better management of tourism."*



Source: Green paper EU Commission (2001) and Olabe (2002).

Figure 3. Spheres of action of a socially responsible company.

As mentioned, the principles of SD have much in common with those of CSR and the terms are sometimes used indistinctly (Henderson, 2007). A company that seeks sustainable tourism is, by definition, socially responsible, while CSR contributes the fundamental principles of sustainability. According to Tourism Concern, an independent British organisation that fights tourist exploitation and favours its more ethical development, tourism's capacity to negatively impact the destination economies, their societies, cultures and environments have exposed the sector industries to heavy criticism, but we mustn't forget that this sector can supply extremely necessary infrastructures, revenues and jobs that stimulate the destination economies and raise their standard of living. This could strengthen the protection of the most mistreated resources and help finance their preservation (Henderson, 2007). Therefore, it would seem like tourist companies have serious and clear obligations to issues related to the places where they do business, so that many of them have to adhere to sustainable tourism types whose purpose is to safeguard cultural and natural heritage (Diamantis, 1999). In this respect, the UN Environment Programme (2005) highlights 12 targets to be integrated into the sustainable tourism agenda, providing general action lines for sector companies. These targets are economic viability, local prosperity, quality employment, social equality, the compliance of visitors, local control, the community's wellbeing, cultural wealth, physical integrity, biological diversity, resource efficiency and environmental purity.



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### 3. IMPORTANCE OF SUSTAINABILITY FOR TOURIST COMPANIES

As presented above, the impact of tourism on the world economy is extremely significant. As it is a worldwide phenomenon, tourism has become one of the sectors with the greatest growth. Nonetheless, the scope and magnitude of the sector's growth poses several questions about its negative impacts, not only from an economic viewpoint, but also from environmental and sociocultural perspectives. By their nature, the hotel offering in particular and tourism offering in general largely depend on the environmental and cultural resources at the destinations. As the tourist industry offers activities that constantly interact with natural systems, this sector has a great capacity to initiate significant changes in the physical setting (Wahab and Pigram, 1997; Hassan, 2000). By way of example, tourists' wishes for isolated and picturesque accommodation lead to an increase in the use of natural areas dedicated to developing resorts and/or tourist complexes.

Owing to the complex structure of tourism and its connection to other activities like trade and transport, it is not easy to generalise its impacts, especially because they depend on a series of interconnected factors like the state of conservation and the particular characteristics of the local environment, the type of tourism and the local community's capacity in managing its resources. According to many authors, tourism's impact can be fit into one of three areas: economic, sociocultural or environmental (Ayuso and Fullana, 2002). Some of the negative impacts to bear in mind are (Hong, 1985; Wahab and Pigram, 1997; Mowforth and Munt, 1998; Ayuso and Fullana, 2002) (Table 4):

- *Economic:* Costs of opportunity stemming from the use of resources for alternative uses, costs derived from fluctuations in tourist demand, possible inflation due to tourist activity, as well as a possible loss of potential economic benefits if the investors are foreign.
- *Sociocultural:* Change in social values and religious beliefs, changes in the economic structure and the host community's social roles, as well as an increase in social problems like violence and prostitution, loss of authenticity in local crafts, and a possible displacement of the local population in favour of tourism development.
- *Environmental:* Problems related to trash treatment, pollution of waters by discharging wastewaters, sound pollution from tourist transport and activities, air pollution from vehicle emissions, damage to geological structures, damages to buildings from the tourist influx, destruction of natural habitats, change in the diversity of species, changes in migration and reproductive cycles of species, elimination of specific species from hunting and the souvenir trade, damages to vegetation, exhaustion of mineral resources, fossil fuels and supplies of underground water sources, proliferation of fires and the desertification of specific areas, and the alteration of urban and rural landscapes.

These changes can be perceived by the main authorities in the corporate arena. On the one hand, by clients, who are gradually altering their attitudes and behaviours, starting to buy products from companies that are more sensitive to the natural and social environment and, on the other, the political-legal context, which is subjected to drastic transformations, aimed primarily at limiting the environmental damage caused by commercial activities (regulatory

standards for products and processes) and respect for human rights. All of this is encouraging companies to adopt active and advanced policies of social and environmental management, which have these advantages (Ludevid, 2000): security (risk reduction), quality, savings (profitability), market (attracting new clients), image, ethics and social responsibility, attempt to continue and survive in the future, and business opportunities (management and application of technologies aimed at prevention, mitigation and restoration, to resolve environmental problems). In this regard, a new company concept, broader and not exclusively centred on economic issues, is evolving, along with consumers' expectations.

**Table 4. Negative impacts of tourism**

<i>Economy</i>
Loss of traditional economies
Costs of opportunity stemming from the use of resources for alternative uses
Costs derived from fluctuations in tourist demand
Possible inflation due to tourist activity
Possible loss of potential economic benefits if the investors are foreign
<i>Environment</i>
Water pollution by discharges of wastewater
Sound pollution from tourist transport and activities
Air pollution from vehicle emissions
Destruction of natural habitats
Changes in the diversity of species
Changes in migration and reproductive cycles of species
Elimination of specific species from hunting and the souvenir trade
Damages to geological structures or buildings from the tourist influx
Damages to vegetation and soil erosion
Exhaustion of mineral resources, fossil fuels and supplies of underground water sources
Proliferation of fires and the desertification of specific areas
Alteration of urban and rural landscapes
<i>Society and culture</i>
Changes in the traditional lifestyle of the host communities
Changes in social values and religious beliefs
Changes in the local identity of the host communities
Changes in the economic structure and the social roles of the host communities
Increase in social problems (violence, prostitution ...)
Loss of authenticity in local crafts
Possible displacement of the local population in favor of tourism development

Source: Compiled by authors based on Hong (1985), Wahab and Pigram (1997), Mowforth and Munt (1998) and Ayuso and Fullana (2002).

However, in comparison to the large number of studies conducted on the general impacts of tourism on the economy, the society and environment, there have been few attempts to comprehensively analyse the impacts attributable to the hotel sector. Furthermore, the majority of them centre on descriptive studies, which try to estimate the environmental impact

caused by a hotel establishment over the course of its lifecycle (Ayuso and Fullana, 2002). According to these studies, the largest environmental impacts in the hotel sector take place in the provision of services and operational phases (maintenance, cleaning, cooking, restaurants and laundry, among others), and to a lesser degree in the phase prior to providing the service (construction and production of auxiliary products). The main environmental impacts stemming from corporate activity are considered to be the consumption of electricity, water and raw materials and the generation of wastes. However, the hotel sector not only interacts with natural systems, as these types of activities also entail both direct and indirect contact between the tourists and the local population. In any case, these contacts could lead to problems such as transforming the local lifestyle and culture, changing local values and increased delinquency (Hong, 1985; Wahab and Pigram, 1997; Ayuso and Fullana, 2002).

In addition, negative sociocultural impacts from tourism can even start before the tourists reach a destination. The fast, and often poorly planned, development of tourism accelerates the quick transition of traditional lifestyles toward a modern and more Western style (Ayuso and Fullana, 2002). This involves a fast loss of cultural identity and the deterioration of traditional values, a situation that could lead to negative consequences including: the rupture of family and social cohesion, as the people work harder to improve their social status, causing them to spend less time with their families; the abandonment of traditional economies like farming and fishing, which are replaced by tourist-related activities; and increased social problems like drug abuse and prostitution (Hong, 1985; Ayuso and Fullana, 2002).

**Table 5. Positive impacts of tourism**

<i>Economy</i>
Benefits obtained by hotels, restaurants ... directly from visitors
Benefits obtained by suppliers and support services from the establishments
Revenues obtained by the resident population by way of wages and dividends
Benefits related to tourist activities
Direct jobs at the tourist installations
Indirect jobs in the sector
Increased demand for local assets
Increase in infrastructures
Increase in income and its improved distribution
<i>Environment</i>
Restoration and preservation of historic buildings and sites
Creation of natural areas
Restoration of natural habitats
<i>Society and culture</i>
Preservation of historic buildings and monuments
Creation of museums with cultural interest
Revitalisation of traditional art forms (music, literature, theatre, dance ...)
Revitalisation of local traditions (crafts, folklore, gastronomy ...)
Revitalisation of minority languages
Cultural exchange between residents and visitors

Source: Compiled by authors based on Hong (1985), Wahab and Pigram (1997), Mowforth and Munt (1998) and Ayuso and Fullana (2002).

The solid link between the hotel sector and the natural, social and cultural environments therefore implies that the sector's survival largely depends on its capacity to reduce the negative impacts in these areas to a minimum. In other words, the quality of the interactions between the hotel sector establishments and tourists will decrease if the setting of a tourist activity is worsened or loses its aesthetic qualities as a result of poorly planned tourist development. Therefore, the mitigation of these negative impacts seems to be essential for maintaining the quality of tourist services.

However, not all impacts of tourism are negative. There are several benefits stemming from tourist activity, both on the economic plane, and the sociocultural and environmental planes (Hong, 1985; Wahab and Pigram, 1997; Mowforth and Munt, 1998; Ayuso and Fullana, 2002). The most noteworthy of these positive impacts include (Table 5):

- *Economic*: Benefits obtained by the installations (hotels, restaurants ...) directly from visitors, benefits obtained by suppliers and support services from the establishments, revenues obtained by the resident population by way of wages and dividends, benefits related to tourist activities, direct jobs at the tourist installations, indirect jobs in the sector, increased demand for local assets, increase in infrastructures and an increase in income and its improved distribution.
- *Sociocultural*: Preservation of historic buildings and monuments, creation of museums with cultural interest, revitalisation of traditional art forms - music, literature, theatre, dance, revitalisation of local traditions - crafts, folklore, gastronomy, revitalisation of minority languages and the cultural exchange between residents and visitors.
- *Environmental*: Restoration and preservation of historic buildings and sites and the creation of natural areas and restoration of habitats.

## 4. KEY CHALLENGES FOR SUSTAINABLE TOURISM

According to the United Nations Environment Programme (UNEP) and the World Tourism Organization the tourism industry faces five major global challenges (WTO, 2005). By describing them, this section illustrates the range of impacts and opportunities that relate to tourism as well as the many reasons why companies should pay attention to its sustainable development.

### Managing Dynamic Growth

The increase in international tourist movements predicted for the next years will bring considerable pressures. In order to avoid damaging the resources on which tourism depends, this growth must be well managed. This will require careful planning of the location and types of new development, improved environmental management practices and influencing consumption patterns. In this sense, certain types of location (e.g., marine and coastal environments, historic towns and cities, cultural heritage sites, fragile natural environments ...) are particularly vulnerable to pressure.

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## **Climate Change**

This phenomenon is a major issue for the long term sustainability of tourism in tow senses: climate change will have consequences for tourism and tourism is a contributor to climate change. The effects of climate change (e.g., rising sea levels, increased frequency and energy of surges and storms, beach erosion, coral bleaching...) are threatening many coastal destinations. Mountain resorts will also suffer from rising snow lines and shortening winter sports seasons. Changes in temperature will affect market appeal in most parts of the world. Some of these impacts are already being felt. It is estimated that tourism may contribute up to 5.3% of global greenhouse gas emissions, with transport accounting for about 90% of the world's total use of fossil fuels and up.

## **Poverty Alleviation**

Halving world poverty by 2015 is the foremost UN Millennium Goal. The potential for the tourism industry to contribute to its reduction is increasingly recognized, partly because it is one of the few sectors in which poor countries' socio-cultural and natural resources give them an economic advantage. The development of tourism provides a good opportunity to help alleviate poverty because it is often a new source of revenue in rural areas (where 75% of the world's poor are to be found). The challenge is to find better ways of channeling tourist spending towards poor people.

## **Support for Conservation**

The need for more financial resources to support conservation is a worldwide issue, although this problem varies from country to country. Protected areas in developing countries receive less than 30% of their basic funding needs. Tourism makes a major contribution to income for protected areas and heritage sites through entry fees, permits ... and this can be extended. Moreover, this industry can become a force for more sustainable land management by providing an additional alternative form of livelihood for rural communities that are dependent on well maintained natural resources.

## **Health, Safety and Security**

Uncertainty about the health and safety of travel of certain destinations has caused significant fluctuations in tourism flows in recent years. Although this may be a short term phenomenon and recovery is often fast, it should be regarded as a global issue for the sustainability of tourism. There are policy implications for image and management of information and for specific measures to improve the safety and security of tourist.

## 5. SUSTAINABLE TOURISM: IMPLEMENTATION

An agenda for sustainable tourism can be articulated as a set of 12 aims that address economic, social and environmental impacts. According to the United Nations Environment Programme and the World Tourism Organization this agenda can be used to develop strategies for more sustainable tourism recognizing the two directions in which tourism policy can exert an influence: (1) minimizing the negative impacts of tourism on society and the natural environment and (2) maximizing tourism's positive contribution to local economies,

**Table 6. Aims for an agenda for sustainable tourism**

<i>Economic viability</i>
To ensure the viability and competitiveness of tourism destinations and firms, so that they are able to continue to prosper and deliver benefits in the long term.
<i>Local prosperity</i>
To maximize the contribution of tourism to the economic prosperity of the host destination.
<i>Employment quality</i>
To strengthen the number and quality of local jobs created and supported by tourism.
<i>Social equity</i>
To seek a widespread and fair distribution of economic and social benefits from tourism throughout the recipient community.
<i>Visitor fulfillment</i>
To provide a safe, satisfying and fulfilling experience for visitors, available to all without discrimination by gender, race, disability or in other ways.
<i>Local control</i>
To engage and empower local communities in planning and decision making about the management and future development of tourism in their area, in consultation with other stakeholders.
<i>Community wellbeing</i>
To maintain and strengthen the quality of life in local communities avoiding any form of social degradation or exploitation.
<i>Cultural richness</i>
To respect and enhance the historic heritage, authentic culture, traditions and distinctiveness of host communities.
<i>Physical integrity</i>
To maintain and enhance the quality of landscapes, both urban and rural, and avoid the physical and visual degradation of the environment.
<i>Biological diversity</i>
To support the conservation of natural areas, habitats and wildlife and minimize damage to them.
<i>Resource efficiency</i>
To minimize the use of scarce and non-renewable resources in the development and operation of tourism facilities and services.
<i>Environmental purity</i>
To minimize the pollution of air, water and land and the generation of waste by tourism enterprises and visitors.

Source: United Nations Environment Programme and the World Tourism Organization (2005).

the conservation of natural and cultural heritages and the quality of life of host and visitors. The 12 aims for an agenda for sustainable tourism are presented in Table 6. The order in

which these twelve aims are listed does not imply any order of priority. Each one is equally important.

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*Chapter 4*

**PSYCHOLOGICAL CARRYING CAPACITY:  
MEASURING THE TOLERANCE LEVELS  
OF THE VISITORS TO THE DESTINATION  
THROUGH TOURISM SATISFACTION**

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**ABSTRACT**

The carrying capacity has a growing interest given that it is closely linked with sustainable tourist development. The justification of the utility of this concept is given by means of efficient methodological proposal. The empirical application is based on studying the psychological carrying capacity of the tourist, that is to say, we verify the tolerance levels of the visitors to the tourist destination with respect to its highest levels of use, which are identified with the tourist season. To this end, the degree of tourism satisfaction is taken into account during distinct times of the year. The opinions are analyzed of those tourists who visit Andalusia (Spain). It is studied the satisfaction of the visitors when the levels of the tourist use are higher. This method can constitute a useful alarm signal for tourism planners, who must complement this work with other assessments of the economic, social and environmental aspects of the tourist destination.

**Keywords:** Carrying capacity; sustainable tourism; visitor experience

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## INTRODUCTION

As Spanou et al. (2012) suggest, when tourism takes place in protected areas, environmental management strategies are necessary to maintain and preserve the areas' natural value and resources. These authors indicate that the key to successful management of such an area is to carefully specify objectives and apply continuous monitoring to detect changes. In this sense, Choi and Sirakaya (2006) stated that the tourist boards are becoming increasingly conscious of the disadvantages of mass tourism and try to look for other options in the planning, management and development of tourism, within whose framework the concept of sustainable tourist development arises as an alternative to the traditional neoclassical model of economic development.

There exists a high consensus which states that the study of tourism indicator formulation is still in its infancy. However, there is a wide list of national and international organisations which have developed initiatives related to sustainability indicators (Vera and Ivars, 2003). But some of the indicators do not seem easy to implement (Ceron and Dubois, 2003).

The concept of carrying capacity occupies a key position with regard to sustainable tourism (Saarinen, 2006). In the application of the sustainable tourism indicators, the concept of carrying capacity is frequently used. This implies that the tourism destinations possess some limits in the volume and intensity that a specific geographic zone can bear without provoking any irreparable damage.

Marchena et al. (1999) noted that the carrying capacity is the most appropriate concept in order to determine and prevent problems of degradation in a tourist destination. Nevertheless, as Saveriades (2000) confirms, there are still no generally accepted definitions nor a systematic procedure to assess this concept.

Definitively, the concept of carrying capacity is attractive in its simplicity (Farrell and Runyan, 1991) and potentially useful (Hovinen, 1982), yet difficult to define in quantitative terms (Hovinen, 1982) and rarely undertaken (Collins, 1998).

Carrying capacity can have different partial definitions depending especially on the economic, social and environmental dimensions (for example, ecological and cultural carrying capacity). The set of these types of capacity can constitute that which can be denoted as tourist carrying capacity. This could encompass the inter-relationship between all those aspects which affect the tourist destination and which show their "holistic" character. However, several authors declared that this concept is useful but it is also problematic to use it in practice to help the development of sustainable tourism (e.g., Butler, 1997; Swarbrooke, 2002; Manning et al., 2002; Liu, 2003).

The paper is organized as follows. The concept of carrying capacity in tourism is first explained in depth by handling its evolution and its meaning in the same way as the most relevant lines of study. This is followed by the contribution of a measuring methodology for psychological carrying capacity by means of an empirical application in the context of nature tourism. This application is initiated by a previous theoretical approach, where the objectives pursued are established, and it is completed with the collection of the results obtained from the analysis proposed. The work is finalized by the most outstanding conclusions as an effort to provide a tool valid for the sustainable planning of a tourist destination.

## THEORETICAL PERSPECTIVES

The importance of carrying capacity in sustainable tourism can be drawn from the interest shown by the institutions which manage the protected natural areas of the United States of America. Tourist visits to these places was also converted into the principal study material in the first academic papers published in the 1960s. It is not, therefore, strange that the concept of carrying capacity stems from ecology, where it is defined, according to the European Agency of the Environment (1998), as the maximum population which can be borne by a determined habitat without causing any permanent damage to the productivity of the ecosystem on which that population depends.

Ever since the 1980s, mankind has been the fundamental representation of this population and in the academic field, following García (2001), two new aspects were incorporated at the point of delimiting the carrying capacity of a territory: the identification of the levels of acceptable and unacceptable use and the search for the quality of the visitor's experience. Shelby and Heberlain (1984) became its prime authors when they developed a social carrying capacity model which focused on descriptive and prescriptive points.

The former is centred on the facts and the latter on the more subjective aspects, in such a way that its descriptive focus detects a specific carrying situation and the prescriptive focus is fixed on the alarm signal. This signal is going to indicate the necessity of intervention by those responsible for the tourist destination in order to attempt to reduce the negative impacts that a tourist overload provokes. As Propst and Kurtz (1989) suggested, the acceptable number and distribution of people in a leisure setting and the behaviours deemed acceptable are normative evaluations.

The evolution of the concept of carrying capacity formed the academic interest of diverse disciplines of which the most active interest was shown in the fields of Economics, Sociology and especially Geography. One of the most renowned definitions was given by the World Tourism Organisation, which signalled that carrying capacity represents the maximum number of people who may visit a tourist destination at the same time, without causing destruction of the physical, economic and socio-cultural environment and an unacceptable decrease in the quality of the visitors' satisfaction.

In this definition, the two fundamental points can be distinguished as those based on the limits or thresholds are established by the carrying capacity. As Papageorgiou and Brotherton (1999) indicated, to maintain the integrity of the basic resources and provide a tourist experience of high quality. In particular, O'Reilly (1986) established two lines of research with respect to the carrying capacity. One line is centered on the capacity of the tourist destination of absorbing the visitors before the negative impacts are perceived by the receptor community. The other deals with the capacity of the tourist destination to attract and satisfy the visitors before the negative impacts are perceived by the tourists themselves, which may cause them to seek alternative tourist destinations.

However, these two approaches must be complementary. That is to say, it is a question of tackling the term from a double perspective: of supply, with the assessment of the receptor community; and of demand, in which the tourist assessment predominates.

From this definition, and by gathering together the distinct typologies of the carrying capacity which have been carried out in the literature (e.g., Getz, 1983; O'Reilly, 1986; Hunter, 1995; Butler, 1997; Saveriades, 2000; Swarbrooke, 2002), we propose a classification

based on the compilation of the ideas in common and on the refinement and restructuring of the most ambiguous terms.

- 1 The ecological carrying capacity, which is defined as the maximum number of visitors that a tourist destination can receive without unacceptably altering the natural surroundings, that is to say, whose limits indicate the risk of a development incompatible with the natural resources.
- 2 The urban carrying capacity, which has a similar meaning to that above, although in this case it is a question of the maximum number of visitors that a tourist destination can receive without unacceptably altering the physical surroundings which are composed of the infrastructure and the urban facilities.
- 3 The cultural carrying capacity, which is related to that above, although it can be expressed as the maximum level of resistance of the traditions and customs and the historical-artistic assets without unacceptably altering the cultural surroundings.
- 4 The economic carrying capacity, which refers to the minimum level of compatibility between the economic activity of the receptor community and the economic benefits which tourism provides without unacceptably altering the balance of the economic sectors of the receptor community.
- 5 The institutional carrying capacity, which is based on the maximum limit of effort of the Public Administration to regulate and control the tourism growth and to listen to the citizens without unacceptably affecting the political surroundings.
- 6 The residents' psychological carrying capacity, which is identified as the maximum level of tolerance by the receptor community's residents of the visitors it receives without unacceptably altering the social surroundings.
- 7 The tourists' psychological carrying capacity, which is understood as the minimum level of satisfaction of the visitor to the tourist destination without unacceptably altering the interest in the visit.

The set of these types of capacity can constitute what could be denoted as the tourist carrying capacity, since a system of indicators is necessary which gathers the interrelation between all these so very diverse aspects which affect the tourist destination and demonstrate its holistic character. However, the complexity of the carrying out of this system of indicators is evident. In this respect, Garrigós et al. (2003) point out a series of disadvantages associated with the measurement of the carrying capacity including those which indicate the variety of measuring patterns and the lack of quantifiable measures, as well as the diverse criticism which such a concept receives. With respect to this last drawback, one school of thought criticizes the utility of tourist carrying capacity (e.g., Lindberg et al., 1997; Buckley, 1999; McCool and Stankey, 2001; McCool and Lime, 2001) and suggests other alternatives for management of the tourist capacity, many of which are based on the approach of management by goals, such as Visitor Impact Management, Limits of Acceptable Change and Visitor Experience Resource Protection. In this way, it is claimed that the maintenance of the social and biophysical conditions which are desired or appropriate in the tourist destination represent a more powerful and useful tool for the management of impacts of unacceptable tourism than the search for some "magic numbers" implied in the identification of the carrying capacity (McCool and Lime, 2001). For their part, Watson and Kopachevsky (1996) state that one of the main criticisms is the lack of conciliation between the descriptive and

prescriptive components that Shelby and Heberlein (1984) propose. In general, this critical point of view approaches what could be understood as the qualitative perspective, which we believe must be complementary to the quantitative perspective of those who propose the suitability of the fixing of numerical limits, since, as Vera and Baños (2004) point out, the reduction to a maximum numeric threshold of capacity constitutes an oversimplification, which serves to undervalue this technique.

However, the determination of maximum numbers of visits depends on the space to which it refers. That is to say, this numerical method becomes more adaptable in those cases where the space is very enclosed, as occurs in the historical and cultural buildings or natural parks.

Furthermore, to the line of study we can add another approach which shows itself to be pessimistic when confronted with the possibilities of use of the tourist carrying capacity. Thus, Swarbrooke (2002) declared that this concept is useful but it is also problematic to use it in practice to help the development of sustainable tourism. Pigram (1980) and Farrell and Runyan (1991) noted that the carrying capacity does not lend itself readily to generalization. León (2004) suggested that this concept is generally arbitrary and very difficult to specify in practice, since its determination is the result of the negotiation of social agents. For his part, Liu (2003) stated that its limits are difficult, if not impossible, to establish given that they depend on the nature of the destination, the type of products on offer, the class of tourist it attracts and the state of its lifecycle.

Therefore even if there is extensive literature on the impacts of tourist use and its implication with the carrying capacity, as Manning et al. (2002) indicated, the efforts to determine and apply the carrying capacity have sometimes been unsuccessful.

Taking all this into account, it is understandable that the tourist carrying capacity is frequently treated in the academic literature from a theoretical point of view, since very few empirical studies have been dedicated to this field. This is shown by a revision of the literature carried out by Coccossis et al. (2001) which detects an absence of specific methods in the carrying capacity research which come near to identifying the number of tourists, not to discover a “magic number” but as a rigorous and scientific approximation to measure it. However, as Echamendi (2001) and Vera and Baños (2004) stated, despite the limitations of practical application and its scarce acceptance, the concept of carrying capacity recovers a predominant role based on the paradigm of sustainability. This academic interest in recent years triggered by the boost in sustainable tourism is reflected in the growing number of empirical studies (e.g., Morgan and Lok, 2000; Saveriades, 2000; López and Andrés, 2000; Roig, 2003; Urtasun and Gutiérrez, 2005; Kostopoulou and Kyritsis, 2006; Hunter and Shaw, 2007; López-Bonilla and López-Bonilla, 2008; Fernández-Latorre and Díaz, 2011).

## METHODOLOGY

Managing visitors is one of the important ways of attempting of control the impacts of tourism (Mason, 2005). This work attempts to contribute a methodological proposal to measure the perceptions of the tourists during their visit. Indeed, this empirical study is focused on psychological carrying capacity of the tourist. This proposal of a psychological carrying capacity measure is based on the level of tourist satisfaction.

As many authors affirm (e.g., Getz, 1983; Coccossis et al., 2001; Choi and Sirakaya, 2006), tourist satisfaction is considered as one of the principal indicators in the measurement of sustainable tourism and of carrying capacity.

This indicator is normally based on the number of satisfied or unsatisfied tourists, proposing a ratio between the two types of tourists. However, the levels of tourist satisfaction and service quality are wide ranging. We think that a more exact indicator which explains when tourist satisfaction declines excessively should take into account comparisons of distinct perceptions of the tourists with respect to the tourist destination in different seasons of the year in order to test a significant variation in tourist satisfaction.

The relationship considered earlier is studied by means of the tourist satisfaction expressed in relative values, that is to say, comparing the satisfaction of the visitors of the tourist destination at certain periods of the year when there are higher and lower levels of tourist use. To determine these periods we use the concept of tourist season in such a way that the high season is identified with a higher level of use than the low season or than the normal season. What can be denoted as relative satisfaction is an indirect way of assessing the tourist satisfaction at different times.

In accordance with the original concept of carrying capacity, the decrease in the tourist satisfaction is under observation more than the discovery of the existence of dissatisfaction with the increase in the density of the destination visited. Hence, the principal objective is to detect the possible negative impact provoked by the high proportion of tourists produced at specified times of the year. To a certain extent, the study of relative satisfaction of the tourist can lead to the degree of saturation of the tourist destination in specific seasons of the year.

In any case, it constitutes an indicator of the psychological carrying capacity of the tourist, inasmuch as it takes into account a change in the usual level of satisfaction of the visitor: the critical level or alarm signal is activated when the satisfaction of the tourist with the place visited falls significantly.

Data come from the Andalusian Tourist Board Survey, which is periodically carried out by the Institute of Statistics of Andalusia (Spain). Thus, the tourist destination is represented by the Autonomous Community of Andalusia in Spain. Specifically, data include to the tourists who visit Andalusia which is made up of the provinces of Almeria, Cadiz, Cordoba, Granada, Huelva, Jaen, Malaga and Seville.

This study does not try to analyze the carrying capacity in the nature parks, but the carrying capacity that exists in the provinces where these nature areas are located via the perceptions of the tourists who are motivated to visit nature. Nowadays, the Net of Protected Natural Areas in Andalusia (Spain) includes more than 1,692,000 hectares. There are 150 protected natural areas in Andalusia, which were visited by 619,050 tourists in 2005, distributed as follows: 174,338 visitors in Almeria, 106,100 visitors in Granada, 104,749 visitors in Cadiz, 97,500 visitors in Jaen, 59,940 visitors in Malaga, 43,291 visitors in Cordoba, 16,974 visitors in Seville and 16,158 visitors in Huelva.

The statistical procedure is based on a one-way analysis of variance (ANOVA). In the second stage of the study, from the possible verification of the existence of significant differences satisfaction in the indicators with respect to the quarterly periods, we endeavour to find out which those periods of the year are which affect the tourist assessment. We do this observing if they coincide with the zones of highest density or level of tourist use.

The Autonomous Community of Andalusia is the Spanish region which receives the most Spanish tourists and the second most popular region for foreign tourists.

The model of tourist development in Spain, in general, is based on 'sand and sun' tourism and, therefore, a high concentration of tourists exists during the summer months. However, there are other Spanish regions and provinces which though not situated near the sea which also receive an important number of tourists in other seasons of the year. In Andalusia both situations exist simultaneously, that is to say, there is a type of 'sand and sun' tourism predominant in Andalusian provinces (Almeria, Cadiz, Huelva and Malaga) and there are other types of tourism distinct from that of 'sand and sun' in four other provinces (Cordoba, Granada, Jaen and Seville).

## RESULTS

The levels of tourist use are measured using the number of tourists who visit each tourist destination during the four quarterly periods of the year, and we denote this as the tourist density. A first impression of these levels of use, where the numbers of tourists who have visited Andalusia during 2005 can be appreciated, is showed in Table 1.

Likewise, Table 1 reflects the current situations of the levels of tourist use in the Andalusian provinces expressed as a percentage. The levels of tourist use in Andalusia are widely dispersed. The provinces of Almeria, Cadiz, Huelva and Malaga possess a high proportion of tourists in the third quarter of the year (July, August and September): a common occurrence for the 'sand and sun' tourism model. On the other hand, the provinces of Cordoba, Granada, Jaen and Seville have a high number of visits during the second quarterly period of the year (April, May and June). In these four provinces, the number of visitors is distributed more equitably over the four quarterly periods of the year.

Satisfaction is measured in two different ways: (1) overall satisfaction, which is represented by the perception of tourists of the destination in general; and (2) the satisfaction with the nature parks, which is represented by the perception of tourists when they visited these protected natural areas.

The analysis of the tourist satisfaction is carried out using the four samples which represent the tourists who are motivated for visiting nature in each of the four Andalusian provinces where the 'sand and sun' tourism predominates. These samples are made up of 277 tourists in Almeria, 334 tourists in Cadiz, 135 tourists in Huelva and 434 tourists in Malaga.

**Table 1. Number of tourists per quarterly period in Andalusia**

Provinces	First Quarter		Second Quarter		Third Quarter		Fourth Quarter		Year
	tourists	%	tourists	%	tourists	%	tourists	%	
Almeria	316,482	13.19	605,780	25.25	1,043,334	43.48	433,982	18.09	2,399,578
Cadiz	458,044	14.78	852,613	27.51	1,229,510	39.67	559,513	18.05	3,099,680
Cordoba	162,521	18.90	270,569	31.46	225,832	26.26	201,123	23.39	860,045
Granada	643,440	23.89	719,459	26.71	722,434	26.82	608,142	22.58	2,693,475
Huelva	253,372	17.60	368,461	25.60	526,325	36.56	291,420	20.24	1,439,578
Jaen	157,596	18.03	250,127	28.62	251,567	28.79	214,569	24.55	873,859
Malaga	1,316,336	17.41	2,027,435	26.81	2,870,201	37.95	1,348,424	17.83	7,562,396
Seville	419,175	21.99	562,867	29.53	420,680	22.07	503,562	26.42	1,906,284
Andalusia	3,726,966	17.89	5,657,311	27.15	7,289,883	34.99	4,160,735	19.97	20,834,895

As mentioned earlier, these samples are extracted from the Andalusian Tourist Board Survey 2005. Tourists who visited these geographic places for holiday and leisure reasons are selected. Furthermore, the selected sample elements are those who only visit one reference province in order to prevent confusion in the assessment awarded by the tourists. The satisfaction levels of the tourists are measured on a ten-point scale, according to their low or high degree of satisfaction of the visit to the tourist destination.

Table 2 gathers the level of satisfaction of tourists with respect to their overall evaluation of the visits and with regard to the evaluation of the nature parks. It is observed that the overall satisfaction is superior in almost the totality of the cases.

The greater differences between both evaluations occur in Cadiz, whereas there are small differences in Huelva and Malaga. To examine the relationship between the number of tourists and satisfaction, two correlation coefficients (Pearson and Spearman's rho coefficients) were used and the correlation matrix is shown in Table 3.

Correlations were significant in the predicted directions. Hence, the predicted hypothesis of a negative relationship between number of tourists and satisfaction is confirmed.

The analysis of the variance is carried out with respect to the overall satisfaction and the satisfaction with nature parks and relative to the seven Andalusian provinces. The validity of the data to be used is first tested. A Kruskal-Wallis test has been also applied, as a non-parametric alternative to the variance analysis and it has been observed that the analysis results are very similar for the robustness test. The variance analysis results are given in Table 4.

In table 4, it is verified that the satisfaction with the nature parks displays greater differences between the quarter periods of the year, with the coefficients being significant at the 0.01 level in most cases.

**Table 2. Tourist satisfaction in 2005**

SATISFACTION	ALMERIA		CADIZ		HUELVA		MALAGA	
	Nature Parks	Overall	Nature Parks	Overall	Nature Parks	Overall	Nature Parks	Overall
Quarter 1	7.41	8.00	8.76	9.10	8.86	8.91	8.14	8.81
Quarter 2	7.18	8.22	8.13	9.16	8.76	7.29	8.67	7.33
Quarter 3	7.54	8.28	7.60	9.60	7.33	8.33	7.63	8.00
Quarter 4	7.68	8.21	8.25	8.94	7.91	9.09	(na)	(na)
Average	7.45	8.18	8.19	9.20	8.22	8.41	8.15	8.05

Note: (na) = there are not available data.

**Table 3. Correlations for number of tourists and satisfaction**

COEFFICIENTS	SATISFACTION	
	Nature Parks	Overall
Pearson	-0.342* (p=0.041)	-0.430* (p=0.013)
Spearman	-0.531** (p=0.002)	-0.536** (p=0.002)



In particular, three significant results with respect to the satisfaction with the nature parks are counted, whereas there are one significant result with regard to the overall satisfaction. It is observed that an important influence is exerted by the distinct seasons on the four Andalusian provinces, where a predominance of ‘sand and sun’ tourism exists. For this, we analyze which those quarters are where this influence appears, by carrying out multiple comparisons between the distinct quarters using the Bonferroni and Tamhane tests in accordance with the existence or not of homogeneity in the variances, respectively. The results are shown in Table 5.

In Table 5, it is noted that the third quarter of the year is the one that differs more significantly with the nature parks by tourists whose main motivation is nature. On the contrary, if overall satisfaction is observed, it is verified that the second quarter in Huelva is the one that displays more significant differences for the tourists.

**Table 4. Variance analysis results (P values)**

PROVINCES	SATISFACTION	
	Nature Parks	Overall
Almeria	0.066	0.416
Cadiz	0.000**	0.078
Huelva	0.000**	0.003**
Malaga	0.006**	0.096

**Table 5. Multiple comparisons between quarterly periods**

PROVINCES	Nature Parks		Overall	
	Quarters	P value	Quarters	P value
Almeria	--	--	--	--
Cadiz	Q1-Q3	0.000**		
	Q1-Q4	0.033*	--	--
	Q2-Q3	0.004**		
Huelva	Q1-Q3	0.000**	Q1-Q2	0.006**
	Q2-Q3	0.000**	Q2-Q4	0.012*
Malaga	Q1-Q4	0.001**		
	Q2-Q4	0.000**	--	--
	Q3-Q4	0.000**		

## CONCLUSION

The carrying capacity is a fundamental concept in the planning and management of tourist destinations. In recent years, academic and professional interest has increased in this measure which is now considered as a key aspect of sustainable tourism. However, the utility of its application has been questioned in the academic literature owing to the difficulties encountered of putting it into practice (e.g., Swarbrooke, 2002; Manning et al., 2002; Garrigós et al., 2003; León, 2004). Nevertheless, this in turn could be due to the scarce scientific treatment it has received.

In this study, this tendency is refuted by considering a methodological proposal in which the possibilities of measuring the psychological carrying capacity are verified.

The empirical application is based on studying the psychological carrying capacity of the tourist, that is to say, we verify the tolerance levels of the visitors to the tourist destination with respect to its highest levels of use, which are identified with the tourist season. To this end, the degree of satisfaction in the nature tourism is taken into account during distinct times of the year. The opinions are analyzed of those tourists who visit four Andalusian provinces during 2005.

It has been verified that provinces based on 'sand and sun' tourism have some significant differences between the quarters of the year: the third quarter, which is where there is a greater concentration of tourists, is emphasized. In addition, the significant differences are more obvious with respect to satisfaction with nature parks than in the overall satisfaction of tourists. Therefore, this study demonstrates a heterogeneity, mainly, with regard to the tourists very motivated by nature (main motivation) and who in the high season visit the provinces where the 'sand and sun' tourism predominates. In particular, the methodology used is an indirect approximation to the measurement of the psychological carrying capacity in the nature tourism, since it is based on the detection of a change in the usual level of satisfaction of the visitor by comparing distinct seasons of the year. Although this method would seem to be a simplistic assumption, as Ryan and Cessford (2003) noted, it might also be an alarm signal which is activated at the moment when the satisfaction with the destination declines significantly. This alarm signal could indicate the necessity of intervention by tourism planners in order to correct any negative impacts. With this proposal, Shelby and Heberlein's model (1984) is completed, by carrying out the study with a combination of both the descriptive focus and the prescriptive focus. With this study, it can be observed that, apart from being unadvisable, it is also unnecessary to calculate a determined number of tourists as a tolerance threshold of the tourist destination. Following the suggestions of Coccossis et al. (2001), we present a straightforward and efficient methodology which can meet the requirements of a measurement of sustainable tourism, although it should be complemented with an estimation of the carrying capacity of other economic, social and environmental areas. All this could make up the tourist carrying capacity. The planners of the tourist destination could make use of this tool to detect negative impacts of excesses in the levels of use in the tourist destination and, therefore, take consequent action.

Finally, it should be mentioned that quarterly periods and provinces are studied in this paper, and the results could be improved by means of using other more reduced periods of time, such as months or weeks. Furthermore, it is common knowledge that the decrease in tourist satisfaction is not provoked solely by the high levels of tourist use, but other factors of influence also exist. Hence, it is necessary to carry out other studies on those factors for which one can directly ascertain the degree of rejection by the visitors facing these situations of possible saturation in the nature areas.

## **SHORT BIO**

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*Chapter 5*

## **CRUISE TOURISM DEVELOPMENT IN THE MEDITERRANEAN SEA: A CROSS COMPARISON**

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### **ABSTRACT**

This paper examines residents' perceptions on a set of socio-economic, environmental and cultural externalities exerted by the development of cruise tourism. The research involves two ports, Messina and Olbia, located on the two largest Italian islands namely Sicily and Sardinia. The random sample, collected in 2011, is stratified by gender, age and place of residence of the interviewees and contains 1,499 for Messina and 1,208 observations for Olbia.

The analysis involves an integrated probabilistic approach where the dependent variable employed is the willingness to support a further investment in the cruise tourism at these two specific destinations. To this aim, a composite framework is used starting with the development of a correspondence analysis to synthesise the residents' perceptions about the externalities, then used as factors within the quantitative estimation. Further explanatory variables are: years of residence, number of family members, distance in kilometres that the resident lives from the port and main tourism attractions, subscription to an association, economic occupation as well as age and gender.

The results show that residents have an overall positive attitude towards the development of cruise tourism with respect to some of the social, cultural and economic positive factors, but concern is also raised on the environmental and some negative economic impacts. These findings provide input to local policy makers.

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## INTRODUCTION

The cruise industry has recently demonstrated its resistance to the economic crisis. As computed by Cruise Market Watch (2014), at the international level, the cruise industry between 1990 (with about 3 million passengers) and 2017 (with about 24 million expected) will experience an average annual growth rate of 7%. On the supply side, this outstanding growth is due to the increased capacity of the marine industry and diversification of the cruise liners, the increase of visits to various destinations (port-of-call) and the creation of new local ports (home-port), as well as the provision of a variety of activities on-board, and in the visited locations, in response to the needs of different consumer segments. On the demand side, cruisers' word-of-mouth has also played an important role. The sharing of positive experiences by a growing and considerable segment of demand influences an ever larger number of actual and potential consumers (Cruise Market Watch, 2014).

According to Cruise Lines International Association (CLIA, 2014), since the beginning of the economic turmoil, the European cruise market has grown by 43%. In 2013 alone, the value of the cruise industry is estimated at 36.2 billion dollars, an increase of 4.5% over the previous year. Hence, in the international panorama, the Mediterranean area continues to be the most popular destination. CLIA data also highlight that the industry in Europe generates 327,000 jobs and €37.9 billion of economic benefits annually. In 2013, the number of cruise passengers in Italy was 869,000 and experienced an increase of 4% in comparison to the previous year. The increasing number of ports of call and destinations around the globe makes this industry one outstanding example of globalization due to its multinational clients and on-board personnel from every continent.

Several papers have discussed the costs and benefits related to this economic activity on destinations, categorizing impacts in three main areas that is: economic, environmental and socio-cultural effects (Brida and Zapata, 2010; Dwyer and Forsyth, 1998; Johnson, 2002; Klein, 2009, 2010; Scherrer et al., 2011; Meleddu, 2014; Bonilla-Priego et al., 2014). From a social and economic perspective, the interactions between the different actors of the exchange process – cruise passengers, crew, residents, and producers of the tourism products – can exert both positive and negative effects (Brida and Zapata, 2010).

There are also a few published papers aimed at analysing the residents' perceptions toward cruise tourism development (Brida et al., 2011; Brida et al., 2012a, b; Diedrich, 2010; Gatewood and Cameron, 2009; Hritz and Cecil, 2008).

The present research aims at exploring cruise activity by discussing and comparing findings of a statistical investigation based on a representative sample of 1,208 residents, living in Olbia, a port of call cruise destination along the North-East Coast of Sardinia, and of 1,499 residents, living in Messina, a port of call along the North-East Coast of Sicily, (Italy). These two islands are the largest in the Mediterranean Sea. Specifically, the analysis involves an integrated probabilistic approach where the dependent variable employed is the willingness to support further investment in the cruise tourism at these two specific destinations. To this aim, a composite framework is used starting with the development of a correspondence analysis to synthesise the residents' perceptions about the externalities that are then used as factors within the quantitative estimation. Further explanatory variables are: years of residence, number of family members, distance in kilometres that the resident lives



from the port and main tourism attractions, subscription to an association, economic occupation as well as age and gender.

Several models have been developed to understand resident's perceptions and attitudes towards tourism development (see Meleddu (2014) for a comprehensive literature review). The pillar Doxey's Irridex model (1976) shows that the relationship between the local community and tourists goes from euphoria to apathy, annoyance and, finally, antagonism as tourist development proceeds. Also Butler (1980) analysed the Tourist Area Life Cycle (TALC) and identified distinctive stages: exploration, involvement, development, consolidation, stagnation and decline, that in some cases can turn into a rejuvenation phase. According to this model a correlation between residents' perceptions and attitudes, and the tourism life cycle phases do exist. Initially, residents may have a positive attitude towards their guests, but as their number increases, local community starts to be concerned about long-term effects exerted from tourism. Jafari (1989) analysed the way tourism develops, discussing the positive and negative consequences of tourism on a local community and defined the advocacy, cautionary and knowledge-based perspectives. Later the social exchange theory (Ap, 1992), stated that if locals perceive the benefits of development to be greater than the costs, they express a more positive attitude toward tourism and are more inclined to support its further expansion. Setting sustainable mass tourism as the desired outcome for most destinations, Weaver (2011) defined three convergent developmental trajectories which can be initially dominated by considerations of growth (organic), regulation (incremental), or both (induced) and discussed the dynamics of the local community for each of them. In the induced path, the local community is displaced and has to be reinvented with a new and larger population. In the organic path, the integrity of the community is eroded, thus requiring a reinvigoration in the rejuvenation stage.

Finally, in the incremental path local residents are empowered and then reinforced through continual adaptation for additional growth.

As noted by several authors, the understanding of host communities' preferences toward tourism is fundamental for its development and sustainability, especially in the long run (e.g., Allen et al., 1988, Lankford and Howard 1994, Gursoy et al., 2002, Oviedo-Garcia et al., 2008). It has been assessed (Fridgen, 1990) how host communities' negative attitude adversely influences tourists' willingness to revisit a specific destination. Therefore residents' acceptance of tourism development is considered a key factor for the long-term success and sustainability of tourism in a destination (Andriotis and Vaughan, 2003). Based upon resident's attitudes, policy makers may derive important policy implications to pursue a win-win development.

The remainder of this paper is structured in the following manner. In the next section, the case studies and the survey are presented. The second section addresses the methodology and the third presents the main findings that emerge from the statistical and econometric investigation. Concluding remarks are given in the last section.

## 2. METHODOLOGY

The first step of the analysis is to set up a Principal Components Analysis (PCA) that, without a priori specific hypothesis on the conceptual domain of the items, allows one to

eliminate the redundancy in original data and reduce the attributes to a set of factors, as a combination of the original attributes. To this aim, an orthonagonal *equamax* rotation is used in order to parsimoniously reduce both items and factors. The attributes with a loading score (i.e., variable contribution) less than 0.60 are excluded from the analysis, in order to obtain more robust indicators of the perceived externalities. To establish the adequacy of the PCA, two tests are run.

