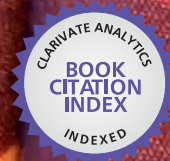


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Towards Practical Application

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TOURISM - FROM EMPIRICAL RESEARCH TOWARDS PRACTICAL APPLICATION

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Tourism - From Empirical Research Towards Practical Application

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Contents

Preface XI

- Chapter 1 **Community Participation toward Tourism Development and Conservation Program in Rural World Heritage Sites 1**
S. Mostafa Rasoolimanesh and Mastura Jaafar
- Chapter 2 **Community Development Strategies for Tourism Development in Langkawi Islands, Malaysia 15**
Azizan Marzuki and Joanne Khoo
- Chapter 3 **Ecotourism and Its Role in Sustainable Development of Nepal 31**
Anup K. C.
- Chapter 4 **Tourism Carrying Capacity for Beaches of South Andaman Island, India 61**
R. Sridhar, E. Yuvaraj, V. Sachithanandam, T. Mageswaran, R. Purvaja and R. Ramesh
- Chapter 5 **Assessing Potential Areas of Ecotourism through a Case Study in Ilgaz Mountain National Park 81**
Mehmet Cetin and Hakan Sevik
- Chapter 6 **Tourism, Competitiveness and Economic Growth: A New Analytical Model 111**
María del P. Pablo-Romero, Palma Gómez-Calero and Javier Sánchez-Rivas
- Chapter 7 **Interaction between Cultural/Creative Tourism and Tourism/Cultural Heritage Industries 137**
Dr. Jurėnienė Virginija

Chapter 8	Tourism and Immigration: The European Contribution to the Invention of Landscape and Hotel Industry in the Atacama Desert During the Nitrate Epoch, 1880–1930	159
	José Antonio González Pizarro	

Preface

Tourism is that area of activity of contemporary man that touches on various fields of human interest. Representatives of numerous academic disciplines find it intriguing for its exceptionally interdisciplinary character. Conditions for and consequences of the development of tourism are investigated, among others, by economists, geographers, sociologists, experts in culture, anthropologists, management and social policy specialists and even by representatives of some natural sciences. Researchers dealing with tourism need to meet strict methodological requirements, but they get access to a very interesting subject of scientific inquiry, which combines social, cultural, economic and environmental aspects to create an ontologically new quality offering epistemological challenges.

The diversity of topics and methodological approaches present in the study of tourism is also visible in this book. It contains eight chapters covering many aspects of contemporary tourism (in methodological and geographical contexts). The authors represent different research approaches and scientific disciplines.

The first two chapters discuss the issue of involving local communities living in rural areas in the development of tourism. The first one concerns the population of areas with exceptional natural values (qualified as World Heritage Sites). The authors, based on analysis of international literature, conclude that involvement of the inhabitants of such areas is related primarily to economic aspects, whereas their participation in decision making is smaller. The second chapter presents a case study of the Langkawi Islands in Malaysia. The authors investigated the effectiveness of the strategies implemented in this area; the strategies were aimed at involving the local community in the development of tourism, which is becoming one of the most important branches of the local economy, replacing agriculture.

The next three chapters are devoted primarily to the relationship between the natural environment and tourism. The first one uses the example of Nepal to present the role of (eco)tourism as a factor that may influence the problems of economic and social development in various ways. The author of the chapter highlights numerous positive aspects concerning the interaction between ecotourism and sustainable development. Nevertheless, he also sees certain related threats. The authors of the next chapter present a methodology for calculating the tourism carrying capacity of the Andaman Islands' beaches. A very detailed analysis of the problem, including environmental aspects as well as the capacity of tourist facilities, makes it possible to learn about the methods applied and results obtained. It may also serve as a suggestion on how to implement similar research projects in other destinations (in particular those susceptible in terms of natural values). The last chapter on the relations between tourism and natural heritage presents the possibilities of using Geographical Information Systems (GIS) to evaluate the impact of ecotourism on the natural environment

(in conservation areas). The Ilgaz Mountain National Park, located in Northern Turkey, was used as the case study for this purpose. The results of the study conducted by the author of the chapter describe the tourist potential of the area using GIS tools.

The final three chapters of the book cover economic and cultural aspects. The sixth chapter features an analysis conducted from a (rather) macroeconomic point of view; the authors investigate the relations between competitiveness theories and tourism and the impact of the latter on economic development. As a product of their study, they present a theoretical model of growth, which takes account of the factors of tourist competitiveness and traditional capital and labor resources. The next chapter concerns a particularly up-to-date topic of mutual relationships between the so called cultural/creative tourism and tourism/cultural heritage industries. The author of the chapter, by quoting examples from all around the world, presents the conceptions of cultural and creative tourism, their resources, objectives as well as benefits and damage to nature and society. The last chapter is somewhat different, as it discusses the impact of migration from European countries on the socio-economic development, including the development of tourist infrastructure, in the region of Antofagasta (Northern Chile) in the period 1880–1930. The chapter is different from the other texts in the book in that it explores a historic topic using a methodology adopted from the science of history. On the basis of an analysis of historical documents and data, the author presents the development of tourism in this area, pointing to the factors which made it possible.

Tourism, a subject of empirical research carried out by scholars representing different fields of knowledge, constitutes at the same time an area of practical activity of contemporary man. It encompasses so vast areas of fields of human activity as economy, environment or culture. This linkage of academic and practical activity represents an ideal possibility for verification of obtained results in the context of their implementation. It results from the fact that majority of research on tourism phenomena may transition to the process of implementation. Taking into consideration this situation, almost all chapters in the book, apart from methodological and theoretical foundations, also include possibility of practical implementation of the results. It particularly concerns such fields as socio-economic development as well as environment and culture. This fact explains the title of the whole book: *Tourism - From Empirical Research Towards Practical Application*.

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Community Participation toward Tourism Development and Conservation Program in Rural World Heritage Sites

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Additional information is available at the end of the chapter

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Abstract

Community participation in tourism development and World Heritage Site (WHS) conservation management is essential for the sustainable development of WHS destinations. Local communities play a significant role in reviving and sustaining WHSs. Community participation ranges from involvement in the decision-making processes at the highest level down to economic involvement and the promotion of the destination at the lowest level. What shape community participation ultimately takes depends on the circumstance of destinations. This study attempts to review the current community participation literature with respect to rural WHS destinations, synthesising the current literature by way of a systematic review. The findings reveal a preference among rural WHS residents for economic involvement and destination promotion rather than participation in the decision-making process. The findings of this study expand upon the community participation literature, clarifying the concept in the context of rural WHS destinations. In addition, the results have practical implications for local authorities responsible for the sustainable conservation management and tourism development of rural WHS—that these seemingly competing objectives are best achieved by involving local residents in economic activities and increasing their benefits from tourism.

Keywords: community participation, conservation programme, economic involvement, rural destinations, tourism development, World Heritage Site (WHS)

1. Introduction

A community is “a group of people who share a geographic area and are bound together by common culture, values, race, or social class” [1] (p. 356). In World Heritage Site (WHS) destinations, a “community” refers to the residents within a WHS area who are instrumental in

reviving the WHS. Community participation constitutes a relationship, established by the members of the community, through their collaboration in achieving common goals and making the community a better place in which to live [2]. Community participation in heritage management can settle conflicts between the needs and interests of residents—between the pursuit of a better quality of life and economic development—and WHS conservation [3]. *The Charter for the Conservation of Historic Towns and Urban Areas* recognises the value of community participation thusly, “The participation and the involvement of the residents are essential for the success of the conservation programme and should be encouraged” [4] (p. 2). Furthermore, *The Burra Charter* stresses that heritage conservation is only sustainable with the participation of the community [5] (Article 12).

Community participation in WHS conservation and the development of heritage tourism has been the focus of several studies [6–10]. Community participation in WHS conservation and tourism development is essential for reviving WHS destinations and for sustaining their development into the future [7,10]. The participation of local residents in WHS heritage management and tourism development contributes toward improving their quality of life and, at the same time, the sustainable conservation of the heritage site itself [3,6,7]. In addition, the participation of local residents improves their sense of belonging, develops social networks, and inculcates a greater appreciation and understanding for the value of the local area [6,7,9,11,12].

Three types of community participation can be identified in the context of tourism development and heritage management: coercive participation, induced participation, and spontaneous participation [13–17]. Coercive community participation refers to the lowest level of participation in which residents have no power over the course of the tourism development. Their involvement is limited to various predefined activities revolving around tourism destination promotion and they receive few economic benefits [16]. In induced community participation, although local residents have a say in the heritage management and tourism development process, they have no actual power or control over the decisions being made by those in positions of authority [16,18]. In spontaneous participation, local residents have the power to make decisions and control the development process [16,17].

Notwithstanding, the involvement of local communities in WHS conservation and tourism development is contingent upon a variety of factors that may either facilitate or hinder their involvement. Local communities must be aware of the value of the WHS in which they inhabit and have the necessary knowledge and skills with which to take advantage of tourism development and conservation opportunities. That said, some incentives might be necessary to motivate local residents to engage with tourism development and conservation processes, lest these opportunities are allowed to pass them by. The perception of benefits in the inscription of a site as a WHS and tourism development can serve to encourage residents to participate in tourism development and WHS conservation.