Firstly, the Kaiser-Meyer-Olkin Measure of Sampling Adequacy (KMO) that with a value between 0.50 and 1.00 implies that the analysis is satisfactory (Kaiser, 1974). Secondly, the Bartlett's Test of Sphericity is also run where the null hypothesis is that the correlation matrix is an identity matrix. Furthermore, the Anderson-Rubin method is employed to estimate the factor score coefficients. The resulting scores are uncorrelated, have a mean equal to zero and a standard deviation equal to one. This method also ensures orthogonality of the estimated factors. In this manner, it is possible to include the main factors of interest as regressors into the relevant econometric specification (Huang and Lee 2011; Brida et al., 2012b), also avoiding potential problems in the econometric estimation because of possible simultaneity issues between the set of perceived externalities and the dependent variable.

The second step involves the econometric specification where the dependent variable is a categorical variable that is used to assess residents' opinion on the level of investment in the cruise activity they would like to experience in their place of residence. This indicator is based on a 5 points-Likert scale (1= not at all, 5=very willing) where the response options are "very low", "low", "medium", "high" and "very high". However, to simplify the model, a dichotomous variable (from now on *WTS*) is constructed that takes the value one if the respondents stated to be either "willing" or "very willing" (4-5 Likert Scale) to support cruise activity in the town of residence and it takes the value of zero otherwise.

Given the definition of the dependent variable, a logit specification is carried out. This is a binary probabilistic regression that deals with situations in which the observed outcome for the dependent variable, *WTS*, can have only two possible categories, that is a respondent who is willing to support further the cruise activity or not.

Because coefficients change from one status to the other, probabilities ( $P$ ) change leading to a new index ( $I$ ), as follows:

$$I_i = \beta_0 + \beta_1 X_i + \varepsilon_i \quad (1)$$

$$Y_i = 1 \quad \text{if} \quad I_i > 0 \quad (2)$$

$$\begin{aligned} P(Y_i = 1) &= P(I_i > 0) = P(\beta_0 + \beta_1 X_i + \varepsilon_i) > 0 = P(\varepsilon_i > -\beta_0 - \beta_1 X_i) = \\ &= P_i \int_{-\infty}^{\beta_0 + \beta_1 X_i} f(t) dt = F(\beta_0 + \beta_1 X_i) \end{aligned} \quad (3)$$

$$P(Y_i = 1 | X) = \frac{e^{\beta_0 + \beta_1 X_i}}{1 + e^{\beta_0 + \beta_1 X_i}} = \Lambda(\beta_0 + \beta_1 X_i) \quad (4)$$

that is the probability to support cruise activity is assumed to be a function of respondents' attitude and a set of determinants defined as  $X_i$ . Since residuals ( $\varepsilon_i$ ) may not be normally distributed, a maximum likelihood estimation is employed to estimate the parameters ( $\beta_0$  and  $\beta_i$ ). The likelihood function allows one to measure the probability of observing that particular set of the dependent variable values that occur in the sample. Since the coefficients can not be

interpreted in the standard manner, the marginal effects are also computed, that are interpreted as the effect of a change in independent variable on the probability, as given by the following expression:

$$\delta p / \delta X = f(\beta X) \beta \quad (5)$$

In addition, the effect of the independent variable on the odds ratio, given by  $\exp(\beta)$ , is calculated. A set of explanatory variables ( $X_i$ ), on the right side of the equation, is included into the models, as follows:

$$\text{WTS} = f(\text{socio economic characteristics, externality factors}) \quad (6)$$

### 3. THE DATA

To make this methodological framework operational, two cruise ports of call in the Italian Mediterranean Sea are considered as a case study, that is Olbia located in the North-East of Sardinia and Messina sited in the North-East of Sicily (Figure 1). The latter is the eighth cruise destination in Italy. According to Risposte Turismo (2014), the number of cruise passengers in Messina increased of 128% from 2004 to 2013 and of 14% from 2012 to 2013. Olbia ranks twelve as a cruise tourism destination in Italy: the number of cruise passengers increased of 585% between 2004 and 2013 and of 1% between 2012 and 2013.



Source: Own elaboration on Mapwindows GIS.

Figure 1. Italy Map.

These figures highlight that Olbia is still in its early stage of cruise tourism development while Messina is at a more mature phase. Hence, it seems of interest to analyse how residents perceive this economic activity in these two destinations that denote an overall different development stage.

To this aim, a survey was constructed that included items selected on the basis of some pillars in community-based tourism (e.g., Dyer et al., 2007; Gursoy and Rutherford, 2004; Perdue et al., 1990) as well as on research that investigated residents' perceptions and attitudes towards cruise tourism development (Brida et al., 2011; Brida et al., 2012a, b). The questionnaire was divided into two sections. The first section focused on socio-demographic information, whereas the second section listed 27 items related to residents' perceptions towards the economic, environmental and socio-cultural impact generated by the cruise tourism development. A 5-point Likert scale was used (1 = completely disagree; 5 = completely agree) to evaluate residents' responses also according to several prior papers (e.g., Andereck et al., 2005; Kibicho, 2008; Brida et al., 2011, 2012 a,b).

Based on the official data published by ISTAT (Italian Institute of Statistics) on the socio-demographic characteristics of Olbia's and Messina's residents, respectively, respondents were selected with a quota random sampling procedure. The quotas were set on age (specifically, three classes were identified: 16-40, 41-65, over 65) and gender, and covered cases characterized by heterogeneous demographics features. The final sample size was determined according to a 95% confidence level with a 3% error.

An initial pilot test was conducted on a sample of 30 residents in each destination, randomly selected with the same type of stratification. This exercise was done to verify the validity of the questionnaire's content, to test respondents' understanding of the questions and the usefulness of the scale used to make the assessments. No relevant concerns were reported in both the pilot-tests. Hence, the research involved data collection in Olbia and Messina during the summer peak of the cruise season, in 2011. Data was collected through face-to-face interviews conducted by trained interviewers directly supervised by the authors.

Interviewers were instructed about the streets and area where to administrate the questionnaire. Only individuals older than 16 years old were asked to take part in the survey. A total of 1,208 complete questionnaires were obtained in Olbia, thus making up a sample that is representative of population at a 2% level. A total of 1,499 complete questionnaires were acquired in Messina thus making up a sample which is representative of population at a 1% level.

#### **4. EMPIRICAL ANALYSIS**

The aim of this study is to further develop the work by Brida et al. (2012c). Firstly, in the present paper, one expands the sample size for Olbia from 947 to 1,208 questionnaires. Secondly, one employs a factor analysis, with categorical variables, that is implemented by using a data reduction approach; that is, in the final specification, one excludes only those coefficients that have an absolute value less than 0.60. In fact, on the first investigation, and on balance, the econometric results on the factor coefficients appear to be more robust.

Although these two cruise destinations denote a different development stage, from the Levene' test,  $F=0.0004$  (p-value 0.994), it emerges that one can compare residents'

perceptions in these two ports, since the statistical value indicates homoscedasticity. The same conclusion is reached when using the t-test for equality of means; also in this case the null hypothesis fails to be rejected (full results can be provided upon request). Hence, in line with the work by Brida et al. (2012c), both the tests confirm that there are not statistically significant differences in terms of residents' perceptions on the whole set of externalities for Messina and Olbia, respectively, despite residents experience a different life cycle in the cruise development. Thirdly, one expands the statistical work by Brida et al. (2012c) by including the factors into a logit specification that helps one to avoid simultaneous issues (see also Brida et al., 2012b).

#### 4.1. Factor Analysis: The Case of Olbia

In the case of Olbia, the procedure leads to three factors and the initial 27-items were reduced to 11-items. From Table 1, it emerges that these factors explain more than half of the total variance (69.6%).

After the data reduction, all the factors present a Cronbach's alpha higher than 0.77 indicating their reliability. The KMO equals 0.82 meaning that the analysis is satisfactory. In addition, Bartlett's Test of Sphericity indicates that the null hypothesis of an identity matrix is rejected.

The most relevant factor, with a total variance explained 26.8%, is the "environmental negative externality" (from now on named as *Nenv*). It contains items related to environmental externalities perceived from the cruise activity: 1. deterioration of the eco system (such as sand erosion damages to flora and fauna); 2. increase the inland and marine pollution; 3. increase of congestion in public and recreational areas; 4. increase of waste. Overall, this factor presents items with loadings higher than 0.80.

In terms of positive externalities two main factors are obtained. *Factor 2* "economic and heritage positive externality" (from now on, *Pecon*) that includes items related to positive effects that residents perceive the cruise activity has on the local economy and heritage asset, as follows: 1. Increase in public investment and infrastructure; 2. increase in private investment and infrastructure; 3. increase jobs opportunities; 4. valorisation of local tradition and authenticity. *Factor 3* "welfare positive externality" (from now on *Pwelf*) relates to items that are regarded to be able to increase services and infrastructure, leading to an overall increase in the welfare of the local community. That is 1. infrastructure improvement (roads, communication, water pipes, etc.); 2. public services improvements; 3. rural and urban gentrification.

#### 4.2. Factor Analysis: The Case of Messina

In the case of Messina, the procedure leads to three factors and the initial 27-items were reduced to 14-items. From Table 1, it emerges that these factors explain more than 60% the total variance. After the data reduction, all the factors present a Cronbach's alpha higher than 0.70 indicating their reliability. The KMO equals 0.84 implying that the analysis is satisfactory. In addition, Bartlett's Test of Sphericity indicates that the null hypothesis of an identity matrix is rejected.

Differently from the case of Olbia, the most relevant factor, with a total variance explained of 16.3%, is the “Cultural positive externality” (from now on named as *Pcult*). It contains items related to cultural positive effects perceived from the cruise activity: 1. Enhancement of other cultural and communities knowledge; 2. Increase in the number of cultural and recreational activities; 3. Valorisation of local tradition and authenticity. Overall, this factor presents items with loadings higher than 0.70.

The second most important factor is *Factor 2* “welfare positive externality” (from now on *Pwelf*) relates to items that are regarded to be able to increase services and infrastructure, leading to an overall increase in the welfare of the local community. That is 1. Infrastructure improvement (roads, communication, water pipes, etc.); 2. Public services improvements; 3. Rural and urban gentrification.

*Factor 3* “negative environmental externality” (from now on named as *Nenv*) contains items related to environmental externalities perceived by the cruise activity: 1. Deterioration of the ecosystem (such as sand erosion damages to flora and fauna); 2. Increase the inland and marine pollution; 3. Increase of congestion in public and recreational areas; 4. Increase of waste.

Finally, *Factor 4* “social and economic negative externality” (from now on, *Nsecon*) that includes items related to perceived negative effects, as follows: 1. The benefits from cruise activity end to external entrepreneurs; 2. Cruise development has a crowding out effect on other relevant projects; 3. Increase in traffic and road accidents; 4. Micro-crime increase.

### 4.3. Econometric Modelling

These factors are then included into the econometric specification, as stated in the methodological section, together with a set of socio-demographic and economic explanatory variables, as defined in Table 2.

#### 4.3.1. The Case of Olbia

Table 3 provides the findings obtained running the general model and a parsimonious model based upon statistically significant coefficients.

As far as Olbia is concerned, it emerges that Model 1 and Model 2 are well-specified: the Likelihood ratio test (LR) on the coefficients confirms that the null hypothesis is rejected. The estimated information criteria are chosen so that they are minimised. In this case, the Akaike criterion (AIC) suggests for a full specification, while the Bayesian information criterion (BIC) suggests for a more parsimonious specification, when only statistically significant coefficients are considered at least at the 10% level of significance.

A further element of robustness is suggested by the stability of the signs and the magnitude of the coefficients between the two specifications.

Hence, one concludes that the most important variables that affect the probability to support the cruise activity are the positive economic externalities (*pecon*) and the positive welfare externalities (*pwelf*) perceived. Yet, the negative factor related to the environmental externality (*nenv*) turns out to be negative with the relatively highest magnitude.

Hence, it emerges that environmental externalities are the ones that most concern residents in Olbia, confirming the study by Brida et al. (2012c).

**Table 1. Contribution of factors and items**

OLBIA	Variable Contribution**	% Variance Explained	% Cumulative Variance	Cronbach's alpha	Messina	Variable Contribution	% Variance Explained	% Cumulative Variance	Cronbach's Alpha
Factor 1: Negative Environmental Externalitty		26.840	26.840	0.88	Factor 1: Cultural positive externality		16.338	16.338	0.77
Deterioration of the eco system (sand erosion. damages to flora and fauna)	0.851				Enhancement of other cultural and communities knowledge	0.808			
Increase the inland and marine pollution	0.887				Increase in the number of cultural and recreational activities	0.769			
Increase of congestion in public and recreational areas	0.845				Valorisation of local tradition and authenticity	0.720			
Increase of waste	0.848								
Factor 2: Economic and heritage positive externality		21.856	48.696	0.80	Factor 2: Welfare positive externality		15.849	32.188	0.81
Increase in public investment and infrastructure	0.807				Enhance environmental protection	0.777			
Increase in private investment and infrastructure	0.805				Infrastructure improvement (roads. communication. Water pipes. Etc).	0.812			
Increase jobs opportunities	0.744				Public services improvements	0.810			
Valorisation of local tradition and authenticity	0.614								
Factor 3: Welfare positive externality		20.943	69.639	0.83	Factor 3: Negative Environmental Externalitty		15.659	47.846	0.83

**Table 1. (Continued)**

OLBIA	Variable Contribution **	% Variance Explained	% Cumulative Variance	Cronbach's alpha	Messina	Variable Contribution	% Variance Explained	% Cumulative Variance	Cronbach's Alpha
Infrastructure improvement (roads. communication. water pipes. Etc).	0.853				Deterioration of the eco system (sand erosion0. damages to flora and fauna)	0.695			
Public services improvement	0.846				Increase the inland and marine pollution	0.810			
Rural and urban gentrification	0.781				Increase of congestion in public and recreational areas	0.720			
					Factor 4: Social and economic negative externality		14.431	62.277	0.77
					The benefits from cruise activity end to external entrepreneurs	0.685			
					Cruise development has a crowding out effect on other relevant projects	0.774			
					Increase in traffic and road accidents	0.734			
					Micro-crime increase	0.617			

Note: \*\* suppressed absolute value of coefficients below 0.60; Olbia: Kaiser-Meyer-Olkin Measure of Sampling Adequacy = 0.82; Bartlett's Test of Sphericity, Chi-square = 5967.362 (0.000); Messina Kaiser-Meyer-Olkin Measure of Sampling Adequacy = 0.84; Bartlett's Test of Sphericity, Chi-square = 9970.109 (0.000).



**Table 2. Socio-demographic and economic explanatory variables**

Variables
Dependent variable, WTS = support to cruise activity in Messina
Gender = dummy, acquires value one if female; otherwise zero
Yres = respondent's years of residence in the destination
Nfam = number family's components
Kcroc: dummy that acquires the value one if resident have had contacts with cruisers; otherwise zero
Occupation = 8 separate dummies variables are created: prim = if the resident belongs to the primary sector (otherwise zero); ind = if the resident belongs to the industry sector (otherwise zero); serv = if the resident belongs to the services sector (otherwise zero); tour = if the resident belongs to the tourism sector (otherwise zero); stu = if the resident is a student (otherwise zero); ret = if the resident is retired (otherwise zero); unem = if the resident is unemployed (otherwise zero); oth = if the resident does not belong to the working force (otherwise zero) – the latter is retained as a reference category.
Ass = dummy that acquires the value one if resident belong to a voluntary organisation (i.e., environmental, cultural, sport, others)
Kcruis = dummy that acquires the value one if resident has had contacts with cruisers; zero otherwise
Kmtour = how many km the resident lives from the most important tourism attractions
Kmport = how many km the resident lives from the port

**Table 3. Econometric specifications (marginal fixed effects)**

Olbia (extended model 1)		Olbia (parsimonious model 2)		Messina (extended model 3)		Messina (parsimonious model 4)	
	mf1		mf2		mf3		mf4
nenv	-0.131 <sup>***</sup> (0.0178)	Nenv	-0.129 <sup>***</sup> (0.0172)	pcult	0.0742 <sup>***</sup> (0.0145)	pcult	0.0733 <sup>***</sup> (0.0140)
pecon	0.102 <sup>***</sup> (0.0172)	pecon	0.0970 <sup>***</sup> (0.0167)	pwelf	0.0695 <sup>***</sup> (0.0146)	pwelf	0.0784 <sup>***</sup> (0.0138)
pwelf	0.0964 <sup>***</sup> (0.0169)	pwelf	0.0885 <sup>***</sup> (0.0164)	nenv	-0.0405 <sup>***</sup> (0.0142)	nenv	-0.0471 <sup>***</sup> (0.0137)
gender	0.0452 (0.0337)		-	nsecon	0.0160 (0.0142)		-
yrsres	0.00214 <sup>*</sup> (0.00114)		-	gen	0.0299 (0.0285)		-

**Table 3. (Continued)**

Olbia (extended model 1)		Olbia (parsimonious model 2)		Messina (extended model 3)		Messina (parsimonious model 4)	
	mfxf1		mfxf2		mfxf3		mfxf4
Nfam	-0.0290** (0.0132)	Nfam	-0.0244* (0.0126)	yresid	0.00121 (0.000844)		-
prim	0.0984 (0.122)		-	nfam	0.0273** (0.0114)		-
ind	-0.0276 (0.0872)		-	prim	-0.143 (0.0989)		-
serv	-0.0173 (0.0766)		-	ind	0.00126 (0.0671)		-
tou	-0.00164 (0.0998)		-	serv	-0.0495 (0.0485)		-
stud	0.0218 (0.0853)		-	tou	0.154 (0.0987)		-
ret	-0.109 (0.0876)		-	stud	0.0465 (0.0561)		-
unem	-0.00112 (0.105)		-	ret	-0.0970* (0.0544)	ret	-0.0661* (0.0358)
kcruis	0.0543*** (0.0162)	kcruis	0.0562*** (0.0146)	unem	-0.0670 (0.0624)		-
ass	0.0839** (0.0332)	ass	0.0720** (0.0322)	kcruis	0.114*** (0.0288)	kcruis	0.136*** (0.0272)
kmtour	-0.00634** (0.00306)	kmtour	-0.00592** (0.00299)	ass	0.0265 (0.0294)		-
kmport	0.0128*** (0.00471)	kmport	0.0117** (0.00459)	kmtour	0.000853 (0.00179)		-
				kmport	-0.00200 (0.00171)		-
N	1071	N	1100	N	1387	N	1450
Pseudo-R <sup>2</sup>	0.1109	Pseudo-R <sup>2</sup>	0.1012	Pseudo-R <sup>2</sup>	0.0656	Pseudo-R <sup>2</sup>	0.0565
LRchi2(18)	163.31(0.00)	LRchi2(18)	152.80	LRchi2(18)	125.75(0.00)	LRchi2(5)	113.22(0.00)
aic	1344.6	Aic	1375.7	aic	1830.1	aic	1904.3
bic	1434.2	Bic	1420.7	bic	1929.5	bic	1935.9

Note: Standard errors in parentheses; \*  $p < 0.10$ , \*\*  $p < 0.05$ , \*\*\*  $p < 0.01$ .

On the one hand, the larger the family and the farther one live from the main tourism attractions the lower is the probability to support the cruise activity. The former result can be explained by the fact the residents who belong to a large family may perceive the need to support more productive activities that are able to create jobs rather than the cruise sector. The latter finding indicates that people who live far away from the main tourism attractions may tend to perceive lower benefits arising from the cruise tourism development and, as a consequence, are less prone to support this economic activity. On the other hand, residents who belong to a specific association (e.g., sport, environmental, cultural etc.), residents who have dealt with cruisers and those who live far away from the port, are more likely to support the cruise activity.

#### 4.3.2. *The Case of Messina*

Table 3 also provides results obtained for the general model and a parsimonious model, for the case of Messina. Although, both Model 3 and Model 4 are well-specified, as indicated by the Likelihood ratio test (LR), the information criteria are minimised in the general specification. Yet, the marginal fixed effects do not diverge much in terms of signs and magnitude in the two models, hence further supporting the robustness of the specification. Amongst the factors that affect the probability to support the cruise activity are the positive cultural externalities (*pcult*) and the positive welfare externalities (*pwelf*) perceived. As expected, the coefficient of the environmental externality factor (*nenv*) turns out to have a negative sign although with the relatively lowest magnitude.

Differently from the case of Olbia, the larger the family the higher is the probability to support the cruise activity. Besides, retired people and residents who have dealt with cruisers appear to be more likely to support the cruise activity.

## 5. DISCUSSION

The two cruise destinations under consideration denote different development stages that may affect residents' attitudes towards this niche of economic activity. Interestingly, after having increased the sample set used by Brida et al. (2012c) for Olbia by approximately three hundred observations, from the Levene's test, it has been confirmed that the two sample statistically belong to the same population and therefore a comparison can be made. Once again, this outcome can be interpreted as no significant differences exist in terms of residents' perceptions on externalities in these two ports despite the fact that they are characterised by different stages in the life cycle. This result is in contrast with the theories developed by Doxey's (1976) and Butler (1980) for which there should be empirical evidence of a lack of correlation between residents' perceptions and the various phases in the tourism life cycle. Yet, some caution needs to be used since several other factors may affect residents' perceptions and attitudes as emphasized in the literature.

As a first step of the empirical investigation, a correspondence analysis has been carried out in order to obtain a set of factors able to capture the correlation between a wide range of externality variables. Specifically, an equamax rotation method has been employed to obtain a parsimonious number of factors and variables. Based on the preliminary empirical findings, a data mining approach has been used taking into account only variable contributions (or

loading scores) higher than 0.60, in order to obtain more robust indicators of the perceived externalities. These orthogonal factors, together with a set of socio-demographic and economic variables, have been included into a logit specification, where the willingness to further support the cruise activity has been used as the dependent variable.

As far as Olbia is concerned, the econometric findings have revealed that, on the one hand, residents are less likely to support the cruise activity if they perceive:

- negative environmental externality (i.e., deterioration of the eco system; increase the inland and marine pollution; increase of congestion in public and recreational areas; increase of waste).

while, on the other hand, they are more likely to support this economic activity if they perceive

- positive economic and heritage externalities (i.e., increase in public investment and infrastructure; increase in private investment and infrastructure; increase jobs opportunities; valorisation of local tradition and authenticity);
- positive welfare externalities (i.e., public infrastructure improvement; public services improvements; rural and urban gentrification);

The econometric findings have revealed that residents in Messina are more likely to support the cruise activity if they perceive:

- positive cultural externalities (i.e., enhancement of other cultural and communities knowledge; increase in the number of cultural and recreational activities increase; valorisation of local tradition and authenticity);
- positive welfare externalities (i.e., public infrastructure improvement; public services improvements; rural and urban gentrification);

while, on the other hand, they are less likely to support this economic activity if they perceive

- negative environmental externality (i.e., deterioration of the eco system; increase the inland and marine pollution; increase of congestion in public and recreational areas; increase of waste).

On the whole, and in both the cases, a positive relationship between personal benefits perceived from tourism and tourism attitudes and support has been confirmed, in accordance with the social exchange theory (Ap, 1992).

## CONCLUSION

This study has investigated residents' perceptions toward cruise tourism development within Olbia, a port of call in North-East of Sardinia, and Messina, a key port of call in Sicily. On balance, residents in Olbia have shown to be relatively more concerned about the negative

externalities affecting the environment. This outcome highlights the relevant role of natural resources perceived by residents. Olbia is in fact a strategic area for tourism in Sardinia and renowned worldwide for the *Costa Smeralda* coast. Hence, the protection of its natural resources seems to be of a primary concern to the respondents.

These empirical outcomes can be used as a guide in planning the future of these two cities as cruise destinations. The importance of involving the local community and the need to monitor over time residents and main stakeholders' perceptions and attitudes as a basis of the decision-making process has emerged. Yet, policy makers should also evaluate overall costs and benefits exerted by a further investment in this specific economic activity, making use of several economic, social and environmental indicators.

The present study has been based on two cruise Mediterranean destinations. Future research will adopt this framework to other ports in order to further generalise the empirical findings. Specifically, it would be of interest to compare a wider number of destinations, with homogenous features and characterised by a more distinctive life cycle in order to further underpin these results and further generalize the empirical findings.

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*Chapter 6*

**RURAL DEVELOPMENT THROUGH TOURISM:  
THE CASE OF CAVE PAINTINGS  
IN “LA CANAL DE NAVARRÉS” (SPAIN)**

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**ABSTRACT**

The group of over 700 sites of prehistoric Rock art of the Iberian Mediterranean Basin, also known as Levantine art, were collectively declared a World Heritage Site by Unesco in 1998. The sites are in the eastern part of Spain and contain rock art dating to the Upper Paleolithic or (more likely) Mesolithic periods of the Stone Age. It is notable for the number of places included, the largest concentration of such art in Europe. Its name refers to the Mediterranean Basin. However, while some sites are located near the sea, many of them are inland in Aragon and Castile-La Mancha; it is also often referred to as Levantine Art. Valencian Community holds 301 places. Province of Alicante has 130 places. Province of Castellón holds 102 places and province of Valencia holds 69 places.

Hunting scenes showing groups of archers shooting arrows at a wide range of animals, following tracks, collecting their prey and gathering honey are just some of the drawings that have endured for thousands of years inside the caves. They are generally found in rocky shelters and their excellent state of preservation and variety (we can identify three styles – Levantine, Macro schematic and Schematic) has allowed us to record and identify the evolution of cave art in the Region of Valencia.

The sites around Bicorp (La Canal de Navarrés, Valencia) are home to world-famous examples of this cave art. Millares, Dos Aguas, Quesa, Moixent, Enguera and Navarrés are all located in the Macizo del Caroig mountains as well and they too have the privilege

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of having archaeological sites with prehistoric paintings that have been declared World Heritage Sites.

In this work we try to analyze if these resources could be the basis for creating a sustainable tourism destination that allows the rural development of this area.

## INTRODUCTION

The corpus of late prehistoric mural paintings in the Mediterranean basin of eastern Spain is the largest group of rock-art sites anywhere in Europe, and provides an exceptional picture of human life in a seminal period of human cultural evolution. Its uniqueness, its documentary value, its integration into a landscape bears the imprint of man but is also of high ecological value, and its fragile and vulnerable nature. It is exclusive to the Mediterranean basin of the Iberian Peninsula because of the complexity of the cultural processes in this region in later prehistory, and to the factor related to conservation processes, such as the nature of the rock and specific environmental conditions.

The so-called Mediterranean Arc Cave Paintings of the Iberian Peninsula is home to numerous examples of rock paintings and etchings. These works of art date from thousands of years ago, and share a common style and characteristics which make them genuinely exceptional. This rock art was created between the Neolithic era and the Copper Age (10,000-4,000 B.C.). The paintings and etchings are located in open air rock shelters and caves. They tend to be figurative motifs sketched on limestone rock, normally in red, black and white. Their main features include the schematic style of the figures and the intense action of the scenes, which depict episodes of war, hunting, daily life and dance rituals. There are a total of 727 pictorial groups which have the UNESCO World Heritage designation, located in different areas of Andalucía, Aragón, Castile-La Mancha, Catalonia, Region of Valencia and Murcia.

The group of over 700 sites of prehistoric Rock art of the Iberian Mediterranean Basin, also known as Levantine art, were collectively declared a World Heritage Site by Unesco in 1998. A World Heritage Site is an area or place of cultural or natural significance that is deemed to have outstanding universal value and is therefore worthy of protection. That protection is made possible through the inscription by the World Heritage Committee of such a place in the World Heritage List in terms of the World Heritage Convention established in 1972 by UNESCO (United Nations Educational, Scientific and Cultural Organisation).

The sites are in the eastern part of Spain and contain rock art dating to the Upper Paleolithic or (more likely) Mesolithic periods of the Stone Age. The art consists of small painted figures of humans and animals, which are the most advanced and widespread surviving from this period, certainly in Europe, and arguably in the world, at least in the earlier works. It is notable for the number of places included, the largest concentration of such art in Europe. Its name refers to the Mediterranean Basin; however, while some sites are located near the sea, many of them are inland in Aragón and Castile-La Mancha; it is also often referred to as Levantine Art.

In Region of Valencia, one of the most important sites is located in the interior of the province of Castellón in the region of El Maestrazgo, and is home to the rock shelters of the gorge of La Valltorta. The most famous paintings from this site were found in the caves of Remigia (Ares del Maestre), Cavalls de Valltorta (containing a stag hunting scene) and Civils



(Tírig). We must also mention the rock shelters of La Sarga (Alcoi) in the province of Alicante.

The interior of the province of Valencia is also particularly rich in rock art. There are splendid paintings in La Canal de Navarrés. There are a group of caves in the municipalities of Bicorp, Quesa and Navarrés, in Valencia, eastern Spain. The area is also known as Macizo del Caroig (Figure 1).

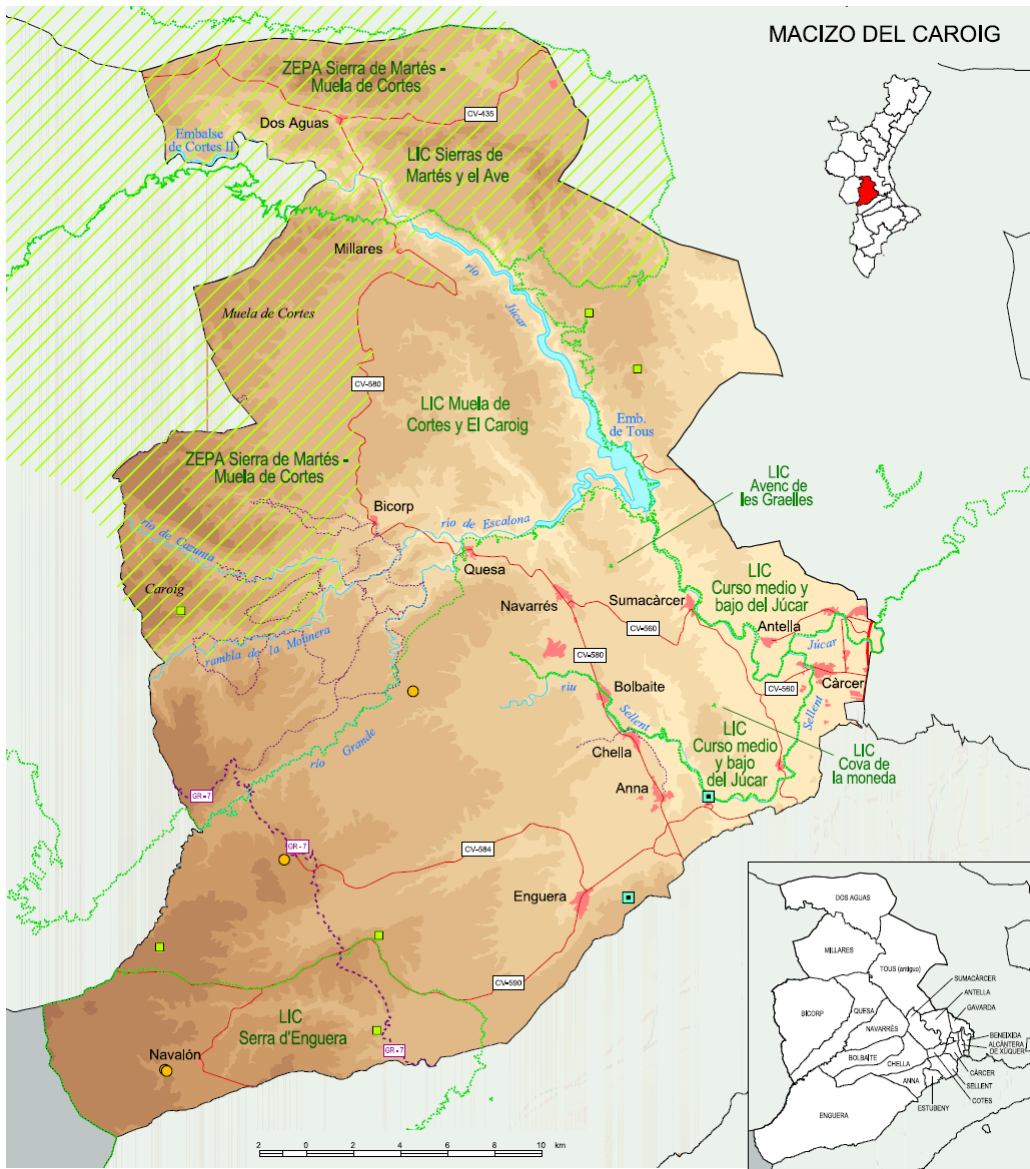


Figure 1. Macizo del Caroig (Asociación para la Promoción Socio Económica del Macizo del Caroig, 2006).

In Navarrés, there is the *Abrigo del Garrofero*, with figurative hunting scenes and several animals. Also, we have *Cueva del Barbero*, with more recent and esquematic figures. Finally,

there is a group of then human faces called *Carasetas*. There is also a prehistoric village called *Ereta del Pedregal*, but it is not visitable. Quesa holds *Abrigo de Voro* with a marvellous dancing hunting men scene. Most caves of Bicorp are in the valley, *Barranco Moreno*, of the rivers Escalona and Cazuma and were used by prehistoric people who left rock art. A special reference has to be made to the Cave of la Araña (Bicorp), with its famous scene showing honey collecting (Figure 2).

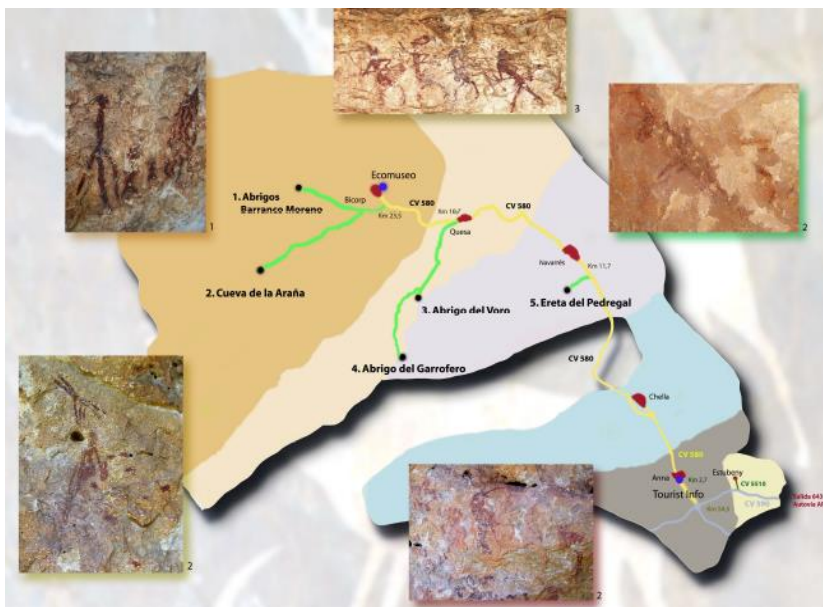


Figure 2. Main painting caves in Canal de Navarrés.

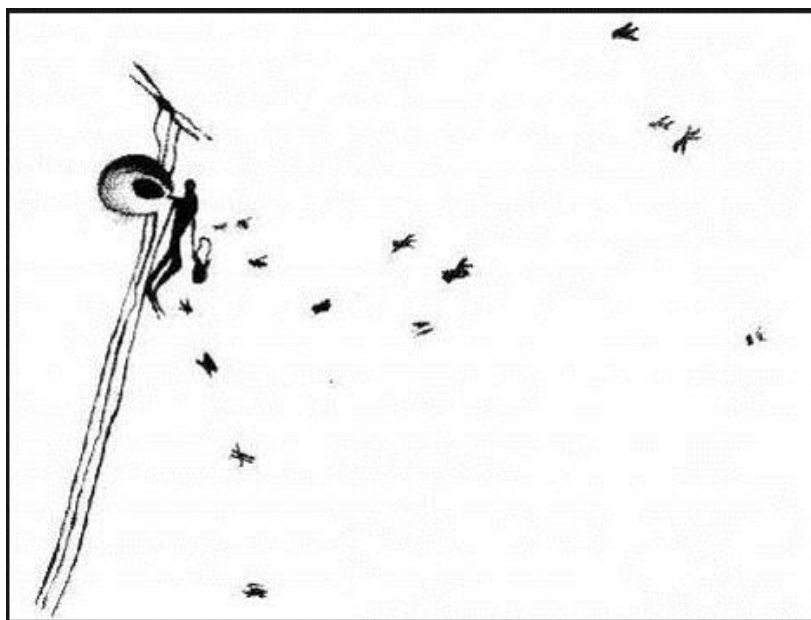


Figure 3. The man of Bicorp. (Hernández Pacheco, E., 2006).

The *Cuevas de la Araña* (known in English as the Araña Caves or the Spider Caves). They are known for painted images of a bow and arrow goat hunt and for a scene depicting an androgynous figure, sometimes called the “Man of Bicorp” (Figure 3). In the pictograph, an androgynous figure trusts his/her life to three thin vines or grass ropes to rob honey out of a hive high up on a cliff wall. Slung over the shoulder is a basket or gourd, ready to hold the sweet bounty about to be harvested. Enormous bees surround the honey hunter, but none are depicted as stinging, climbing lianas and gathering honey from wild bees. The dating of such art is controversial, but the famous honey-gathering painting is believed to be epipaleolithic and is estimated to be around 8000 years old. The caves were discovered in the early twentieth century by a local teacher, Jaime Garí i Poch.

These resources that are a significant part of this rural area heritage, however, are not used for the sustainable development of this area. Nowadays, heritage is of increasing significance to each society. Why this is so is not entirely clear but probably it has to do with the increasing speed of modernization and the scale of change in society. In such circumstances, evidence of past societies can provide a sense of belonging and security to modern societies and be an anchor in a rapidly changing world. In many societies, too, heritage can be an important definer of identity. Understanding the past can also be of great help for managing the problems of the present and the future (Thomas & Middleton, 2003).

The recognition that heritage places are not isolated has led to their surroundings being addressed both as a physical setting and as a series of social, economic and environmental threats and opportunities.

Tourism is one of the world’s largest industries. The World Travel and Tourism Council (WTTC) estimates that tourism generates some 12% of the world total GNP. With studies predicting continued growth, tourism is an increasingly important factor in the planning and management at UNESCO World Heritage sites.

While no formal data have been collected, a site’s inscription on the World Heritage List often coincides with a boost in visitation rates. Even at current rates, tourism is an important issue at World Heritage sites. A 1993 UNESCO United Nations Environmental Programme (UNEP) study showed that most managers of natural sites regard it as a key issue. Interviews and surveys carried out by the World Heritage Centre at cultural sites have revealed similar concerns.

Tourism offers well-known advantages. Visitor fees, concessions and donations provide funds for restoration and protection efforts. Visitors may be recruited as friends of a site and can help generate international support. Tour operators and hotel chains can play a role in the management of a site by making financial contributions, aiding monitoring efforts, or instructing their clients in responsible tourism. Tourism can also promote cultural values by supporting local handicrafts or by offering alternative economic activities.

On the downside, tourism spawns well-known problems. Managing rapid tourism growth is a time-consuming process demanding clear policies, ongoing dialogue with stakeholders, and constant monitoring. Tourism activities require environmental impact assessments (EIAs) and procedures for minimising impacts. At sites with limited budgets and staff, growing tourism can stretch scarce resources and take managers away from protection efforts.

While tourism can contribute to protection and restoration efforts, the right balance between economic gain and undesirable impacts can be elusive. Managers know that a tourist attraction must be periodically renewed to remain competitive. In the case of World Heritage sites, they are also aware that they are under an international obligation to maintain or restore

the site's original values. This responsibility poses difficult questions regarding the degree of change that should be permitted to accommodate tourism growth. Another problem is ensuring that a portion of tourism revenue remains in the community as a means of fostering local protection, conservation and restoration efforts.

In this work we try to explore and analyze how Cave Paintings in La Canal de Navarrés these resources could be the basis for creating a sustainable tourism destination that allows the rural development of this area.

## MANAGING CULTURAL HERITAGE FOR LOCAL DEVELOPMENT

To understand the contribution that World Heritage properties can make to society and to local and national economies is all the more urgent as greater importance is given to sustainable use and benefit-sharing for heritage. In recent years, as a result of major phenomena such as globalization, demographic growth and development pressure, the cultural heritage sector has started to reflect on the relationship between conservation and sustainable development.

This was triggered by the realization that, in the face of these new challenges, heritage could no longer be *confined to the role of passive conservation of the past*, but should instead *provide the tools and framework to help shape, delineate and drive the development of tomorrow's societies*. (ICOMOS, 2011)

As one of the most important paradigms of our time, sustainable development refers to a pattern of resource use that balances the fulfilment of basic human needs with the wise use of finite resources so that they can be passed on to future generations for their use and development. Since the Rio Earth Summit in 1992, the paradigm of sustainable development has been broadened to include three constituent but mutually supportive elements; environmental protection, economic growth and social equity. The importance of an effective system of governance has also been stressed, including a participatory, multi-stakeholder approach to policy and implementation.

Sustainable development is today the universally agreed and ubiquitous goal of nearly all development policies at local, national and global levels. New approaches, stemming from recent research, are introducing innovative ways of expressing the concept of social sustainability, and terms such as *well-being*, *good-life* or even *happiness*, are finding their way into governmental policies and statistics, focusing on subjective and qualitative indicators, rather than on purely quantitative ones (Boccardi, 2012).

In relation to cultural heritage, the issue of sustainable development can be understood in two ways:

1. As a concern for sustaining the heritage, considered as an end in itself, and part of the environmental/cultural resources that should be protected and transmitted to future generations to guarantee their development (intrinsic).
2. As the possible contribution that heritage and heritage conservation can make to the environmental, social and economic dimensions of sustainable development (instrumental).

What is probably required is a combination of the two approaches, which are not mutually exclusive; on one hand, reaffirming the cultural value of heritage by rendering more explicit its contribution to society in terms of well-being and happiness. In this sense, the increasing emphasis on quality of life and well-being as the ultimate goals of development in global and national development agendas suggests that aspects such as creativity, spiritual fulfilment, knowledge and beauty might find their way into official statistics on social sustainability by making *culture* and heritage legitimate and significant constituents of sustainable development.

On the other hand, we need to explore the conditions that would make heritage a powerful contributor to environmental, social and economic sustainability, with its rightful place as a priority in global and national development agendas.

Embracing initiatives that deliver mutual benefits to the property and its surroundings may not seem essential to the protection of the Outstanding Universal Value, but may prove important in the long term because they tie the property into its context in a positive and enduring way, thus favouring its long-term survival. For example, the mutual benefits of promoting local skills to conserve the property, rather than training new talent from elsewhere, may only emerge in a long timeframe (Lithgow, 2011).

In addition to conserving biological and cultural diversity, it is now widely recognised that many protected areas also have important social and economic functions. These include protecting watersheds, soil and coastlines, providing natural products for use on a sustainable basis, and supporting tourism and recreation. Many protected areas are also home to communities of people with traditional cultures and knowledge: these assets also need protection. Since most protected areas have multiple objectives, there is a need to consider a wide array of social preferences and values (both for present and future generations), institutional structures and barriers, philosophical outlooks, forms of knowledge and conflicting opinions of what is important. Because all these various considerations have to be taken into account, the task of preparing Management Plans for protected areas can be challenging, yet it is essential for the well being of the natural and cultural resources being managed (Thomas & Middleton, 2003).

## **ANALYSIS OF THE POSSIBILITIES OF DEVELOPING THE CAVE PAINTING IN LA CANAL DE NAVARRÉS AS A SUSTAINABLE TOURIST DESTINATION**

In order to analyse the possibilities of this area we must look at if it is know as a cave painting area in the region and if people consider it as a tourist destination. The objectives are to delimitate:

- Social features of tourists that visit the area
- Trip features of tourists that visit the area
- Tourist profile in the area
- Tourism practice factures in the area
- Opinion about tourism opportunities in the area

The primary data for this research was collected through a survey to 400 inhabitants in Comunidad Valenciana region. A stratified random sampling with proportional allocation according to the number of inhabitants per municipality was done.

The first question was if respondents knew where is La Canal de Navarrés. 78% of respondents said No. Only 37% of those that said yes were able to situate the area in a map. Then, we asked them if they knew what was Abrigo del Voro. Only 9% said yes. We also asked if they knew what Cueva de la Araña is. 15% answered that they knew it was a cave painting. Then, we asked if they knew what the Cave Paintings of the East of Spanish are. 29% of people said that they knew it. Only 40% of them were able to describe these Cave Paintings.

In the second part of the survey we looked at the tourism features of people. The first question was about the sort of tourism respondents practise. Figure 4 shows the answers.

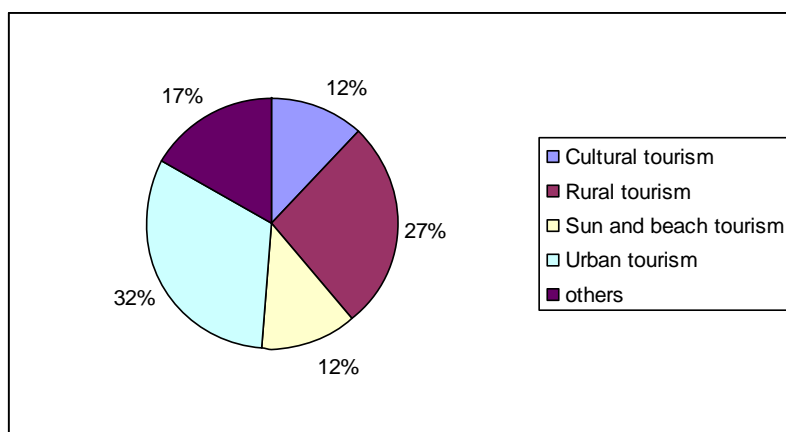


Figure 4. Sorts of tourism.

Then, we asked how many times respondents went on tourism per year. Results can be seen in Figure 5.