This study aims to synthesise the community participation literature to date in the context of WHSs. Notwithstanding, the participation preferences of residents may vary according to the circumstance of the destination [19,20]. The current study, therefore, focuses exclusively on rural WHS destinations to explore community involvement and identify how local authorities

and correspondent organisations can best go about involving residents in the sustainable development of WHS destinations. The remainder of this chapter is organised as follows. In the next section, we explain our methods for conducting this systematic review of the literature. We review and analyse the existing literature with respect to community participation in WHS conservation and tourism development, various types of community participation, and factors influencing community participation in rural WHSs. Following the literature review and analysis, we undertake a discussion of our findings. We conclude this paper by outlining the theoretical and practical implications of this study and offer a number of recommendations for future research.

2. Methodology

This paper uses content analysis to review the current community participation literature with respect to rural WHSs. To be more exact, we reviewed books and scholarly articles published in refereed tourism journals identified using Google Scholar from 1990 until late 2015. Content analysis is a research method used to trace the evolution of a phenomenon over an extended period and can reveal a wealth of related knowledge [21,22]. We searched Google Scholar for scholarly articles using three groups of keyword searches. In search Group 1, we searched for “community participation,” “community involvement,” “community engagement,” “resident participation,” “resident involvement,” “resident engagement,” and “public participation.” In Group 2, we searched for “rural destinations” and “rural tourism.” In Group 3, we searched for “World Heritage Site,” “heritage management,” and “heritage tourism.” We narrowed our search by combining these three keyword groups. We finalised our list of articles by including at least a keyword from Group 1 and another keyword from either Group 2 or 3. Using this method of selecting the articles, we identified approximately 60 literary sources for analysis. Each article was reviewed and analysed to identify (a) the concept of community participation in tourism destinations, particularly rural WHSs; (b) the various types of community participation and what was most prevalent in rural WHSs; and (c) the factors influencing the successful community participation of residents in rural WHSs. Using this approach, we elucidated a number of recommendations for rural WHS authorities looking to successfully involve local communities in sustainable WHS conservation and tourism development.

3. Analysis and findings

3.1. Community participation in WHS conservation and tourism development

As previously noted, community participation constitutes a relationship established by the members of the community themselves through their mutual collaboration in working toward achieving common goals and making their community a better place in which to live [2]. Community involvement, therefore, is a process of working together with people in the community for the benefit of the said community. In such an arrangement, the connections and interactions between community members are important for creating strong bonds and

relationships. Consequently, community involvement can create a sense of belonging, trust, and credibility among community members [6,23].

Numerous studies attest to the importance of community participation in the conservation and tourism development of heritage sites [6–9,24]. Community participation in WHS management can address conflicts between the economic and developmental interests of the community and the need to conserve the WHS destination as a precious resource and can assist in clarifying the concept of heritage among community members [3,8]. Several heritage management studies have confirmed the importance of public participation in sustainable conservation programmes [7,10]. The local community's participation in heritage management contributes toward an improved quality of life, economic development, and the sustainability of conservation programmes [3,6,7]. Moreover, community participation can instil a sense of pride in the community.

According to the UNESCO World Heritage Committee, the declaration of a site as a WHS forms part of an overall strategy aimed at recognising and protecting the site [25]. As such, the accumulated local knowledge and sense of belonging to a certain place should ideally help the community to live in harmony with the value associated with the site. Educating local communities about their histories, however, is a vital prerequisite for communities to familiarise themselves with their heritage and for them to feel a sense of pride for their site and historical relics. Community participation is vital to this pride-instilling process. Community involvement in heritage projects can influence residents' sense of belonging, aid in the development of social networks with others, and improve residents' pride and understanding of the value of the local area [7,9,11,12,24].

Notwithstanding, WHSs and tourism development are characterised by symbioses and tension [8]. The inscription of a site as a WHS enhances the international visibility of the site, thus serving to attract tourism development, which in turn has the potential public and financial support for the conservation of the heritage site [8,26]. Nonetheless, it is important to develop the site and its surrounding area as a tourist destination for the economic development of local communities while, at the same time, prioritising sustainable conservation programmes within the area to maintain the site itself [27]. Therefore, community participation in the context of WHS conservation programmes and tourism development is significant and meaningful. Community participation strengthens communities because it involves making connections between individuals within the community, with these relationships helping to create a sense of belonging, trust, and credibility [3,6]. Moreover, in the context of WHS conservation and tourism development, community participation is an empowering process involving all tiers of stakeholders (i.e., local government, local residents, and private enterprise), such that problem identification and decision-making are shared and stakeholders have a collective interest in the sustainability of the development [6,28–33]. Both the community and the tourism developers alike benefit from their involvement in this process, boosting their respect for the traditional lifestyle and values of the destination community [30,32,34–36]. Destination communities, due to their historical knowledge of how the community adapts to change and being the group most affected by tourism, should be actively involved in tourism planning, especially given the expectation that they will become an integral part of the tourism

product [30,37]. Furthermore, some of the negative impacts of tourism might be avoided, and positive impacts maximised, through community participation in the planning process.