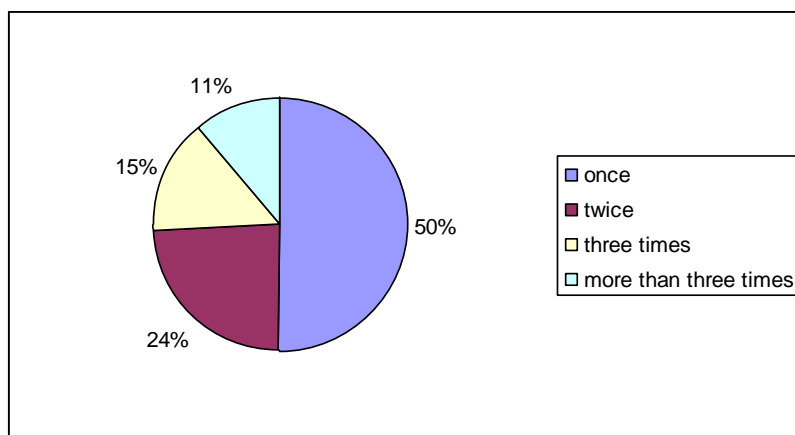


Figure 5. How many times do you go on tourism per year?

The next question was about how long were, as an average, these trips. Answers can be seen in Figure 6.

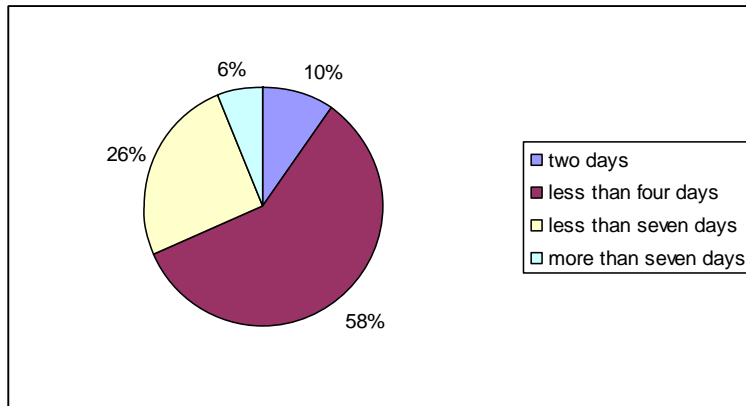


Figure 6. How long, as an average, are your tourist trips?

We also asked how much they spend, as an average, per person and day on a tourist trip. Figure 7 shows their answers.

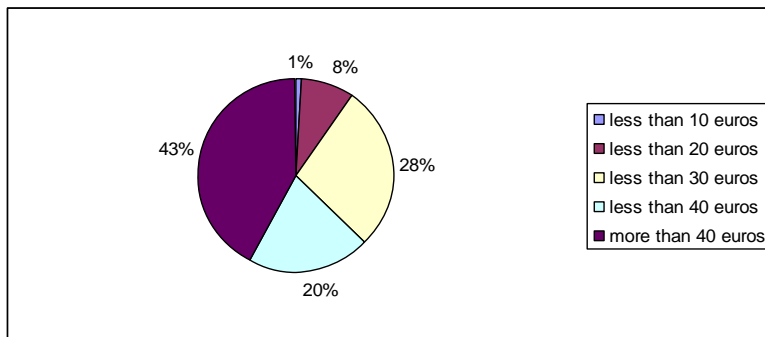


Figure 7. How much do you spend, as an average, per person and day on a tourist trip?

We also asked who they travel with on these tourist trips. Results can be seen in Figure 8.

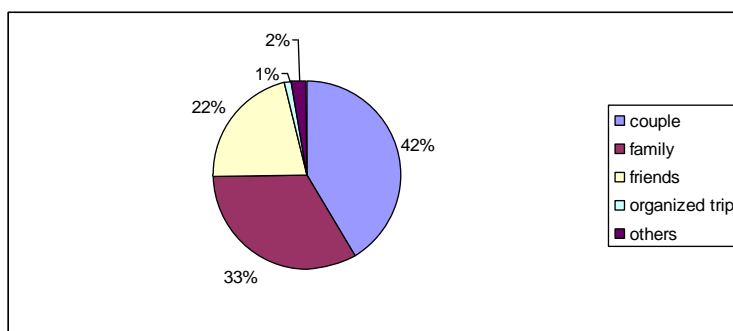


Figure 8. Who do you travel with on these tourist trips?

On the third part of the survey, we looked at what they consider important for choosing a tourist destination and what do they consider important when they arrive at the destination. Figure 9 show the results of the first question.

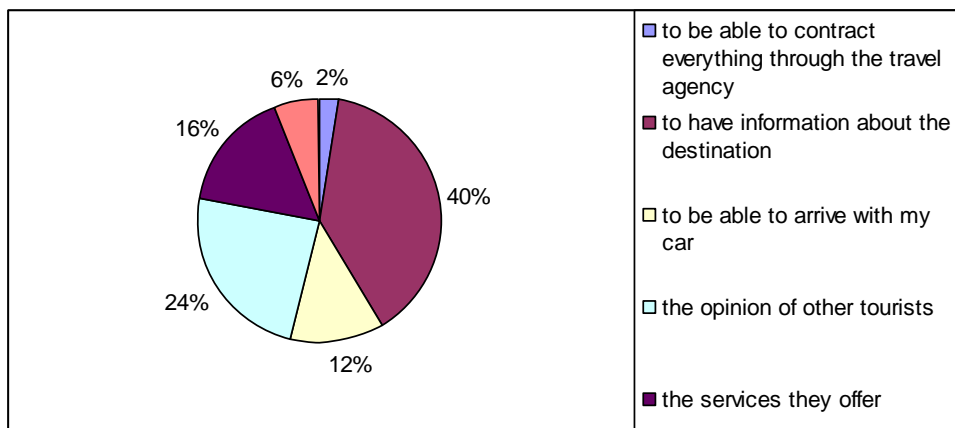


Figure 9. What do you consider important for choosing a tourist destination?

Then, we asked them to valuate these possibilities. This is shown in Figure 10.

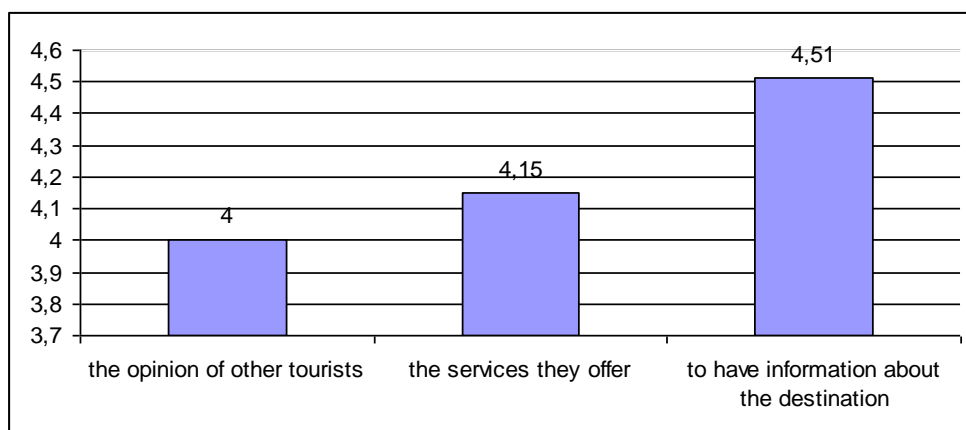


Figure 10. Valuate your election for choosing a tourist destination (1= not important at all; 5= very important).

Figure 11 shows what they consider important when they arrive to the destination. We also asked them to valuate their election.

This can be seen in Figure 12. We asked them if they consider as a possibility a tourist destination based on cave paintings. 84% said no. We told to those that consider cave paintings as a possibility to tell which factors they consider important apart from cave paintings. Results are shown in Figure 13.

Then, those that consider cave paintings as a possibility were asked to valuate their election. This can be seen in Figure 14.



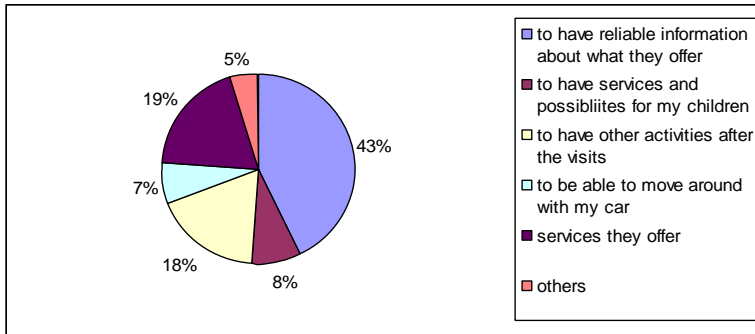


Figure 11. What do you consider important when you arrive to the destination?

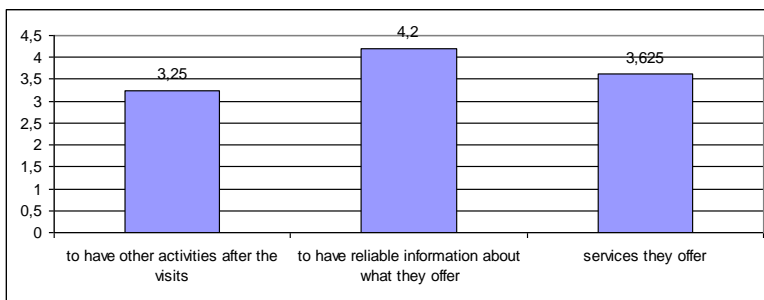


Figure 12. Valuate your election when arriving to the destination (1= not important at all; 5= very important).

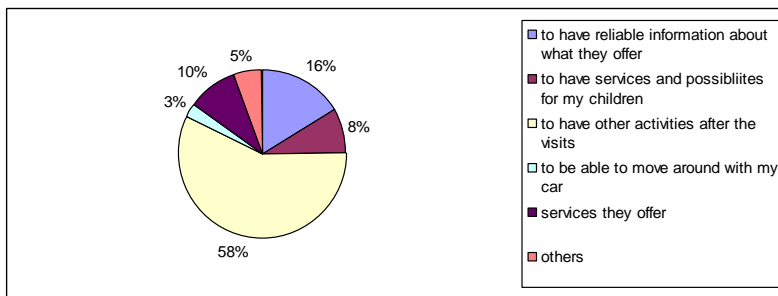


Figure 13. Which factors do you consider important apart from cave paintings?

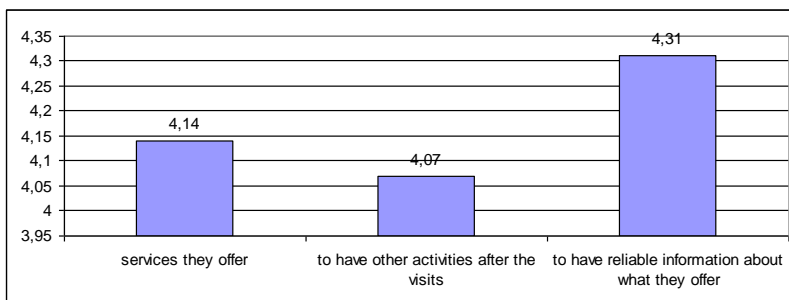


Figure 14. Valuate your election when considering cave paintings as a tourist destination (1= not important at all; 5= very important).

Next question to those that consider cave paintings as a possibility was about how much time they would spend on a tourist trip visiting cave paintings. 71% answered two days, 25% declared less than four days and 4% less than seven days. We also asked them how much they would spend, as an average, per person and day on a tourist trip visiting cave paintings. Results are shown in Figure 15.

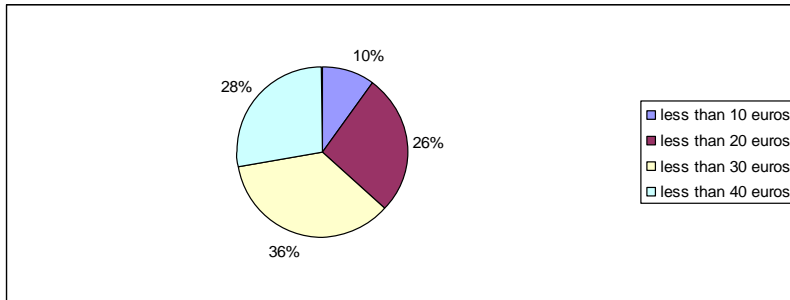


Figure 15. How much would you spend, as an average, per person and day on a tourist trip visiting cave paintings?

The next question wanted to know who they travel with on these tourist trips. 40% would travel with their couple, 33% with their families and 27% would travel with friends.

The last two questions were about what they would consider important when choosing a tourist destination based on cave paintings. Results are shown in Figures 16 and 17.

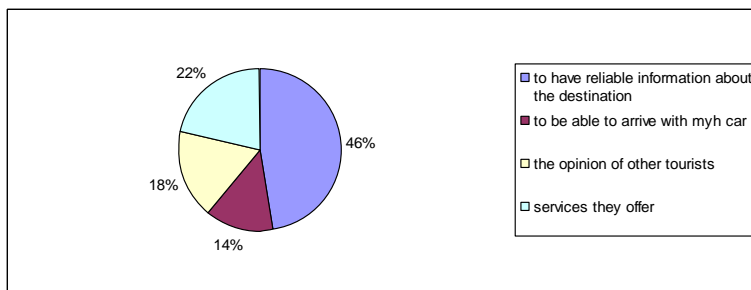


Figure 16. What do you consider important when choosing a tourist destination based on cave paintings?

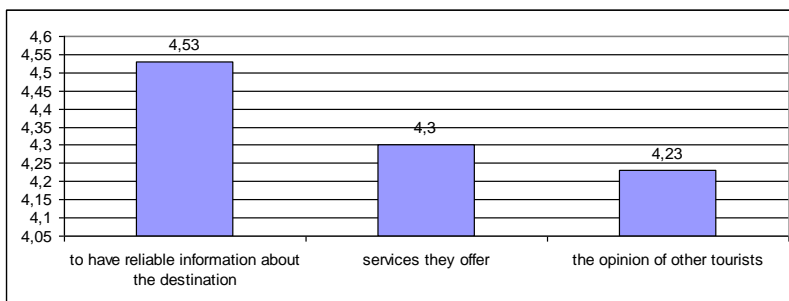


Figure 17. Valuate your election about what you consider important when choosing a tourist destination based on cave paintings (1= not important at all; 5= very important).

## CONCLUSION

The corpus of late prehistoric mural paintings in the Mediterranean basin of eastern Spain is the largest group of rock-art sites anywhere in Europe, and provides an exceptional picture of human life in a seminal period of human cultural evolution. Its uniqueness, its documentary value, its integration into a landscape bears the imprint of man but is also of high ecological value, and its fragile and vulnerable nature. It is exclusive to the Mediterranean basin of the Iberian Peninsula because of the complexity of the cultural processes in this region in later prehistory, and to the factor related to conservation processes, such as the nature of the rock and specific environmental conditions.

The interior of the province of Valencia is also particularly rich in rock art. There are splendid paintings in La Canal de Navarrés. There are a group of caves in the municipalities of Bicorp, Quesa and Navarrés, in Valencia, eastern Spain. The area is also known as Macizo del Caroig.

These resources that are a significant part of this rural area heritage, however, are not used for the sustainable development of this area. In this sense, we can affirm that:

- Cave paintings of Canal de Navarrés are not known in Comunidad Valenciana
- There could be a demand for rural – cultural tourism based on cave paintings in the region.
- This market segment considers important, when considering this possibility:
  - to have other activities after the visits (58%),
  - to have reliable information about what they offer (16%),
  - However, the most valued factor is to have reliable information about what they offer (4.31/5).
- 71% of these tourists would spend two days in these visits.
- 36% of these tourists would spend less than 30 Euros per day and person in this trip.
- 40% of these tourists would travel in couple and 33% would travel with their family. 37% would travel with friends.
- When choosing when choosing a tourist destination based on cave paintings, these tourists consider important:
  - to have reliable information about the destination (46%)
  - services they offer (22%)
  - the opinion of other tourists (18%)
  - Again, the most valued factor is to have reliable information about what they offer (4,53/5)

So, we can say that the area has assets to become a tourist destination based on cave paintings. However, it also has some weaknesses that must be solved. The main weakness is the lack of presence in its area (Comunidad Valenciana).

The first strategic action should be to develop an information campaign in order to build this image. They also must condition the cave paintings and facilitate access to them.

Furthermore, some actions have to be promoted for enhancing and developing the collective consciousness of the value of the cave paintings among local population.

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*Chapter 7*

## **TOURISM MARKET RESEARCH IN SPANISH HIGHER EDUCATION: ETYMOLOGICAL ISSUES**

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### **ABSTRACT**

Tourism Market Research has been an optional subject in the Curricula of the Tourism Diploma in Spanish Higher Education until 2009. The adoption of the European Higher Education Area seems to boost the participation of this subject in the new Tourism Degree in Spain. However, this subject is present in the curricula of less than half of the Spanish universities imparting the Tourism Degree. This subject should have a greater academic participation in Spain due to the transcendence of tourism in this country and the need for training the students and enhancing their interest in tourism research.

The term tourism market research is widely accepted by the academic community. However, there is some controversy regarding the use of the terms of market research and commercial research. In some cases, conceptual differences are posed between the two terminologies, while in other cases, a greater equity is advocated. We try to understand the basis of these differences, concluding that the two terminologies have their own limitations, so it would be advisable to use a more appropriate and enlightening term.

**Keywords:** Marketing, tourism market research, commercial research

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## INTRODUCTION

In 1996 tourism degree studies were included in the Spanish higher education (HE) system, introducing a new period for training professionals in the sector and opening up new possibilities for research development in the tourism field (Cervera-Taulet and Ruiz-Molina, 2008). Following to Munar and Montaña (2009), when the Bologna Declaration was signed in 1999, Spain's HE system had three levels: the first level had 3 year programmes entitled *diplomaturas*, degrees that did not provide access to any upper HE level. All tourism studies in Spain belonged to this level. The second level, *licenciado*, had 5 to 6 year programmes and provided access to doctoral level. No tourism degree was offered at this level. The final level was that of *doctorate*. No doctoral degree in tourism was offered.

In Spanish Higher Education, Tourism Market Research has been an optional subject in the Curricula of the Tourism Diploma (*diplomatura*). The adoption of the European Higher Education Area seems to boost the participation of this subject in the new Tourism Degree. Specifically, the White Paper of the Tourism Degree, developed by the National Agency for Quality Assurance and Accreditation (ANECA, 2004), proposes ten knowledge scopes that represent different academic approaches to tourism. A knowledge scope devoted to areas that may tackle the social or market research is indicated among them.

The subject Tourism Market Research has been given as a compulsory subject for the first time in the University of Seville in academic year 2011-2012. It is a compulsory subject because it must be taken by all the students registered in the Degree. It is a third year subject of the Tourism Degree and consists of six ECTS. The teachers of that subject are the authors of this paper. However, this subject is not included in every curriculum of those Spanish universities imparting the Tourism Degree. For instance, among the nine public universities of Andalusia, this subject is taught only in the universities of Cordoba, Malaga and Seville. That is, the subject is imparted in three of the eight universities that currently offer the Tourism Degree. The subject is compulsory in the three universities mentioned. In Spain, the subject is present in the curricula of less than half of the universities. We believe this subject should have a greater academic participation in Andalusia and Spain due to the transcendence of tourism in our country and the need for training the students and enhancing their interest in tourism research.

Tourism Market Research belongs to marketing discipline (defined in Spain, more specifically, as the area for commercialization and market research). The concept of tourism market research may be widely accepted by the academic community, but the term or nomenclature from which it comes reveals its inaccurate use. The linguistic root of that term in marketing literature is *market research*, although the term *commercial research* is also used. In tourism, when it is required to generalize, it may be more accurate to use the term *tourism market research* rather than *tourism commercial research* or *commercial research in tourism*. However, when this process of generalization is limited, the expression *commercial research of a tourism business* is perfectly valid. There is no doubt that the words *commercial* and *tourism* do not really match and require a greater linguistic distance in order to make them clearly understandable.

Obviously, the terms *tourism research* or *research in tourism* are misused for identifying the tourism market research. In this case, research is referenced broadly, comprising any disciplinary or operation scope.



The concept of *social research in tourism* also shows the same dilemma, although in a more restricted manner, since this type of tourism research refers to any discipline in the field of social sciences.

To this point, the question arises whether the term *tourism market research* is accepted in the academic community, especially due to resonance or appearance, or it is possible to spread its acceptance mainly for conceptual reasons. In this sense, this paper is focused on the etymology of *tourism market research*. That is, we intend to explore the origins of the term in order to explain, from a greater conceptual background, the reasons by which the terminology used may be accepted or rejected.

This study is an exercise of theoretical reflection, structured in the following epigraphs. First, we try to highlight the semantic divergence about the terms *tourism market research* and *tourism commercial research*. The following epigraph is focused on justifying the reasons of this divergence. And finally, in conclusion, we try to provide solutions that bring the different academic postulates closer.

## THEORETICAL FRAMEWORK

As previously mentioned, the term *tourism market research* seems to have some consistence in the academic scope versus other similar terms, but we believe it is justified only by matters of form and not background. This is obvious considering the lack of consensus between the implementation of *market* and *commercial research*. In Spain at least, controversy raised between authors, researchers and specialists in the field, which is based on the different ways of understanding these two terms. This way, marketing literature in Spain frequently points out the dichotomy of identifying or not both terms as synonyms. Commercial research is proposed to include market research, but it is also accepted that both terms are concepts that cover the same or almost the same.

As we said, many prestigious Spanish authors, both academics and professionals, have shown their differences about equalizing the terms *market research* and *commercial research*. On the one hand, some authors claim that the concept of commercial research is wider than *market research*, as the last is focused only on knowing the target market (e.g., Miquel, Bigné, Cuenca, Miquel and Lévy, 1999; Pedret, Sagnier and Camp, 2000; Díez and Landa, 2002; Santesmases, 2004; García, 2005). So, for instance, Pedret et al. (2000) state that *commercial research* comprises the study of any problem or chance, no matter if a market is investigated or not. In this case, performing a competition study could be an example, but there is no doubt that the market is the aspect organizations study the most.

On the other hand, some authors consider that *commercial* and *market research* are identical terms (e.g., Ortega, 1990; Ferré, 2003; Fernández, 2004; Trespalacios, Vázquez and Bello, 2005; López-Bonilla and López-Bonilla, 2012). In this case, it is stated that the concept of market is wider than that of target market. It must be highlighted that Trespalacios et al. (2005) defend the greater preponderance of the term *market research*, since, as they indicate, it is the original concept and it is generally used at an international scale.

These are the two positions clearly adopted in the marketing literature in Spain. The balance either favors the equality of both terms or gives more importance to commercial research.

A third possibility is not arguable, as so would be that the concept of market research was wider than that of commercial research. Interestingly, a study performed by Landa et al. (2001) indicate that there are a slightly higher percentage of Andalusian managers who believe that market research is conceptually more encompassing than commercial research.

And why would we not think that market research may not be wider than commercial research? To do this, we can consider the differences between the words “market” and “commercial”. As we know, the market is the main core of attention of any organization in the development of a marketing activity in today’s world. Thereby, if an organization performs a study on its competitors, it is probable that the competitors analyzed are those who supply the same market to which that organization is directed to or intends so. If so, all “commercial” studies end up in the ocean of “market”. For instance, competitors or distributors are not studied separately without connecting them to the main body that is the current market or organization potential. In short, as Ferré (2003) suggests, the aim of market research is to obtain factual data about the market in any of its aspects.

Following to Butazzi (1970) and Ortega (1990), this divergence in the terminology used is greatly due to language. Interestingly, both authors hold opposing stances regarding the duality presented in the previous epigraph. So, for instance, Butazzi (1970) states that market research is a pointlessly restrictive expression that, according to the strict meaning of the word, it may refer only to market study.

The word *marketing* was admitted in our official vocabulary not long ago. In the nineties of the XX century, this word was still understood by the Royal Academy of Spanish Language as a voice of English origin that was translated to our language as *mercadotecnia*. Besides, the marketing subject was initially gathered in the university curricula with the term *mercado* (market), which was later replaced by *mercadotecnia* until the term *marketing* was consolidated these days, as it is incorporated with more emphasis in the current undergraduate and postgraduate curricula.

As we know, the concept of marketing developed from the Anglo-Saxon, especially from the United States. But the apparent confusion we may have in our language does not seem to exist in the Anglo-Saxon countries. However, the Anglo-Saxon handbooks of marketing have been translated from a clear orientation toward the use of the terminology *market research*. This is evidenced by the Spanish titles of books from prominent North American authors like Malhotra and Burger (1997), Aaker and Day (1989), Kinnear and Taylor (1989), Malhotra (1997), Zikmund (1998) and Hair, Bush and Ortinau (2004). All these books include the English words *Market Research* in their original titles. Besides, the contents thereof are not limited exclusively to studies of the target market.

To this point, the question arises about which came first, commercial or market research. Which was the first term adopted? Where was it adopted? Perhaps looking over the history we may search for answers in greater depth. Sánchez, Mollá and Calderón (1999) performed an interesting study on the evolution and conceptual development of commercial or market research. Ten evolution stages are established in this study, which are divided in decades regarding the most relevant attributes. We believe other stages focused on the evolution of the terminology used could be added, in line with these stages of the development of the subject content. This way, we will establish four evolution stages, which are origin, transition, determination and reinforcement. In Table 1 we intended to summarize the main events that describe these four stages, marking them chronologically.

The origin of this concept appears in the 1910s. Specifically, Charles Coolidge Parlin was one of the pioneers as he first created, around 1911, a research department at the Curtis Publishing Company, which was known as the *Commercial Research Division*. Around the same time, Professor Duncan, from the University of Chicago, wrote the first important handbook about the subject, whose title was *Commercial Research: an Outline of Working Principles*. The transition stage of the terminology began in the 1920s. The concept of market as a key element for analysis grew in this decade. One of the main contributions in this period was brought by White in 1921, through his book *Market Analysis: its Principles and Methods*. In the 1930s, more important contributions were brought by different authors, like Lazarsfeld in 1934 with his book: *The Psychological Aspect of Marketing Research* and Brown in 1937 with his book: *Market Research and Analysis*.

Now, the determination stage may be located from the introduction of statistical methodologies in the academic literature, at the end of the 1930s. In this stage, a remarked milestone is the founding of the *American Marketing Association* (AMA), which represents a symbol in the development of the scientific literature used in marketing. With this endeavor, the Association published in 1937 a handbook named *The Technique of Marketing Research*, in which various relevant authors participate, like Wheeler, Balzari and Lazarsfeld. This period of determination may be justified also through the ideas of Zaltman and Burger (1980), who state that in the 1940s a subtle but important change occurred in the concept, which evolves from the term *market research* toward *marketing research*. The meaning of this change is justified by the greater research activity in the management environment, which is directly related to the decision-making of the organization. This idea may be inspired on the book of Blankenship and Heidingfiels, 1947, named *Market and Marketing Analysis*, in which they distinguish market analysis from marketing analysis.

Last, a reinforcement stage must be highlighted from the boost and widening of the concept of marketing in the 1970s. Obviously, all the American authors mentioned before belong to this time (Zaltman and Burger, 1980; Aaker and Day, 1989; Kinnear and Taylor, 1989; Malhotra, 1997; Zikmund, 1998; Hair et al., 2004). However, there is no doubt that Philip Kotler should be included among the main spreading authors.

Kotler's book: *Marketing Management* in 1967, as well as its successive editions, has become a classic in the marketing literature and also the most influential book in this subject, as confirmed by Professor Cruz in the prologue of the most recent Spanish edition (Kotler, Cámara, Grande and Cruz, 2003).

**Table 1. Evolution stages of market research**

STAGE	PERIOD	MILESTONE
Origin	1910s	Charles Coolidge Parlin (Curtis Publishing Company) creates a research department known as <i>Commercial Research Division</i>
		Professor Duncan (University of Chicago) publishes a handbook named <i>Commercial Research: An Outline of Working Principles</i>
Transition	1920s	The idea of market as a key concept (White, in 1921, and others authors)
Determination	1930s	The <i>American Marketing Association</i> (AMA) is created in 1937. Introduction of statistical methodologies
Reinforcement	1970s	The concept of marketing widens (Kotler, in 1967, and others authors)

Source: Own elaboration.

But the evolution of the terminology has its foundation in the United States, and not so much in Europe. In the European continent, the proliferation of studies and organizations related to the subject is appreciable from the Second World War. It is odd how in countries like France, Holland, Great Britain or Italy professional institutes and organizations appear, with the word *market* highlighted in their initials as the main element. However, the *European Society for Opinion and Marketing Research Association* (ESOMAR) was created in 1948, as an organization that protected the codes of ethics in applied research. It is possible that in Europe, as well as in other countries out of North America, the term *market research* may have developed in a special manner due to a slower evolution of the concept of *marketing*, mainly, as we observed in the stages previously mentioned.

The term *commercial research* seems to be more characteristic of Spain and its language. The use of this terminology may avoid confusion regarding the application areas involved in such research. However, the term *commercial research* is not so precise, especially considering the conceptual evolution of marketing. Since the 1970s, the concept of marketing involves a number of fundamental transformations, one of them being the growth of marketing activity toward all types of organizations, both lucrative and non-lucrative. In this sense, commercial research is more likely to be related to business organizations, while social sectors should also be considered.

Spanish and Spanish American authors do not have to adopt exactly the same words the Anglo-Saxon do in the theoretical or practical development of the subject. Of course we can use our own terminology, but it is not advisable to put our own obstacles when moving forward in knowledge. It makes no sense that we create our own terminology attempting to facilitate comprehension and then the opposite happens, entering this dilemma. We know that *market* is the most relevant concept in marketing literature. However, the term *market* is not enough to assemble the whole concept of *marketing*, and this last term is already recognized in our language since not too many years. However, the term *market research* has taken deep root in the academic and professional tradition and keeps its linguistic strength. But, is it beginning to be obsolete? Or is it necessary to define its borderlines in more detail?

## CONCLUSION

An example of the formal differences between *commercial research* and *market research* appears in the area of tourism. In this case, the term *tourism market research* is clearly used in the presence of other similar terms due to the sound or aesthetics of the language.

From the analysis of the history evolution of *commercial research* and *market research*, we have extracted a semantic evolution of the terminology, in which we observed four stages. Obviously, these stages make more sense in the country where the concept of *marketing* originated and developed. At the first stage the terminology appears and the term *marketing* has no validity. In the second stage, known as “transition stage”, the concept *market* is emphasized. The third stage, known as “determination stage”, involves the differentiation of the terms *market* and *marketing*, being the last the most relevant. And finally, in the fourth, “reinforcement stage”, the terminology adopted must match the current dimensions of the concept of *marketing*. As we observed, these four stages are clearly distinguished in the United States but not in Europe.

Perhaps in Europe, in general, the stages of “determination” and “reinforcement” are not definitely closed yet. Perhaps, as Tribe (2006a, 2006b) argues, tourism knowledge is still in a pre-paradigmatic stage.

Taking stock of this, we detected two clear directions in Spain regarding the use of the terminologies *market research* and *commercial research*. One of them could be called *translator’s tendency*, and it is based on the belief that *tourism market research* is the prevailing concept. The other direction, which could be called *adapter’s tendency*, is based on the belief that *commercial research* is wider than *market research*. However, both directions show certain limitations.

Almost all authors, Spanish and non-Spanish, agree that the most commonly accepted definition of *market research* or *commercial research* is the one provided by the American Marketing Association (AMA) in 1987, which is the function that links the consumer, the client and the public to marketing managers through information. This is only the first part of the definition, but it is enough to appreciate that it highlights the connection between two poles, which are the organization and its market. Therefore, all the information that an organization tries to obtain in order to make its marketing decisions comes from the market, directly or indirectly.

With certain doses of eclecticism, it may be assumed - taking a sentence of Suárez (1996) - that the terms *tourism commercial research* and *tourism market research* are close to being synonyms. Thus, we could think that it is not necessary to be so purist about the use of the language. Or maybe it is in this case? Thereby, we can go further in our will to reach a semantic consensus, guided by the words of Pedret et al. (2000), who estate that the concept of *tourism commercial research* is as wide as the concept of *tourism marketing* could be.

In this way, we have already adopted in Spain other terms with similar linguistic structures that suggest that the use of the adjective “commercial” is weak compared to the noun “marketing”; for instance, the concept of marketing plan, marketing management, marketing information system or marketing environment. Can you say that a marketing plan is broader than a commercial plan? And that marketing management includes commercial management? And that the marketing environment is greater than the commercial environment? At least, it seems to be. Confirming these conceptual differences is not enough for better understanding marketing, but they must also be appreciable at a glance.

The terminologies *commercial research* and *market research* present some deficiencies, as we intended to show. Thus, should we compare and decide which of the two terms shows greater deficiencies? It is not necessary; as neither of them is a precise term and this should be enough for us to adopt an eclectic attitude as we commented above: they are close to being synonyms. Or, they could rather start being synonyms in the Spanish marketing literature in the near future.

Collaboration between Anglo-Saxon and Spanish authors, from Latin-American or other countries, could be a good way of reaching a linguistic consensus, as it occurs in the book of Kotler et al. (2003). But, being purist about the use of the language, the most precise term would be *marketing research* or *tourism marketing research*. This terminology is not widespread yet in the Spanish-speaking world, although it has been already used previously in the translation of some handbook (e.g., Dillon, Madden and Firtle, 1996) or in the work of some renowned Spanish author (e.g., Luque, 1997).

In short, the use of this terminology may remove all the deficiencies observed in the terms *commercial research* and *market research*.

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*Chapter 8*

# **DETERMINANTS OF ADMISSION FEES FOR TOURIST ATTRACTIONS: EVIDENCE FROM ONLINE REVIEWS BY TRAVELERS**

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## **ABSTRACT**

Determining the prices of tourist attractions has always been a thorny issue, given the economic, social, cultural, and even political considerations involved. A delicate balance is also necessary to accommodate the influences of both the demand and supply sides of the market. By constructing a comprehensive regression model, this study inductively proposes and empirically investigates the major determinants of admission fees for tourist attractions. The study also distinguishes the respective impacts of such admission fees on different market segments. The travel reviews on a tourism e-commerce website in China are used as data sources.

Research results demonstrate variations in the influences of the indicators of class, authenticity, amenities, accessibility, and discounts on both the admission fees for attractions in general and the major market segments. The findings of this study may shed light on the theoretical implications of the proper pricing of tourist attractions as well as on the improved use of such pricing to optimize value for tourists.

**Keywords:** Tourist attractions, admission fees, determinants, perceived values, online travel reviews

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## 1. INTRODUCTION

Admission fees for tourist attractions have long been regarded as a crucial instrument in moderating the demand for visits by potential tourists and in realizing the economic and social objectives of the attractions (Gunn, 1994; Jia et al., 2008; Page and Swarbrooke, 2001). Given the complex nature of tourist attractions in economic, social, cultural, and even political terms, Mill and Morrison (1998) suggested that a vast array of factors should be considered in determining the admission fees for such attractions. However, as an essential element of the tourism industry that practices free market principles, attractions should still be considered as subject to pricing issues that must match the expectation of the ultimate consumers—the tourists (Yang, 2007). In numerous cases, the prices of tourist attractions are treated as proxy for the overall cost of travel to the locations of these attractions (Hall, 2000). Meanwhile, the admission fees for attractions have been empirically proven to exert a substantial degree of elasticity on the demand for visits by travelers (Tisdell, 2006).

With the exponential growth of e-commerce in tourism in recent years, a wide variety of internet-based tools can be employed to better delineate both ends of the demand–supply chain of tourism products. One such tool is the increasing application of online word-of-mouth among tourists in evaluating both the demand for and the service quality of tourism products (Jeong et al., 2003; Law and Bai, 2008). Online word-of-mouth comes in various forms, such as comments on discussion boards or interactions on social networking services. With its convenience, safety, and trustworthiness, this approach is considered to assume greater validity and thus a better reflection of consumer product evaluation compared with traditional information sources (Barkhi, Belanger and Hicks, 2008; Park, Lee and Han, 2007). Although online travel-related reviews have been elaborated in studies in the hotel and travel agency sectors, research concerning the impacts of such reviews on the admission fees for tourist attractions remains limited. Considering this research gap, the present study intends to investigate the influences of online word-of-mouth in the context of Chinese tourist attractions using a comprehensive and systematic approach. The objectives of this study are twofold: (1) to explore and model the major attributes integral to the attractions and expressed by online word-of-mouth evaluations; and (2) to examine the impacts of deduced attributes on the admission fees for the attractions investigated, which can be further categorized into distinct segments.

## 2. LITERATURE REVIEW

### 2.1. Tourist Attractions As Hedonic Products

In the semantic description by Page and Swarbrooke (2001), tourist attractions were regarded as the embodiment of products with core, peripheral, and augmented elements. In this regard, a tourist attraction should be priced as a hedonic entity that incorporates the respective values of its intrinsic attributes. By far, studies on the pricing of tourist attractions have concentrated on the demand side while considering the proper strategies to effectively market the attraction to potential visitors and to explore different market segments. The expectation and responses of potential visitors were stressed by Arin and Kramer (2002) as

key considerations in the pricing of attractions. Based on empirical examinations, Tisdell (2006) concluded the price inelasticity of the market demand for first-tier attractions or those with a wide variety of resources. In such cases, the modest accommodations of admission fee increases by the market were noted. However, high prices charged could not always be sustained, as indicated by Davis and Tisdell (1998). After a certain critical point, negative effects on visitation volume and revenues for the attractions would be observed. Therefore, a differential pricing scheme should be preferred to appropriately target different market segments and to optimize the yields from tickets (Mill and Morrison, 1998).

With regard to the demographic and sociological features of the markets, income level was first determined by Arin and Kramer (2002) to be positively related with the willingness of potential tourists to pay to visit an attraction; the same effects were demonstrated by travel distance, number of previous visits, and history of paying entrance fees. Similar observations can be made with regard to the attitude of the visitors toward environmental protection and their affiliation with environmental groups. Accordingly, Page and Swarbrooke (2001) cautioned for increased flexibility in the planning of the pricing scheme to maximize visitation. Liu (2005) also emphasized the importance of appropriate marketing efforts in shaping and manipulating the price expectations of potential tourists. Hall (2000) proposed due public and community participation in the pricing process in the case of attractions fraught with considerable public interest.

## 2.2. Online Travel Evaluations

The Internet is regarded as the latest utilitarian embodiment to realize the social exchange behaviors of rational consumers (Yoon, 2002). On such an online platform, customer product evaluations further facilitate customer-to-customer (C2C) word-of-mouth communication whose significant effects on purchasing decisions have already been empirically proven in the real world (Yan, Zhang and Li, 2012). Kiecker and Cowles (2001) classified online reviews of products into spontaneous, quasi-spontaneous, independent, and corporate types. With their multimedia, interactive, virtual reality, and—probably most importantly—social networking features, online evaluations were described by Nelson and Otnes (2005) as enhancements of their offline counterparts, given their advantages that include increased availability of information, involvement, and trust as well as less perception of risks.

According to Park, Lee, and Han (2007), online reviews can exert their effects throughout the entire decision-making process of the customer and in ways that incorporate quantity and quality tolls. Particularly, consumer-generated reviews have always provided more credibility than company-generated content (Yoon, 2002). In influencing customer perception of the products, online reviews typically function as both information providers and recommenders via rational and emotional presentations of user-oriented messages.

E-commerce in tourism has long been embedded with the popularity of online reviews in various forms, and according to the observations made by Zhang et al. (2010), engagement with online reviews has become customary for users of tourism websites. Notably, word-of-mouth has been considered as an integral part of travel behavioral intentions, thereby attenuating its salience in the theoretical elaborations on planned travel behavior (Chiou and Droge, 2006; Yan, Zhang and Li, 2012). According to Lee, Qu, and Kim (2007), online reviews can serve as effective moderators in bridging the gap between consumer expectation

and perception of the tourism products, given the particular experienced-based features of such products. Thus, by leveraging the extent of customer involvement in the purchase decision process, positive online reviews can either enhance the perceived values of tourism products or motivate revisits among tourists.

Although online reviews are usually considered as a check-and-balance mechanism for tourism websites, propositions have suggested the manipulation of the reviews by the websites to help achieve their corporate objectives. Specifically, Vermeulen and Seegers (2009) proposed that travel websites should fully embrace online reviews and customize their functions to strengthen corporate image and public relations. Law and Bai (2008) further pointed out the unique function of reviews in repairing any damage caused by product or service failures in the tourism industry.

### 3. METHODOLOGY

This study designates tourist attractions in China as its main research subject. The reason is that compared with tourist attractions in developed countries, those in China have long been known for charging high admission fees, especially for world natural or cultural heritage sites (Huang, 2007; Ma and Li, 2006; Yang, 2007). In view of the tremendous scale of China's tourism industry and the significant role played by tourist attractions, exploring the relationships between attraction attributes and admission fees can shed light on the further development of Chinese tourist attractions in both theoretical and practical terms.

This study first collected and analyzed the data based on online reviews of Chinese tourist attractions from [www.17u.com](http://www.17u.com). This website, which reported a revenue of 625 million RMB in 2011 ([www.iresearch.com](http://www.iresearch.com), 2012), is among the three leading online travel websites in China. The website is also one of the few tourism e-commerce businesses in China that sell admission tickets to individual attractions, which is different from the common practice of other dominant websites such as [www.ctrip.com](http://www.ctrip.com) or [www.elong.com](http://www.elong.com) of bundling the attractions into an itinerary. By far, [www.17u.com](http://www.17u.com) has sold admission tickets for over 800 tourist attractions all over China.

The raw data for this study were obtained from the respective online review pages of each tourist attraction featured on [www.17u.com](http://www.17u.com). Note that the website declares that all the ticket prices listed are only applicable to Chinese nationals, and that foreigners should contact the website separately to inquire about ticket prices. Thus, the research focus of this study is the online reviews by domestic tourists and their impacts on the admission fees for the attractions. With regard to the review process, the website already provides tourists with a unified scale of 1 to 5 for the rating of the attractions. Meanwhile, the website encourages objective, in-depth, and insightful comments on the attractions through prize coupons. Thus, an attraction listed on the site laden with such comments is common. Both the quantitative ratings and qualitative reviews were considered by this study in proposing the factors that influence admission fees for tourist attractions. Attractions with missing values of ratings were dropped from the dataset. A total of 712 attractions were included in the analysis. The final list of attractions did not include the famous Forbidden City and Summer Palace because they were not partners of the website in the first place. Excluding these two attractions, all the

remaining world natural and cultural heritage sites in China were identified for further examination, therefore enhancing the representativeness of the dataset.

In the model construction process, the dependent variable was designated as the admission fees for the Chinese tourist attractions listed on [www.17u.com](http://www.17u.com), which were extracted in December 2012. Out of the 712 attractions investigated, 124 (17.4%) imposed prices ranging from 0 yuan to 50 yuan (at an exchange rate of 6.2 yuan to 1 US dollar), 348 (48.9%) charged between 51 yuan and 100 yuan, and the remaining 240 (33.7%) charged over 101 yuan. The attraction with the lowest admission fee charged 12 yuan; 310 yuan was recorded as the highest admission price.

For the proposition of the independent variables, this study took an inductive approach based on both the existing literature and the online reviews available. The following five constructs were yielded: official attraction class (Peng, 2003), authenticity (McKercher and du Cros, 2002), amenities (Buckley, 2003; Knapman, 1995), accessibility (Lindberg and Aylward, 1999), and discounts (Ma and Li, 2006; More, 1999). The official attraction class was in accordance with the “A-rating” system stipulated by the China National Tourism Administration in ascending order from 1A to 5A. The construct of authenticity has been intensively cited in the assessment of the values of tourist attractions. Authenticity encompasses the evaluation of attractions with natural and cultural features as well as those characterized by amusement facilities in terms of the experiential attachments assigned to them by tourists. As far as amenities are concerned, the service aspects of the attraction products are incorporated in this dimension. Finally, the attributes of both accessibility and discounts, which have already been considered in the literature, were outstanding in the online reviews browsed. Specifically, accessibility is related to the integration of the attractions at the destination level, and the marketing strategies for the attractions are related to discounts. Thus, the postulated independent variables were deemed to be representative of the influencing factors of admission fees for attractions.

During the data input stage, a coding procedure was implemented on the reviewer comments found on the homepage of each examined attraction to yield the values of the respective independent variables. This procedure was conducted by three coders who were previously trained to implement relevant coding criteria. In case of disputes over the understanding of certain comments, deliberations were held to clarify and achieve a common agreement among the coders. The coding for each attraction was conducted twice, with the results cross-referenced to produce the least biased outcomes. All the independent variables except the attribute of attraction class were rated on a scale of 1 to 5, with 1 indicating the lowest value and 5 indicating the highest.

Then, a regression model was constructed to delineate the relationships between the independent and dependent variables.

$$\text{LNPRICE} = \beta_0 + \beta_1\text{AClass} + \beta_2\text{Authenticity} + \beta_3\text{Amenities} \\ + \beta_4\text{Accessibility} + \beta_5\text{Discount} + \varepsilon$$

The natural logarithm regression model was chosen to explore the regressive nature of the proposed relationships between the dependent and independent variables. Regression analysis has been widely applied in tourism research, with particular merits for investigations such as this study that features the non-linearity of multiple variables (Song and Li, 2008). The computer software SAS 9.0 was used in the data analysis process.

## 4. RESULTS

### 4.1. Price Indicators for the Attraction Industry

First, a collinearity analysis was conducted to examine the stability of the coefficient estimates, which would indicate the internal validity of the proposed model (Neuman, 2000). The variance inflation factors were found to be below the cutoff point of 10, and the values of tolerance demonstrated that the 10% limit of possible contribution to the variance of any independent variable by collinearity was not exceeded. With the Durbin–Watson statistic value at 2.30, the probability of residual correlation in the model could be tenably excluded (Wooldridge, 2012). Thus, the proposed relationships between the independent and dependent variables could be established. Meanwhile, 72% of the variance in the dependent variable could be accounted for by the proposed model ( $R^2 = 0.721$ ,  $F = 427.42$ , significant at the 0.01 level). The research results are presented in Table 1.

**Table 1. Regression results**

Variable	Unstandardized Coefficients		Standardized Coefficients	Collinearity Statistics		t-value	p
	B	Std. error	Beta	Tolerance	VIF		
AClass	0.376*	0.032	0.702	0.701	4.362	12.282	0.000
Authenticity	0.196*	0.068	0.311	0.241	4.212	4.365	0.006
Amenities	-0.062	0.080	-0.068	0.364	7.687	-2.494	0.202
Accessibility	-0.074	0.078	-0.081	0.124	5.787	-3.562	0.563
Discount	0.143*	0.052	0.164	0.835	2.524	3.251	0.002
Constant	2.652	0.206				18.241	0.000
$R^2$	0.721						
Adjusted $R^2$	0.695						
F-value	427.42*						
Observations	712						

Notes: \* $p < 0.01$ .

Then, t-tests were performed to explore the particular contribution of the respective independent variables to the dependent variable. Table 1 shows that whereas class, authenticity, and discounts were significant determinants of the admission fees for the attractions ( $p < 0.01$ ), the influences of amenities and accessibility were not prominent. Among the significant constructs, class was found to exert the strongest impact, with an increase of one level in the A-rating system corresponding to a 37.6% surge in admission fees. For every one unit of increase in the review ratings for authenticity and discount, admission fees would increase by 19.6% and 14.3%, respectively.

### 4.2. Price Indicators for Attraction Segments

Given the dominant impacts of attraction class on the admission fees, the original pool of research subjects was further divided to illustrate the particular impacts of authenticity, amenities, accessibility, and discounts on the respective categories. In accordance with the grading system of Chinese tourist attractions, the following three segments were identified:

(1) 5A attractions, (2) 4A and 3A attractions, as well as (3) 2A and 1A attractions. For each segment, the proposed model was re-regressed on the four aforementioned constructs. The results are presented in Table 2.

**Table 2. Regression coefficients for attraction segments**

Variable	5A		4A and 3A		2A and 1A	
	n	Std. error	n	Std. error	n	Std. error
AUTHENTICITY	0.430*	0.193	0.332*	0.136	-0.276	0.169
AMENITIES	0.302*	0.155	-0.231	0.263	-0.323	0.154
ACCESSIBILITY	0.032	0.172	-0.226	0.068	-0.221	0.277
DISCOUNT	0.147	0.148	0.218*	0.072	0.564*	0.232
Constant	3.323*	0.921	3.889*	0.887	4.002	1.230
R <sup>2</sup>	0.420		0.475		0.466	
F-value	5.442		7.212		3.855	
Observations	122		332		258	

Notes: \* $p < 0.01$ .

The findings indicate that for tourists visiting the 5A attractions, including those listed as world natural and cultural heritage sites, authenticity was found to be the most influential factor in the setting of admission price, with a correlation value of 0.430 ( $p < 0.01$ ). Notably, the amenities attribute also demonstrated a significant impact, given its correlation value of 0.302 ( $p < 0.01$ ). For the 5A segment, accessibility and discounts were not significant in the purchase decisions of tourists. With regard to the 4A and 3A attractions, the results were consistent with those of the overall industry, with authenticity and discounts indicating conspicuous effects with correlations of 0.332 and 0.218, respectively ( $p < 0.01$ ); minimal impacts were observed in amenities and accessibilities. By contrast, only discounts performed positively (0.564,  $p < 0.01$ ) in the third group of 2A and 1A attractions compared with the non-significant roles of the other three constructs. The results in Table 2 indicate that the investigated factors have exerted diverse influences on the purchase decisions of tourists in relation to the different segments of attractions.

## 5. DISCUSSION AND IMPLICATIONS

By constructing a comprehensive regression model, this study empirically examines the influences of the major indicators of admission fees for tourist attractions in China. The results of this study, which indicate varying degrees of impacts, may reveal academic and practical implications that can motivate further research. Particularly, the use of online reviews as data sources can shed light on deliberations about B2C and C2C interactions in the e-commerce era of tourism in both methodological and managerial terms.

The confirmation of the importance of the authenticity factor by this study echoes the argument by McKercher and du Cros (2002) that credited authenticity as an effective “de-inhibitor” in eliminating the perceived constraints in the purchase decision-making process. Meanwhile, the discovery of discount as another salient indicator of admission prices for tourist attractions also highlights the significance of considering the demand side during the pricing and marketing process (Leiper, 1990). This finding is particularly applicable to the

case of Chinese attractions, which have long been criticized by the public and the media for charging high admission fees (Yang, 2007). In addition, the constructs of amenities and accessibility observed in the online reviews are found to exert a limited impact on admission fees for the tourist attractions. This result can be explained by the peripheral nature of these two constructs in the attraction product portfolio (Liu, 2005). Specifically, amenities are closely related to the service aspects of the attraction experience, the values of which may be overestimated in the perception of the tourists. Moreover, the diminished function of accessibility may be accounted for by the theory of distance decay, which proposes the descending significance of transportation-related considerations in the decision-making process of travelers with the growing intrinsic values of the attractions (Lew and McKercher, 2006).

With regard to the influences of the indicators on the three market segments, the salience of the factor of amenities in the 5A segment may be attributed to the need of tourists for an all-around experience that satisfies intangible and tangible aspects. The previous experiences of these tourists may also be considered in identifying their preferences for amenities. Such assumptions can be duly supported by deliberations on the theory of travel career, which postulates the increasing sophistication of needs during the travel of tourists (Mill and Morrison, 1998). Meanwhile, the performances of the examined indicators in the 4A and 3A segments, which correspond to the results for the entire industry, highlight the dual functions of factors from both the supply and demand ends in determining the admission fees for tourist attractions. In terms of the dominant influences of discounts on the 1A and 2A segments, cost concerns take precedence over other factors in the purchase decisions of tourists. This result may be explained by the emphasis placed by this segment on the cost–benefit cross-tabulation from the visit. For this segment, the perceived extra value could greatly boost the motivation to travel, whereas attractiveness, loyalty, and revisit intentions can be easily disturbed by price shifts (Lee, Qu and Kim, 2007).

Correspondingly, relevant measures can be blueprinted and implemented by both industrial practitioners and destination marketers to effectively optimize the values that tourists pay for. For the 5A segment, amenities should be further integrated into the core products of the attractions to leverage the experiential values of the tourists. As admission ticket revenues remain the major and, in some cases, the sole income sources of numerous tourist attractions in China (Liu, 2005), focus on complementary amenities for the entire portfolio would guarantee additional income. As for the 4A and 3A segments, messages with balanced information on both the attractiveness and tangible values should be appropriately communicated to tourists. Strategies such as celebrity endorsements and themed product development would fit the dual functions. Lastly, consistent marketing efforts emphasizing discounts can be enhanced through bundling with other components of the tourism industry to boost the demand from the 2A and 1A segments. For example, at [www.17u.com](http://www.17u.com), the practice of posting travel diaries in exchange for coupons is a step toward the right direction.

## CONCLUSION AND FUTURE RESEARCH

Determining the prices of tourist attractions has always been a thorny issue, given the economic, social, cultural, and even political considerations involved. This fact is further



complicated by the increasing competition at both destination and regional levels, which can be partly attributed to the omnipresence of online tourism service providers (Ma and Li, 2006). Thus, a balance must be established to accommodate the dual influence of the demand and supply sides of the market. This study contributes to tourism research by identifying and investigating the major determinants of the admission fees for Chinese tourist attractions as well as by distinguishing the respective impacts of these determinants on different market segments.

Notwithstanding its attempts to provide a comprehensive and consistent examination, this study has several limitations. Given the inductive nature of this study in proposing the independent variables, the current cohort of determinants may be insufficient. Future studies may explore the relevant literature, integrate other significant variables, and use data sources other than online reviews to generate highly valid results. Specifically, the incorporation of moderating factors such as involvement and constraints would provide a comprehensive picture (Yan, Zhang, and Li, 2012). The regression model designed and applied by this study can be refined, especially with regard to the consideration and handling of longitudinal data. Given that the research scope of this study is limited to Chinese tourist attractions listed on a single website, the study results have an inherent deficiency in terms of generalizability. Future research may include international attractions, to which the social and cultural contexts of pricing for tourist attractions can be cross-referenced.

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*Chapter 9*

**THE MANAGEMENT OF NATURAL WORLD HERITAGE  
SITES AS AN ESSENTIAL COMPONENT OF CULTURAL  
TOURISM AND SUSTAINABLE DEVELOPMENT-  
THE TOKAJ-HOLLÓKÖ CASE STUDY  
IN NORTHEASTERN HUNGARY:  
FROM A NATIONAL/LOCAL PAST TOWARDS  
AN INTERNATIONAL/GLOBAL FUTURE**

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**ABSTRACT**

This study focuses on various key issues related to the developmental facets of cultural tourism as an alternative cultural policy at the local level. In this context, scope for capitalizing on local cultural capital is seen through the lens of cultural tourism in both the commercial and the not-for-profit aspect, as these contribute decisively to reaping economic, social, cultural and educational benefits, i.e., substantiating sustainable local development.

The management of cultural heritage with a view to capitalizing on it constitutes a cultural challenge, heavily dependent on properly understanding those values which are embedded in the notion of 'cultural heritage'.

In the context of this case study emphasis was given on the analysis of the ethnographic village of Hollókő and the historical wine region of Tokay, located in northeastern Hungary and listed as UNESCO World Heritage Sites in 1987 and 2002 respectively. It is concluded that cultural tourism is a tool necessary for sustainable development and that its elaborate and sophisticated nature calls for strategic planning

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and rational sustainable management, as the absence thereof could possibly lead to significant deterioration of cultural heritage and in the long run alter the very identity of a location, as evidenced in particular in the case of Hollókő. Especially for World Heritage sites, the strategic management of cultural tourism and the host community's active participation become imperative given the rapid development of tourism that World Heritage status brings.

**Keywords:** Cultural tourism, cultural heritage, sustainable development, sustainable tourism, cultural management, Hollókő, Tokay

## 1. INTRODUCTION

Nowadays, at both local and European level, it is generally acknowledged that no urban, suburban or rural area should be deprived of development opportunities. Moreover, in order for areas and places to act as social models it is crucial that their socioeconomic functions be/get activated through coherent and focused responses to contemporary challenges, allowing for a cross-cutting and overarching nature of sustainable development to be put into practice (Agenda 2000).

It is also true that there is a strong correlation between culture and development. In many cases culture and development constitute the flip sides of the same coin. They are both qualitative and quantitative procedures, and at the same time associated with the achievement of specific results).

Cultural development cannot take place in a vacuum. Regardless of whether policies are designed with a view to the cultural development of a group, a community, a region or a nation (e.g., by prioritizing remote regions which had hitherto been neglected), it is evident that cultural growth and development take place within a concrete framework of space and time.(Bitsani, 2004)

Thus, cultural development is inevitably linked to the history and historical memory of a place, its monuments, its traditional know-how and folklore. This paper handles the concept of culture as a whole, the multidimensional character of cultural actions and activities at a local level; thus, it consequently highlights an immediate need to connect cultural actions with decentralized initiatives as well as integrated local development.

Within this context it is widely agreed upon that tourism today is a major social and economic power. Furthermore, over the past two decades, cultural tourism has been picking up to include activities promoting and protecting cultural capital, catering to new tourist trends and meeting consumer taste and expectations which now focus on destinations far from the classic model of sea and sun (Hughes and Allen, 2005).

Cultural tourism is a form of tourism which is based on acquaintance, knowledge and enjoyment of historical and contemporary content of each destination. Sustainability enters lately the concept of tourism to offset the financial gain, balancing the protection of natural resources, the number of visitors, the profit and the smooth daily life of each place. Culture as a tourist attraction is particularly important for the development of the tourism industry at local, regional and national level. For this reason, UNESCO from 1993 to today, supervises with the aid of the EU, the monuments and world heritage sites which are either proposed as

tourist destinations or are placed under the protection of monuments and sites as World Heritage Sites in danger.

In many tourist destinations the world's cultural heritage is the biggest attraction for international tourists and also a major source of revenue. Cultural tourism is one of the alternative ways of developing tourism as a part of its cultural content, it is associated to key management actions to benefit the organization and functionality of places.

As a result thereof, cultural tourism can effectively boost local development through solutions to problems caused by the seasonality of tourism while facilitating the organization of cultural events, enhancing the appreciation of local cultural diversity and establishing a sense of broader recognition for each region.

This study focuses on various key issues related to the developmental facets of cultural tourism as an alternative cultural policy at the local level. In this context, scope for capitalizing on local cultural capital is seen through the lens of cultural tourism in both the commercial and the not-for-profit aspect, as these contribute decisively to reaping economic, social, cultural and educational benefits, i.e., substantiating sustainable local development.

First, the issue of protecting, showcasing and capitalizing on cultural heritage sites is being researched. Moreover, the relationship between culture and economy, which has been officially acknowledged by the European Union and in particular by international organizations such as UNESCO, is taken into account. Then, bearing in mind that the simple preservation of cultural heritage no longer suffices and there is an emerging need for cultural heritage to act as cornerstone for current cultural creativity, in other words a dynamic field where new ideas, knowledge and approaches may be tested, developed and diffused into society at large, certain practices are being proposed, consistent with the de-monumentalization of the cultural monuments of the past that may be converted into areas of knowledge, communication and development.

One of the key issues at stage one of our research concerns determining the confines of human interaction with the surrounding natural environment and afterwards the interconnection between people and the cultural landscape for, nowadays, we approach this relationship in a radically different manner as our natural environment overall is at stake.

Everywhere in Europe it is clear that striking an environmental balance anew no longer resides with nature but rather involves human skillfulness and, having this in mind, sites are becoming important yet again in this new international context. This paper elaborates on key issues related to the management of cultural landscapes and cultural heritage in Europe.

The modern concept of cultural heritage is associated with the built environment and should be considered within the ecological framework of the world. Natural World Heritage sites are special due to their outstanding universal value, which is examined in this framework. The overarching precept in general is that maintenance and management policies must be based in a critical process that starts with research, documentation and demarcation of inherent cultural resources and related values. These values may be grouped in two: cultural values and modern economic values (Bitsani 2013).

The management of cultural heritage with a view to capitalizing on it constitutes a cultural challenge, heavily dependent on properly understanding those values which are embedded in the notion of 'cultural heritage'. Decisions relevant to development projects in world heritage sites should be based on balanced judgments while prioritizing values and objectives as well as giving careful consideration to the aims of the Conventions (1972:

Convention for the Protection of the World Cultural and Natural Heritage /2003: Convention for the Safeguarding of the Intangible Cultural Heritage).

Given that cultural heritage is governed by laws which explicitly state they are enacted in the defense of the public interest, and since in most countries these laws fall within the jurisdiction of the State or other state institutions, it should be accepted as an axiom that cultural heritage should be regulated on the basis of public interest (Bitsani and Kalomenidis, 2007, p. 355-356).

In the context of this case study emphasis was given on the analysis of the ethnographic village of Hollókő and the historical wine region of Tokay, located in northeastern Hungary and listed as UNESCO World Heritage Sites in 1987 and 2002 respectively. It is concluded that cultural tourism is a tool necessary for sustainable development and that its elaborate and sophisticated nature calls for strategic planning and rational sustainable management, as the absence thereof could possibly lead to significant deterioration of cultural heritage and in the long run alter the very identity of a location, as evidenced in particular in the case of Hollókő. Especially for World Heritage sites, the strategic management of cultural tourism and the host community's active participation become imperative given the rapid development of tourism that World Heritage status brings. The inclusion of a cultural site in the World Heritage list, upon condition of taking regulatory measures, combined with legal protective measures, and proceeding with awareness-raising, education and management activities, becomes vital for site/monument preservation as well as sustainability purposes, especially in the current framework of an ever-more globalized, homogenized but also unstable macro-economic, cultural, social and ethics landscape. Nonetheless, both the listing criteria as well as subsequent sustainability constitute a dynamic process which calls for constant vigilance and proper adaptation of national, supranational and cultural policies along with strategic planning, primarily requiring nonetheless the active involvement of local communities, which are directly interdependent with the monument *in situ*.

## **2. CULTURAL HERITAGE (TANGIBLE AND INTANGIBLE) AS AN ESSENTIAL COMPONENT OF PLACE IDENTITY**

According to article 1 of the law 2039/1992, "Ratification of the treaty for the protection of the architectural heritage of Europe," the term "Cultural architectural heritage" refers to the following: Monuments, which means every construction considered especially important due to historical, architectural, artistic, scientific, social or technical interest. It also includes facilities or decorative elements that are integral parts of these particular plants and facilities. Also refers to architectural conglomerations that are either urban or rural constructions, similar to each other so that they form a kind of unity that shall be bounded typographically. In addition, to the places that are regarded as complex works created by both man and nature, partly built so that they are stretches of land vastly distinct and homogeneous. They basically resemble monuments or aggregates. (Spiliopoulou, 2013; Bitsani, 2014: 33).

They illustrate examples of social life in the past, while the modern surroundings of these places are mere continuations of that life. The preservation and maintenance of these buildings is not just a monumental act but it also contributes to the shaping of stimulants that



will facilitate us in our effort to perceive history's course and the continuation of a certain place.

Additionally, it helps us to connect to a particular area, giving one a real sense of belonging as well as a substantial identity. (Bitsani & D' Arcangeli, 2009; Bitsani, 2014:33).

Maurice Halbwachs (1992), was the first to coin the term collective memory, citing that 'memory is not just restricted to reminiscing about and recalling the past, but it also includes a network of external to the individual relations, patterns and objects that support, objectify and embody the past. According to Halbwachs the members of a social group are those who remember. (Halbwachs, 1992, 2003). Eric Hobsbawn writes the following in one of his last books: "history is neither primordial memory nor collective traditions. It is what people learn from their preachers, their teachers, authors of history books, columnists and television commentators." (Eric Hobsbawn, 2011: 22). It is apparent that the eminent Marxist historian refers to something that is rather obvious: to the fact that historical knowledge and generally historical culture and cultural heritage which is an aggregate of knowledge, notions, attitudes, perceptions, practices, invented traditions and stereotypes all make up ones identity, giving meaning to people's way of life. The three steps of time which happens to be historicized is also linked to identity.

They tend to be historic constructions, conflicting readings not just among the creators and vehicles of the dominant ideology, but also among the organized collective subjects which make up the civil society (Leontidou, 2005; Hall and Hubbard, 2013).

What the British historian forgets to mention is that no longer do one-dimensional transmitters and receivers of ideological regimes exist, given that the generation of ideology is a complex procedure that creates meaning. If we were to focus on the school mechanism we would claim that it is not only teachers as intellectuals who participate in the formation and diffusion of knowledge, but also the students themselves who are not considered insignificant, but instead coherent vehicles which have a significant social meaning for the past, and which also play a crucial role in their socialization and in the shaping of their identity. (Kontochristou, 2010 ). In order to perceive the connection between culture and memory, it is necessary to cite some general references concerning the relationship between sociology and culture.

Culture or civilization was an area that concerned classic sociologists like: Marx, Weber, Durkheim, Simmel. The differences among the approaches are vast, and on a sociological level that regards attitudes, what is expressed is the way in which the Europeans and Americans see the meaning of tradition. (Bitsani, 2009 ).

While the first tend to regard tradition something that is passed on to us from the past which we keep, the latter believe that it is important to point out that it is we ourselves that start or create traditions. Both are aspects of the truth. And while we inherit some traditions from our ancestors, we are also creators of traditions. For example, the family. Nearly all families create their own family traditions (anniversaries, celebrations, rituals). The very existence of these traditions is of vital importance in order for some institutions to survive. Collective memory is metaphorically a construction. Its formation and establishment is in need of a specific means. Antiquity, (monuments, architecture, material cultures have the ability to convey meanings and to symbolize things, by having the advantage of an image that is easily printed on the human mind.

Monuments as constructions made by man in a certain place constitute collective representations, aiming to shape collective memory (Halbwachs, 1992). They encapsulate a

narrative place that combines the “indirect” speech of history with the “direct” speech of memory and they survive materialistically and intellectually in time and space. (Bitsani and Kalomenidis, 2007).

Therefore, monuments play a pivotal role in the process of creating fixed moral values: they mark the area with a permanent durable trace, which constitutes the foundation of memory and historical cohesion of specific places.

In practice, the institutionalizing of monuments, or the protection of architectural works states man’s intention to preserve something in time and space and therefore in his memory. Besides, the word monument etymologically refers to memory while from a semantic point of view; it refers to the process of stimulating the mind. (Miles et al., 2003; Sapounaki – Drakaki, 2005).

Ancient monuments and historic buildings, monuments of past times constitute a defining feature of the city, bearing the history of a place and its residents.

The monument and its uses, facilitates social needs that are connected with the identity of the people and the perpetuation of important events. Our research approach consists in dealing with the “monuments” of the past, on the one hand as materialistic evidence of a certain era while on the other hand as a potential sphere of activity and as ‘omen subjects’ that participate in the historical procedure, that constitutes the various and disparate social and cultural identities of a place, in areas where converging ideologies, conflicting arguments and collective representations come together by referring to the past and the present. Bitsani and Kalomenidis (2007) have determined the philosophical and cultural management of resources: ‘all the cultural goods, including cultural landscapes, that have survived from the past, are perhaps cultural resources.’ That means that they have some kind of potential value or use in the present or the future. They are ‘tangible connections to the past that has survived’ (Cleere, 1984: 125). Within this context the “monuments”/cultural places project the idea of an experienced, social (Bitsani and Kalomenidis, 2007) place (which constitutes a product of realities with various, historical and societal deposits) they are approached as places with many ‘histories’ that have a malleable content which is also easy to negotiate with. They are also considered as areas where various identities and ideologies (official ones as well as unofficial, prevailing/popular) converge and diverge whether they concern the past or the future.

The above concern the other aspect of history and their dialectic relationship with man and this aspect is of fundamental importance in order to fully understand the past and the future. On the contrary, an abrupt violent rupture with the past and cultural heritage that has been passed over by previous generations can bulldoze determined human values and customary laws that contribute to the maintenance of social cohesion.

Therefore, architectural heritage and the listed buildings of the cities make up the key link between the cultural environment of the past and the modern environment.

In this light its universal dimension is recognized and man’s obligation is to preserve it, since the monuments are witnesses of man’s existence, activities, and intervention. It represents man’s connection with space, while at the same time it determines the identity of a place as well as contemporary life and its development.

The human environment refers to every one of man’s creations, which regards the past and is connected to its historical situations and its identity and is indelibly associated with the natural environment. Its preservations must therefore be based on a framework of complete viable and sustainable development, focusing on certain requirements such as man’s need to

update and enrich the quality of his life. The quest for the “message” of cultural properties has become more important. It requires us to identify the ethical values, social customs, beliefs or myths of which intangible heritage is the sign and expression. The significance of architectural or urban constructions and the transformation of natural landscapes through human intervention are more and more connected to questions of identity. ( Bitsani and Kalomenidis, 2007, Bitsani, 2014:34).

## **2.1. Intangible Heritage**

A place can not only be defined by its material and tangible elements but by certain symbolic dimensions as well. These dimensions, express a particular, very unique, system of meanings and values emerging from the structure of space, like language expressions, religious symbols, social institutions, cultural differentiations financial activities and relations etc. The city is a commonly perceptible, tangible, 3-dimensional reality. A general way of living which reveals the history, the different potentials according to the times, the social-economic circumstances and the cultural system. Over the past thirty years, the concept of cultural heritage has been continually broadened. The Venice Charter (1964) (Bitsani, 2002: 103- 105) made reference to “monuments and sites” and dealt with architectural heritage. The question rapidly expanded to cover group. Today an anthropological approach to heritage leads us to consider it as a social ensemble of many different, complex and interdependent manifestations. This is now reflecting the diversity of cultural manifestations of buildings, vernacular architecture, and industrial and 20th century built heritage. (Bitsani, 2002: 93).

Tangible culture is the counterpart of culture which is tangible or touchable, whereas intangible culture includes song, music, drama, skills, crafts, and the other parts of culture that can be recorded but cannot be touched and interacted with, without a vehicle for the culture. These cultural vehicles are called “Human Treasures” by the UNESCO (2003).

The term ‘cultural heritage’ has changed content considerably in recent decades, partially owing to the instruments developed by UNESCO. Cultural heritage does not end at monuments and collections of objects. It also includes traditions or living expressions inherited from our ancestors and passed on to our descendants, such as oral traditions, performing arts, social practices, rituals, festive events, knowledge and practices concerning nature and the universe or the knowledge and skills to produce traditional crafts.

According to the 2003 Convention for the Safeguarding of the Intangible Cultural Heritage, the intangible cultural heritage (ICH) – or living heritage – is the mainspring of humanity’s cultural diversity and its maintenance a guarantee for continuing creativity. It is defined as follows (Unesco, 2003; Kurin, 2004; Arizpe, 2004):

Intangible Cultural Heritage means the practices, representations, expressions, knowledge, skills – as well as the instruments, objects, artifacts and cultural spaces associated therewith – that communities, groups and, in some cases, individuals recognize as part of their cultural heritage. This intangible cultural heritage, transmitted from generation to generation, is constantly recreated by communities and groups in response to their environment, their interaction with nature and their history, and provides them with a sense of identity and continuity, thus promoting respect for cultural diversity and human creativity. For the purposes of this Convention, consideration will be given solely to such intangible cultural heritage as is compatible with existing international human rights instruments, as well

as with the requirements of mutual respect among communities, groups and individuals, and of sustainable development. While fragile, intangible cultural heritage is an important factor in maintaining cultural diversity in the face of growing globalization. An understanding of the intangible cultural heritage of different communities helps with intercultural dialogue, and encourages mutual respect for other ways of life. (Hall and Barrett, 2012).

The importance of intangible cultural heritage is not the cultural manifestation itself but rather the wealth of knowledge and skills that is transmitted through it from one generation to the next. The social and economic value of this transmission of knowledge is relevant for minority groups and for mainstream social groups within a State, and is as important for developing States as for developed ones. (Kurin, 2004).

Traditional, contemporary and living at the same time: intangible cultural heritage does not only represent inherited traditions from the past but also contemporary rural and urban practices in which diverse cultural groups take part; (Kurin, 2004).

Inclusive: we may share expressions of intangible cultural heritage that are similar to those practiced by others. Whether they are from the neighboring village, from a city on the opposite side of the world, or have been adapted by peoples who have migrated and settled in a different region, they all are intangible cultural heritage: they have been passed from one generation to another, have evolved in response to their environments and they contribute to giving us a sense of identity and continuity, providing a link from our past, through the present, and into our future. Intangible cultural heritage does not give rise to questions of whether or not certain practices are specific to a culture. It contributes to social cohesion, encouraging a sense of identity and responsibility which helps individuals to feel part of one or different communities and to feel part of society at large. (Creative Newfoundland and Labrador, 2006: 34; Arizpe, 2004).

Representative: intangible cultural heritage is not merely valued as a cultural good, on a comparative basis, for its exclusivity or its exceptional value. It thrives on its basis in communities and depends on those whose knowledge of traditions, skills and customs are passed on to the rest of the community, from generation to generation, or to other communities;

Community-based: intangible cultural heritage can only be heritage when it is recognized as such by the communities, groups or individuals that create, maintain and transmit it – without their recognition, nobody else can decide for them that a given expression or practice is their heritage. (Kurin, 2004).

Intangible cultural heritage is slightly different from the discipline of oral history, the recording, preservation and interpretation of historical information (specifically, oral tradition), based on the personal experiences and opinions of the speaker. ICH attempts to preserve cultural heritage ‘with’ the people or community by protecting the processes that allow traditions and shared knowledge to be passed on while oral history seeks to collect and preserve historical information obtained from individuals and groups. (Deacon, Harriet et al., 2004: 21).

Intangible cultural heritage is passed orally within a community, and while there may be individuals who are known tradition bearers, ICH is often broader than one individual’s own skills or knowledge. A 2006 report by the government of Newfoundland and Labrador said, regarding oral culture in their area, “The processes involved in the continuation of this traditional knowledge constitute one of the most interesting aspects of our living heritage. Each member of the community possesses a piece of the shared knowledge. Crucial

knowledge is passed on during community activities, frequently without any conscious attention to the process. Japan was the first country to introduce legislation to protect and promote its intangible heritage (Bitsani, 2014: 35-36).

The search of the concept of place accompanied the development of geography in the Anglo-Saxon areas in the 20th century. The search of the definition of cultural landscape is associated with the influence of a group of people over a natural setting (Bitsani, 2014:37). Apart from the existence of a landscape as a human entity, Sauer also elevated such definition as a conceptual meaning for geography to describe “an austere geographical way of view of human culture” (Sauer, 1984: 33-54).

The cultural landscape is not only defined based on specific material (tangible) elements, but is also based on symbolic elements, which express a specific system of meanings, senses, values through space, such as religious symbols, social institutions, cultural specificities, economic activities and relations (Bitsani,2004; Bitsani and Kalomenids, 2007). Thus, a place is tangible which is universally accepted; a place which is understood by people or is transformed based on people’s means, wishes and aims; a general framework of life, which reveals history and different aspects of life, based on the socio-economic conditions and the cultural system. In regard to its territorial boundaries, the place is defined from the field of operation of human senses and relations.

Both urban but also rural places are significant, especially those which have been characterized and identified with important sites of the past and mainly recognized because of these. This condition made us think about the role of historic and ancient monuments and heritage in general for the recognizability of the place but also of other intangible elements which may contribute to such recognizability and access. Thus, all these elements constitute the place identity, whether this is a city, a country, a territory, rural or semi-urban place (Sassen, 2013; Anhlot, 2010).

Identity is defined in a distinct way for each population. Heritage can be part of the national identity. Heritage is a broad area which incorporates many aspects and meanings which may vary. Nature, prehistory, archaeological remains, buildings, religion, language, traditions, and folklore all symbolize the past and are worth retaining for future generations. These variables, which are incorporated into the heritage definition, may be distinguished as material and immaterial, tangible and intangible, physical or social forms of heritage (Benevolo, 1997; Bitsani, 2004; Hall, 2003; Hall, 2012).

### **3. THE ROLE OF INTERNATIONAL ORGANIZATIONS IN MONUMENT PROTECTION AND PROMOTION**

Culture, throughout UNESCO’s multilateral and longitudinal actions and activities, has been a springboard for peace-building among people. Unesco cultural-policy, based on respect for the individual cultural identity of each society as well as stronger cooperation and exchanges among and between cultures through both international conferences and regulatory/operational actions (as declarations set directions in cultural policy formulation while international conventions are binding for Members ratifying them) focuses solely on the protection of cultural heritage in all its dimensions while encouraging cultural expression, promoting contemporary cultural diversity and social cohesion as well as modern cultural

creativity (Athanassopoulou, 2002:154-157; Konsola, 2006: 125-126, 129; Stenou, 2004:5; Unesco, 2005: 2; Unesco, 2002: 62-64; Unesco, 2006:1). However, in UNESCO's longitudinal action its fundamental approaches and reciprocal lines of action (priority axes) have been gradually redefined to provide appropriate and effective responses to global societal challenges (Konsola, 2006:125; Stenou, 2004:3-17) until the decisive role of culture's multi-faceted dimension in socio-economic sustainable development and prosperity became apparent (Brundtland, 1987:5-9; Konsola, 2006:127; Paschalidis, 2002:227, 230-231; UN, 1992:5; UN, 1996:12-16; Unesco, 1982:1-6; Unesco, 2014a).

### **3.1. The Importance of World Heritage Listing in Times of Financial and Economic Crisis**

Given that the convention is binding for Member States that ratify it, defining not only the criteria required for inclusion in the WHL but also the obligations of the Parties, each signatory must safeguard its cultural heritage and submit periodic reports to the World Heritage Committee about the state and maintenance of the monument-site so that appropriate corrective measures be taken by the said Committee or else the monument-site shall be removed from the list (These reports are crucial to the work of the WHC as they enable it to assess the condition of the sites, to decide on specific programme needs and to resolve recurrent problems). (Konsola, 2006:129-131; Kyrkos, 2008:2; Leask & Fyall, 2006:7; Unesco, 2014c).

Therefore, numerous are the advantages of inclusion in the WHL since, on the one hand, signatories thus benefit from provision of technical/economic/scientific assistance and an effective-comprehensive management system that sets out adequate preservation measures and monitoring mechanisms for legislative and regulatory measures as well as strategic planning. (A key benefit of ratification, particularly for developing countries, is access to the World Heritage Fund as about US\$4 million is made available annually to assist Parties in identifying, preserving and promoting World Heritage sites. On the other hand, prestige that comes from being a Party to the Convention and having sites on the World Heritage List serves as a positive catalyst for local/regional/demographic development, cultural tourism growth, attracting financial resources, raising awareness for heritage preservation, strengthening international cultural cooperation, and furthering cultural and political diplomacy. (Biagioli, 2013:6; Konsola, 2013:3; Laidet, 2013:42-44; Leask & Fyall, 2006:12; Shackley, 1998:7; Throsby, 2010:126-127; Unesco, 2014b; Unesco, 2014c; VanOers, 2009:8)

In particular, in the current decentralized, specialized and globalised context of digital communication and rapidly- evolving commercial exchanges of cultural goods and services, ecological disasters, dense cross-cultural encounters but also an unstable macro-economic, cultural, social and ethics landscape (Amin, 1994:1-6; Castells, 2010:75-76; Gantzias, 2007:1-6; Gantzias 2013a: 2-4; Gantzias, 2013b:85-87; Ioannides & Debbage, 1998:99; Kelly, 1994:25-27; Kelly, 2010: 9; Parry, 2007 : 67-82; Throsby, 2010:3; Urry, 2002:14), where moreover imbalances in social cohesion intensify, public funding for culture is being drastically cut, shortcomings in effectively enforcing legislation increase, supervision and cultural management require strengthening, the economic crisis and financial uncertainty are hampering decision-making, making it very difficult to take effective rational and coordinated decisions because perception of risks to cultural heritage through non- sustainable cultural

tourism development but also the looting and vandalism of cultural and natural heritage are on the rise due to economic distress and despair, and especially as regards World Heritage sites in areas of military conflicts (GHF, 2014; VanOers, 2009:2). Inclusion of a monument in the WHL, in spite of inherent procedural weaknesses (there are often barriers to these effective measures being taken, such as complexity, high cost, political factors that determine the nomination, which initially lies in the engagement of member states and not in Unesco's hands etc. ), and the fact that World Heritage status is often interwoven with socio-cultural negative repercussions may lead to an illusion of viability and stability while giving rise to a sense of new nationalism, increasing inter-state competition, or even acting as a Trojan horse through the advent of harmful mass tourism (Askew, 2010:39-41; Fyall & Rakic, 2006:162; Goeldner & Ritchie, 2011: 25; Hall, 2006 : 30-32; ICOMOS, 2002 : 5; Lickorish & Jenkins, 1997 : 78-79; Leask & Fyall, 2006 : 14-16; Pedersen, 2002 : 30-35; Timothy & Nyaupane, 2009 : 56-65; Richards, 2005 : 51-52; Shackley, 1998 : 205; Shackley, 2006 : 91; Van-der-Aa, 2005: 140). It is thus becoming absolutely vital to highlight the importance of monument-sites, to motivate and raise general public awareness as concerns obligations that such a nomination begets and to promote the careful handling of a monument's fragile nature to enable safeguarding, preservation and sustainable management, at local, national and international level.

## **4. CULTURAL TOURISM AND SUSTAINABLE DEVELOPMENT**

### **4.1. The Concept of Cultural Tourism in Light of International Organizations' Objectives and Policies**

In the mid-20th century, as societal, economic, environmental and technological developments did away with the western industrial- and economy-centered model and also deconstructed the "myth of development" (Morin, 1998a,p. 534-535, p. 545), an "alternative, cultural centric -model" emerged, which dispelled those preconceived elitist economic-cultural perceptions that permeated the works and institutions of high culture (BilleHansen,1995a as referred to in Madden, 2001:171-172; Snowball, 2008: 8-9), based on the concept of culture as a way of life and dealing with culture as the cornerstone (Throsby, 2010: 1-2) and also reintroduced "humanity on the planet" (Morin, 1998:43) to promote social cohesion, a sense of collective identity, cultural self-expression, creativity and intercultural exchanges as well as a knowledge-based economy. ( Bitsani, 2014: 73-75; Unesco, 2002:62-64). And so culture has a dual role to play: on the one hand, it is the main development objective, since it equals "everything that gives meaning/value/a purpose to mankind"; on the other hand, it is the "most important means of achieving growth." (Paschalidis, 2002:227,230-231; Unesco, 1982:1-6).

As a result, the rapid growth of cultural tourism, although initially measured in purely financial terms (Smith,2003,p. 11), along with the recognition of scope its elaborate character had to offer (Dimitsantou-Kremezi, 2002:3; Jafari, 1996:43) led to the need for a clear definition of those components which set it apart from all other forms of tourism and also led to the need to investigate its social-cultural implications, since as of the 20th century tourism had been seen as culture (Urry, 1990 as referred to in Richards, 2001:4).

In line with that idea, the traditionally narrow definition of cultural tourism, a natural consequence of its centuries-old connection with standards of high culture, no longer focuses, in one-dimensional terms, on a commercialized recording of the most -visited sights and monuments (Bonink, 1992 as referred to in Richards, 2005:23) but is rather broader and stands for the human need for variety, new experiences and knowledge accumulation (Richards, 2005:23-24). However, the concept of cultural tourism linking tourism to cultural heritage is still cause for skepticism and gives rise to different views as to its management (Paschalidis, 2002:237) and definition (Richards, 2005:21). As pointed out by McKercher and Du Cros, there are almost as many definitions of cultural tourism as there are cultural tourists (2002: 2).

The concept of tourism stems from a dynamic modern consciousness and culture (Nuryanti, 1996:250 as referred to in Christou, 2005: 4) and is a means of profitably managing cultural relations and actions based on efficiency and productivity, while cultural heritage emerges as a communicative-cultural tool, a “social good” (Konsola, 2013:4) and a vehicle for historical values, a part of our tradition that is directly connected to the values and structures of our society (Dimitsantou-Kremezi, 2002:1) due to, moreover, its ethical fundamental principles calling for preservation and promotion for generations to come (Bitsani, 2004:104, 207, 91).

In addition, the concept of “sustainable development”, which first appeared in 1987 in the United Nations report entitled “Our common future” (Brundtland, 1987:5-9), and in particular after the “Rio Declaration” (UN, 1992:5) and the Conference of the “Habitat II” (UN, 1996:12-16), stresses through its triple approach the need to harmonize the economic, cultural and environmental components with the objective of meeting both the needs of today and the future while at the same time identifying the crucial role cultural heritage plays in sustainable development, clearly highlighting the fact that cultural tourism is a tool for sustainable development and intercultural exchanges, bringing together people, natural-cultural diversity and heritage (Dimitsantou-Kremezi, 2002:1; Richards, 2001: 5) and requiring a strategic and rational management to strike a balance in its complex nature (Bitsani, 2004:212).

As a result international organizations (Unesco-Icomos -E. U), in light of the broader concept of cultural heritage, which includes both the physical and tangible as well as the spiritual and intangible (cultural traditions and collective memory) while focusing on the importance of local community participation in planning and managing cultural tourism (Dimitsantou-Kremezi, 2002:1-2), decided on objectives and policies (Richards, 2001: 5) to ensure an appropriate and harmonious coupling of cultural diversity, ethics and values with economic development dynamics.

In line with this framework, cultural tourism needs to be developed so as to respect and showcase all fragile cultural and natural heritage, a sense of identity, collective memory and the traditions of the host region and its society as a whole, to encourage cooperation and constructive dialogue between parties, to help view, interpret, understand, preserve, enrich and exploit it, through properly recommended strategies and analytical/measurable steps aimed at rational and sustainable management, for the sake of this and the next generations (Dimitsantou-Kremezi, 2002:5; Richards, 2001:5,248; Unesco, 1996:3-73; Unesco, 2003a: 2-9).



## 4.2. Positive and Negative Impact of Cultural Tourism Development

According to recent surveys, cultural tourism stands for 40% of the world's international tourism and according to estimates it equals 50% of European tourist activity (OECD, 2009: 21) with its future potential actually on the rise since the majority of visitors of cultural sites and monuments are not "specifically cultural tourists" (Richards, 2005, p. 229), which indicates that attracting tourists who are mainly culturally motivated (Richards, 2001:146-147) constitutes an "investment with guaranteed benefits" (Paschalidis, 2002:239, Bitsani, 2004 : 194).

Although it is difficult to quantify and examine the profile of "specific cultural tourists", due to the persisting general trend of a mixed-holiday model (Richards & Munsters, 2010:1,7), cultural tourists are generally more educated, young, socially, culturally and environmentally sensitive, technologically savvy, wealthy, professionally successful individuals who tend to opt for tourist destinations with a special and rich cultural identity and who expect high standards (Konsola, 2013:3; Richards, 2001:247, 252, 11, 35; Smith, 2003:104); At the same time they tend to spend up to ten times more than mass tourists do: as a result they contribute significantly to the local economy of areas they visit and are instrumental to the consolidation of the socio-economic fabric of those regions as they help strengthen the competitiveness of local economic operators and ensure more stable employment in the visited areas and regions (Goeldner & Ritchie, 2011:214; Bitsani, 2004:209).

By analysing the profile of the modern cultural tourist/consumer, since that profile to a large extent shapes cultural tourism (Binkhorst, den Dekker & Melkert, 2010: 45), it is obvious that benefits arising from a successful symbiosis between tourism and culture are not limited to the positive multiplier effects of tourism development for the economy on a national, regional and local level (employment and new jobs, support to small and medium-sized businesses, more foreign exchange inflows and tax revenue etc.) (Goeldner & Ritchie, 2011: 24-25;Kokkosis & Tsartas, 2001: 29-31; Lickorish & Jenkins,1997: 74), as by focusing on the preservation and promotion of natural and cultural heritage such benefits can increase and may be taken advantage of in a competitive and sustainable manner.

Cultural tourism, through the growth of local cultural activities, regardless of their seasonality, not only contributes largely to a longer tourist season but also helps improve the rate of employment and acts as a positive catalyst for the revitalization of regional and demographic development (Konsola, 2013: 3), blunting the usual disparities and inequalities between center and periphery while enhancing respect for natural resources, cultural identity and heritage on a local, national and international level while attracting funds needed for the maintenance, preservation and display of the aforementioned (restoration and maintenance of monuments, traditional and listed buildings, preservation of natural biodiversity, revival of traditions, development of training centres to help the local population acquire skills and specialize, relevant development policy implementation in order to create high quality spaces, transport, infrastructure, energy, public utilities and information network modernizations, life-long learning, education and innovation particularly in deprived cities and areas etc.) (European Communities, 2002:16; Lickorish & Jenkins,1997:79-80; NWHO, 1999:7; Unesco, 2003b:5-6). Therefore, apart from relieving tourist congestion (Paschalidis, 2002: 238) at urban- metropolitan areas, cultural tourism helps the revival of less popular areas for tourists (Richards, 2005:53). In addition, it provides significant incentives to the host

communities so that they protect and maintain their cultural background, intangible heritage, living traditions, their collective memory and authenticity in order to foster a sense of understanding and appreciation for the latter (Butcher, 2003:118; Dimitsantou-Kremezi, 2002:4-5; Moulin, 1996:65), bringing tourists and residents alike in contact with their heritage while strengthening intercultural dialogue and an understanding of cultural differences (Richards, 2005: 133).

It is true, however, that cultural tourism, as well as alternative forms of tourism (Kokkosis & Tsartas, 2001:83), developed as an antidote (Eadington & Smith, 1992:33) to the post-war mass tourism model of the 4Ss (sea-sun-sand-sex) (Ivanovic, 2008:6) which emerged in the 1960s and 1970s (Richards,2005:13) and tended to be synonymous with social, cultural and environmental sensitivities.

The 1980s and 1990s made the weaknesses and negative impacts of the conventional model visible (Butler, 1992:33), at the same time rendering necessary the moralizing of the new, alternative, more refined forms of tourism, since mass tourism has been thought of as detrimental to the environment and culture (Butcher, 2003:7). Then ‘new tourism’, which was thought of as conscientious and moral, emerged as an ‘environmental imperative’ (Poon, 1993 as referred to in Butcher, 2003: 7). Moreover, the tourist industry adapted to the new post-Fordism consumption standards (Urry, 2002: 14; Ioannides & Debbage, 1998: 99) and by eliminating the distinction between high and low culture (Richards, 2005:26-27), in a convergence of economic and cultural policies, it focused on creating new specialized and alternative markets (Richards, Goedhart & Herrijgers, 2001:73). Therefore, the new moralized tourists are being treated as socially, environmentally and culturally conscious as opposed to the “self- involved” mass tourists who live in a “tourist bubble” (Butcher, 2003:18). However, according to Butler (1992:35), not only is the simplistic demonization, romanticization and moralization of alternative forms of tourism inadequate but also misleading.

Indeed, an ever-increasing number of studies points to the long-term socio-cultural effects of an uncontrolled, unplanned, speculative and non-rational management of cultural tourism (Paschalidis, 2002:237), since the latter is less visible, contrary to the economic effects which become obvious in the short run (Lickorish & Jenkins,1997:81-82). Cultural tourism as a “magic formula” (Picard, 1996:185 as referred to in Richards, 2001:20) in the hands of tour operators may lead, among others, to the commercialization of tradition, the establishment of pseudo-cultures, social tensions, xenophobia, changes in local socio-environmental identity and traditions, degrading arts and values, homogenizing cultural goods and services, altering the landscapes, natural ecosystems but also alienating cultural diversity and traditional architecture while possibly encouraging illegal trade of natural and cultural heritage (Goeldner & Ritchie, 2011: 25; Lickorish & Jenkins,1997:78-79; Pedersen, 2002:, 30-35; Timothy & Nyaupane, 2009: 56-65; Richards, 2005:51-52; Smith, 2003:45-61). Especially for World Heritage sites, given the rapid development of tourism World Heritage status brings, an illusion of viability and stability may emerge that can potentially be used as a basis for the establishment of a national identity, even a new sense of nationalism (Shackley, 1998:205), or else a “Trojan Horse” that involves the “damaging mass tourism” (Butler 1990, as referred to in Richards, 2005: 52). In particular, because of the asymmetric intensive mass tourism exploitation, tourist, cultural, urban/metropolitan areas are being threatened by desertification since they have abused their most valuable natural and cultural resources, i.e., in essence their competitive advantages have been lost to air pollution, tacky architecture-

crowding-alienation, aesthetic nuisance, environmental pollution, deterioration of cultural social identity, etc. (Butler, 1992:33; Paschalidis, 2002:237-238; Bitsani, 2004: 209).

## **5. THE CASE STUDY OF TOKAJ-HOLLOKÖ HUNGARY**

### **5.1. The Profile of Tokaj-Hollókő**

In northeastern Hungary the historic wine region of Tokaj and its buffer zone, i.e., an administrative area of 27 settlements with a surface area of 88,124 ha in total, was included in the World Heritage List in 2002 as a cultural landscape (Unesco, 2012:88-89) since, as stated in the criteria for its inclusion in the WHL (III, V), not only does it represent a distinct viticultural tradition that has existed for at least a thousand years and has survived intact up to the present., but it also vividly illustrates the specialized form of traditional land use that it represents (Advisory Body Evaluation, 2002:17).

Hollókő, an ethnographic-medieval village, located in Nógrád, a County in Northern Hungary (circa 100 km north-east of Budapest), along with its surrounding area, is the first historic settlement worldwide to make the World Heritage List (1987) since as stated in the criteria for its inclusion in the WHL (V), this is an outstanding example of a deliberately preserved traditional settlement, representative of a culture that has become vulnerable under the impact of irreversible change. Historical data demonstrate that the village has been able to preserve its cultural identity from the feudal wars and modernization thanks to its medieval castle, situated on the hill and perched above the village, which dates back to 1310 and served as protection against the Mongol invasion. Not only is Hollókő, its 57 residential and farm buildings as well as its church, i.e., a total of 126 buildings (ICOMOS,1987:1-2; Kovács, 2004:44), an area geographically protected and isolated, a living example and sample of the Palócz subgroup culture-crafts-folk-dialect and architectural tradition within the confines of the Hungarian nation, but it also bears witness, in Central Europe as a whole, to the traditional forms of rural life which were generally abolished by the agricultural revolution in the 20th century (ICOMOS,1987:1-3;Kovács, 2004:44; Unesco, 2012:88-89; WHC-Nomination Documentation, 1987:17-18).

### **5.2. The Impact of Cultural Tourism Development on Tokaj-Hollókő**

The inclusion of Hollókő on the World Heritage List led to rapid growth for the tourist industry, boosting Holloko's economic development, but had damaging social and cultural repercussions, all of which have had an adverse effect on social cohesion. During the '90's, given the reputation the area acquired thanks to its new World Heritage global status, there was a significant increase in tourist growth rates with as many as 120,000 visitors per year (Smith, 2009:213-214), while in 2006 there was a 36% increase in the number of locally-accommodated visitors (Priest, 2007:6). Tourism became a 'curse and a blessing' "for the historic village altogether since, on the one hand, Holloko's historicity without tourism could not have survived, although tourist growth jeopardized its future sustainability. On the other hand, the commercialization of tradition has substantially altered Holloko's cultural identity

and authenticity (Roman, 1993:154-156). Quite telling in that sense is the fact that the villagers have gradually given up on animal-farming, their traditional costumes are now being used as a means to attract tourists while folk customs and architectural heritage are in danger since many traditional houses are being turned into commercial areas; all in all, the historical village's cultural identity is converted into a sordid, bartered, good by tossing a handful of coins at it. In addition, tourist revenue is almost entirely in the hands of foreign investors, instead of being reinvested in local development, thus preventing spin-off effects from actually benefiting the local community. Illustrative of this is the fact that only 26% of the total real estate now belongs to Palócz people (Kovács, 2004:32-34,54-60).

As of 2000, the majority of Palóc people permanently reside in the newly-built agglomeration which was established post-war within walking distance. Only 20 individuals currently reside in the village, out of a total of 380 (Heritprot, 2013; Kovács, 2004:33; Mikula, 2013), more than 70% thereof being pensioners and over 50 years of age on average (Vilagorokseg, 2013). Although it initially appeared as if tourist development would have had a positive impact on demographic trends, in the 1970's (Kovács, 2004:30-31). As a result, specialists and qualified labor force are fewer along with depopulation and a drop in the active population. Statistics indicate that the overall population declined by 64%, self-employment is at 17%, unemployment at 60%, with a mere 14% of the women working and only 41 out of a total of 71 are short-term seasonal workers in the village (Kovács, 2004:31).

Although its achieving WHL status has contributed greatly to the inflow of financial resources from European programs, which were used to modernize and upgrade tourist accommodation, to carry out advertising campaigns, to reconstruct the school, kindergarten and parks, to upgrade transport infrastructure etc., geopolitical upheavals and the former government's unilateral focus on natural/architectural heritage as well as the availability of poorly-skilled workforce (Kovács, 2004:40-66; Phare, 2002:27; Sztrémi, 2007:24) turned the historic center into a living museum village, since the last remaining youth, being financially weak and unable to develop their own business activities, not really anticipating the long-term prospects of cultural tourism, normally opt for other professional paths (Kovács, 2004:60-84), most often property and real estate transactions given that the price of buildings and the land have soared (Ispánné, 2009 as referred to in Kovács, 2009) and so tourist investment is left in the hands of foreigners (Kovács, Molnár & Farkas, 2000:19-20; Limbacher, 2005:26-27).

On the other hand, the modernisation and upgrading of tourist accommodation facilities by means of European funds led to an additional lengthening of the tourist season, seasonality being a typical feature of tourism in Hungary (Puczkó & Rátz, 2001:199). Tourists are drawn to history and look forward to learning more about this country's rich heritage and engaging in cultural contacts helps make the overall experience quite positive: tourists stay in traditional guest-houses, visit museums, go sightseeing into historic city centers, buy souvenirs, participate in an interesting array of cultural programs (various folk events, family programs, textile-pottery courses, etc.) (Peter, 2009:17), unlike what used to be the case in the past, when they were merely passing through (Smith, 2009:214). It is worth noting that during Hollóko's traditional Easter celebration, featuring townspeople in traditional dresses, the congregation gathers in the town church, and given the fact that Hollóko is famous for its church, the number of visitors reaches 15,000 that day, all of which flock to the two and only streets of the village. (Sztrémi, 2007: 24).

In addition, UNESCO granted protected status to the surrounding area with its unique fossils of Ipolytarnóc, a fact that generated additional research interest and brought European

funds aimed at preserving and enhancing local biodiversity and geological wealth, thus making the region a popular venue now which is now hosting various conferences (CoE, 2011:72-78; Ipolytarnoc, 2013:1-20). Hollókő's WHS (world heritage status) contributed decisively to promoting the enhancement of sites of natural and cultural interest along with the sound management of any related tourism activity, such as the integrated development of the national park of Bükk, which resulted in the nomination of the first transnational Geopark (Novohrad-Nógrád Geopark in North Hungary and South Slovakia) (Horváth, & Csüllög, 2010:146). Designed to build infrastructure and create services suited to the requirements of modern sustainable standards, offering guests huge scope and facilities to acquaint themselves with the historical and cultural and natural wealth of the region through geotourism activities, information centers, sightseeing-tours, educational and hands-on programs, exhibitions, seminars, etc., it also helps stimulate local socio-economic activities and the setting-up of tourism-related businesses that promote visits and tours lengthening the tourist season. Furthermore, such developments help the modernization of existing infrastructure aimed to attract top-notch stakeholders, quality tourists, international investment/-financing and sponsorship volunteers coupled with more synergies with a view to eventually developing intercultural competences and mutual cross-cultural understanding (HNTO, 2013: 8-12; Nogradgeopark, 2009:1-35)

Although for almost two decades virtually nothing was done in terms of plans, projects and research, as concerns tourism's economic/social/cultural repercussions on the historic village (Kovács, 2007:30), in recent years the state recognizing the development impetus that the sustainable management of cultural tourism in the less-favored region and the weak national economy has to offer (Rátz & Puczkó, 1998: 6-7; Tsartas & Stavronoudis, 2010:12-13) and proceeded with establishing a committee for strategic planning in accordance with Unesco's requirements and specific recommendations; it also acknowledged the fact that the absence of long-term planning and the non-involvement of the local community (Sziva, 2010:58) have significantly altered the distinct local cultural identity and local residents' needs (ICOMOS, 2006:3). The Community however appears incapable of handling effectively Hollókő's WHS (Katalin, 2012:5), since, as noted, the controversy between the parties involved (people-government-agencies-entrepreneurs), hampers its implementation (Carter, 2013:10; Limbacher, 2005:26-27).

However, the case of Hollókő affected not only national cultural government policy-making but also that of neighboring countries which began to develop and promote their own cultural heritage (Horváth, & Csüllög, 2010:150-151), as shown by the submission of a proposal to include the Romanian village of Rimetea under Hollókő's nomination (Ministerul Culturii, 2012:1-6). Moreover, historical settlements at regional and national level jointly work on cultural tourist projects in order to enhance their development possibilities. In 2008, The Kozard-Bokor-Hollókő joint tourism programme came up second in a competition for the title of the best protector of traditions by EDEN (European Destinations of Excellence: a project promoting sustainable tourism development models across the European Union) (Eden, 2013:13; Igó, 2010:84-85). In addition academic institutions are working on the implementation/utilization of a web cultural tourism platform for the remaining 400 Rural Heritage Houses, which are scattered throughout the country, with a view to both their preservation and the promotion of cultural heritage, by integrating facility management information technologies into the preservation process while implementing a decision-support system model for site management. The project aims to record their current status so that

managers can maintain them and so that their tangible and intangible value may be appreciated and preserved for the sake of future generations. (Bassa, 2013:152-157).

### ***5.2.1. Evaluate Their Integration into WHS list***

With a view to establishing a set of clear criteria and benchmarks on a case-by-case basis in order to evaluate inclusion on the WHL, we do not focus solely on accession period terms, criteria and socio-economic conditions but attempt through the methodological approach of a SWOT analysis (strengths-weaknesses-opportunities-threats) to examine the outcome thereof, so as to showcase the list's crucial role in shaping the present situation.

### **Tokaj-Swot**

In 1992, after the "Rio Declaration" (UN, 1992:5) with the concept of sustainable development, the term cultural landscape was introduced in the Convention of 1972, in order to stress the specific economic interdependence of between man and nature as well as the fundamental need to maintain a balance between the two (Prats, 2013:5). In accordance with the operating instructions of the Convention (Rössler, 2001:12-13; Unesco, 2012:88-89), the integration of Tokaj falls under the category of cultural landscape, with an active social role in contemporary society closely associated with the traditional way of life, and an evolutionary process still in progress. Moreover, there is significant material evidence of its evolution over time (The notion "land use" was introduced into the 1994 version of OG as a reference to cultural landscapes and the notion of "human interaction with the environment" was introduced into the OG in the 2005. Respectively criterion III, though initially referring to cultures that have disappeared, after changes were made in 1994/96, now refers to continuing cultural traditions (Jokilento, 2008:26-29; Rössler, 2001:12-13). It should be noted, however, that the procedure for inclusion in the list usually is initiated at the highest levels of government – the national state – and then goes to the lower institutional levels. As a result, it does not reflect the views of all parties, groups and stakeholders concerned (e.g., international organizations, state, wine producers, Community). The inhabitants of a territory are not really consulted, at least not decisively, and when the inscription on the World Heritage List is finally conceded by UNESCO, they simply expect quasi-automatic economic returns for their territory, which is followed by disappointment when they realize that influx of money does not involve everybody. The "native people" have an intimate relationship with their landscape which does not necessarily correspond, for instance, to the UNESCO criteria of inscription to the World Heritage List. This leads to conflicts of interest, which hinder both the configuration of nomination criteria as well as subsequent site management. In the case of Tokaj, its inscription as a historical winegrowing site was not accepted by the non-winegrowing vested interests.

Leading to a clear rift between wine producers and other inhabitants in the different representations of the area thus affecting the impact of inclusion in list as a historical winegrowing landscape. According to residents' point of view, the criteria should be more focused on natural-geological wealth, the history, architecture and cultural heritage and less on the winegrowing heritage (Biagioli, 2013:6). In 2012 the government named Tokaj (the monument, the buffer zone and the 27 communities) as the first historic cultural landscape, in order to ensure the sustainability not only of the monument, but the wider cultural heritage of the area (its anthropological, architectural, archeological, ethnological and scientific value) (WHC-SOC, 2013:4).

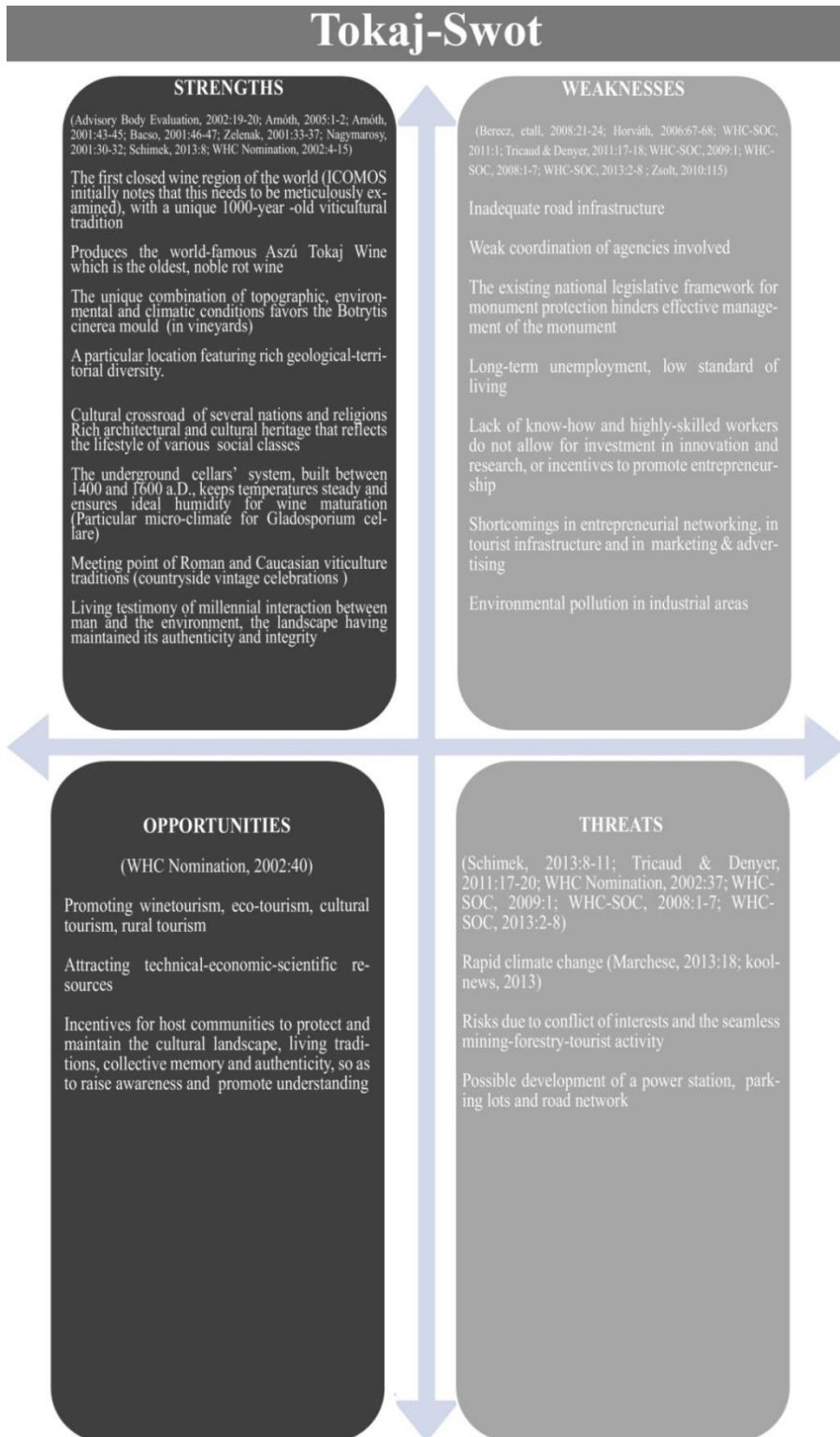


Figure 1. Tokaj Swot analytical presentation.

<b>Tokaj Swot analytical presentation</b>
<p><b>STRENGTHS</b> (Advisory Body Evaluation, 2002:19-20; Arnóth, 2005:1-2; Arnóth, 2001:43-45; Bacco, 2001:46-47; Nagymarosy, 2001:30-32; Schimek, 2013:8; WHC Nomination, 2002:4-15; Zelenak, 2001:33-37)</p> <ol style="list-style-type: none"> <li>1. The first closed wine region of the world (ICOMOS initially notes that this needs to be meticulously examined), with a unique 1000-year -old viticultural tradition</li> <li>2. Produces the world-famous Aszú Tokaj Wine which is the oldest, noble rot wine</li> <li>3. The unique combination of topographic, environmental and climatic conditions favors the Botrytis cinerea mould (in vineyards); it “rots” the over-ripe grapes, resulting in the so-called “noble rot”</li> <li>4. Habitat of primary vine (<i>Vitis sylvestris</i>) and of the Miocene fossil vine (<i>Vitis Tokajensis</i>)</li> <li>5. A particular location featuring rich geological-territorial diversity. (Volcanic subsoil, rich in ores, minerals, fossils and underground sources, constitutes a favorable climate for Botrytis cinerea, for Gladosporium cellare (in wine-cellar) and sessile oak for barrels and casks</li> <li>6. Cultural crossroad of several nations and religions</li> <li>7. Rich architectural and cultural heritage that reflects the lifestyle of various social classes</li> <li>8. The underground cellars’ system, built between 1400 and 1600 a.D., keeps temperatures steady and ensures ideal humidity for wine maturation (Particular micro-climate for Gladosporium cellare)</li> <li>9. Meeting point of Roman and Caucasian viticulture traditions (countryside vintage celebrations )</li> <li>10. Living testimony of millennial interaction between man and the environment, the landscape having maintained its authenticity and integrity</li> </ol>
<p><b>WEAKNESSES</b> (Berecz, etall, 2008:21-24; Horváth, 2006:67-68; WHC-SOC, 2011:1; Tricaud &amp; Denyer, 2011:17-18; WHC-SOC, 2009:1; WHC-SOC, 2008:1-7; WHC-SOC, 2013:2-8; Zsolt, 2010:115)</p> <ol style="list-style-type: none"> <li>1. Inadequate road infrastructure</li> <li>2. Weak coordination of agencies involved</li> <li>3. The existing national legislative framework for monument protection hinders effective management of the monument</li> <li>4. Long-term unemployment, low standard of living</li> <li>5. Lack of know-how and highly-skilled workers do not allow for investment in innovation and research, or incentives to promote entrepreneurship</li> <li>6. Shortcomings in entrepreneurial networking, in tourist infrastructure and in marketing &amp; advertising</li> <li>7. Environmental pollution in industrial areas</li> </ol>
<p><b>OPPORTUNITIES</b> (WHC Nomination, 2002:40)</p> <ol style="list-style-type: none"> <li>1. Promoting wine-tourism, eco-tourism, cultural tourism, rural tourism (creation of new jobs, strengthening of SMEs, foreign exchange inflows, increase in tax revenue, etc)</li> <li>2. Attracting technical-economic-scientific resources (restoration and maintenance of monuments, traditional buildings and architecture, protection and preservation of natural biodiversity, revival of traditions, development of education centers-specialization of domestic population, modernizing of infrastructure, upgrading transport network, ecological planning, etc)</li> <li>3. Incentives for host communities to protect and maintain the cultural landscape, living traditions, collective memory and authenticity, so as to raise awareness and promote understanding</li> </ol>
<p><b>THREATS</b> (Schimek, 2013:8-11; Tricaud &amp; Denyer, 2011:17-20; WHC Nomination, 2002:37; WHC-SOC, 2009:1; WHC-SOC, 2008:1-7; WHC-SOC, 2013:2-8)</p> <ol style="list-style-type: none"> <li>1. Rapid climate change (temperature rising, extreme weather conditions and soil erosion) (Marchese, 2013:18; koolnews, 2013)</li> <li>2. Risks due to conflict of interests and the seamless mining-forestry-tourist activity (mining and rock extraction for use in construction, smelting, farming of crops that are not incompatible with the local biodiversity, deterioration of vineyards due to widespread tourist use, etc)</li> <li>3. Possible development of a power station, parking lots and road network</li> </ol>





Figure 2. Hollókő Swot analytical presentation.

<b>Hollókő Swot analytical presentation</b>	
<b>STRENGTHS</b>	
1.	Architectural tradition and heritage, while retaining authenticity and integrity, are in perfect harmony with the countryside and provide the only testimony of the architectural construction methods of the past originating in the 13th century. (ICOMOS, 1987: 1-3; Kovács, 2004: 44; WHC-Nomination-Documentation, 1987:17-18)
2.	UNESCO and NATURA protected surrounding areas, the national park of Bükk and the unique fossils of Ipolytarnóc, have attracted additional research interest and European funds aimed at the preservation and enhancement of local biodiversity and geological wealth, (CoE, 2011:72-78; Ipolytarnoc, 2013:1-20)
3.	Holloko is a living community whose conservation not only includes farming activity but also ensures its success (ICOMOS, 1987:1-3; WHC-Nomination-Documentation, 1987:17-18)
4.	Holloko not only represents the Palocz sub-group within the Magyar entity, but also bears witness, for the whole of Central Europe, to the traditional forms of rural life which were generally abolished by the agricultural revolution in the 20th century. (ICOMOS, 1987:1-3)
<b>WEAKNESSES</b>	
1.	Failure in harmoniously coupling Holloko's cultural identity and its WHS as well as its associated developmental and economic dynamics, mainly due to geopolitical upheavals and the former government's unilateral focus on natural/architectural heritage, existence of poorly skilled workers and lacking specialization of inhabitants (Kovács, 2004:40-66; Kovács, 2007:30; Sztrémi, 2007: 24)
2.	Weaknesses in the legislative framework meant for the management of the monument (Kovács, 2004:61-62)
3.	Investment and tourist revenues are not used for the maintenance and other improvements to the infrastructure of the village, but remain in the hands of foreign investors and individuals (Ispánné, 2009 as referred to in Kovács, 2009; Kovács, 2004:32-34,54-60; Kovács, Molnár & Farkas, 2000:19-20; Limbacher, 2005:26-27).
4.	The seasonality of tourism is possibly its biggest weakness (Puczkó & Rátz, 2001: 199).
5.	Inability of the stakeholders (residents-government-bodies-entrepreneurs) to coordinate sufficiently as regards the site's sustainable management (Carter, 2013:10; Katalin, 2012:5; Limbacher, 2005:26-27; Sziva, 2010:58).
<b>OPPORTUNITIES</b>	
1.	Upgrade and modernization of accommodation-infrastructure, as well as development of cultural activities and programs can contribute, on the one hand, with more jobs and an extension of the tourist season, and, on the other hand, with the further modernization of existing infrastructure to attract quality tourism, international investors, funders, sponsors and volunteers while developing intercultural attitudes (Phare, 2002:27; Peter, 2009:17; Priest, 2007: 6; Smith, 2009: 214; Sztrémi, 2007:24)
2.	The maintenance and renovation of historic buildings, based on the respect of the local architectural tradition, satisfy conditions for developing soft-sustainable tourism (Kovács, 2004:44-46).
3.	The creation of the world's first inter-cultural geopark Nogradgeopark improves local and regional development (Horváth, & Csüllög, 2010:146; HNTO, 2013:8-12; Nogradgeopark, 2009:1-35).
4.	Recognition at government level of growth and development dynamics the sustainable management of cultural tourism offers to the less-favored region and the weak national economy (Rátz & Puczkó, 1998: 6-7; Tsartas & Stavrinoudis, 2010:12-13)
5.	Development cooperation at regional and national level, in order to strengthen growth potential for historical settlements (Bassa, 2013 :152-157; Eden, 2013:13; Igó, 2010:84-85; Ministerul Culturii, 2012:1-6).
<b>THREATS</b>	
1.	Population reduction, unemployment, low standard of living. The village residents are only 20, out of a total of 380 persons of which today 70% are pensioners with an average age of 50 (Vilagorokseg, 2013). Demographic data shows that as of the 80s the population shrank by 64%, self-employment is at 17%, unemployment at 60%, with just 14% of the female population working and out of a total of 79 employees, only 41 are employed in the village (the few young, not having the means to set up their own business, are forced to leave investments in foreign hands. Only 26% of the total real estate is owned by residents). ( Ispánné, 2009 as referred to in Kovács, 2009; Kovács, 2004:32-34,54-60.60-84Kovács Molnár & Farkas, 2000:19-20; Limbacher, 2005:26-27).
2.	Commercialization-poor delivery, gradually residents give up animal-farming (ICOMOS, 2006: 1-3; Kovács, 2004:54;Roman, 1993:154-156).
3.	The rapid development of cultural tourism in conjunction with the absence of a strategic plan and proper management thereof, in the absence of local community involvement, may cause further deterioration in the region's unique and non-renewable natural and cultural resources (Kovács, 2004:83; Sziva, 2010: 58)
4.	The forced relocation of the majority of the Palóc to the modern village (only 20 out of a total 380 people reside in the historic center), which was built post-war within walking distance in order to preserve the authenticity of the historic settlement, has transformed the historic center into a living museum, cutting off residents from their heritage (Hollókő has almost broken into old and new parts with the local people living in the latter. They have almost abandoned the central part, where their ancestors and forefathers used to live. What used to be the village of poor farmers is now a shrine of traditions, the centre of tourism and recreation activities.) (Heritprot, 2013; Kovács, 2004:33,54; Mikula, 2013)

### 5.3. The management of Tokaj-Hollókő

#### 5.3.1. *The Comparative Study of Inclusion Criteria Mainly Indicates the Following*

1. The inclusion on the WHL is most often the apex of a long process and a series of conservation projects at national and regional levels (Askew, 2010:38). Either way, the integrity and authenticity of the monuments are given undue prominence (for example: despite a devastating fire at the beginning of the 20th century, Hollókő was rebuilt in a homogenous way, preserving the traditional techniques of rural and Palócz architecture. Respectively in the case of Tokaj, although frequent military incursions over the centuries led to the destruction of a substantial proportion of historic buildings, scrupulous respect for international standards in conservation and restoration was given). More important than authenticity in the case of cultural landscapes such as the Tokaj region is integrity, since the area covered by the nomination is old and there is evidence that many of the nominated vineyards have been cultivated for more than a millennium (Advisory Body Evaluation, 2002, :19-20; ICOMOS, 1987: 1-3; WHC Nomination, 2002: 11-15)
2. In the case of Hollókő it is emphasized that Palócz folklore, architectural tradition and way of life guarantee successful maintenance (ICOMOS, 1987: 1-3; Kovács, 2004:53). With regard to Tokaj, both the legislative framework and the management plan guarantee protection and sustainability (Advisory Body Evaluation, 2002:19)
3. Also site and area uniqueness is being praised; both cases after all are precious testimony to longitudinal economic, social and historical developments. Hollókő bears witness, for the whole of Central Europe, to traditional forms of rural life which were generally abolished by the agricultural revolution in the 20th century, while Tokaj is being highlighted as a cultural crossroad, mirroring the lifestyle of different social strata (showcasing special construction forms and techniques by a civilization and a culture reflecting the lifestyles of aristocracy and peasantry, wanderers and permanent residents, Hungarians and immigrant peoples have formed a unity which survives to the present day) (Advisory Body Evaluation, 2002:18-20; ICOMOS, 1987: 1-3; Kovács, 2004:53; WHC Nomination, 2002: 15)

However, a more thorough examination indicates the following:

1. In both cases, the previous institutional vacuum in the Hungarian legislative framework with regard to protection and management of monuments on the WHL (Inkei & Hentz, 2013:2, 4-5, 12-13, 28-31), as well as the controversy between the parties involved, have caused weak coordination that stands in the way of implementing a strategic management plan. Quite telling is the fact that Hollókő's inclusion on the WHL triggered serious problems (Roman, 1993:154-156), which subsequently were maximized (Carter, 2013:10; Katalin, 2012: 5; Kovács, 2004:83; Kovács, 2007:30; Limbacher, 2005:26-27; Sztrémi, 2007: 24; Sziva, 2010: 58)
2. Poorly skilled workers, infrastructure shortcomings, unemployment, a low standard of living, all characterize the region. In particular in the case of Hollókő the disappearance of ethnographical heritage (commercialization-alteration of tradition, abandonment of animal-farming), but also the Palócs' living conditions (depopulation and a drop in the active population) is increasingly at risk (Ispánné,

- 2009 as referred to in Kovács, 2009; Kovács, 2004:32-34, 54-60, 60-84; Kovács, Molnár & Farkas, 2000:19-20; Limbacher, 2005:26-27).
3. Hollókő's inclusion on the WHL was essentially a step towards cohesion by the political regime which was then in power in Hungary (László Kovács, 2012:4). So even though the criterion referred to "a culture that has become vulnerable" (Unesco WHC, 2014a) and that Palócs' intangible heritage and lifestyle, which are tangibly reflected in the traditional village (Deacon & Beazley, 2006:14; Kuruk, 2004: 18), are to be protected, it seems that intangible heritage is subordinated and sacrificed to the economic interests of particular groups (Kuruk, 2004: 18). The previous government's unilateral focus on natural/architectural heritage has cut off residents from their heritage (the Palóc were considered as inadequate to assess, appreciate and understand their own heritage) (Inkei & Hentz, 2013:2; Kovács, 2012: 4). On the other hand, Tokaj's denomination as a winegrowing site was not accepted by the non-winegrowing interests and a division between wine producers and other inhabitants clearly emerged in the different representations of the area and emphasis on promotion of enotourism, stepped up social inequality and exploitation of the classes (Biagioli, 2013: 6).
  4. In recent years, increasing attention at the national level has been given to both sustainable development of tourism (enotourism, ecotourism, agrotourism, cultural tourism etc) and preservation, effective conservation, enhancement and promotion of cultural heritage, through strategic planning, actively involving the host Communities (a structured dialogue with young people should involve those engaged in various innovative forms of tourism) (Tsartas & Stavrinoudis, 2010:12-13; WHC-Unesco, 2014a; WHC-SOC, 2013:13-16; WHC, Unesco, 2014b), in particular after the adoption of a new law on cultural heritage in 2011 (Act LXXVII/ 2011) (Inkei & Hentz, 2013:30-31)
  5. Although periodic monitoring of monuments (on a regular basis, at least in recent years, contrary to the past) and observations on issues that need to be resolved, ensure not only that all necessary steps are taken, but also engage relevant actors at the appropriate stage of the implementation of the management plan objectives (for example, in Tokaj the upgrading of the road network, parking and power station were suspended due to their endangering the sustainability of the monument and in Hollókő management shortcomings were revealed, threatening deterioration of the authenticity and integrity of the monument, thus leading to the establishment of a management structure for the World Heritage site) (Advisory Body Evaluation, 2002:19; Roman, 1993:154-156; ICOMOS, 2006: 2-3; Tricaud & Denyer, 2011:17-20; WHC-SOC, 2008: 1-7; WHC-SOC, 2009: 1; WHC-SOC, 2011: 1; WHC-SOC, 2013: 2-8; WHC-Unesco, 2014), it should be noted that Unesco, as a supra-organization, in order to maintain its neutral- universal profile and depoliticized characteristics, is not so actively and decisively involved in resolving the various problems, as becomes evident from the long-term lack of periodic controls in Hollókő. So, inclusion, but also the management of the monument, is left to national-regional-cultural policies, which are normally superficial and aimed at reaping political, commercial and economic benefits as well as the enhancement of cultural hegemony, through the acquisition of world-cultural-status. Let it be noted that the configuration of membership criteria, following a top-down hierarchical approach,

does not reflect the views, the needs and expectations of the habitants, which are directly interwoven with and dependent on the monument, thereby contributing to a conflict of interest (Askew, 2010:38-41).

## CONCLUSION

There is a dire need to develop cultural tourism so as to achieve sustainable development in the current digitally globalized landscape, but it is also evident, that an effort must be made to achieve a strategic harmonization between culture's fragile nature and tourism's prospects, in order to ensure that by eliminating threats, the benefits from such a complicated coupling are maximized, competitive and viable.

Indeed, cultural tourism, being an essential pillar of the tourist boom in the cities, but in particular disadvantaged and often degraded regions. plays a key role in socio-economic and, cultural development as well as the growth and recovery of geographically isolated areas, providing multiplier benefits at local and national level. However, by means of a comprehensive assessment - which is not, as all too often happens, a purely moralist, soft-environmentally conscious attitude toward tourism, free from the suffering mass-tourism causes (Lanfant & Graburn, 1992:92; Picard, 1996:108 as referred to in Richards, 2001:19), and without an integrated, strategically effective use of its dynamics, primarily by the host community, may lead to significant deterioration in the overall natural and cultural heritage as well as the identity of a place.

Nowadays, taking into account the rapid economic-cultural-environmental-social developments which are reinforced by the global financial crisis, the mobilization of the international community as regards aid and reconstruction, developing innovative synergies, awareness –raising and cultivating a sense of responsibility vis a vis the fragile nature of cultural heritage is an urgent necessity. Particularly as concerns World heritage sites of universal value, their inclusion on WHL, upon condition of taking regulatory measures, combined with legal protective measures, along with awareness-raising, education and management activities, becomes vital with a view to ensuring site/monument preservation and the consolidation of awareness, as protection and maintenance makes it imperative that their special and fragile nature be taken into account; after all, they should be the prime concern of the humankind as a whole, and they constitute an essential part of nations and the world in terms of culture and civilization. (Trova, 2003:188)

However, both inclusion, as well as safeguard, visibility and balanced exploitation of opportunities that inclusion offers, require not only the institutional and active engagement of states and stakeholders, but, above all, a substantial investigation of the needs, the views and expectations of local communities, which are directly interdependent with the monument in situ. Especially World heritage sites of particular ethnographic nature, as evidenced through Hollókő's case study, due to the fact that their symbolic and exceptional cultural value is often disproportionate to their size or beauty (Shackley, 1998:205), given that is not limited to material/cultural expressions but also includes intangible cultural heritage, results to their inability to effectively and sustainably handle their new WHS and cope with the new consumer and tourist requirements or development opportunities, within the current context of an ever-more globalized and homogenized landscape.

We realize therefore that both the inclusion of monuments to the List and their subsequent viability constitute a dynamic, interdependent and constantly evolving and ongoing process, which requires, to be effective, constant vigilance, adjustment, awareness, attention and sensitivity, Unesco's holistic approach, substantial engagement on the part of states, but above all calls for primarily the dynamic cooperation and active involvement of local communities, which are interdependent on the monument in situ. Given that sustainable development tends to be synonymous, if not identical, with the successful coexistence and rational exploitation of unique and non-renewable natural and cultural resources, the deliberate desire to avoid the hitherto unprecedented changes and challenges in the social, cultural and environmental deterioration that the misguided management of the monument and the dynamic that inclusion on the WHL marks, must be a matter of top priority for development policy-making and enforcements at local, regional, national and international level.

### **Suggestions for a Sustainable Development Strategy of Modern and Postmodern Places through Cultural Tourism**

According to the definition of the UN and UNESCO "culture consists of a bundle of spiritual, material, intellectual and emotional features of society or a social group. It does not include only culture and science, but also modes of life, fundamental human rights, value systems, traditions and beliefs". According to the second definition adopted by the same international organizations, development is "a complex, comprehensive and multidimensional process, which extends beyond the mere economic growth and integrates all dimensions of life and all the activities of a community, all whose members are invited to contribute and should take advantage of its benefits". In other words, development is a cultural process, which cannot be imposed from outside, but must be created by the society itself, thus, automatically connects culture with development, and democratic participation of all active from the bottom to up.

The spirit that prevailed internationally underlying our study and suggestions as well, is that culture should be regarded as a source of self-renewal and gear change, as a body of moral, aesthetic and spiritual value that can add to economic activity some noble purposes rather than those which give the motive of profit, purposes which liberate man from poverty and ignorance, will stimulate creative trends and create new forms of solidarity between individuals, peoples and between man and nature.

The concept of culture in contemporary reality, includes not only the fine arts but also lifestyle, recruitment of history, the consciousness of society, as well as the development of technology. Therefore, the width of the field of cultural governance and cultural policy is directly linked not only with contemporary artistic creation, but also with other essential topics such as social inclusion and cohesion, cultural diversity, the revitalization of the area and the local development, the economy, education (a cultural society with active participation in events) as well as the development of cultural tourism.

The proposed strategy based on the integrated approach of the places through the analysis of the Hungarian research example and its development prospects, focused contemporary cultural identity and cultural heritage in the light of the overarching objective of sustainable

development, so that any options to support social and economic cohesion, economic development and environmental protection of the study area.

At this point, as we have seen in the research example of Tokay and Hollókő we clarify that the term cultural heritage includes the natural environment according to both the scientific theory of the cultural landscape and the most recent scientific theory which comes from the field of biology and natural sciences that defines the space as a single wholeness and attaches to the scientific terminology of “homoecosystem”.

The axes on which rests the integrated approach are:

- The characteristics of this cultural capital equipment tangible and intangible, that compose the separate identity of each city and constitute a comparative advantage for this.
- The relations of interaction and synergy between intercultural and overall cultural identity on the one hand and sectors of society and economy on the other.

It should be noted that this framework needs to be in close relationship and interaction with other features of the city and other policies that support its growth.

Two are the main features of the methodological approach taken in the proposed design:

The first feature relates to the integrated approach of the study area and the effort made for the interconnection of cultural resources with its development. This integrated approach is the result of the perception that recording, utilization and promotion of the cultural identity of the region is closely linked to its characteristics, the local economy and society, etc. and cannot be achieved without deepening to them. At the same time, this approach is necessary, so that any policy choices made for the promotion of the cultural identity of the region as a ‘development tool’, to take into account the physical, social and economic environment in which they will be required to be implemented.

The second feature concerns the effort to pursue broader consensus in decision making and policy development, through the promotion of participatory approaches, thus enabling all stakeholders, and citizens of the area:

- To gain ‘voice’ in the context of planning for the best use of the cultural heritage of their region,
- To provide a broad update in relation to the role of natural and cultural resources in the development perspective of their area,
- Be aware and understand the need for sustainable use of these resources,
- To contribute their ideas and personal experiences to create better and closer to the local natural, social, cultural and economic reality solutions for the exploitation of cultural resources,
- To promote and encourage to co-formulation of relevant policies for the utilization of cultural resources, which is essential for the successful implementation of these policies.

*Stage I*

At this stage the definition of the problem, of the target and sub-targets are set out in order to solve it, while deepening in the study area takes place for recording the status quo.

The objective refers to the recording of the cultural characteristics of the area that make up the cultural identity and using this as an 'enabler' for further development. Through the recording of these traits, the determination of the characteristics is sought to identify those components that make up the cultural identity (and diversity) and explore the comparative advantages of the region in this field.

The study of the existing situation is particularly important, as it will give the necessary information to deepen the state of the natural and human environment of the city, the resources available and the possibility to use them, etc.

Furthermore, emphasis is given at this stage in the investigation of the institutional framework for culture, which records the existing institutional framework at national and European level.

*Stage II*

At this stage structured alternatives for sustainable development on the basis of holistic human intercultural identity of any place, any city take place, which support the economic development of the region. These alternatives, then, are evaluated by a panel with a group of evaluation criteria, which 'measure' the efficiency of these solutions with respect to the targets they have set (impact on physical, social and economic profile of the city).

Within the framework of the participatory approach, workshops with agents and members of the local community take place, in which:

- Alternatives for the utilization of a specific intercultural identity of the area under discussion take place for the improvement, revision, etc., in order to improve the final version of these solutions through the integration in these views of ideas and visions of local society, and
- The criteria with which these alternatives will be evaluated are discussed but also their priorities, with a view that the final selection of evaluation criteria and priorities to reflect the choices and visions of the local community of any city.

The product of stage evaluation is the documented choice of a particular alternative, which is also proposed to implement the solution. Simultaneously, the attitudes of stakeholders towards a series of policy measures to implement this option are investigated, in order to make them more efficient in the implementation stage.

*Stage III*

The processing of information collected in the previous step leads to the final wording of the alternative plan for sustainable development for the city and the finalization of the policy measures to implement and is based on the visions and aspirations of the local community.

It is now widely accepted view that culture is an investment for society as well as a tool for communication, expression and social cohesion. In this direction, integrated actions may create networks and cells (clusters) between clubs, groups, and structures of local authorities of cities so that cultural resources to be tools for economic and social development with multiple benefits. It should be noted that the modern city is an open system of interaction with



other national global, international environmental conditions of globalization etc. so that any strategic plan for cultural and global sustainable development must be adapted to the horizon and perspective of the international arena. Accordingly, the use of new technologies is particularly important in order to have global diffusion and visibility.

In this design rationale, new technologies must exist as a separate action in formulating cultural policy. Its aim is the application of new technologies in the development and support of the cultural policy of the city as a development portal promoting cultural identity and cultural development with interactive character pages for display of cultural capital and other resources, etc. GIS applications smart city guides etc., lead to a creative development environment. Utilization and promotion of cultural resources, cultural monuments and sites of historic built environment, museums and other cultural and environmental resources, with new modern digital media technology, respecting the uniqueness and scientific analysis of data (multimedia, internet, virtual reality) may take place.

All actions and policy measures are finalized at this stage, both start and result in Ecumenical Culture and human identity as defined by the universal timeless values, the whole which is the component that runs vertically and horizontally throughout the proposed project. The actions and policy measures based on the logic of concentric circles whose center is the culture in all its manifestations.

Also, the design must be implemented in two time levels in historical time (cultural/natural heritage sites) and today in modern (contemporary cultural production and action) and the future. It is attributed to the scientific theory of cultural landscape ( Sauer, 1925, Berkeley School California 1925) and linking the past present and future of any city of any place.

Maybe all of the above seem like voices from the future, like innovative solutions but the coexistence of solidarity, participatory governance based on equality and recognition of human dignity and restore the harmony of the ecosystem in every part of the planet is our duty. All this is assuming the structural understanding that each of us and each element of each city each place, material or immaterial are both links of a chain that is called life, and the legacy we leave to future generations.

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*Chapter 10*

## **E-HOSPITALITY STRATEGIES ENHANCING COMPETITIVENESS: EVIDENCE FROM CHINA AND CENTRAL MACEDONIA, GREECE**

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### **ABSTRACT**

Hospitality businesses need to implement a number of strategies so as to compete successfully in today's tourism market. Among other tools, hoteliers can use information and communication technologies (ICTs) in order to attract more guests, ameliorate service quality, deliver exceptional guest satisfaction and increase revenues, as well as market share. This chapter investigates the needs and ICT tools used by the new tourists when searching, selecting and booking a lodging abroad. Furthermore, it explores what are the success factors on ICT and examines whether the ICT investments enhance competitiveness in the hospitality industry and to what extent. Based on the research findings, strategic proposals are addressed to the hotel managers towards enhancing the competitiveness of their property.

In order to achieve the research goals, the authors conducted two surveys: the first took place in China (which is a priority tourism market for many Mediterranean countries) and the second in Central Macedonia, Greece.

The results reveal that the needs and practices of the Chinese outbound tourists as it concerns the ICT tools are as follows: information about the destination should be in the Chinese language and listed preferably in 'Baidu', a superior search engine for Chinese netizens; The majority of the Chinese tourists (88.27%) are using Chinese OTAs (online travel agencies) when searching/booking hotels; The most preferred social media in China are QQ, Weibo and WeChat; Most tourists (51% of the sample) are satisfied when searching and purchasing tourism services from the Internet.

On the other hand, the findings show that the top 5 ICT systems considered the most critical to success for the Greek hotel managers are: guest security systems; website development with booking engine; on-line guest satisfaction evaluation; high-speed/WiFi Internet; and, the property management systems. Furthermore, adequate (more than 5%

of annual capital expenditures) and proper investments in new technology systems enhance the hotel competitiveness in terms of efficiency, effectiveness and profitability.

A content analysis and online survey conducted in China, as well as a competitive analysis in the area of ICT and the application of both benchmarking and empirical analysis for the hotel economic assessment in North Greece, are among the main contributions of this chapter. The findings and proposed analyses can help hotel managers evaluate and compare their property with the competitive set as well as utilize the suggested strategies in order to improve the competitiveness of their property and become more active players in the tourism market.

**Keywords:** Information and communication technologies, e-hospitality, Chinese new tourists, competitiveness, tourism destination, Greece

## INTRODUCTION

According to the latest data (Tourism Review, 2014), since 2012 China has become the number one source market and Chinese tourists have remained the leader buyers in the world with a record of more than USD 102 billion spent on international tourism, contributing 30% to the international tourism avenue (Dai, 2014). The Hurun Report on the Chinese Luxury Travellers conducted by Hoogewerf (2013) shows that the average spent of the Chinese outbound travellers reached USD 6,000 per person for a single trip. In 2013, 97 million Chinese travelled abroad and is expected to surpass 100 million in 2014 (China Daily, 2014). It is estimated that China will become the largest tourism outbound market in the world by the year 2020 (United Nations World Tourism Organization - UNWTO, 2009).

The new Chinese tourists (Arlt, 2006) are travel-savvy and well-educated, who prefer not to follow the rushed trips as most of the tour groups do, but slow down to explore more specific regions and activities (China Outbound Tourism Research Institute Report, 2014). These new Chinese tourists are mostly linguistically competent and technologically capable. A recent study by the Boston Consulting Group (2013) revealed that the new Chinese travellers prefer self-organized travelling to niche and less-known destinations through researching and educating themselves about destinations online (Threnhart, Chang and Arlt, 2012) and are fascinated with sharing their travelling dairies via a variety of social media. Empowered by the dramatic evolution of information and communication technologies (ICTs), Chinese new tourists are looking for unique experiences and authenticity of destinations (Cox et al., 2009). To attract the 485 million internet users in China (also potential consumers, more than the entire population of Europe), a further understanding of what they need, as well as how to meet their needs bring huge opportunities and challenges to the hospitality industry.

On the other hand, Greece has a long tradition in tourism and hospitality mainly due to its history and ancient civilisation. A land of rich economic, religious and intellectual activity for more than three and a half millennia; geographically spread on an archipelago of more than 2,500 islands; located at the south-eastern corner of Europe, inevitably stimulated travel activity since the beginning of recorded history. In modern times, a dramatic increase of tourism flows to Greece was experienced, facilitated by plenty of natural, cultural and environmental resources (Buhalis, 2001).

In 2012, the country welcomed over 16,5 million tourists and was in the 17th position as regards the number of international tourist arrivals and 23rd as regards the international tourism receipts (UNWTO World Tourism Barometer, 2013). These data prove that the Greek tourism is one of the few sectors of the national economy that is competitive at a global level (SETE, 2013).

China is a market of high interest for Greece and its hospitality sector (ICAP, 2012). Furthermore, Greece aims to make Central Macedonia an irresistible attraction for tourists (GTP, 2014). Central Macedonia, located in the country's Northern part, is the second most populous region in Greece after Attica and includes two popular tourism attractions, namely the city of Thessaloniki and the Chalkidiki peninsula.

Hospitality businesses in Greece and all other worldwide tourism destinations need to follow a number of principles in order to compete successfully in today's tourism market place. These principles include: put guests first and ensure they feel important, special and comfortable; be a leader in quality; develop radical innovations; and, strengthen the hotel's strategic position within the industry (Poon, 1993; Hayes et al., 2011). Information and communication technologies help the accommodation sector reach two of the main goals of a hotel: to deliver exceptional guest satisfaction and increase profits. The hotels that will be successful in the next few years are the ones that do everything possible to satisfy their guests and offer high-tech yet high-touch services (Walker, 2010).

The purpose of this chapter is threefold:

- a. To explore the new needs of the Chinese outbound tourists concerning the use of ICTs when searching for accommodation abroad (demand side);
- b. To investigate the as-is situation in Central Macedonia, Greece of how ICTs are adopted to enhance competitiveness in the hospitality sector and to what extent (supply side);
- c. To propose strategic suggestions to the accommodation sector, specifically in the field of ICTs towards achieving competitiveness and attracting new guests.

After extensive literature review, the authors found out that the above facts are missing from the contemporary literature and thus, content analysis and surveys were conducted both in China and Greece so as to identify answers to the research problem. The applied methodological approach is illustrated in Figure 1.

This chapter is divided into the following five parts: the Literature Review (part one) introduces the theoretical background of the research, which justifies the research methods followed. Part two (Methods and Results) analyses the followed steps for: understanding the needs of Chinese new tourists; identifying the ICTs enhancing competitiveness in the hospitality industry of Central Macedonia, Greece; and, investigating whether the Capital Expenditures on ICTs have created a competitive advantage in the accommodation sector of the same region. Part three (Research Findings and Suggestions) summarizes the research findings in both the demand side (China) and supply side (Greece) and includes the proposed strategic solutions for the hoteliers towards enhancing the competitiveness of their property in the area of ICTs. Part four (Limitations and Future Research) refers to the limitations that were faced during the research, and, finally part five (Conclusion) includes a summary of the chapter's principal results. The used References are quoted at the end of the chapter.

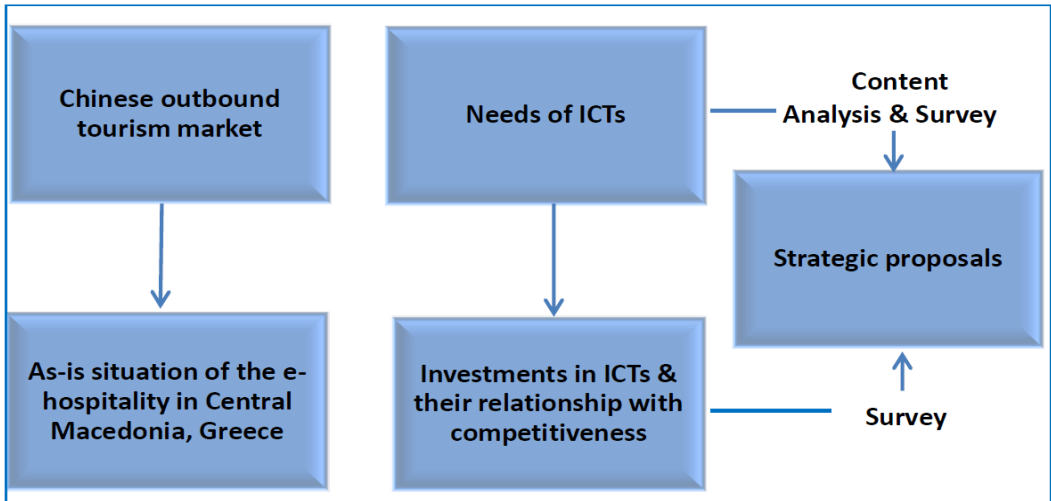


Figure 1. The methodological steps of the research.

## 1. LITERATURE REVIEW

### 1.1. e-Hospitality

Roger's theory (1983) in the *Diffusion of Innovation*, fundamentally supported any forms of ICT-applicable sectors, which answers the questions of how, why, and at what extent new ideas and technology spread throughout the social systems. This provided a theoretical background for the newly emerged phenomena, beginning with the divisions of e-business and e-marketing and later, in subdivisions of e-tourism/hospitality, e-government and e-learning, etc.

Organisation for Economic Co-operation and Development - OECD (2000) revealed that electronic business (e-business) offers considerable opportunities for firms to explore customer profiles, enter new markets and expand their business. World Tourism Organization (WTO, 2001) indicated that e-business particularly provided small and medium-sized enterprises (SMEs) the opportunity to undertake their business in a more cost-effective way.

Tourism and hospitality is an extremely information-intensive industry. The rapid development of ICTs facilitates the speed and efficiency with which the industry's information is processed, distributed and otherwise manipulated. There is no doubt that ICTs have contributed to the rapid growth of electronic marketplace (Salwani, Marthandan, Norzaidi and Chong, 2009), and assisted organization to manage operation systematically and enhance business competitiveness through promoting global presence and partnership around the world in an efficient manner (Law, Leung and Buhalis, 2009).

ICTs have been applied in tourism since the early adoption of Computer Reservation Systems (CRS) in airlines in 1950s and in Global Distribution Systems (GDS) in the 1980s. Then the application in hospitality mainly linked to Property Management Systems (PMS) and hotel Customer Relationship Systems - CRS (Ma, Buhalis and Song, 2003).

ICTs are essential for the hospitality sector to enhance its competitiveness and proficiency. To this direction, it is critical for an economy and a business to adopt existing

technologies in order to enhance productivity by fully leveraging ICTs in daily activities and production processes for increased efficiency and competitiveness (World Economic Forum, the Global Competitiveness Report 2011-2012).

According to Nyheim, McFadden and Connolly (2005), hospitality firms can use technology in order to: lower their cost structure; increase revenues and market share; create unique value propositions for guests; and create unprecedented returns for investors. The kinds of technology used throughout the hospitality industry vary widely depending upon the size and type of hotel. Hotel back-office systems are becoming increasingly sophisticated and are widely recognized as being a key to improved profitability. Moreover, in-room technology is rapidly becoming a very real competitive differentiator (Inkpen, 1998).

Based on the traits of the hospitality and functionality of ICTs, the authors developed an understanding of three interactive domains contributed to the nature and concepts of e-hospitality, which are:

Hospitality: e-hospitality is a comprehensive electronic focus on lodging establishments, centred on tourists and covering all functional areas of the hotel (e.g., rooms, front office, back office, food and beverage operations, sales and marketing, entertainment facilities, etc.)

Business: e-hospitality is a business activity, particularly e-business, embracing all business functions, e.g., e-commerce, e-marketing, e-finance, etc.

ICTs: e-hospitality adopted ICT techniques to operate its business activity in a hotel context to satisfy tourist customers. It is digitalized and reengineered by ICT tools.

Thus, the authors define e-hospitality as a *digitalized interaction between tourists and hospitality industry within a lodging infrastructure, and among its alliance partners.*

## 1.2. The Effects of ICTs in the Accommodation Services

Wigand (cited in Werthner), has depicted the value or profit impact of IT not as direct, but as indirect, meaning that it occurs via the improvement of business process. This makes it difficult to measure improvements in productivity. The direction of change has to be aligned with the business strategy, which by itself is affected by the enabling potentials of IT (Werthner, 1999).

In hotel business, technological change means investing in new techniques with the aim of improving results. Information Technology (IT), such as the Internet, intranets, and central reservation systems, is one of the crucial technology investments that are often made by hotels to improve performance (Tsai, Song and Wong, 2009).

Several studies have identified a positive and significant relationship between the use of IT and the development of a competitive advantage (Siguaw, Enz and Namasivayam, 2000). Nyheim, McFadden and Connolly (2005) define competitive advantage as a property's (or chain's) ability to attain and maintain a strong bottom line. Furthermore, IT decisions can play an important role in areas such as employee productivity, revenue enhancement and guest service (Siguaw, Enz and Namasivayam, 2000).

Ham, Kim and Jeong (2005) examined the effect of IT applications on the performance of lodging operations. Their findings indicate that the installation of computer applications in

the front office could improve hotel performance. Although installing back-office applications may not contribute to the improvement of hotel performance in the short-term, it does help with the improvement of the hotel's long-term productivity. Moreover, their study showed that restaurant and banquet management systems have a significant impact on the performance of the hotel operation.

At European Union (EU) level a survey by e-business w@tch (2006) provides evidence for a high ICT impact on the organization of internal work operations, services and supplies of the tourism companies. More specifically, the survey revealed that the percentages of tourism companies observing a positive influence of ICT in various business areas are as follows: revenue growth 51%; business process efficiency 57%; internal work processes 63%; procurement costs 37%; product/service quality 41%; customer service 53%; and, productivity 58%.

Data from another survey show that over the past few years an increasing share of total turnover for accommodation services is generated via internet (ECORYS, 2009).

Jonsson and Devonish (2009) found out that among the used competitive strategies, the *leveraging information technology to deliver value* was ranked as the most important competitive strategy used in their total sample. Moreover, Scholochow, Fuchs and Hopken (2010) presented a data envelopment analysis model in order to investigate ICT's efficiency and effectiveness in the Austrian hotel sector. Their results show that the impact of ICTs on productivity gains is positive and significant.

As it regards the penetration of ICTs into the Greek accommodation sector, a field research in hotels in 2007 (sample of 250 hotels) has shown that the computer usage in the Greek hotels was 78%, whereas the Internet usage was 74%. The ICT profile of the hotels was as follows: proprietary website 63% of the sample; participation in an advertising website 46%; on-line procurement 19%; on-line sales 50%; use of ERP systems 11%; use of CRM (Customer Relationship Management) 13% (Observatory for Digital Greece, 2007 and 2009).

Another research carried out in 2008 by the Research Institute for Tourism (sample of 289 small and medium size hotels) found out that the 83.4% of the hotels used the Internet for room reservations, with the average percentage of reservations being 10%. The percentage of hotels that have a website was 88.9% and from the rest of the properties (11.1%), that do not have a website, the 68.8% intended to develop one in the near future. The same study revealed that from the 51.2% of the hotels programming to make capital expenditures, the majority (34.8%) intended to invest in room renovations and only the 12.2% planned to invest in new technologies.

### **1.3. Competitiveness**

The competitiveness of a country derives from the performance of its businesses which include the hotel enterprises (Barros, 2005). While a community's growth stimulates hotel performances, in turn hotels contribute to the community's economic, social and cultural development (Go, Pine and Yu, 1994). There are many other factors (e.g., input, process, output and outcome) that determine the hotel industry's competitiveness (Tsai, Song and Wong, 2009; Roy, 2011).

The factors considered to be important for the hotel competitiveness are the following: strategic decisions (Wong and Kwan, 2001; Hwang and Chang, 2003); marketing (Keh, Chu



and Xu, 2006; Brown and Ragsdale, 2002), including city promotion initiatives and city knowledge networks that can become an effective tool for the competitiveness of hotels (Navarro and Martinez-Martinez, 2011); consumer satisfaction, service quality and pricing; technologies and innovation (Barros and Alves, 2004); operational (in particular environmental and energy) costs (Barros, 2005); strategic alliances with competing firms (Tsai, Song and Wong, 2009).

According to Olsen, West and Tse (1998); Tsai, Song and Wong, 2009); Navarro and Martinez-Martinez (2011); and, Roy (2011), the major determinants of hotel competitiveness are: location; technology; human capital, education level and training; strategies; productivity; capital; guest satisfaction-service quality; brand image; strategic alliances; strategic investments; operational efficiency; market conditions; demand conditions; pricing; niche marketing; process management.

In this chapter, competitiveness is seen as *involving elements of productivity, efficiency, effectiveness and profitability.*

## **Productivity and Efficiency**

*Productivity* measures how well production processes transform resource inputs into outputs and it is the quotient between output(s) and one, more or all inputs used in a production process (Keh, Chu and Xu, 2006). Hotel productivity includes efficiency, effectiveness, quality and predictability (Tsai, Song and Wong, 2009). Service firms can increase productivity in four ways: by improving their labour force through better recruiting or more extensive training; by investing in more efficient capital equipment; replacing works with automated systems; recruiting consumers to assist in the service process (Lovelock and Young, 1979).

*Efficiency* is connected to how input resources are utilized and is achieved when the marginal productivity per unit is equated across all resources that contribute to a firm's output (Keh, Chu and Xu, 2006). Tangen (2004) describes efficiency as 'doing the things right' and according to Walker (2010) efficiency is 'getting the most done with the fewest number of inputs'.

## **Effectiveness and Profitability**

*Effectiveness* is concerned with determining which strategy – among all possible strategies – maximizes long-term Return on Investment - ROI (Keh, Chu and Xu, 2006). According to Tangen (2004) and Walker (2010) effectiveness is doing 'the right thing' (e.g., reaching the strategic goals).

*Profitability* on the other hand is the efficiency of a hotel company at generating earnings. So to speak, profitability illustrates how well the management makes investment and financial decisions to generate profits. Profitability ratios are often used to measure how effectively a company's management is generating profits on sales, total assets and stockholders' investments (Moyer, McGuigan and Kretlow, 2001).

#### **1.4. Capital Expenditures for Technology and Their Impact on Competitiveness**

Hotels normally reserve at least 4% of gross revenue for new furniture, fixture and equipment, technology upgrades and new mechanical systems. Nevertheless, the 4% reserve is not enough to meet the true capital requirements over a longer-term basis and each hotel should reserve approximately 8-9% of revenue each year for capital expenditures and repair & maintenance costs combined (Simon, 2009).

A study called 'CapEx on hotel Capital Expenditures' carried out in the USA concluded that full-service hotels averaged 6.88% of gross revenues on CapEx from 1983-1993. The average CapEx for all hotels was 5.77% of gross revenues over 25 years. The same study showed that in the full-service hotels the breaking down of CapEx into components is as follows: rooms and corridors 40%; food and beverage 15%; other public space 15%; building 15%; other 7%; technology 5%; ADA/Life safety 3% (Berg and Skinner, 1995).

Based on the CapEx 2007 study of capital expenditures in the hotel industry, the Furniture Fixtures & Equipment (FF&E) expenditures by property age per available room in the full service hotels are as follows: for properties < 5 years old: 2.3% of gross revenues; from 5-15 years old: 3.5%; > 15 years old: 5.4%; overall: 5.1% (Stanford, 2008).

Armijos, DeFranco, Hamilton and Skorupa (2002) studied technology investments in the lodging operations and found out that the average capital expenditures for technology as a percentage of total revenues increased from 4.26% in 2000 to 4.98% in 2001, while technology operating expenditures as a percentage of total revenues increased from 5.59 to 6.26% in the same period.

Based on the theoretical background, the methodological framework is outlined in the next part. The objectives of the research are: to investigate the changing needs of the Chinese new tourists concerning the use of ICTs when searching or booking their accommodation abroad; to explore the as-is situation of what/how ICTs are invested in the hotels of Central Macedonia, Greece; and, the measurement of the competitiveness and the opportunities and challenges ICTs bring to meet the needs of the Chinese tourists. On the basis of these understandings, strategic proposals are put forward to suggest the Greek hospitality sector in order to take a more active role in the Chinese outbound tourism market.

## **2. METHODS AND RESULTS**

For the achievement of the research goals, the authors conducted two surveys with both qualitative and quantitative nature: the first took place in China (which is a priority tourism market for many Mediterranean countries) and the second in Central Macedonia, Greece. As it is shown in the methodological approach (Figure 1, Introduction), three major steps are followed in the context of the research:

## 2.1. Understanding the Needs/Practices of Chinese New Tourists Concerning the Use of ICTs

In this step, the purpose of the research is to understand: a) the search engines that Chinese tourists are using when searching information about a tourism destination; b) the websites they are using to search or book hotels; c) the preferred social media in China; and, d) the satisfaction degree of Chinese customers when searching and purchasing tourism services through the internet.

Thus, an on-line questionnaire was designed and distributed at random in the area of the mainland of China during September, 2013 - February 2014. From the 717 responses obtained, 716 are believed as effective samples. The main objectives of the questions were to provoke detailed answers and specifically to target: the preferred search engines that are used by the Chinese netizens (Internet citizens); the websites that the Chinese tourists often use to search and book tourism services before, during and after their travels; the social media that are dominant in knowledge/information communication and sharing; and to what extent the Chinese customers are satisfied with searching and purchasing tourism services through the internet.

The demographic features of the Chinese new tourists are included in the Table 1 and the rest of the findings are shown in the Tables 2 and 3.

**Table 1. Profile and description of the sample**

Demographic features of the Chinese New Tourists ( <i>N</i> =716)	
Gender	Male (36.69%); Female: (63.31%)
Age	18-24 years: (49.6%); 25-34 years: (30.38%); 35-44 years: (17.07%); Older than 45: (2.59%)
Permanent residence	South West: (55.91%); Eastern China: (25.10%); Northern China: (7.04%); Other: (11.95%)
Occupation	Students: (42%); Private sector: (27%); Public sector: (25%); Freelancers and Unemployed: (6%)
Highest education	Bachelor: (61.65%); Master: (17.85%); College: (8.23%); PhD: (5.86%); Other: (6.42%)
Monthly income	2.001-7.000 Yuan: (40.45%); Less than 2.000 Yuan: (40.03%); More than 7.000 Yuan: (19.53%)

Note: One Euro is equal to 8 Yuan.

Source: Authors' own elaboration.

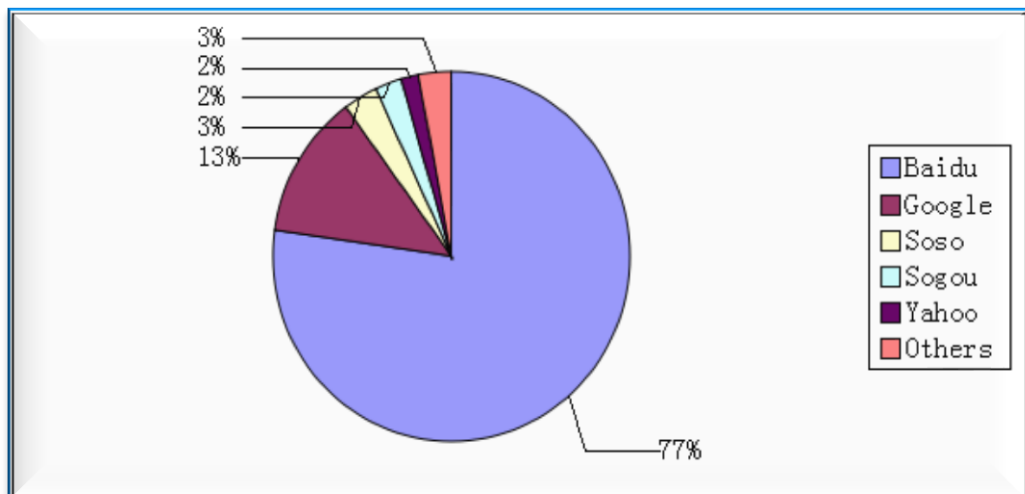
In summary, among the total population of the 716 respondents, the data collected depict a young, affluent, well-educated segment with a tendency of female and non-first-tier city residents. Based on the survey and a comparison with the existing literature, the rest of the results are as follows:

### 2.1.1. The Search Engines that Chinese Tourists Are Using when Searching Information about a Tourism Destination/Booking Tourism Services

It is known that the top three search engines in the world are Google, Yahoo and Baidu, which respectively covered a market share of 67.5%, 7.8% and 7.0% in 2012. However, according to the figures in the same year from comScore, an American-based Internet analytics company which is globally-recognized in measuring the preferred source of digital business, Baidu is the dominant search-engine in China. The percentage of user preferences is shown in Figure 2.

Chinese people have been getting used to 'Baidu' ([www.baidu.com](http://www.baidu.com)) instead of 'Google', because Baidu is the biggest Chinese language website and search engine in the world for websites, audio files, and images search. Particularly after Google company quit offering a censored 'Google.cn' search engine to the Chinese market in 2010, Baidu became the local search leader in China and a superior search engine for Chinese netizens, which offers online encyclopedia in Chinese language (Baidu Baike, similar to Wikipedia), a keyword-searchable forum (Baidu Luntan), mobile search applications, and multimedia content such as music, clips, maps, videos and movies, etc.

As the first Chinese company included in the National Association of Securities Dealers Automated Quotations (NASDAQ)-100 in 2007, the internet-search revenue share of Baidu reached 76% in China in 2011, and ranked 5th in the Alexa Internet rankings in the world. 'Baidu Knows', the biggest knowledge-share community in the world with 10 million daily visitors, is an extremely active Q&A (question and answer) platform for Chinese netizens, which generates 71.308 questions and 223.907 answers every day, among which 50.7% are queries for knowledge and information. During the process of each Q&A, 3,14 users are involved to exchange and share information and knowledge. It is significant to notice that the Q&A about travel and tourism is listed in the top 10 Q&A categories (Research Report of Chinese Online Searching Behaviour, 2013).



Source: adapted from [www.comscore.com](http://www.comscore.com).

Figure 2. The preferred search engines in China.

### 2.1.2. The Websites that Are Used to Searching or Booking Tourism Services

The development and impact that ICTs brought to tourism industry is not a new issue in the global world, however it was not clearly defined in China till the last decade (CNTA, 2013). e-Tourism was officially termed as tourism e-business in China (Lew and Yu, 1995), emphasizing it was originally derived from the existing e-business behaviours and measures.

According to the Developmental Report of China Tourism e-Business (CNTA, 2011), an increasing number of Chinese tourists tends to search information from the websites of the major well-recognized online travel agencies (OTAs) to self-organize their independent travels, including booking air tickets, hotels and searching for tourism information.

When asking the question about the websites that Chinese tourists are using to search or book hotels, Content Analysis is used, which emerged in 1920s and was often adopted in tourism research (Stepchenkova, Kirilenko and Morrison, 2009). Holsti (1969) generalized Content Analysis as any technique which makes inferences via objectively and systematically identification of specified characteristics of messages. It is a widely-used method to contextualize interpretation of documents produced during the processes of communication using manual or computer techniques (Krippendorff, 2008).

The answers of the respondents in the above question of the survey are as follows: 571 (79.74%) have had the experiences of using ICTs to search or book hotels, who generated 740 responses which are incorporated into three broader categories, namely Chinese online travel agencies (OTAC), foreign OTAs (OTAF) and company/hotel official websites. The issue concerns about the ICT tools that the Chinese tourists are often used to search for or book hotels, is shown in Table 2.

**Table 2. Websites that Chinese tourists are using to searching or booking hotels**

Booking From:	OTAC	OTAF	Company Website	Total
Respondents	504 (88.27%)	94 (16.46%)	14 (2.45%)	571
Responses	601 (81.22%)	123 (16.62%)	16 (2.16%)	540

Source: Authors' own elaboration.

All the received answers were coded (e.g., 1= OTAC; 2= OTAF; 3=Company website), and the percentage of the respondents and the corresponding answers which belong to the specific categories were calculated as follows:

504 respondents (88.27%) generated 601 (81.22%) responses, which mentioned the first category, meaning that the majority of the Chinese tourists are using Chinese OTAs (e.g., Ctrip, Qunar and Mango) when searching/ booking hotels;

94 respondents (16.46%) gave 123 answers (16.62%) of the second category, who favour foreign OTAs to search or book hotels (e.g., Booking.com, Agoda); and,

Only 16 responses (2.16%) from 14 respondents (2.45%) selected the third category, namely the company/hotel website.

These figures indicate that the Chinese new tourists are more familiar and feel more comfortable to use the websites of Chinese OTAs rather than foreign OTAs to search or

purchase hotel products. A very small number of them book hotels directly from the hotel websites.

### 2.1.3. The Preferred Social Media in China

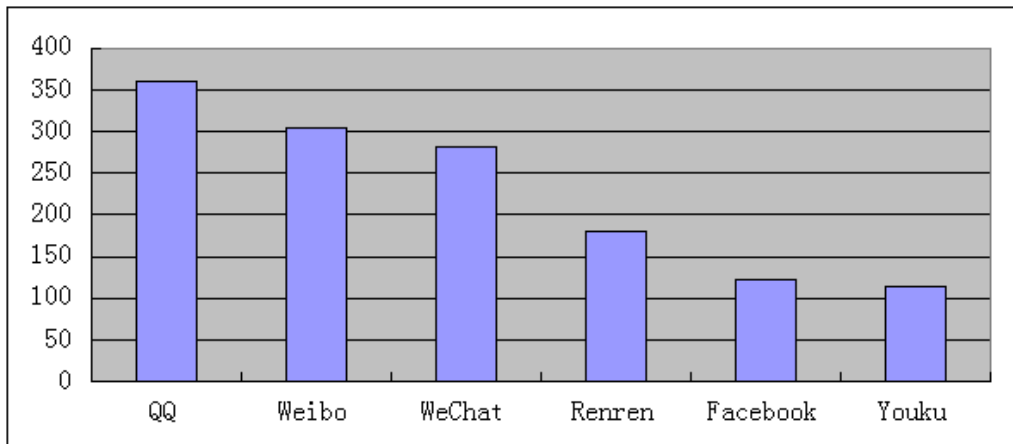
The leading global information and measurement company Nielsen (2012) divided the major Chinese social media into three types, which are Microblogging (termed as Weibo in China), Social Networking Service (SNS), and Location-Based Services (LBS).

It is found that 97% Chinese netizens are Weibo users, 70% are using SNS and only 10% users for LBS, among which 66% are both Weibo and SNS users (Nielsen, 2012). According to Nielsen (2012), the top nine purposes of using social media in China are the following:

- Communicating with friends;
- Leisure and entertainment;
- Acquiring news and information;
- Sharing news;
- Sharing photos;
- Sharing videos;
- Learning about products;
- Finding good restaurants;
- Needs for work and jobs.

The above facts imply that personal experiences (particularly for fun) are largely communicated and shared anonymously or with real names through Weibo and SNS. Based on these findings, the authors provided the recipients of the questionnaire with three types of social media options which are often used in China (Weibo, SNS and LBS). The answers of the respondents are shown in Figure 3.

From these social media only Facebook is based in the US, the rest are all Chinese companies.



Source: Authors' own elaboration.

Figure 3. The preferred social media in China.

According to a recent research conducted by iResearch Consultancy (2013), a research company focusing on China's internet industry, it is necessary to understand what these Chinese social media are, and how Chinese new tourists are significantly influenced by them.

Till the end of August 2013:

QQ which functions as both SNS and Weibo, is an instant message program, which has 818 million monthly active users;

Weibo is a micro-blogging service, which has two major service providers in China, namely Sina and Tencent, which respectively cover 536 million and 507 million users;

WeChat used as a SNS, is a mobile text and social message communicative service, which has 600 million users, not including its 100 million oversea users;

Renren, a social networking service, has 280 million registered users whose monthly PC and mobile active users are 110 million and 26 million respectively.

Youku is a SNS which is used as online video hosting service with an average 14,71 million unique visitors (UV), and 200.000 million video visitors (VV) per day.

#### ***2.1.4. The Satisfaction Degree of Chinese Customers When Searching and Purchasing Tourism Products/Services through the Internet***

A five-point Likert Scale ranged from strongly disagree to strongly agree was employed to test the level of agreement or disagreement of the experiences of searching and purchasing tourism products/services through the internet.

The responses show that a large proportion of respondents agreed on the following: purchasing tourism products/services online provides better price (48% of the sample); the experience of online purchasing is enjoyable (41%), convenient (74%) and time-saving (65%) particularly when they have a credit card and limited time. Moreover, most of them (54%) are satisfied with their pre-experiences of on-line purchasing of tourism products and services. All the data were processed by SPSS 17.0, and the summarized results are shown in Table 3.

**Table 3. The attitudes and satisfaction of on-line searching and purchasing tourism products/ services**

Descriptive Statistics				
	N	Mean	Std. Deviation	Variance
Satisfaction on Products/Services	716	3.54	.681	.464
Satisfaction on Products/Services Purchasing Experience	716	3.53	.673	.454
Satisfaction on Products/Services Content Presentation	716	3.47	.710	.504
Satisfaction on Products/Services Purchasing Decision Making	716	3.55	.681	.463
Valid N (listwise)	716			

Source: Authors' own elaboration.

From the means of the four issues about the satisfaction on products, products purchasing experience, products content presentation and products purchasing decision making, the results obtained are between 3.0 - 4.0, which indicates that the attitudes of the respondents tend to be positive.

## 2.2. Identification of ICTs Enhancing Competitiveness in the Hospitality Industry of Central Macedonia, Greece

The aim of this second survey carried out in Greece is to explore what are the success factors on ICT in the hospitality industry, as well as to examine whether the ICT investments made by the hotel sample enhanced their competitiveness and to what extent.

### 2.2.1. Data Collection and Sample Characteristics

The nature of this study requires a plethora of input as well as a long-term (2005-2010) investigation into sensitive areas of the hotel's management, such as efficiency and profitability. Due to this fact, the data were collected both through questionnaires and in site visits to the hotels for direct collaboration with their managers and executives whenever this was necessary. Moreover, an extensive elaboration of data published in several sector studies and financial directories took place so as to calculate indicators and industry averages.

The survey was conducted from January to September 2013 and the hotels of the sample are located in Central Makedonia, Greece and more specifically in Thessaloniki and Chalkidiki. The authors selected Thessaloniki and Chalkidiki for the survey for the following reasons: Thessaloniki is the second largest city of Greece and has very good upper class hotel infrastructure. The city has the potential to develop as a city break destination and China (as well as the whole Asia and Pacific region) is expected to play a more active role towards this goal. Thessaloniki's international airport "Makedonia" has the ability to serve more than 4.000.000 passengers per year (Patikas, 2013). The number of international tourist arrivals at the airport was 1.352.018 in 2013 and during the last years this number has an increasing tendency (SETE, 2013).

On the other hand, the Chalkidiki peninsula is one of the key tourism destinations in Greece and it is located in close vicinity to Thessaloniki. This fact provides the possibility to the travellers to visit both Thessaloniki and the beaches of Chalkidiki during the same trip. The area has a considerable number of resort hotels by the beach and more than one third of its hotel capacity belongs to the luxurious and high class lodgings, which as generally admitted, keep reliable and well-organized records.

**Table 4. Hotel capacity in Thessaloniki & Chalkidiki**

Hotel classification	Nr of hotels	Nr of rooms	Nr of beds
5*	32	5.078	10.272
4*	64	7.511	14.416
Total 5 & 4-star hotels	96	12.589	24.688
Total (all hotel categories)	665	31.304	60.665

Source: Association of Greek Tourism Enterprises.

Note: The 5 & 4-star hotel beds are the 40.7% of the region's total hotel bed capacity.



The Table 4 above includes data concerning hotel capacity in Thessaloniki & Chalkidiki.

The questionnaire developed for the study was sent to all 96 upper class hotels of Thessaloniki and Chalkidiki. Since some hotel managers were not willing to share their financial data, twenty four questionnaires were not answered and the sample consists of 72 hotels (75% of the total 96 four and five-star hotels operating in the region). Some of these hotels belong to the same company or group of hotels, and they publish consolidated balance sheets and performance data. The personal contacts for obtaining or clarifying the ICT, performance and financial data included collaboration with each hotel's general manager, as well as the financial, ICT, sales & marketing and human resources manager (a total of 360 executives).

The questions included in the questionnaire can be classified into four basic groups:

- a) The hotel basic characteristics, such as: location, classification, bed capacity and ownership;
- b) The contemporary technology systems used by the property and which of them are considered to be the most critical to success for the hotel;
- c) The capital expenditures made by the hotel for ICT investments over the period 2005-2010; and,
- d) The property's economic data and performance for the same period.

### 2.2.2. Profile of the Sample

The sample consists of 4 and 5-star city and resort hotels; all the hotels offer a big variety of food and beverage services and are managed directly by the ownership and not by third-party professional companies. The synthesis of the sample is shown in the Table 5:

**Table 5. Synthesis of the sample**

Number of Hotels	Classification	Location	
		City	Resort
27	5*	11	16
45	4*	15	30
Total: 72		26	46

Source: Authors' own elaboration.

### 2.2.3. Determining the Sample's Success Factors on ICTs

Critical success factors are those activities that a company must do well to be successful. Among the possible hotel critical success factors (in the area of ICTs) are the following: added-value facilities in guest rooms, central sales or reservation system, customer surveys and feedback, guest security, etc. (Brotherton, 2004).

The ICT success factors should be effective technology tools towards attracting more new guests and retaining the existing ones, thus contributing to the hotel's prosperous operation and performance.

In order to identify the sample's most critical success factors concerning the application of contemporary technology systems, a competitive analysis was conducted by entering the collected data in the Hotel Competitor Analysis Tool (H-CAT): a Strategic Positioning Tool

for Managers (Enz and Thompson, 2011). This tool is an Excel spreadsheet and the analysis concerned the ICT assessment of the hotels that compose the sample.

The results of the analysis show that the ICT factors (and their weight) considered to be the most critical to success for the hotels in question are (Table 6):

**Table 6. Hotel critical success factors in the area of ICT**

SN	FACTOR	WEIGHT % (respondents average)
1.	High-speed/WiFi Internet	10
2.	Website development with booking engine	15
3.	Guestroom phones with automatic features	5
4.	Smart-cards applications	8
5.	In-room media devices	5
6.	Guest security systems	20
7.	On-line guest satisfaction evaluation system	12
8.	Points of Sales system	7
9.	Intranet and extranet technologies	8
10.	Property Management Systems	10
TOTAL WEIGHT:		100%

Source: Authors' own elaboration.

The hotels of the sample are used for further analysis and study aiming to test whether their capital expenditures (CapEx) in new technologies have enhanced, over the years, their competitiveness and performance.

### **2.3. Investigation if the Capital Expenditures on ICT Create a Competitive Advantage**

Given the ICT-intensive nature of hotel businesses, the next methodological step is to investigate whether the level of capital expenditures on ICT made by the hotels of the sample over the period 2005-2010 have created a competitive advantage in relation to:

- a. Their direct competitors (the other hotels of the sample located in the same area and belonging to the same class); and,
- b. The upper class Greek hospitality industry in total.

Towards this goal, the authors quote the sample's average percentage of CapEx for ICT investments during 2005-2010 (Table 7), as well as the sampled hotels' key facts and the respective industry averages (Table 8) for the following economic performance indicators:

Labour Productivity.

Efficiency indexes: Return on Equity and Return on Capital Employed.

Effectiveness: Annual occupancy; Turnover; Revenue per Bed, and

Profitability indexes: Margins of Gross Profit, Operating Profit, Net Profit and EBITDA.

Moreover, benchmarking and empirical analysis is used for the comparison of hotels and for the assessment of their performance.

### 2.3.1. ICT Investments of the sampled hotels

The Table 6 below shows the average percentage of capital expenditures of the surveyed hotels for ICT investments over the period 2005-2010.

**Table 7. Average percentage of CapEx for ICT investments (%) 2005-2010**

Number of Hotels	Percentage (%) on CapEx
4	8.0
3	7.0
6	6.5
5	6.0
9	5.5
8	4.5
5	4.0
4	3.0
10	2.5
8	2.0
6	1.0
4	0.5

Source: Authors' own Elaboration

Note. This percentage includes the cost for purchase, installation, operation, maintenance, upgrade and training on ICT systems.

### 2.3.2. Economic Performance Indicators and Benchmarking

The *labour productivity* in the hospitality sector is measured by dividing the total revenue by the number of full-time equivalent employees (Walker, 2010). The authors adopt this simplified way of productivity measurement in order to be able to compare all the hotels of the sample by using the same standards.

The *efficiency* of hotel enterprises is assessed by using the indexes Return on Equity and Return on Capital Employed (ICAP, 2012). *Effectiveness* is evaluated by the hotels' operating performance. The hotel performance assessment methods include the following variables: average annual occupancy, turnover (sales) and revenue per available bed (Kasavana and Brooks, 2005). For the assessment of profitability the indexes of Gross Profit, Operating Profit, Net Profit and EBITDA margin are used (ICAP, 2012)<sup>1</sup>.

<sup>1</sup> Efficiency indexes:

$$\text{Return on Equity} = \frac{\text{PROFIT BEFORE TAX}}{\text{EQUITY}} \times 100$$

$$\text{Return on Capital Employed} = \frac{\text{PROFIT BEFORE TAX}}{\text{LIABILITIES}} \times 100$$

Profitability indexes:

$$\text{Gross Profit} = \frac{\text{GROSS PROFIT}}{\text{SALES}} \times 100$$

$$\text{Operating Profit} = \frac{\text{OPERATING MARGIN}}{\text{SALES}} \times 100$$

$$\text{Net Profit} = \frac{\text{PROFIT BEFORE TAX}}{\text{SALES}} \times 100$$

In order to assess the performance of the hotel companies, benchmarking process of their key performance indicators for the period 2005-2010 is applied. The average indicators of the hotel sample, as well as the respective industry averages are presented in the Table 8:

**Table 8. Sampled Hotels' Key Indicators & Industry Averages (Mean 2005-2010)**

Performance Indicator	Hotel Sample	Industry Averages (5* & 4* hotels)
Labour Productivity (€)	45.352	23.400
Efficiency	Return on Equity (%)	-1,55
	Return on Capital Employed (%)	1.32
Effectiveness	Average annual occupancy (%)	74.41
	Turnover (Mio €)	8.76
	Revenue per available bed (€)	7.688
Profitability	Gross Profit Margin (%)	15.065
	Operating Profit Margin (%)	-14.82
	Net Profit Margin (%)	-2.36
	EBITDA Margin (%)	5.32
Average Percentage of ICT on CapEx	4.0	N/A

Source: Authors' own elaboration.

### 3. RESEARCH FINDINGS AND SUGGESTIONS

After having studied and analysed the data resulting from the two surveys conducted, the main findings can be summarized as follows:

#### 3.1. Findings in the Demand Side (China)

##### *3.1.1. The Search Engines that Chinese Tourists Are Using When Searching Information About a Tourism Destination/Booking Tourism Services*

According to the latest reports the mobile search users in China are 365 million. It is important to notice that the growth of the mobile search users has reached 73.65 million (25.3%) over the end of 2012, which means the trend of search behaviour of Internet use has gradually evolved from personal computers to a mobile end.

Although several search engines are playing a more active role in everyday searching in China, such as Google, 360, SOHU, and SOSO, Baidu has undoubtedly become the dominant search engine for Chinese netizens since the last decade. Baidu and its self-related products (e.g., Baidu Baike, Baidu Luntan) provide netizens with abundant information and knowledge resources and is used by the 77% of the sample.

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$$\text{EBITDA} = \frac{\text{EBITDA}}{\text{SALES}} \times 100$$
 (EBITDA is the total resulting as the sum of Operating margin + Financial costs + Accounted depreciation costs).

### ***3.1.2. Chinese Tourists Are More Likely to Search/Purchase Hotels via OTAs Rather than Hotel Websites***

The majority of the Chinese tourists are using Chinese online travel agencies - OTAs (e.g., Ctrip, Qunar and Mango) when searching and booking hotels and only a very small number of them book hotels directly from the hotel websites.

### ***3.1.3. The Preferred Social Media in China***

Three types of social media are important for Chinese netizens to share news, information and knowledge, and to search for fun and entertainment, which are Microblog (termed Weibo in Chinese), social networking service (SNS) and location-based service (LBS). According to the answers obtained from the respondents in the research, the preferred top six social media are QQ (functioning as both Weibo and SNS); Weibo, Wechat (a SNS program), Renren (a SNS program), Facebook (functioning more like a SNS than a Weibo) and Youku (a SNS program, but specifically an online hosting service). It is worth mentioning that among these six preferred social media in China, only Facebook is an America-based platform, the rest are Chinese companies.

### ***3.1.4. The Satisfaction Degree of Chinese Customers When Searching and Purchasing Tourism Products/Services through the INTERNET***

The researchers included in the questionnaire four questions so as to understand the satisfaction degree of Chinese customers when making online searching and purchasing of tourism products/ services. These questions are: the satisfaction on tourism products and services; tourism products and services purchasing experiences; tourism products and services content presentation; and, tourism products and services purchasing decision making.

A five-point Likert Scale was appointed from 1-strongly disagree to 5-strongly agree, and the data were processed by a SPSS 17.0 program. The average means obtained are between 3.0 - 4.0, indicating that the attitudes of the respondents towards searching and purchasing tourism products/ services through the Internet tend to be positive.

## **3.2. Findings in the Supply Side (Greece)**

### ***3.2.1. ICT Factors (And Their Weight) That Are Considered to Be the Most Critical to Success for the Managers of the Sampled Hotels Are:***

- 1) Guest security systems 20%
- 2) Website development with booking engine 15%
- 3) On-line guest satisfaction evaluation system 12%
- 4) High-speed/WiFi Internet 10%
- 5) Property Management Systems 10%
- 6) Smart-cards applications 8%
- 7) Intranet and extranet technologies 8%
- 8) Points of Sales system 7%
- 9) In-room media devices 5%
- 10) Guestroom phones with automatic features 5%.

**3.2.2. *The Average Percentage of the Surveyed Hotels' ICT Investments on CapEx (2005-2010) Is 4% (45 Hotel Companies Have Spent Less Than 5% and 27 Have Spent More Than 5%).***

**3.2.3. *There Is a Positive Correlation between the Investments on Technological Change and the Enhancement of Competitiveness. More Specifically:***

Those hotels that have spent more than 5% of their capital expenditures on contemporary technologies the period 2005-2010, have increased competitiveness (efficiency, operating and net profit margin) compared to their competitors. There are 25 hotels in this category. Moreover, compared to the industry averages (5\* and 4\* hotels), the specific hotels have enhanced indexes in terms of efficiency, turnover, operating profit margin and net profit margin.

However, those hotels that have not invested enough in contemporary technologies (less than 5% of their CapEx) show declining competitiveness especially in terms of efficiency and profitability. The number of hotels belonging to this category is 45.

The 4 hotels that have spent on average 8% of their CapEx for ICT Investments have the highest economic performance indicators in terms of efficiency, effectiveness and profitability compared both to their key competitors in the area, as well as to the Greek industry averages.

The only exceptions to the above findings are two 5-star hotels which have invested in new technologies (more than 5% of their CapEx), but despite this fact they have negative economic results till 2008. Further investigation has shown that after this year, the specific hotels were absorbed by another company that after a huge increase in capital expenditures in 2009 appears to be profitable in 2010.

**3.2.4. *Labour Productivity***

The data show that in the case of some hotels, labour productivity is unusually high but their "profitability" margin is negative. The only possible interpretation for this phenomenon is that some companies employ a high number of foreign employees who are not registered with the local Social Security Organization. Since labour productivity is the quotient of total revenue by the number of (registered) employees, the result sometimes does not reflect reality.

**3.2.5. *Factors/Technological Systems Contributing to Competitiveness***

According to the management of the hotels having been found competitive on overall performance, the main factors contributing to the creation of their competitive advantages and the weighting index of each factor in competitiveness are the following: proper strategic decisions 30%; high standards of service quality & guest satisfaction 20%; well-trained & motivated staff 20%; continuous technology & innovation investments 20%; careful control of operational costs 10%.

As for the technological systems (and factors) that have contributed significantly to the creation of their competitive advantages, these are the following: Key lock System; High-speed/WiFi Internet; Website development with booking engine; Property Management and Human Resources Management system; Points of Sales system (PDAs included); In-room media devices including guest comfort and convenience features; Web based guest

questionnaires; Continuous training of staff on the use of technological systems, always towards guest satisfaction and offer of high quality services.

### **3.3. Strategic Proposals Enhancing Competitiveness in the ICTs Area of the Lodging Industry**

Based on the research findings, the following key success strategies emerged and are proposed to the hotel managers towards competitiveness enhancement of their business in the area of ICTs:

There were 618 million Internet users and 500 million mobile Internet users in China by the end of December, 2013. Among them, the number of the search engine users is 490 million. The search engines Baidu and Google are much more often-used by the Chinese netizens to search tourism information than other searching engines which focus on specific segment of online content (e.g., Ctrip, Booking.com). Therefore, working with these searching engines (particularly Baidu) in the Chinese language is crucial to win the visibility and increase the competitiveness of the hospitality companies. Besides this, to search in a way of questions and answers (Q & A) through Micro-blog like Weibo is increasingly popular in China to communicate and share information and experiences among groups with common interests. Therefore, to have a Chinese Weibo account will attract more followers and potential customers in China.

Hotels and OTAs should enter a new stage of collaboration to ensure that customers are happy and having a pleasant searching/booking experience. Through this collaboration, hotels are connected with the OTAs to offer better choices to the customers. It is important for hotels and OTAs to realize that they are serving the same customer. Of course the hotel revenue is different when the bookings are received through an OTA or directly on the hotel website. However, the commission that the OTAs charge should be considered as a necessary marketing expenditure, because guests are always looking for the best deals on the OTA sites. Working with Chinese OTAs and China-based OTAs will help to increase visibilities and opportunities. A user-friendly booking experience introducing real-time rates and packages and a live-chat service are very helpful to reach customers and better understand their changing needs.

Given that by 2017 the mobile channel will account for over 30% of online travel sales, the internet connection and particularly the use of mobiles will facilitate developing better customer relationships. Moreover, linking with a wide range of social media, especially QQ, Weibo and WeChat will bring the hospitality industry to the playing field of word-of-mouth. Therefore, tourism and hospitality companies who have mobile-user friendly applications will be more ready for today's and tomorrow's customers than the ones without.

As it was found, the top hotel critical success systems and factors (in the area of ICTs) are (in order of importance): Guest security system; Website development with booking engine; On-line guest satisfaction evaluation system; High-speed/WiFi Internet; and, Property Management system. Thus, it is recommended to the hoteliers to install and use contemporary technological systems that offer guest security, comfort and convenience and at the same time they have significant effects on the property's competitiveness and profitability. The hotel's website in particular, should be translated in several languages and definitely into Chinese.

Besides this, to meet the needs of the Chinese new tourists, a collaborative strategy to work with Chinese or China-based OTAs is required.

Considering that technology and innovation investments at adequate level can contribute towards hotel efficiency, effectiveness and profitability enhancement, it is proposed to the hotel managers to spend at least 5% of their annual capital expenditures for ICT investments. This will help them to survive and become more successful in the challenging game of competitiveness.

## **LIMITATIONS AND FUTURE RESEARCH**

This study was limited to a relatively low sample reached in China (716 responses) considering the population of the country; on the other side it was restricted only in 5 and 4-star resort hotels in Central Macedonia, Greece. Another limitation was the reluctance of some hotel managers to share operating performance and financial data of their property. Despite this fact, the samples are enough for reliable findings and conclusions, since Chinese respondents covered the major netizens of the mainland of China; and the size of the hotel sample in Central Macedonia (72 properties being the 75% of the region's upper class total hotel capacity) is considered representative.

Future research is suggested to include a higher number of respondents from the demand side, as well as hotels of all levels of service and from wider geographical areas. Likewise, the guest perceptions on the subject should be taken under consideration for having more global and precise results. Furthermore, due to the very high number of variables required for the measurement of hospitality competitiveness, the future researchers should focus on developing comprehensive, yet reliable and effective methodologies that will help the industry players understand, apply and interpret both the input and the outputs of the assessment.

## **CONCLUSION**

It is expected that in the next years the competition in the lodging industry will be increased both at global and national level. In order to survive, the hospitality companies need to continually pursue new, different opportunities for the future. Success will depend on adoption of innovative strategies and creation of competitive advantages that will help the hotels establish, maintain or improve their position in the market. According to a considerable number of authors, researchers and reports, technology can be used in hospitality in order to enhance service quality, competitiveness, revenues and market share.

This chapter was intended to identify the new ICT needs and practices of outbound tourists, while exploring the most critical success factors on ICT and examining the impact of ICT investments on the competitiveness of high-class hotels. In order to achieve the study purpose, the authors conducted a survey among 717 samples in the mainland of China, 571 of which have had experiences in searching and booking hotels online. Simultaneously, they carried out a survey in 72 upper class hotels located in two tourism destinations of Central Macedonia, Greece. The data were collected through a questionnaire and several in site visits



to the hotels. Moreover, in order to calculate the required variables, an extensive elaboration of data published in several Greek sector studies and financial directories took place.

After data collection, the following analyses took place:

First, a content analysis was done to understand what ICT tools the Chinese new tourists are using to search and book hotels online. The study revealed that Chinese new tourists are more dependent on the Chinese or China-based OTAs rather than hotel websites when searching or booking hotels online. Chinese netizens prefer to use the Chinese-based comprehensive search engines to search basic information, and to apply Chinese-based social network platforms to exchange and share information and experiences. The attitudes of Chinese netizens in searching and booking tourism products/services online are positive. Next, competitive analysis in the area of ICT was conducted in Greece. It was found that the top five ICT systems considered to be the most critical to success for the hotel managers are: guest security systems; website development with booking engine; on-line guest satisfaction evaluation; high-speed/WiFi Internet; and, the property management systems.

Second, data on ICT investments and economic performance were elaborated and their mean was presented by descriptive statistics. Then, benchmarking as well as empirical analyses were performed to identify whether the level of capital expenditures on ICT had significant effects on the competitiveness of the sampled hotels. It was found that adequate (more than 5% of annual capital expenditures) and proper investments in new technology systems enhance the competitiveness of the hotels in terms of efficiency, effectiveness and profitability.

Finally, strategic proposals were put forward to hoteliers to consider what and how to invest on ICTs in order to be more competitive and to meet the needs of their guests, especially to play a more active role in the emerging markets such as China.

The above findings, as well as the proposed analyses and strategic proposals of this chapter can help hotel managers evaluate and compare their property with the competitive set and utilize the results in order to enhance their competitiveness.

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*Chapter 11*

**LAND PLANNING AS A SUPPORT FOR SUSTAINABLE  
DEVELOPMENT BASED ON TOURISM:  
A CASE STUDY OF SLOVAK RURAL REGION**

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**ABSTRACT**

Current research details methodological framework for the land planning of the recreational activities based on ecologic approach. Human impacts on landscapes caused by touristic activities should be in accordance with sustainability level, i.e., without changing natural landscape elements, their function and processes, as well as environmental quality. Region of Štiavnické Bane in Slovakia represents a case study area that is completely under nature and landscape conservation. The methodological framework for the planning of recreational activities is based on the methodology of ecologic carrying capacity which is implemented by the Landscape ecological planning. The main result from this work is suitable tourism activities determined by the ecological approach. Methodological steps include spatial analysis, interpretation, evaluations and propositions which were suggested for recreational activities. The most suitable activities for winter periods are downhill skiing, cross-country skiing and winter tourism. For the summer period the best activities are the following ones: hiking, water sports and recreational activities linked to watering and sport fishing.

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The most suitable activities for the year-round period are service facilities and therapeutic recreational facilities. This sum of the activities represents the level of the land using that has not any negative environmental impact.

**Keywords:** Sustainable tourism, environmental management, land use planning, landscape management, nature-based tourism, sustainable development

## 1. INTRODUCTION

Human population growth combined with the decrease of natural areas and their fragmentation makes a point of concern and current challenge for planners, landscape ecologists and conservation biologists throughout the world (Sanderson et al., 2002). In the recent decades planning and regulation of natural areas have proven to be insufficient measures for the balancing of complex interplay of social, natural, cultural, environmental, and economic factors within the landscape. The continued development and landscape usage raise problems that transcend traditional boundaries (Jakobsen et al., 2004). Since 1950s, the tourism sector increased dramatically and became a mass phenomenon. In 2000, about 700 million tourist arrivals were counted worldwide (Gossling, 2002).

The problem of landscape sustainable development and planning cannot be managed by the single research institution. Accordingly, no separate scientific disciplines are able to manage or to have a full competence in the problem of managing landscape environment. Integration of perspectives in a multidisciplinary approach and cooperation between different actors in the landscape is the only reasonable way to successfully complete this task (Cortner et al., 1996; Healey, 1997).

The objective of this paper is to show a conceptual and methodological framework for land planning of recreational activities based on the ecologic approach without forthcoming impact on environment. The framework consists in landscape ecologic planning, aimed to determine suitability tourism activities with regards main goals of sustainable development. This framework focuses on developing a process of regional and local development based on tourism, especially within the protected areas.

Impact on the landscapes should not trigger changes in natural landscape elements, as well as their function, processes and environmental quality. Many of the human activities have no respect to natural characteristics of the landscapes.

Therefore, a wide range of the spatial environmental data is used for the current research to highlight current problems in the local landscapes. The data spatially cover study area - Region of Štiavnické Bane (2 194,80 ha) in Slovakia. The location of the study area is demonstrated on the Figure 1.

The region is located in the Landscape Protected Area of Štiavnica Mts., which is the biggest stratovolcano in Slovakia. The protected area includes a set of unique mining area and especially historic monuments. The mining activities, known in this area since centuries, have a strong influence on the formation of the current landscapes (Grega; Vozár, 1964).

According to Lichner (2005), special elements of the landscape are artificial lakes called "tajchy", which were formerly created for mining and today are used for recreation purposes. The landscape conservation belongs to the second level in Slovakian Law of Nature and Landscape Protection.



Figure 1. The Localization the Region of Štiavnické Bane (study area).

The target aim for the landscape protection is balanced relationship between the land cover types and land use types, which is affected by a massive “tourism attack” on landscapes since the last three decades, as reported by (Králík, 2001).

Therefore, the study is focused on the identifying and describing the most suitable recreational activities on the basis of the ecological approach of tourism. The main challenge in land planning is not only to design and effectively manage landscape using, but also to address all major environmental and human points of concern and issues presented nowadays (Forman, 2006). Hence, the philosophic framework of this study might be summarized in a motto: “Think globally, plan regionally, and act locally”

## 2. METHODOLOGICAL FRAMEWORK

The methodological framework for the land planning of recreational activities is based on the methodology of ecologic carrying capacity (Hrnčiarová et al., 1997). The methodology is adapted from the steps of Landscape Ecological Planning (LANDEP), initially drawn by Ružička and Miklós (1982, 1990). This methodological framework for the regional development is directly recommended by Agenda 21 in Chapter 10 of this work. Land planning, especially landscape ecological planning, has a long research tradition in Slovakia. The methodology of LANDEP applies original scientific process for landscape planning, which is designed to be environmentally friendly alternative in spatial arrangement of the human activities within the landscapes. Landscape planning is an activity that regulates human impact on landscapes within a range of sustainable development. The aim of landscape planning is to harmonize trends of the development of human society with the principles of nature and landscape protection (Ružička; Miklós, 1982, 1990; Ružička, 2000; Sklenička, 2007).

According to Forman (2006), planning based on landscape ecology usually focuses on men, and how land can be effectively designed for their use.

Environmental or land characteristics, as well as visual quality or cultural characteristics are carefully examined to scale human activities in the landscape with the least impact. There are numerous useful research works, syntheses and reviews which provide particular insight into this problem. Thus, this concept has been very well studied previously in Great Britain (Best, 1981; Green, 1985; Turner, 1987; Lucas, 1991) Central Europe (Ružička, Jurke, Kozová, Žigrai; Svetlosanov, 1982; Schmid; Jacsman, 1987; Kiemsted, 1993; Hrnčiarová et al., 1997; Hrnčiarová, 1999), Canada (Hills, 1974; Kehm, 1993) US (McHarg, 1969; Zube; Zube, 1977; Fabos, 1979; Turner, 1987; Marsh, 1991; Steiner, 1991; Steiner et al., 1988; Steinitz, 1990; Turner, 1992; Gustafson; Parker, 1994).

The main subject of ecological carrying capacity requires good inventories of the landscape elements (abiotic, biotic and socio-economic) that are confronted to the society requirements. For example, such elements of the landscape as vegetation, soil, water, elevation, etc. are traditionally visualized on maps. Perhaps more important are inventories of flux centres, natural disturbance regimes and differential sensitivities to human impact (Forman; Godron, 1986). Almost every factor that involves flows or movements proves that management cannot be based on the usual static maps where boundaries are drawn as if they were barriers. No absolute barriers exist in nature, but only filters. Environmental or land characteristics on the one hand, and visual quality or cultural characteristics on the other, are carefully examined to place human activities in the landscape with the least amount of impact. In the current research we applied and adopted useful syntheses and reviews provided, in particular by (Forman, 2006).

Landscape planning became nowadays very actual research topic, especially within regional development. A result of the ecological carrying capacity is evaluating of human impacts on the landscape and determining of the proposal plan for the land using. The concept of a region involves broad geographic area, a local microclimate and a common sphere of human activity and interest. The local microclimate puts limits on the range of species and natural processes, though varied topography, natural disturbances, and human activities still provide a rich diversity of ecological conditions within a region (Goldstein, 1992). The sphere of human activity and interest, commonly tied together with transportation, communication and culture, also limits the range of human activities. However, diversity exists within this range, since humans interact with topography and ecological conditions (Forman, 2006).

Pointed methodology of ecological carrying capacity is considered as a system that consists in five elements (steps). Each element in the methodology is correlated to others. By this methodology it is possible to draw up suitable activities as a basis for sustainable regional development.

### 3. RESULTS

The main result of this work is determined suitable tourism activities performed by the ecological approach. Ecological carrying capacity of the landscape is a primary tool for determinations of the most suitable places for human recreation activities. The ecological planning tool is based on the intersection of the environmental, social and economic factors for sustainable development. Without qualitative landscape planning, it is impossible to reach balance and harmony between natural resources and society's needs.



This section brings database of spatial environmental information of Štiavnické Bane region. Information focused on abiotic, biotic and socio-economic elements of landscape.

### 3.1. Analysis of Landscape Elements within the Study Area

Any type of areas represents an important subset of the landscape elements being managed (Leopold, 1933; Forman, 1986; Salwasser et al., 1987; Wagner; Kay, 1993). Analytical section lists landscape elements within the inventory of Štiavnické Bane Region. It is the process of obtaining landscape environmental information (abiotic, biotic and socio-economic), which is spatially represented and recorded on the maps.

Ecological analyses underlined importance of simultaneous detection of spatial and scaling variations across a range of landscape formats (Dungan et al., 2002). Single landscape elements are arranged in the general landscape pattern, where each element has different size and shape (Han et al., 2005). Composition and configuration of the landscape components form basic properties of landscape pattern (Wagner; Fortin, 2005).

The abiotic elements of landscape are represented by geomorphological relief, types of geological substrate complex and units of soils. From the Table 1 one can recognize that region of Štiavnické Bane is mostly situated in a moderately dissected uplands (flat ridges and gentle slopes). Geological types of substrate complex confirm strong volcanic basement of this area. The majority of the area is covered by cambisols. Each one abiotic element in the region is necessary to use at different levels – limits. Difference in usage makes it possible to determine sustainable development levels for landscape elements.

The biotic landscape elements and their spatial coverage of the landscape represents Table 2. Forest's vegetation and herb – grassland vegetation are the most representative land cover patches. Proportions of the landscape covering pointed on some area potential for location of the recreational activities. Current land use in the region of Štiavnické Bane demonstrates how human activities are reflected in the abiotic and biotic components of landscape structure, which is expressed by degree of anthropogenic land cover transformation. It gives a framework for understanding current state of biota and landscape using, since the intensity of land using should be consistent with natural conditions: their mutual incompatibility may cause various conflicts in the landscape.

Ecological priority's elements represent positive human activities in landscapes, such as conservation of landscape or natural resources. Region of Štiavnické Bane protected in the full range by second level of landscape conservation at the national law level. The Table 3 focused on the area difference with positive activities on the landscape. Impacted landscapes represent a set of negative human influences on the landscape. Thus, Table 3 illustrates types of impacted landscapes, which are expressed by the scale range. The most vulnerable and affected landscape elements are soils and water sources.

### 3.2. The Interpretation of the Landscape Elements within the Study Area

This working step focuses on determination of the landscape purpose-built properties. It is performed using assessment criterion for the localization of recreational activities within the landscape.

**Table 1. Analysis and Interpretation of the Abiotic Landscape Elements**

Code	Name of landscape elements	a	b	c	d	e	f	g	h	i	Σ	Area (ha)	Area (%)
A <sub>x</sub>	Types of geo-relief	x	x	x	3	2	x	x	x	3	3	2194,80	100
A <sub>1</sub>	Moderately dissected uplands (flat ridges and gentle slopes)	x	x	x	2	2	x	x	x	2	2	771,07	35.13
A <sub>2</sub>	Strongly rugged highlands (polygenic slopes of highlands)	x	x	x	3	2	x	x	x	3	3	282,39	12.87
A <sub>3</sub>	Strongly rugged mountainous lowlands (slopes of highlands)	x	x	x	3	2	x	x	x	3	3	1141,34	52.00
B <sub>x</sub>	Types of geological - substrate complex	2	1	2	2	1	2	2	x	2	2	2194,80	100
B <sub>1</sub>	Loam to sandy – alluvial sediments	3	2	2	x	x	x	x	x	x	2	17,86	0.81
B <sub>2</sub>	Pebble - clayey sediments deluvial	2	x	x	2	1	x	x	x	2	2	424,11	19.32
B <sub>3</sub>	Weathered clay and debris on sand rocks	1	x	x	x	x	1-2	1-2	x	3	2	75,40	3.44
B <sub>4</sub>	Clay, gravel and stone weathered rocks on effusions	x	x	x	x	x	1-2	2-3	x	1	2	1389,05	63.29
B <sub>5</sub>	Weathered clay and debris on volcanic rocks	x	x	x	x	x	2-3	2-3	x	1	2	136,64	6.23
B <sub>6</sub>	Anthropogenic sediments	*	*	*	*	*	*	*	*	*	*	151,74	6.91
C <sub>x</sub>	Types of soil units	1	x	x	3	2	2	2	3	2	2	2194,80	100
C <sub>1</sub>	Haplic luvisols	1	x	x	3	2	x	x	x	3	2	121,81	5.55
C <sub>2</sub>	Cambisols unsaturated	x	x	x	2	2	x	x	x	2	2	1217,43	55.47
C <sub>3</sub>	Cambisols pseudo-clay	x	x	x	x	2	x	x	x	2	2	693,81	31.61
C <sub>4</sub>	Lithic leptosols and other leptosols	x	x	x	3	2	2	2	3	x	2	134,23	6.12
C <sub>5</sub>	Anthropogenic soils	*	*	*	*	*	*	*	*	*	*	27,53	1.25

External factors of landscape elements: a potential leak; b flooding area surface water; c wetting from groundwater sources; d soil erosions by water; e soil erosions by wind; f rock fall; g gravitational movements; h avalanches of slopes; i slopes upheaval.

Degree of landscape vulnerability: x irrelevant value; 1 less vulnerable area selected disturbances; 2 moderately vulnerable area; 3 very vulnerable area; \* non-evaluated.

**Table 2. Analysis and Interpretation of the Biotic Landscape Elements**

Code	Name of landscape elements	j	k	L	m	n	Σ	S	Area (ha)	Area (%)
D <sub>x</sub>	Herbal - grassland vegetation	2	1	2	2	2	2	2-3	442,4	20.2
D <sub>1</sub>	Fresh meadows and pastures	2	1	2	2	2	2	2	61,46	2.80
D <sub>2</sub>	Dry and semi-arid grassland	2-3	x	2	1-2	2-3	2	2-3	331,47	15.10
D <sub>3</sub>	Meso- and oligotrophic grassland	1-2	x	3	1-2	2-3	2	2-3	46,92	2.14
D <sub>4</sub>	Recovered grasslands	1-2	1	1	2	1	1	3	2,53	0.12
E <sub>x</sub>	Complex herbal - grasslands and woody vegetation	2	2	2	3	3	3	2	189,5	8.6
E <sub>1</sub>	Complex of shrub vegetation undergrowth	2	1	2	x	3	2	1-2	177,08	8.07
E <sub>2</sub>	Meadows and pastures	2	2-3	2-3	3	3	3	2-1	12,39	0.56
F <sub>x</sub>	Forest vegetation	1	1	2	x	1	1	2	1310,5	59.7

Code	Name of landscape elements	j	k	L	m	n	$\Sigma$	S	Area (ha)	Area (%)
F <sub>1</sub>	Hornbeam - oak forests	1	x	1	x	1	1	2	11,77	0.54
F <sub>2</sub>	beech - oak forests	1	x	1	x	1	1	2	194,12	8.84
F <sub>3</sub>	oak - beech forests	1	x	2	x	1	1	2	359,49	16.38
F <sub>4</sub>	Lime - maple forests	2	x	3	x	2-3	3	2	45,98	2.10
F <sub>5</sub>	Beech forests	1	x	2	x	1	1	2	457,55	20.85
F <sub>6</sub>	Beech – spruce forests	2	1	2	x	2	2	2	159,68	7.28
F <sub>7</sub>	Coniferous monocultures	1	x	2	x	1	1	3-2	81,94	3.73
G <sub>x</sub>	Agricultural cultures on arable land	1	1	2	2	2	2	2	16,7	0.8
G <sub>1</sub>	Arable land – small blocks	1	1	2	3	2	2	3	5,30	0.24
G <sub>2</sub>	Arable land – large blocks	1	1	2	1	1	1	4	11,40	0.52
H <sub>x</sub>	Rivers and reservoirs	2	3	3	x	2	3	2	30,70	1.40
H <sub>1</sub>	Water streams	2	3	3	x	x	3	2-1	52 839 meters	
H <sub>2</sub>	Artificial lakes	1	2	3	x	2	2	3-2	30,71	1.40
I <sub>x</sub>	Industrial and mining components	1	2	1	x	1	2	5	16,7	0.8
I <sub>1</sub>	Factory site with objects	1	1	1	x	1	1	5	8,10	0.37
I <sub>2</sub>	Underground mining	x	3	x	x	x	3	5	8,64	0.39
J <sub>x</sub>	Energy pipes	2	x	x	x	x	2	5	6 592 m	
J <sub>1</sub>	Electric high-voltage lines	2	x	x	x	x	2	5	6 592 m	
K <sub>x</sub>	Road network	3	x	2	x	x	3	5	67 253 m	
K <sub>1</sub>	Road network	3	x	2	x	x	3	5	67 253 m	
L <sub>x</sub>	Settlements elements	2	2	3	2	3	2	2	112,3	5.1
L <sub>1</sub>	Settlements area	x	x	x	x	x	x	4	111,24	5.07
L <sub>2</sub>	Vegetation and parks, cemeteries	2	2	3	2	3	2	2	1,09	0.05
M <sub>x</sub>	Elements of tourism	2	x	x	x	1	2	4-5	75,9	3.5
M <sub>1</sub>	Cottages, cottage and rustic villages	x	x	x	x	x	x	5-4	60,42	2.75
M <sub>2</sub>	Camping sites	x	x	x	x	x	x	5-4	1,65	0.08
M <sub>3</sub>	Courses	2	x	x	x	x	2	5	1,80	0.08
M <sub>4</sub>	Ski	x	x	x	x	x	x	5	12,06	0.55
M <sub>5</sub>	Cross-country ski	2	x	x	x	1	2	4-5	5 703 m	
M <sub>6</sub>	Education and tourism trails	3	X	x	x	1	2	4	41 230 m	

Internal factors of landscape elements: j mechanical disturbance of the soil surface; k changes in groundwater level; l chemicals environment; m lack of change in traditional use; n removal or destruction of vegetation.

Degree of landscape vulnerability: x irrelevant value; 1 less vulnerable area selected disturbances; 2 moderately vulnerable area; 3 very vulnerable area; \* non-evaluated.

Degrees of ecological landscape significance (S): 1 very significant land cover patches; 2 significant land cover patches; 3 moderately significant land cover patches; 4 less significant land cover patches; 5 the least significant land cover patches.

**Table 3. Analysis of the negative and positive human influences on the landscape**

Code	Name of landscape elements	Area (ha)	Area (%)
<b>A. Ecological Priorities Elements</b>			
N <sub>x</sub>	Protected landscape elements	1242,62	56.6
N <sub>1</sub>	5 <sup>th</sup> degree of protection by national law	89,82	4.09
N <sub>2</sub>	2 <sup>nd</sup> degree of protection by national law	1152,80	52.53
O <sub>x</sub>	Elements of the territorial system of ecological stability	417,7	19.1
O <sub>1</sub>	Extremely important biocenters	273,65	12.47
O <sub>2</sub>	Very important biocenters	6,71	0.31
O <sub>3</sub>	Significant biocenters, bio-corridors	137,35	6.26
P <sub>x</sub>	Significant natural resources - forest resources	163,3	7.4
P <sub>1</sub>	Protective forests	137,35	6.26
P <sub>2</sub>	Special purpose forests	25,97	1.18
R <sub>x</sub>	Other significant landscape structure elements	249,28	11.4
R <sub>1</sub>	Prospective landscape structure elements	249,28	11.36
<b>B. Landscape Loading Elements</b>			
S <sub>x</sub>	Air pollution	1592,17	72.4
S <sub>1</sub>	Medium air pollution	1592,17	72.54
T <sub>x</sub>	Pollution of watercourses	417,7	19.1
T <sub>1</sub>	Very clean and pure, almost without pollution	30,71	1.40
U <sub>x</sub>	Emission pollution and erosion of soil resources	163,3	7.4
U <sub>1</sub>	Medium soil pollution	69,32	3.16
U <sub>2</sub>	Strong erosion	61,70	2.81
U <sub>3</sub>	Extreme erosion	440,91	20.09

Interpretation is based on the determination of the vulnerability of selected abiotic, biotic landscape elements and ecological significance of the biotic landscape elements as well.

Landscape vulnerability represents a characteristic of the landscape, which expresses the expected response to the landscape's external (interference, stress) factors.

The vulnerability is expressed by the scale values determined for each one from the landscape elements. It mainly encompasses abiotic and biotic elements and factors of their natural resilience. The scale range of vulnerability is assessed by the natural disturbance, or resilience, factor for every landscape element.

From the Table 1 one can notice that the most vulnerable element is individual types of geo-relief. In fact, the most impacted geomorphic relief types are 'strong rugged highlands' (polygenic slopes of highlands) and 'strong rugged mountainous lowlands' (slopes of highlands). The Table 2 shows vulnerability of the biotic landscape elements.

The most disturbed land cover elements are water bodies (rivers and reservoirs) and complex of herbal grasslands.

Landscape signification is establishing how natural (self-regulatory) processes within the ecosystem maintain and support conditions for the regeneration and genetic resources, natural resources, ecological stability and biodiversity.

The ecological landscape signification is expressed by scale value for each one biotic landscape element.

The ecological significance is assessed according to Hrnčiarová et al. (1997), which results from the operation of the ecological processes in the landscape. The Table 2 pointed on ecological signification of biotic landscape elements in Štiavnické Bane Region.

The ecological signification is expressed on the scale level where the first level is the most significant landscape element, and the last one is, on the contrary, the least significant landscape element. The most significant landscape elements are forest landscapes. The values of the landscape significance are possible to modify by the quantification of the landscape changes in form of landscape metrics. The set of the outputs is indicating directly how the on-going ecological processes are operating within the landscape (Klauco et al., 2012).

### 3.3. The Landscape Elements Evaluation of the Study Area

The evaluation of the landscape elements is the core task of the whole land planning process. It implies assessment of how the human requirements in form of recreational activities are confronted with existing values of landscape properties. Each landscape element has the own recommended limit threshold value for its using. The determined limit value includes, for example, concentration of pollutants, or slope angle that should be not exceeded. The limit threshold sets up the maximum acceptable level under which the landscape will not be affected by significant adverse changes and negative human impacts. These limits are expressed as a combination of appropriate and acceptable conditions and phenomena, which constitutes satisfactory conditions at the location of the proposed activities on the landscape without their significant disruption. Based on the landscape properties the degrees of suitability have been assigned to every recreational activity. The Table 4 shows assigned degrees for the coded following activities:

- Winter recreational activities – a1 alpine; a2 downhill skiing (ski slopes); a3 cross-country skiing (skiing cross-country skiing); a4 ski jumping, tobogganing (jumps, bobsled and toboggan runs); a5 technical infrastructure associated with winter activities.
- Summer recreational activities – b1 camping, public campsites; b2 public sports and cultural activities, sports games; b3 (playgrounds, tennis courts, etc.); b4 climbing, b5 hiking (hiking trails and nature trails); b6 cycling (cycling tourist routes); b7 horse riding; b8 gathering wild fruits (including mushroom picking in meadows and dams); b9 water sports and recreational activities linked to watering; b0 sport fishing; ba recreational hunting.
- Year-round activities – c1 dwellings; c2 hotels, motels; c3 service facilities (cafeterias, parking lots, etc.); c4 mountain transport facilities; c5 therapeutic recreational facilities; c6 allotment.

### 3.4. The Spatial Proposition for Recreational Activities in the Study Area

The spatial proposition sets up selection of the unlimited activities and their location within the landscape.

**Table 4. The Landscape Elements Evaluation**

Code	Name of landscape elements	a1	a2	a3	a4	a5	b1	b2	b3	b4	b5	b6	b7	b8	b9	b0	ba	c1	c2	c3	c4	c5	c6
A <sub>1</sub>	Moderately dissected uplands	0	2	1	1	2	2	L	0	0	1	1	1	-	-	-	-	2	2	L	2	-	2
A <sub>2</sub>	Strong rugged highlands	0	2	2	1	2	2	0	0	0	1	2	2	-	-	-	-	L	L	L	1	-	L
A <sub>3</sub>	Strong rugged mountainous low slopes	0	1	0	L	0	L	0	0	0	1	L	L	-	-	-	-	L	L	0	1	-	0
B <sub>1</sub>	Loam to sandy – alluvial sediments	0	0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
B <sub>2</sub>	Pebble - clayey deluvial sediments	0	0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0	-	-
B <sub>3</sub>	Weathered clay and debris on sand rocks	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
B <sub>4</sub>	Clay, gravel and stone weathered rocks on effusions	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
B <sub>5</sub>	Weathered clay and debris on volcanic rocks	0	0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
B <sub>6</sub>	Anthropogenic sediments	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
C <sub>1</sub>	Haplic Luvisols	-	-	-	-	-	L	L	L	1	-	-	-	-	-	-	-	L	L	-	-	-	L
C <sub>2</sub>	Cambisols unsaturated	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
C <sub>3</sub>	Cambisols pseudo-clay	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
C <sub>4</sub>	Lithic leptosols and other leptosol	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
C <sub>5</sub>	Anthropogenic soil	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
D <sub>1</sub>	Fresh meadows and pastures	0	2	1	L	L	2	2	L	2	2	2	2	2	-	-	2	2	L	2	2	L	L
D <sub>2</sub>	Dry and semi-arid grasslands	0	2	1	L	L	2	2	L	2	2	2	2	2	-	-	2	2	L	2	2	L	L
D <sub>3</sub>	Meso-and oligotrophic grasslands	0	2	1	L	L	1	2	L	1	1	2	2	2	-	-	2	2	L	2	2	L	2
D <sub>4</sub>	Reclaimed grasslands	-	2	1	L	L	2	2	0	-	1	2	1	2	-	-	1	2	L	2	2	L	1
E <sub>1</sub>	Complex of shrub vegetation undergrowth	-	-	2	-	-	0	0	0	-	1	L	L	2	-	-	L	0	0	0	0	0	0
E <sub>2</sub>	Meadows and pastures	-	L	2	L	L	L	L	L	-	1	2	2	2	-	-	2	L	L	L	L	L	0
F <sub>1</sub>	Hornbeam - oak forests	-	0	2	0	2	0	L	0	-	1	2	2	2	-	-	1	L	L	L	L	0	L
F <sub>2</sub>	Beech - oak forests	-	0	2	0	2	0	L	0	-	1	2	2	2	-	-	1	L	L	L	L	0	L
F <sub>3</sub>	Oak - beech forests	-	2	1	0	2	L	L	0	0	1	2	0	L	-	-	1	L	L	L	2	0	L
F <sub>4</sub>	Lime - maple forests	-	0	0	0	0	0	0	0	0	2	0	0	L	-	-	0	0	0	0	0	0	0
F <sub>5</sub>	Beech forests	-	2	1	0	2	L	L	0	0	1	2	0	L	-	-	1	L	L	L	2	0	L
F <sub>6</sub>	Beech – spruce forests	-	2	1	0	L	L	L	0	0	1	2	0	L	-	-	L	L	L	L	2	0	0
F <sub>7</sub>	Coniferous monocultures	-	L	2	L	1	L	L	0	L	2	L	L	L	-	-	1	L	L	L	L	2	0
G <sub>1</sub>	Arable land – small blocks	-	0	2	-	0	0	0	0	-	2	L	L	-	-	-	1	0	0	0	0	0	2
G <sub>2</sub>	Arable land – large blocks	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	L	-	-	-	-	-	-

Code	Name of landscape elements	a1	a2	a3	a4	a5	b1	b2	b3	b4	b5	b6	b7	b8	b9	b0	ba	c1	c2	c3	c4	c5	c6	
H <sub>1</sub>	Water streams	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
H <sub>2</sub>	Artificial lakes	-	-	-	-	-	-	-	-	-	-	-	-	-	1	1	2	-	-	-	-	-	-	
I <sub>1</sub>	Factory site with objects	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
I <sub>2</sub>	Underground mining	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
J <sub>1</sub>	Electric high-voltage lines	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
K <sub>1</sub>	Road network	-	0	2	-	-	-	-	-	-	1	1	2	-	-	-	-	-	-	-	-	-	-	
L <sub>1</sub>	Settlements	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
L <sub>2</sub>	Vegetation and parks, cemeteries	-	-	0	-	-	-	-	-	-	L	0	L	L	-	-	-	0	0	0	-	0	0	
M <sub>1</sub>	Cottages, cottage and rustic villages	-	-	L	-	L	0	2	1	-	1	2	0	2	2	2	L	1	0	2	L	-	0	
M <sub>2</sub>	Camping sites	-	-	L	-	L	1	1	1	-	2	2	0	1	-	-	-	-	2	1	L	0	0	
M <sub>3</sub>	Courses	-	-	L	-	-	-	1	1	-	2	L	1	-	-	-	-	2	L	1	-	-	-	
M <sub>4</sub>	Ski	-	1	1	1	1	-	2	-	-	2	-	-	-	-	-	-	-	-	2	1	-	-	
M <sub>5</sub>	Cross-country ski	-	-	1	-	2	-	2	-	-	1	0	0	-	-	-	-	-	-	L	L	-	-	
M <sub>6</sub>	Education and tourism trails	-	-	1	-	-	-	L	-	-	1	L	0	-	-	-	-	-	-	0	0	-	-	
N <sub>1</sub>	5 <sup>th</sup> degree of protection by national law	L	0	L	0	0	0	0	0	L	L	0	0	L	0	0	0	0	0	0	0	0	0	
N <sub>2</sub>	2 <sup>nd</sup> degree of protection by national law	1	1	1	2	2	2	2	L	2	1	2	2	2	2	2	2	2	2	1	2	1	0	
O <sub>1</sub>	Extremely important biocenters	L	0	L	0	0	0	0	0	L	L	0	0	L	0	0	0	0	0	0	0	0	0	
O <sub>2</sub>	Very important biocenters	L	0	L	L	L	0	0	0	L	L	L	L	L	0	0	L	L	L	L	L	2	0	
O <sub>3</sub>	Significant biocenters, bio-corridors of	2	2	1	2	2	L	2	L	2	1	2	L	2	L	L	2	L	L	2	2	1	0	
P <sub>1</sub>	Protective forests	0	0	0	0	0	0	0	0	0	2	L	0	L	L	L	L	0	0	0	0	0	0	
P <sub>2</sub>	Special purpose forests	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	1	0
R <sub>1</sub>	Prospective landscape structure elements	0	0	2	0	0	L	2	2	0	1	2	2	2	-	-	2	0	0	2	2	0	0	
S <sub>1</sub>	Medium air pollution	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	2	1	1	1
T <sub>1</sub>	Very clean and pure, almost without pollution	-	-	-	-	-	1	-	-	-	-	-	-	-	1	1	-	1	1	-	-	1	1	
U <sub>1</sub>	Medium soil pollution	1	1	1	1	2	1	1	1	1	1	1	1	1	-	-	1	1	1	1	1	1	1	
U <sub>2</sub>	Strong erosion	L	L	L	L	L	L	L	L	L	L	L	L	L	-	-	L	L	L	L	L	L	L	
U <sub>3</sub>	Extreme erosion	0	0	0	0	0	0	0	0	0	0	0	0	0	-	-	0	0	0	0	0	0	0	

Type of limits: Over\_0- excluded activities, L- inappropriate activities. Under\_1- suitable activities, 2- less suitable activities. Unclassified\_- does not affect limitation, \* assessed separately.

The final determination of suitable recreational activities is the spatial overlay of the outputs with the ecological evaluation. Spatial overlay determines suitable places for winter, summer and year-round activities. The result of the spatial overlay process is only non-limited recreational activities and their location. The cartographic attachments represent the area for the suitable activities, which are made in accordance with natural conditions. In these places recreational activities are under limitations with regards to natural properties of the landscape.

The most suitable recreational activities for winter periods (Figure 2) are 'a2' - downhill skiing (ski slopes) and 'a3' - cross-country skiing (skiing cross-country skiing). For the summer periods (Figure 2) the best suitable are the following activities: 'b5' - hiking (hiking trails, and nature trails); 'b9' - water sports and recreational activities linked to watering; 'b0' - sport fishing. The most suitable activities for the year-round periods (Figure 2) are 'c3' - service facilities (cafeterias, parking lots, etc.); c5 - therapeutic recreational facilities.

#### 4. DISCUSSION

Our planet must be planned, used and kept sustainably, because there is no another known place for humankind to live (Forman, 2006). The planet Earth is unique as a sensitive ecological system, since though there is renewable energy available, only few matter incomes from and goes back to outer space (Woodwell, 1990; Mooney, 1991).

In this sense, the biosphere of the planet Earth is a closed and finely adjusted system with finite resources, both economic for production and non-economic of natural and human value. (Woodwel, 1983; Turner et al., 1990).

Implementation of sustainable development strategy is possible in many ways. Individual reasonable behaviour of people at local and global level of society is one effective method.

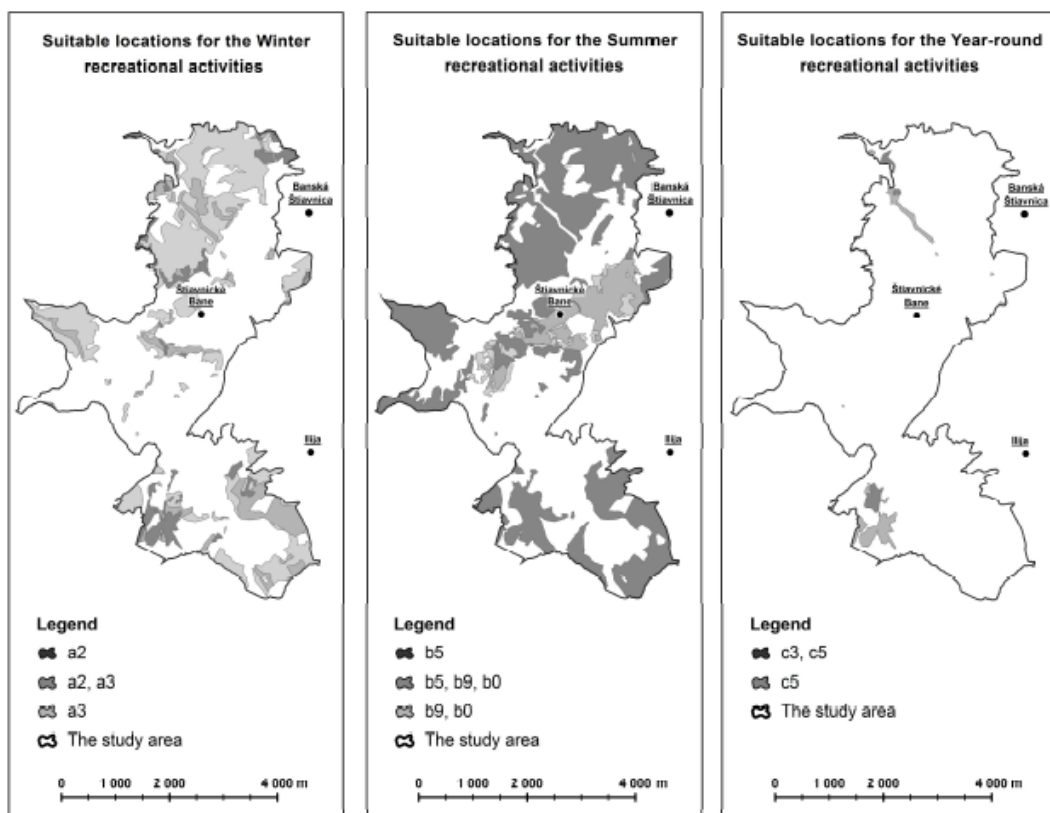


Figure 2. The Most Suitable Recreational Activities.



Implementation of sustainable development at regional level is possible by the wide scale of planning documentation, and is permanently developing and gradually updating. For instance, 'Local Agenda 21' became modified, updated and transformed into 'Local Action 21' and after the environmental meeting 'Johannesburg Summit 2002'. It is a type of document where it is possible to integrate landscape planning tools, such as ecologic carrying capacity of landscape. However, in many cases this document still misses professional approach of environmental and ecological researchers and needs improvements.

Methodological framework for documentation of Local Agenda 21 was developed by Kozová et al. (2003). The main characteristic of the methodology consists in two different approaches for creation Local Agenda 21. The first approach is based on the community request, which should be based on landscape usage and natural resources. The second one is the expert direction, designed to use landscape ecology planning tools, such as LANDEP or ecological carrying capacity of the landscape. According to Švihlová and Wilson (1999) and Švihlová (2004) it is possible to use other tools as well, mostly for the promotion of regional development which is based on a wide range of sustainability, for example:

- Territorial zoning plans
- Program of social and economic development
- Environmental action planning
- Waste management plans
- Environmental impact assessment (EIA)
- Strategic environmental assessment (SEA)
- Various plans for nature and landscape protection

The ecological carrying capacity focuses on confrontation and co-existence between human requirements and landscape properties. A result of this confrontation implies respect of configuration of natural environment and selecting suitable activities for social and economic development.

To apply more effectively ecological principles in management, planning, and policy, a rich variety of approaches is emerging. These include sustainable development, adaptive management, ecosystem management, and new forestry. Sustainable environments may integrate all the approaches (Clark, Munn, 1986; Lubchenko et al., 1991).

To sum up, this work details base steps of methodology of ecological carrying capacity, which selects human activities that provide sustainable development of the study area and hence, will not destroy natural environment. The process of determination of suitable recreational activities is drawn up according to the landscape-ecological planning concept with ecological approach.

## CONCLUSION

All human economic activities, as well as social life, are realised in the landscape. Landscapes are recognized mainly through their attributes. Therefore, it is necessary to understand how different potential human induced factors impact on landscapes, inter-relate and react, and to what extent landscapes can be affected by existing anthropogenic

interferences. In this work there were determined suitable recreational activities for the tourism development in the region of Štiavnické Bane. Determined activities are assessed in accordance with natural conditions and landscape properties. Development of any area, respectively landscape, should be committed to basic environmental and ecologic variables of the space, where it is located and realized.

Hence, ecological carrying capacity is identified and localized as a pallet of recreational activities, which does not disturb natural resources and environment. This is a very important approach for understanding of sustainable development.

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*Chapter 12*

## **BRUNEI TOURISM AT A STANDSTILL**

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### **ABSTRACT**

As a small nation, Brunei Darussalam has committed to developing tourism in order to detach itself from being too reliant on oil and gas, which has fuelled its economy since the late 1920s. The country produced the first tourism master plan, while restructuring the tourism authority in 1996, which highlighted the gravity to develop the tourism sector, as well as the potential of its tourism industry in the Southeast Asian region. Nearly two decades later, tourism's contribution to the country's gross domestic product (GDP), employment and investment is still unconvincing, although figures show that they are increasing. Neighbouring developing countries such as Cambodia, Laos and Vietnam have recorded greater percentage contribution to their respective GDPs than Brunei Darussalam's. A new five-year tourism master plan was implemented in 2012 that outlines nature and culture and Islamic tourism as the key areas to be developed. In spite of this, there still exists scepticism about Brunei Darussalam's tourism development. Therefore, this chapter aims to uncover the reasons for tourism's weak contribution and slow growth in Brunei Darussalam, and identify the challenges faced by the country in developing its tourism industry.

### **INTRODUCTION**

Brunei Darussalam is more known as an oil-wealthy nation than as a tourist destination. Since 1929, when oil was first discovered in this tiny kingdom on the north-western coast of the island of Borneo, it has prospered to the extent that its economy has been dominated by the oil and gas sector until now. The government of Brunei Darussalam has identified the potential of tourism as early as the 1990s, which was evident in official documents such as the country's national development plans (GBD, 1993; GBD, 2007; GBD, n.d. a; GBD, n.d. b). During the same time, the government also re-organised the administration of tourism

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development by appointing a new head for tourism, and upgrading it from a unit to a division. The first tourism master plan was also produced in the mid-1990s which essentially recognised the strengths as well as the weaknesses of developing tourism in the country (KPMG, 1998).

The year 2001 was designated as the ‘Visit Brunei Year’ with the aim to boost the growth of the tourism industry locally and to promote the country internationally as a tourist destination (Anaman & Looi, 2000). The Monitor Report of 2003 also acknowledged the prospect of tourism in Brunei Darussalam, as it identified that “four clusters in the economy with the greatest potential to attract FDI were business services, financial services, hospitality and tourism, and transportation and logistics” (Crosby, 2007:10). The Brunei Tourism Board was established in 2005, represented by government agencies and the tourism industry, to coordinate activities and development of tourism products and services (Ahmad, 2014). Brunei Darussalam joined the World Tourism Organisation (UNWTO) in November 2007, with the intention to increase the international profile of the country as a tourism destination (Brunei Tourism, 2007). A new tourism master plan was recently produced for the period 2011 to 2015, which detailed out the implementation of 69 tourism projects to be carried out in stages (Hab, 2011; Oxford Business Group, 2013).

All these initiatives are indicative of the government’s strong desire in developing tourism as an industry that can contribute towards diversifying the country’s economy. Given Brunei Darussalam’s strategic position in Southeast Asia, surrounded by countries that are well-established as tourism destinations, one would anticipate that the country would leverage on this advantage. However, as can be seen in the following section, Brunei Darussalam appears to be left far behind in its tourism development and contribution, even by neighbouring countries such as Cambodia, Laos and Myanmar, who are politically less stable than Brunei Darussalam. It is the purpose of this chapter to seek an understanding of the primary reasons for the slow growth and weak contribution of tourism to the country’s economic progress.

## **TOURISM STANDING**

The number of tourist arrivals into Brunei Darussalam has been fluctuating over the past few years. As reflected in Figure 1, there is a regular and stable increase from 2004 to 2008, but since then, tourist arrivals have been unsteady. The country’s international tourism reflected through the number of foreign tourist arrivals had a positive growth of 89% in the past years from 2004 to 2013. The highest tourist arrival was in 2011 with 242,000 tourists, and over the last 10 years, from 2004 to 2013, international tourist arrivals averaged at 185,513 annually. There was a sudden decline in tourist arrival in 2009 with 157,000 tourists, which could have been due to the global financial crisis. The figure rose for the following two years, but dropped again in 2012. This fall could be attributed to the suspension of long-haul flights by the national carrier, Royal Brunei Airlines, in 2011 for services to Auckland, Brisbane, Perth, Ho Chi Minh City and Kuching (Too, 2011). Travelers from Australia and New Zealand have been patronising Royal Brunei Airlines and transiting in Brunei Darussalam before reaching their final destination, London, and vice-versa. The flight cuts will certainly bear an adverse impact on inbound tourists to Brunei Darussalam.



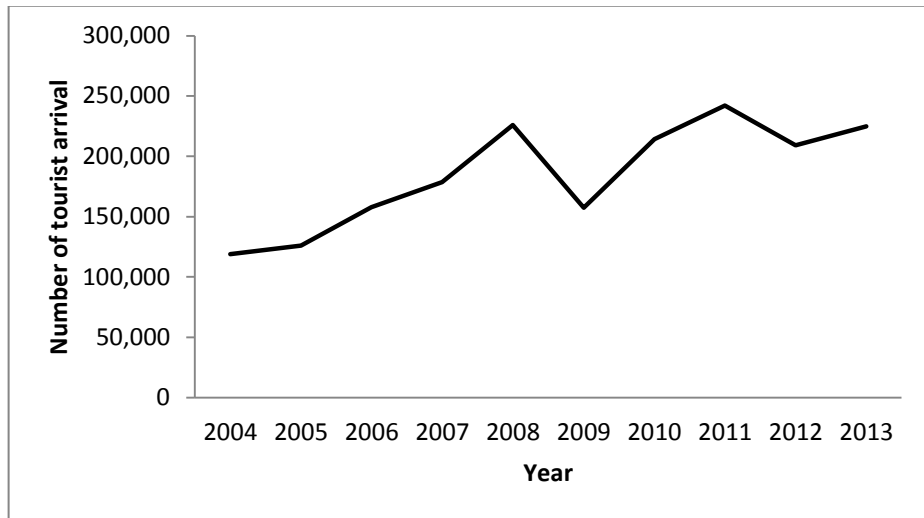


Figure 1. Tourist Arrivals in Brunei Darussalam 2004-2013.

Source: Tourism Development Department (2014).

Brunei Darussalam's tourism industry is believed to directly account for only 1.5% to the country's gross domestic product in 2013, which amounts to BND 325.1 million (WTTC, 2014) (1 BND = 0.79 USD in September 2014). This figure is expected to increase by 5.1% in 2014, and by 4.8% annually for the next ten years from 2014 (WTTC, 2014). It is apparent that the contribution of tourism to Brunei Darussalam's GDP is not substantial, and Figure 2 further demonstrates this trend which has been sturdy but not impressive, for the period 2004 to 2014. Generally, it shows a decrease in the tourism's direct contribution to Brunei Darussalam's GDP over the period, and has plateaued in the past couple of years. This begs one to ask whether the efforts carried out by the government in promoting tourism thus far have been effective or otherwise.

As a new player to tourism, Brunei Darussalam has netted a small portion of the global tourism market. The World Economic Forum has recognised the tourism potential of the country, ranking it at 72 out of 140 countries on the 2013 Travel and Tourism Competitiveness Index (World Economic Forum, 2013). However, in terms of prioritisation of travel and tourism, Brunei Darussalam was ranked 123 of 140 whereby the World Economic Forum indicates that the country has yet to put emphasis on the sector. In comparison with other countries in the Southeast Asian region, the figure for tourist arrivals in Brunei Darussalam is very low, and in fact, it is the lowest in ASEAN (refer to Figure 3). According to the Official Website of the Association of South East Asian Nations (ASEAN, 2014), Brunei Darussalam received the smallest number of tourist arrivals in the year 2012 with only 0.23% of total tourist arrivals in ASEAN, covering Cambodia (4.02%), Indonesia (9.02%), Laos (3.73%), Malaysia (28.06%), Myanmar (1.19%), Philippines (4.79%), Singapore (16.24%), Thailand (25.05%) and Vietnam (7.67%). Myanmar's tourism direct contribution to its GDP stood at 1.5% in 2013, which is similar to Brunei Darussalam, but other neighbouring countries such as Laos (4.6%), Cambodia (10.4%) and Vietnam (4.5%), received greater percentages to their respective GDPs from tourism (WTTC, 2014). It can be deduced from these figures that tourism may have contributed to the economy of Brunei

Darussalam, but in comparison with other countries in the Southeast Asia, it is still lagging behind the rest in the region.

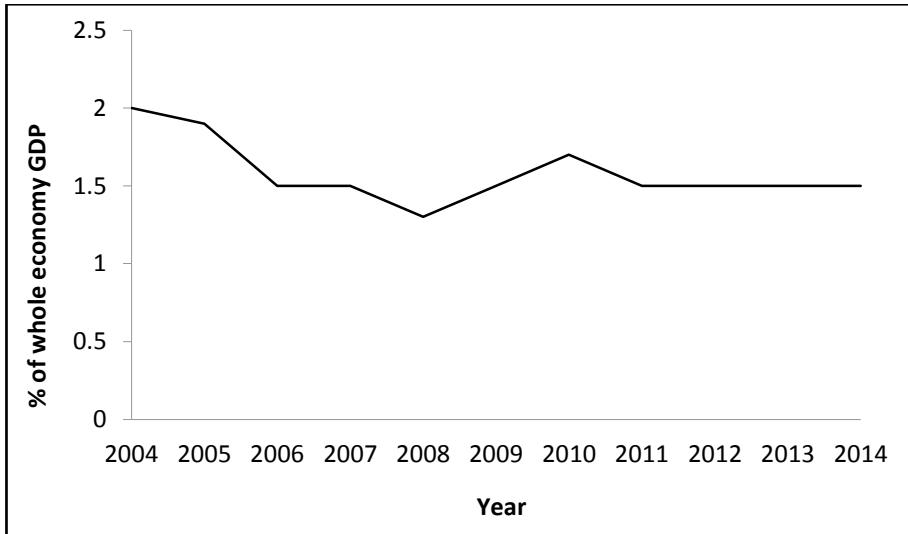


Figure 2. Tourism's Direct Contribution to GDP.

Source: WTTC (2014).

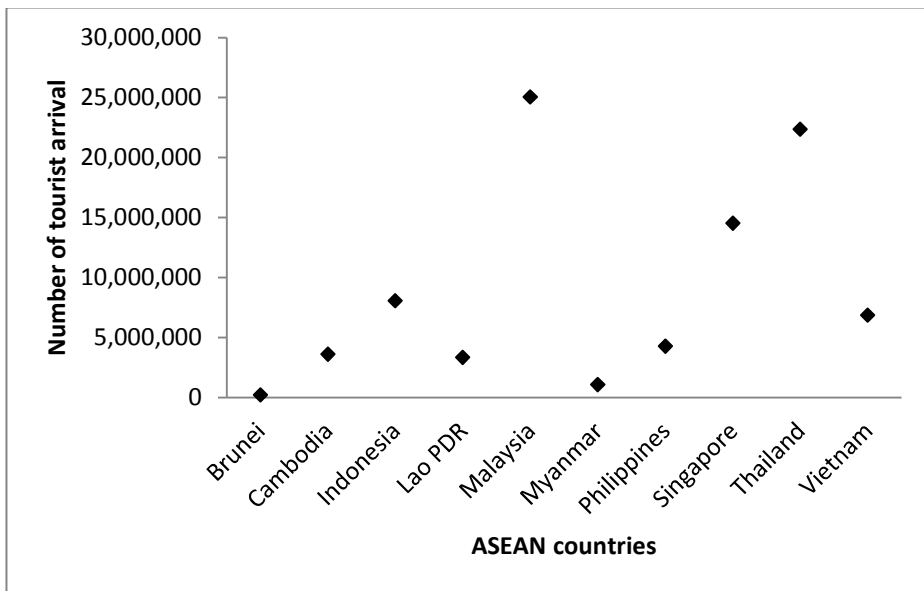


Figure 3. Tourist Arrivals in ASEAN in 2012.

Source: ASEAN (2014).

In relation to employment, WTTC (2014) claimed that tourism supported 5,000 jobs in Brunei Darussalam, which is equivalent to 2.4% of total employment. Crosby (2007) argued that hospitality and tourism employed approximately 3.5% of the private workforce, and half

of those employed are foreign workers. Even though tourism development generates employment in the country, it is worrisome to note that partially they consist of expatriates when there are over 5,000 Bruneians who are unemployed (Bandial, 2011).

Despite the fact that the country has developed the support facilities and services necessary for tourism, such as airport facilities, visitor attractions, telecommunication services, banking facilities and accommodation (Ahmad, 2014), the pace of tourism development has been rather slow, or one should say, at a standstill. There appears to be a lack of progression from where it began to what it has contributed now. In Ahmad's (2014) study in comparison to a similar survey conducted in the 1990s, he found that there has been no significant improvement on certain tourism facilities, namely ground transport, entertainment and handicrafts and souvenirs.

In general, there is a strong desire to support and develop tourism in Brunei Darussalam. The government has pushed numerous initiatives to spur tourism growth. The performance of the tourism sector has been encouraging, but not impressive to convince the country's leaders that tourism will be one of major drivers of its economy. Ku writes that the "prospects of the tourist industry remain uncertain" (2009 p. 262).

## **IMPEDIMENTS TO TOURISM GROWTH**

The government acknowledges the constraints faced by the country's tourism sector. The country's Long-Term Development Plan identifies limited human resource, insufficient skills, inadequate places of interest and limited dissemination of tourist information as major obstacles to developing tourism in Brunei Darussalam (GBD, 2007). Crosby (2007) further adds other barriers to tourism growth in the country including an underfunded tourism unit, policy constraints regarding land ownership, visa requirements and inadequate infrastructure. The Asia-Pacific Economic Cooperation (APEC) Tourism Working Group report also echoed infrastructure and human resource deficiencies as main impediments to tourism progress in Brunei Darussalam (Anon., 2013).

### **Inadequate Tourism Infrastructure**

Tourist arrival was adversely affected in 2011 when the national carrier, Royal Brunei Airlines cut flights to Australia and New Zealand to concentrate on four primary long-haul (Melbourne, Dubai, London and Jeddah) and nine short-haul destinations (Bangkok, Hong Kong, Kota Kinabalu, Jakarta, Kuala Lumpur, Manila, Singapore, Shanghai and Surabaya) (Oxford Business Group, 2013). In spite of the country's strategic location in Southeast Asia, foreign airlines are not attracted to set up routes to Brunei Darussalam as there are better airport facilities nearby, such as Singapore Changi Airport and Kuala Lumpur International Airport. The limited aviation connectivity could also be avoided with improved policies on landing rights (Anon., 2013). Accordingly, the government of Brunei Darussalam is undertaking a modernisation and expansion project of its airport which is expected to be completed by the end of 2014. This will double the airport's handling capacity to 3 million passengers annually, aside from developing itself as a competitive air logistics hub in the

region, improving airport connectivity, and increasing flight frequencies and passenger traffic. This will directly contribute to the prospective growth of the travel and tourism sector in the country.

In addition, there has been a rise in cruise ship tourism in the region (Oxford Business Group, 2013; WTTC, 2006), and Brunei Darussalam has become a stopover point. Hence, the cruise market clearly offers good growth potential. Brunei Darussalam, however, has limited capacity to accommodate this segment where cruise ship facilities are lacking as the country's port was designed primarily for industry activities. Enhancement of existing port facilities as well as new facilities and services at the surrounding towns is therefore needed to cater for the rising trend of cruise ship tourism.

Aside from aviation and maritime connectivity and facilities, another key infrastructural weakness is public transport (Crosby, 2007). Tourists are obliged to take local tour packages because of the difficulty in travelling around Brunei Darussalam using public transport. Taxis are rarely to be found and their fares can be excessive, whilst buses are irregular and unpredictable (Jong, 2011). The government has recently reviewed the country's transportation system, and will come up with a land transport master plan. The Minister of Communications revealed that public bus transportation is considered as the first choice of alternative transportation, and that they will be implementing steps towards providing better public bus transportation under the new master plan (Kon, 2014). The realisation of this plan may be uncertain since Brunei Darussalam has one of the world's highest car ownership rates with 2.65 people per vehicle (Masli, 2013), which may put people off from using public transport.

## **Lack of Skilled Workforce in Hospitality and Tourism**

With 5,000 Bruneians who are reportedly unemployed (Bandial, 2011), it is difficult to accept that the country is lacking in human resources, or that it has limited human resources. In a study among job seekers in the country, Cheong and Lawrey (2009) found that there was a very high mismatch of job expectations and actual requirements in the job market. During the first career fair organised by the Department of Economic Planning and Development, where over 1,500 job opportunities in the retail, hospitality and tourism sector were offered, the Minister of Home Affairs highlighted that skills-job mismatch was the major reason for locals failing to secure employment (Shahminan, 2013). As a result, a significant proportion of jobs in the tourism industry continue to be occupied by foreign workers. Over 2,400 job vacancies in retail, hospitality and tourism, banking and finance, construction, automotive and logistics were offered in the career fairs in 2013, but only 18% of the openings were filled (Yacob, 2014). This further indicates that there is a significant mismatch between skills and desired employment in Brunei Darussalam's tourism industry.

The existing vocational and technical education in Brunei Darussalam seems to lack focus on skills development and alignment with the national manpower needs. Suitable trainings that are relevant to the needs of the industry are therefore essential to ensure that the country's workforce possess the skills in hospitality and tourism. Both the educational institutions and the tourism industries are required to collaborate and work closely to align courses and trainings with the evolving tourism products and technologies. This will gradually reduce the need for foreign workers in the sectors, and therefore, providing job

opportunities for the locals. Brunei Darussalam is in the process of reforming its technical and vocational education, with greater engagement of industries, which will see transformational changes in the infrastructure and curriculum over the next five years (Souyono, 2014). Such transformation is expected to enable its youth to gain employment with the right skills set.

### **Insufficient Attractions for Tourists**

Although it is recognised as a peaceful and stable country, Brunei Darussalam is still trailing behind its neighbouring countries in terms of travel and tourism. The government also acknowledges that the country is not to compete with established tourism destinations in the region, rather, it serves to complement and add value to existing tourism products (KPMG, 1998). As such, it has been concentrating in niche tourism areas including nature (e.g., rainforest), culture and heritage (e.g., mosques, royal palaces, water village or '*Kampong Ayer*'). It was noted, however, that Brunei Darussalam has a limited scope of available attractions (Too, 2012), hence foreign tourism firms have little interest to explore and promote the country as a tourist destination (Oxford Business Group, 2013).

Brunei Darussalam will need to expand the existing market as well as to provide more attractions for tourists. Increased diversification of tourism products will help to stimulate new opportunities for the growth of the country's travel and tourism. Besides excursions to the rainforest for trekking for instance, nature-based ecotourism could be expanded to include nature-based sporting activities such as water rafting and cruising.

The Brunei Tourism Board has been participating in more trade shows and roadshows outside the country to promote Brunei Darussalam (Yakub, 2010). However, Brunei faces very tough competition from its neighbouring countries such as Malaysia, Singapore and Indonesia, which are all vying to increase their tourism revenue. These neighbouring countries have been aggressively involved in marketing their attractions for decades and the tourism industry of these countries has well benefited from marketing efforts of foreign airlines as well as international hotel brands established in the respective countries (WTTC, 2006). Since there are only few foreign airlines operating airline services to Brunei Darussalam, its tourism industry failed to seize the full benefit of international marketing. One way to induce the growth of its tourism is to take the opportunity of the close link with neighbouring countries, particularly ASEAN countries, by facilitating and heightening air travel between member countries.

## **FUTURE DIRECTION**

The first tourism master plan developed by KPMG (1998) recognised four special interest tourism products that are appropriate for the country, namely cultural and royalty tourism, ecotourism and adventure tourism, theme park tourism, and cruises. The master plan also identified several tourism products as unsuitable for Brunei Darussalam, and these include resort tourism, golf tourism, and conferences and exhibitions. In a survey among players in the tourism industry by Ahmad (2014), he found that tourism organisations shared similar views with the master plan. Contrary to the earlier master plan, Brunei Darussalam's tourism

authority is now promoting resort tourism, golf tourism, and conferences and exhibitions. The government calls for its tourism stakeholders to devise strategies for the development and promotion of golf tourism in the country, as it has several international-standard golf courses and playing golf is relatively cheaper compared to other countries in the region (Kasim, 2014). Similarly, the tourism authority also saw the potential as a Meetings, Incentives, Conventions and Exhibitions (MICE) destination, which could benefit the economy as the host country normally receives mass volumes of people coming in to attend large-scale MICE events, and therefore bringing in tourism income (Razak, 2007).

A more recent master plan for tourism was crafted for the period 2011 to 2015, which plans to target 400,000 international visitors in 2016 and increase the tourism sector's contribution to GDP (Hab, 2011; Oxford Business Group, 2013). During the country's Legislative Council session, the Minister of Industry and Primary Resources revealed that the new plan has identified 69 projects to raise the tourism industry in Brunei Darussalam, which included upgrading museums, building a sanctuary for proboscis monkeys, training tourist guides, increasing tourist facilities at a remote village, as well as the building of the second phase of the Kampung Ayer Cultural and Tourism Gallery (Fung, 2012). The tourism master plan will focus on two clusters, namely on natural assets and culture, and on heritage and Islamic tourism. These tourism products are still parallel to the earlier master plan, with an additional attention paid to Islamic tourism, which is a growing niche tourism in several Islamic countries in the world today.

The tourism industry, nonetheless, expressed its scepticism over the country's capacity to compete with established tourism destinations nearby, such as the Malaysian states of Sabah and Sarawak, each of which possesses notable world-renowned natural landmark in the form of Mount Kinabalu and the Mulu Caves (Shahminan, 2014). Similarly, they also raised the challenge in developing Islamic tourism in the country since Brunei Darussalam is surrounded by Muslim-majority countries such as Malaysia and Indonesia, which have performed well in attracting Muslim visitors. No matter what tourism products Brunei Darussalam aspires to develop and promote, it is highly likely that it will lose out to its contenders in the region who are more ready and more capable to gain tourism earnings from them.

The future growth of Brunei Darussalam's tourism is very much dependent on the commitment of the government as well as the private sectors to develop and make use of the full potential of the sector to foster economic growth and ultimately the well-being of its citizens. Brunei Darussalam has a number of unique attractions encompassing the niche areas of nature, culture and heritage. The country's tourism sector is vulnerable against long-standing tourism destinations in the region. In order to secure a sustainable growth of its tourism, more efforts and alignment need to be done by all stakeholders directly or indirectly contributing to the tourism industry. This requires a deeper understanding on the current situation and needs of the country's tourism sector, and what is required for it to grow.

## CONCLUSION

Tourism has the potential to play an important role in the economy of Brunei Darussalam, as it has been identified as one of the mechanisms that can hasten the country's

economic diversification process, provide employment opportunities, increase revenue from foreign currency exchange, help enhance the image of the country and its international relations, and thus contributing towards a better quality of life for its population. The pace of tourism development in Brunei Darussalam has been rather sluggish, even though it has already established some of the support facilities and services necessary for tourism. The very insignificant contribution of tourism to Brunei Darussalam's economy indicates the small size of the tourism industry compared to the neighbouring countries, particularly the ASEAN member countries. Inadequate infrastructure, lack of skilled workforce for the tourism industry, and limited product offering are some of the main reasons for the stagnation of Brunei Darussalam's tourism. Tourism will not advance or become a critical contributor to the country's economy unless these hindrances are addressed. There is always a platform to enable improvements to be made which essentially require both the government and the private sectors to invest more capital in order to realise the full potential of the tourism sector in the country. Over the next few years, one will be able to assess whether current initiatives, including improvements to the tourism infrastructure, implementation of new tourism and transportation master plans, as well as vocational and technical education reforms, will eventually bring Brunei Darussalam's tourism out of obscurity.

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*Chapter 13*

## **BARRIERS AND DRIVERS TO SUSTAINABLE TOURISM DEVELOPMENT: EVIDENCE FROM GREECE**

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### **ABSTRACT**

This study presents insights into the barriers and drivers to sustainable tourism development in Arta, Greece based on residents' perspective. The empirical analysis is based on the estimation of binary logistic regression model. Results, based on statistical analysis, confirm that there are many administrative as well as economic barriers that prevent the development of sustainable tourism in the specific area. The empirical results support that residents' perceptiveness for sustainable development varies over residents with particular demographic characteristics. In particular, the residents recognize that their area is a place where sustainable development can flourish if emphasis is given in the education and information campaigns of the citizens. Finally, this study shows that the most important parameter for the promotion of sustainable tourism development in the area is not only the local authorities initiatives but as well as the citizens participation.

**Keywords:** Barriers; Drivers; Sustainable tourism

### **INTRODUCTION**

There is evidence that tourism sector plays a major role to overcome recession in Greece. Tourism is considered as an important engine for the economic growth and development of countries or local areas (Voon & Voon, 2012; Styliadis & Terzidou, 2014; Webster & Ivanov,

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2014). Tourism sector has important impacts on nature, societies and cultures. Researchers have studied the multiple impacts of tourism development on the three pillars that form the sustainable development of a place: society, economy and environment (Haralambopoulos & Pizam, 1996; Coccossis & Tsartas, 2001; Karagiannis, 2013). As regards to the impact on society and culture, tourism can lead to improved community services, such as additional recreational and cultural facilities. But tourism development also has an impact on social attitudes, beliefs and values of the locals. In some cases, there may be a loss of identity and local culture (Coccossis & Tsartas, 2001). On the microeconomic level, there are many positive effects. In particular, the tourism sector is the most important sector of the service industry and contributes to reduce unemployment, even with the problems of seasonality. Therefore, tourism provides an improvement in the living standards of people that it employs. Also it would increase investments and create profits for local businesses related to tourism, such as handicrafts, construction, agro-pastoralists, services, transport, commerce (Haralambopoulos & Pizam, 1996; Karagiannis, 2013). On the macroeconomic level, inbound tourism is a source of foreign exchange income which is very important for improving the balance of payment. Finally, tourism works holistically in tourist areas, claiming more and more space for activities and infrastructure. Increasing the number and types of tourist resorts can be harmful to the environment and country planning (Coccossis & Tsartas, 2001).

In this context, several concerns are raised about the effects of the mass tourism to sustainability. Sustainable development is defined as the development that meets the needs of the present generation without compromising the ability of future generations to meet their own (Brundtland, 1987). According to World Tourism Organization (1998) "Sustainable tourism is defined as the tourism which meets the needs of contemporary tourists and host regions while protecting and enhancing opportunities for the future. It is envisaged as leading to management of all resources in such a way that economic, social, and aesthetic needs can be fulfilled while maintaining cultural integrity, essential ecological processes, biological diversity, and life support system". However, the promotion of sustainable tourism managements is strongly related to residents' perspective. Sustainable tourism must meet the requirements of the standard of living of the local population in the short and long term (Liu 2003). Sustainable tourism requires a strong local and regional planning and development control, with the participation of local communities (Hunter, 1997) and there should be efforts to develop environmental awareness among tourists and local communities to protect the environment (Shalan, 2005).

So, it is important that the various policies and measures related to tourism activities are integrated into the framework of sustainable development. Any efforts to achieve sustainable development at a global or local level will fail if the impact of tourism is not taken into account. However, little attention has been paid in the literature to the analysis of barriers and drivers to sustainable tourism development. Thus, the aim of the paper is to examine the main barriers and prospects of tourism development based on residents' perspectives taking into account sustainability parameters. For the purpose of our study, empirical analysis is based on a stratified sample of 280 consumers, which was carried out the first quarter of 2014. The structure of the paper is the following. The next section presents the data and the adopted methodology of the analysis. Then the empirical results occurred are presented and discussed. The last section concludes the paper and policy implications and limitations of the analysis are presented.

## METHODOLOGY AND DATA

The research provides some insights into the determinants that affect consumers' barriers and drivers to sustainable tourism development. Data for the current research are collected by a cross-section survey of 280 residents. The research took place in Arta the first quarter of 2014. The sampled households were chosen randomly using socioeconomic and demographic criteria. The form of the survey was a questionnaire, which was administered using face-to-face interviews with locals in the prefecture of Arta. Arta is the capital of the Arta Prefecture and the second biggest city of the Epirus. Arta was chosen as a case study because little has been done towards tourism development and especially sustainable tourism.

Empirical results are based on the estimation of logistic regression model. Logistic regression is used for predicting the probability of an event occurring by fitting data to a logit function. Logistic regression is a useful way of describing the relationship between one or more independent variables and a dichotomous variable, expressed as a probability to believe that sustainable development is necessary or not.

In our case, under the binary logistic model, the estimated value of the dependent variable is interpreted as the probability that a resident  $i$  believes that sustainable tourism development is necessary in his/her region, as identified by the values of the explanatory independent variables. Thus, binary logistic analysis enables us to measure the impact of each variable on residents' perspective that sustainable tourism development is necessary in his/her region. The following subsets of independent variables were used in this empirical analysis, namely: (i) socioeconomic factors (such as age, gender, educational status and private income), (ii) perceived barriers to eco-friendly tourism development variables (such as lack of capital, lack of expertise and lack of infrastructure) and (iii) variables regarding perceived advantages of the region (such as natural resources and cultural heritage). Therefore, in this empirical study, we employed the following expanded specification for a resident's perspective that the promotion of sustainable tourism development is necessary in his/her region<sup>1</sup>:

$$STD_i = b_0 + b_1 gender_i + b_2 age_i + b_3 univ_i + b_4 income_i + b_5 sector_i + b_6 lack exp_i + b_7 lack cap_i + b_8 lack inf_i + b_9 nature_i + b_{10} culture_i + u_i \quad (1)$$

where  $STD_i$  is a binary variable indicating whether the resident  $i$  believes that the promotion of sustainable tourism development is necessary in his/her region or not; specifically, the variable takes the value 1 when the resident believes that sustainable tourism development is necessary in his/her region and zero otherwise.  $gender_i$  represents a dummy variable accounting for 1 if the respondent is female and zero if male;  $age_i$  represents the resident's age;  $univ_i$  represents a dummy variable accounting for 1 if the respondent has completed undergraduate studies and zero otherwise;  $income_i$  represents the resident's monthly private income in euros;  $sector_i$  represents a dummy variable accounting for 1 if the respondent is occupied in the tourism industry and zero otherwise;  $lackexp_i$  represents a dummy variable accounting for 1 if the resident think that lack of expertise is a barrier to sustainable tourism development and zero otherwise;  $lackcap_i$  represents a dummy variable accounting for 1 if the

<sup>1</sup> In particular, the question format was: "In your opinion, is the promotion of the sustainable tourism development necessary in your region?". Dichotomous choice answer: Yes or No.

resident think that lack of capital and funding is a barrier to sustainable tourism development and zero otherwise;  $lackinf_i$  represents a dummy variable indicating if the respondent think that lack of infrastructure is a barrier to sustainable tourism development and zero otherwise;  $nature_i$  represents a dummy variable accounting for 1 if the respondent believes that tourism development in the area should be based on the promotion of natural environment and zero otherwise;  $cultural_i$  represents a dummy variable accounting for 1 if the resident believes that tourism development in the area should be based on the promotion of cultural heritage and zero otherwise; and  $u$  is an error term. Table 1 presents the estimated results for equation (1).

## RESULTS

In this section we present the results of the statistical and econometric analyses to estimate the parameters towards residents' perspective regarding the importance of sustainable tourism for the development of their region.

### DESCRIPTIVE STATISTICS

From the sample of 280 residents in question, 51.8% were women and 48.2% men. Most respondents were university-educated (51.4%). Regarding the participants' age, most respondents were between the ages of 45 and 59 years (46.1%); 7.9% were between 25 and 29 years, 26.4% between 30 and 44 years and 12.5% above 60 years. The majority was employees where 16.8% of them were working in the private sector and 41.4% in the public sector. 8.6% were freelancers, whereas 14.6% were pensioners. The income of 35.7% of respondents varied between €1,001 and €2,000 and 31.8% declared having an income between €500 and €1,000. 74.6% of respondents were married. The majority (68.9%) believe that there are prospects for local development based on tourist activities and only 11.8% already work seasonally on tourist businesses. 56.8% of the residents agreed that sustainable tourism development is the necessary form of tourism development for their region.

Next, interviewees were asked about the perceived barriers that hinder the sustainable tourism development in their region. In particular, 75% of the respondents reported that lack of infrastructures, such as roads, is an important hindering factor to promote sustainable tourism development, 57.5% of them reported that there is a lack of qualified personnel in the tourism sector and 33.2% of respondents think that lack of financial resources and funding is a limiting factor to create tourism facilities, such a hospitality accommodation, according to sustainability criteria. However, 22.9% of the residents reported that administrative problems on the part of local authorities are important barriers to sustainable tourism development of their reason. Finally, respondents mentioned as a significant barrier to the promotion of sustainable tourism development the lack of initiatives by the resident. As to the drivers that can encourage the sustainable tourism development, the majority of respondents reported that their city has cultural heritage and natural environment that can attract sustainable tourists. Another important driver is characterized the promotion of the characteristics of the region through internet (33.2%), as well as the participation of the residents to educational programs regarding the potential of sustainable tourism development (25%).

## LOGISTIC REGRESSION ANALYSIS

Several interesting results were obtained from the empirical estimation of Eq. (1). Table I presents the results of the fitted binary logistic model with respect to residents' perspective that sustainable tourism development is necessary in their region. As follows from Table I, all the estimated coefficients of the explanatory variables presented in the model are statistically significant at a level of 10%, 5% or 1%. In particular, women are more likely to believe that sustainable tourism is important for the development of her city than men, at a 5% level of significance.

**Table 1. Estimated binary logistic regressions of residents' perspective that the promotion of sustainable tourism is necessary for the development of the region (yes: 1 no: 0)**

Independent variables	Estimated Coefficients	Odds Ratio	$e^{\beta^1} - 1$
Constant	-2.688*** (-2.83)	-	-
gender	0.637** (2.22)	1.890	0.890
age	-0.019** (-1.95)	0.981	-0.019
univ	1.602*** (4.81)	4.964	3.964
income	-0.0001* (-1.94)	0.998	-0.002
sector	1.505*** (2.76)	4.502	3.502
lackexp	1.459** (1.81)	4.300	3.300
lackcap	-0.981*** (-3.20)	0.374	-0.626
lackinf	1.05*** (2.56)	2.863	1.863
nature	0.809*** (2.32)	1.092	0.092
culture	0.903*** (2.85)	2.467	1.467
Log likelihood	-156.06		
Nagelkerke R <sup>2</sup>	0.285		
Hosmer and Lemeshow	3.12 (0.811)		

Note: \*\*\*, \*\*, \* represent levels of significance at 1%, 5% and 10%, respectively. Z statistics are presented in parentheses.

Age is a statistically significant factor in the residents' perspective that sustainable tourism development is necessary, at a 5% level of significance. Indeed, it is estimated that young people are more probable to believe that sustainable tourism development is necessary in their city than older respondents. Educational level is also included in the model, indicating that there is a positive and statistically significant relation, between higher education and belief that sustainable tourism is necessary for the development of the region, at a 1% level of significance. As far as economic parameters are concerned, the estimated coefficient for income and belief that sustainable tourism is necessary for the development of the region is negative and statistically significant at 10% level of significance. Thus, low income residents are more favorable to the sustainable tourism development of their city than others. What is more important is the fact that the empirical results indicate that there is a positive and statistically significant, relation between current occupation in the tourism sector and the belief that sustainable tourism is necessary for the development of the region, at a 1% level of significance. So, those respondents who work at the tourism services are more likely to believe that sustainable tourism is necessary for the development of their region.

As far as the perceived barriers to the sustainable tourism development, the empirical results indicate that those respondents who think that lack of expertise is a barrier to sustainable tourism development are more likely to believe that sustainable tourism is necessary for the development of their region, at a 5% level of significance. Accordingly, those who believe that lack of infrastructure is a barrier to tourism development are more probable to believe that sustainable tourism is necessary for the development of their region, at a 1% level of significance. Contrary, respondents with a positive attitude to the necessity of the sustainable tourism development of their region are less likely to believe that lack of financial resources is a barrier to that direction, at a 1% level of significance. Finally, as expected, the perceived advantages of their region positively affect residents' perspective that tourism development of their region should meet the sustainability criteria. More precisely, respondents who are favorable to sustainable tourism development are more likely to believe that tourism development in the area should be based on the promotion of natural environment and cultural heritage of their city.

## CONCLUSION

This paper has focused on providing insights into which factors affect residents' perspective towards prospects of sustainable tourism development of their area, focusing on barriers and drivers that can promote sustainable development. The results suggest that highly-educated people with low income and women are more likely than others to support the promotion of sustainable tourism development on their region. This study also shows the importance of drivers and barriers on residents' perspective regarding the promotion of sustainable tourism development. In particular, sustainability awareness and promotion of natural and cultural heritage are significant factors that positively affect respondents' positive attitude toward prospects of sustainable tourism development. According to residents, it is important for the sustainable tourism development of a city to overcome barriers such as lack of infrastructures and lack of initiatives on the part of local authorities. The positive attitude of residents regarding sustainable tourism development is necessary to achieve it. In this



context, investigating the socioeconomic profile of residents would benefit the acceptance of such developmental programs. Despite the significant findings of the present study, there are a number of limitations to this study that should be noted. In particular, a limitation of the study is the fact that we have recruited residents of a specific region, employing a stratified sampling method. So, addressing a larger group of residents from regions with differentiated socioeconomic characteristics and developmental prospects would benefit the generalization of our results. Finally, we did not take into account in our empirical analysis parameters such as how respondents perceive the meaning of sustainable tourism. So, further research is needed to address the aforementioned limitations.

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*Chapter 14*

## **THE ROLE OF TOURISM IN THE FORMATION OF ENVIRONMENTAL OUTLOOK**

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### **ABSTRACT**

The paper discusses features of tourism as a special sphere of activities focused on the formation of environmental outlook. Tourism specifics related to environment conservation becomes evident in its features as a segment of economy and in peculiarities of territory development. Tourism as a multipurpose type of natural resource use, successfully combined with other types of economic activities, requires various features of natural complexes, often polar. Tourism is shown not to cause direct removal and use of natural resources. On the contrary, the support of quantitative and qualitative parameters of these resources is considered the basis for industry development. Tourism, which main resource is natural complexes, is extremely interested in their conservation. Strategically tourism interrelation with nature and its protection is regarded as nature protection for tourism; nature protection through tourism; nature protection from tourism. Environmental tourism is the main type of tourism, which determines the value of natural recreational resources as an important condition of their functioning. A highly specialized environmental tourism and ecological properties of tourism in general are distinguish. Definitions of environmental tourism and its specifics in countries of different development are briefly analyzed. Various macro-regions of the world have different opportunities and prospects for tourism development in general and for environmental tourism in particular. World ecological community concluded that the optimum for the ecological well-being of a country is to conserve 10-15% of its area. These figures should be taken with great caution, because for regions located in high latitudes, where natural complexes are most sensitive to human impacts, they do not correspond to reality. Due to ambiguity of definitions and requirements for environmental tourism, there are some opinions on “not harmless theoretical enthusiasm about ecological tourism” in Russia.

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## INTRODUCTION

Since the beginning of the 1990ies globalization and ecologization, two interrelated world trends, have become quite evident in the development of society. They determine conditions of production, specifics of natural resource management, and rules of conduct of every person in the surrounding world. Tourism plays a special role in the environmental outlook formation, as it is the most eco-friendly sphere of human activities. Tourism specifics related to environment conservation becomes evident in its features as a segment of economy and in peculiarities of territory development.

A governing factor for tourism development in a certain area is the use of its resources (especially natural) and their properties. Tourism is a special sphere of activity able to combine general features of natural resource use in the area and create a unique character of area development. The most important feature that distinguishes tourism from other sectors of economy is its ability to support and develop various quantitative and qualitative parameters of natural resources, but not their direct removal or consumption. The following other features of recreational activities that contribute to area development may be noted.

1. Unlike most sectors of economy, which products are transported to consumers, tourism, on the contrary, generates great migration flows of people to places, where recreational resources are concentrated, i.e., to the products of tourism.
2. Tourism is often the “pioneer” in the development of natural resources, the first to involve into its activities natural complexes and their elements, which have not been used before, such as exotic and unique landscapes, high mountains, beaches, snow, caves, waterfalls, etc.
3. Therefore, tourism as a multipurpose type of natural resource use requires various features of natural complexes, often polar. Some kinds of tourism need natural complexes and their components to be unique, others to be typical. Tourism demands both comfort and difficulties to overcome; winter and summer; the urban and wildlife environment. Therefore, at present almost our entire planet has become a tourist resource. As a consumer of an area and the fastest growing industry “tourism is ahead of all other sectors of economy” [1, p. 125].
4. Tourism successfully groups with other types of natural resources management, such as agriculture (agricultural parks), forestry (natural parks), fishing (water parks) and environmental protection (national parks), even with mining (tours). At the same time tourism require from natural and anthropogenic complexes new additional properties (attractiveness, comfort, variety, availability, etc.).
5. Specifics of natural resource use for tourist purposes (complexity, availability, complementarity, etc.) interfere with common concepts of natural resource management accepted in other sectors of the economy. In case of tourism it is difficult to define the frame of such traditional concepts as “a natural complex”, “natural conditions for tourism”, “tourism environment”, “touristic resources”. They have unequal scope and content, when applied to different forms and types of tourism [2].
6. Unlike other industries, where embodied and live productive forces mostly impact the environment, in tourism, it is the consumer (the tourist), who affects nature. It is

the tourist, who in the process of recreational activities directly affects landscapes and their components, and this anthropogenic pressure could severely undermine the stability of self-organizing natural complexes in areas of popular public recreation and intensive tourism. In Russia these areas are Seliger, Valaam, the Crimea southern coast, Moscow region, and some others. Therefore, methods of improved production technologies, widely used for the biosphere protection, are not the only and perhaps not most important in case of tourism. Of great importance are the territorial organization of tourism activities, functional zoning and such spatial organization of recreational areas, in which recreational needs of people are satisfied to the maximum, but not damage natural complexes as the main touristic resources.

7. Tourism, based in general on natural complexes as its primary resource (and at present on a global scale), is exceptionally interested in preserving these complexes. Pollution and transformation of components of the geographical environment “wash out” recreational resources and make it impossible to organize tourist activities. Tourism, more than any other industry, is interested in regulating human impacts on natural complexes, creating eco-efficient industrial and household technologies [1].
8. Tourism plays a leading role in environmental education and awareness of the world population, and is the most effective instrument for the formation of the global environmental outlook.

Thus, the distinguishing feature of tourism is that it, as a special sphere of economic activities, combines natural resource management, socio-economic, educational and environmental aspects.

1. Natural resource management. Tourism uses natural resources more specifically, and as was above noted, without their direct extraction and transformation, and most importantly, in a complex way as a single system.
2. Environment protection. Specific features that distinguish tourism from other resource-based industries, give rise to different views on the role of tourism in the conservation of the natural environment. Tourism interrelationship with nature and its protection should be considered as follows.
  - a. Nature protection for tourism. Tourism cannot exist without its natural basis, i.e., the natural environment. Moreover, it has specific requirements for its state and availability of specific resources. Therefore, to develop tourism, one of the most profitable spheres of human activity, it is extremely important and vitally necessary to care for environment purity, its primitive grandeur.
  - b. Nature protection through tourism. Tourism, as a form of vigorous activity in close contact with nature, educate people to love nature, stimulates nature protection.
  - c. Nature protection from tourism. Like any human activity, tourism affects natural complexes and causes their deterioration (when tourist activities become excessive). Therefore, any kind of tourism should follow environmental requirements (ecologization of tourism) [1].
3. Socio-economic development. Tourism entirely belongs to the economic sector of human activity, which main goal is to make a profit. About 30 industries are directly

or indirectly related to tourism. Tourism development needs new roads, bridges, hotels, parking lots, shops, cafes and restaurants. It creates new jobs to be professionally staffed. Today, revenues from international tourism are about a trillion dollars [3].

Compared to various human activities, tourism differs in that the use of recreational resources serves the needs of people for rest and recreation. The main function of recreation (and tourism as its most important component) is human health resumption, vocational rehabilitation and improvement of life activity. Since the individual concepts of rest and recreational needs are very diverse, therefore the requirements for these resources are also different. And this explains the diversity of resources and tourist activities. From the perspective of the environmental outlook formation eco-tourism seems to be the most effective type of tourism.

Ecological tourism took shape in 1970-80ies as a local idea of creating a balance between economic benefits of recreation in nature and environmental safety of recreational areas. This idea was a part of the global movement for nature conservation on our planet as the basis of life on it. Local ideas gradually transformed into regional and a new global outlook appeared: eco-tourism is a kind of activity able to neutralize anthropogenic impacts and to reduce the threat of ecological crisis [3].

Demand for eco-tourism is growing at rate 7% per year according to the WTO experts. Annually, it consumes goods and services worth \$ 55 billion, which is 25% of international trade in services and 12% of the gross world product. Demand for this type of recreation is directly associated with the increasing ecologization of social consciousness with the environmental imperative. At the same time, eco-tourism should be considered in the context of diversification of demand. Strengthening of the role of regional factors, including the environmental one, will provide reorientation of the major global tourist flows towards regions poorly developed in terms of tourism.

One must admit that the assessment of the current state and level of eco-tourism development in various publications differ significantly. Most differences relate to the definition of eco-tourism. For instance, if we take as guidelines the notion that eco-tourism includes all forms of recreation, based on the use of natural resources, estimations of its volume will be significantly higher than in the case, when eco-tourism is described as a recreational and knowledge-expanding activity in nature, accompanied with technologies of environmental management.

Opportunities and prospects for tourism development in general and eco-tourism in particular are different in various macro-regions. World ecological community concluded that the optimum for the ecological well-being of a country is to conserve 10-15% of its area. These figures should be taken with great caution, because for regions located in high latitudes, where natural complexes are most sensitive to human impacts, they do not correspond to reality [3].

“Environmental, natural, soft, quiet, humane, gentle, ecological and socially responsible tourism” is not a complete range of definitions of this segment of the tourism industry. Diversity of terms reflects the largeness of content, plurality of specific forms of activity in this new vast field of tourism, which is generally called eco-tourism. There are many definitions of eco-tourism, each of which focuses on its certain important aspects. Taken together, these definitions adequately describe the diversity and evolution of ideas about the

goals and objectives of this new tourist industry. In general, the analysis of various definitions of eco-tourism makes it possible to select a number of major criteria, which reveal the essence of eco-tourism and explain its significance for the environmental outlook formation. Eco-tourism should answer the following purposes.

- 1) It should be addressed to nature and mainly based on the use of natural resources.
- 2) Eco-tourism must not damage the environment, i.e., be environmentally sustainable.

The implementation of this principle grounds on the understanding of the importance of landscape and biological diversity, their role in maintaining the ecological balance on the planet. The main tactical steps are based on the frame program of environmental management: planning, organization, motivation, analysis and control of eco-tourism activities. At the planning stage the ecological capacity should be determined; the environmental strategy should be developed and coordinated with the marketing strategy; pricing policy should be created taking into account environmental requirements; long and short-term activities should be planned in accordance with the laws; environmental measures should be included in the business plan. The organization stage includes the implementation of such activities as the cooperation with the government institutions of different levels on environmental and legal issues; the creation of a strictly verified internal structure of tours and nature trails, including the appropriate staffing; the provision of certain measures to reduce the risks of recreational activities. There should be motivation to encourage self-actualization of organizers and executors of eco-tourism activities, as well as moral and material incentives. The implementation stage should obligatory include the analysis and control of environmental risks, monitoring of the recreational area, and rehabilitation measures in order to modify the activity as needed.

- 3) Eco-tourism should target environmental education and form public awareness of an equal partnership between men and nature. This means the recognition by population of values of the area of living, as this area in people's minds is associated not only with moral satisfaction owing to the beauty and purity of nature, but also provides economic benefits received from this nature. Tourists, taking part in ecological tours, are, in any case, people, who are not indifferent to environmental problems. They also increase the level of their environmental education by getting new information during the tour. Moreover, they become a sort of walking advertisement, when promoting a particular tour. The mass media, being involved in the eco-tourism promotion, contributes to attracting more new participants in environmental activities, thus increasing environmental outlook of the population.
- 4) Eco-tourism should care for and preserve the local socio-cultural environment. Local cultural traditions and national character are unique eco-tourism resources. The culture and customs of the people living in areas of ecological tours should receive due respect and care.
- 5) Eco-tourism should also be cost effective and ensure the sustainable development of areas where it takes place. This principle has a special significance for eco-tourism, since it usually develops in economically backward regions, little affected by human activities, where job security and standards of living are usually low. Therefore, it becomes particularly beneficial for the local population to be engaged in such

spheres as tourism hospitality, manufacturing and marketing of souvenirs, food production and services for tourists, animation and amusements, security and nature rehabilitation activities, etc. [3].

The distinction is made between a highly specialized ecological tourism and ecological aspects of tourism. The first is often identified with scientific ecological activities, for example, studies of the ecology of a golden rhododendron or a Japanese crane. The second appeared and developed, as noted earlier, due to the ecologization of the society as a whole. This explains the desire of tourists to combine, for example, two-week “beach” tours with highly ecological excursions, to implement eco-friendly technologies in traditional tourist products.

It is also worth mentioning that a narrow (classical) interpretation of eco-tourism is prevalent in countries with extensive poorly developed areas (Canada, Australia, Russia). Its broad interpretation is typical for countries with very limited “wildlife” resources. The concept of “eco-tourism” originated in counties, where outdoor recreation is becoming every year more and more exotic.

Despite the seeming obviousness of the role of eco-tourism in the conservation of natural wealth of the world, this field of recreation in Russia has certain “hidden traps” both in terms of its development and implementation of its tasks of environmental education. Due to ambiguity of definitions and requirements for eco-tourism, there are some opinions on “not harmless theoretical enthusiasm about ecological tourism” in Russia. In countries, which are not able to develop of environment-friendly tourism due to poor infrastructure and stereotypes of exploitive use of resources, pirate natural resource use for recreation and frank cheating of tourists become possible [4, p. 161]. Irrespective of obvious discrepancies in definitions and content of the term “eco-tourism”, it should be admitted that internal culture and conscience of an eco-tourist is his driving force and conduct regulator. Strict requirements to the organizers of eco-tours also play the key role. These people should “have a truly encyclopedic knowledge of botany, zoology, ecology, geography, history and local ethnography, become good athletes, almost doctors or rescuers and after all highly moral and selfless people .... because the quality of recreation depends on them, but not on declarations” [4, p. 160].

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