Community participation in the context of tourism planning focuses on the decision-making process and the benefits of tourism development [29,32,33]. The involvement of the local community in the decision-making process benefits the local economy and boosts residents' respect for their traditional lifestyle and values [32,34–36]. Local residents can benefit economically, either through employment with introduced businesses or by establishing their own small businesses to generate additional economic benefits for their community [33]. Local community participation provides residents with a range of opportunities to participate effectively in tourism development activities, to mobilise their capacities as social actors rather than as passive subjects, to make decisions, and to control the activities that affect their lives.

The participation of the local community in tourism is a driving force for change and a catalyst for development. According to Telfer and Sharpley [38], local communities can provide a wide range of perspectives on tourism development. Inskip [39] argued that only through their involvement in tourism activities can local communities maximise the socioeconomic benefits from tourism. Moreover, the accuracy of representations of their traditional lifestyles and values is contingent upon the involvement of the local community in the planning and development process [36]. Therefore, sustainable tourism development relies upon the involvement of the local community. Notwithstanding, this literature has revealed various streams of community involvement and participation, which should be elucidated to understand this concept better in the context of rural WHSs.

3.2. Types of community participation

Several researchers have identified various types of community participation, from manipulative participation to citizen power [13–16]. Arnstein [13], a pioneer in this area, suggested an eight-tier hierarchy of resident participation categorised according to three groups: manipulative participation, citizen tokenism, and citizen power [18]. Pretty [14] developed a somewhat similar typology of community participation inclusive of three categories: manipulative participation, passive participation, and self-mobilisation [15,17]. Tosun [16,18] applied the typologies of Arnstein [13] and Pretty [14] to tourism to identify the three forms of community participation already explained: coercive participation, induced participation, and spontaneous participation [17]. Note, however, that, in coercive community participation, residents' involvement is limited to predefined activities in accordance with decisions made by power-holders who also determine how residents will act to promote the destination and to what economic benefits they will be entitled. The residents themselves, however, have no actual power or opportunities to make their voices heard [16]. The second form of community participation, based on Tosun's typology, is induced community participation, which is similar to citizen tokenism in Arnstein's model and consultation in Petty's typology [16]. In induced community participation, although residents' have a voice in the tourism development process, they lack the power with which to control the decision-making processes [16,18]. In short, power-holders determine whether the opinions of residents will be accepted or rejected and how they will impact the planning and development process [17]. This type of participa-

tion often takes the form of public hearings and usually occurs late in the development planning process, once most issues have already been resolved and decisions have been made [40]. The highest level of community participation is spontaneous participation in Tosun's model, citizen power in Arnstein's typology, and self-mobilisation and interactive participation in Petty's study. As observed previously, spontaneous participation refers to the power of residents to make decisions and control the process of development [16]. Spontaneous participation can generate trust, ownership, and social capital among the residents [23,41].

However, several studies have found that destination communities in the developing world, or in less developed areas, such as rural destinations, prefer minimal levels of community participation and economic involvement [19,20,33]. Residents in these locations tend to be less interested in participating in decision-making or controlling the process of tourism development and heritage conservation [19,20,33]. In some less developed destinations, residents indicated a preference for involvement of economic activities and benefit sharing over involvement in the decision-making processes [19]. We speculate that such findings are the product of the economic importance of tourism to rural communities. Tourism in rural WHS destinations has historically been an important mechanism for development. Consequently, rural destination communities aspire to become involved in tourism activities, if only so that they might receive a significant share of the economic benefits in the form of direct revenue, employment, infrastructure, and housing ownership [42]. Of course, the involvement of local communities benefits tourists as well, as the local community is ideally poised to provide tourists with a range of accommodation, information, transport, and other facilities and services [43]. Secondary to these economic benefits, tourism helps to improve the local community's quality of life [44]. A study of tourism in a mountainous area reported that local community involvement played an important role in the development and conservation of the environment and other resources and in marketing the destination [45].

3.3. Factors influencing community participation

Residents' community participation preferences are contingent upon a number of factors [6,11]. Having investigated the factors influencing residents' community participation preferences in heritage management and tourism development, three categories of influencing factors become apparent: motivation, opportunity, and ability [46,47]. Motivation concerns residents' willingness and interest to become involved in the development/management process [48,49]. In the context of WHS destinations, motivation affects residents' perceptions, WHS inscription, and subsequent tourism development impacts. Focusing on the perceived positive impacts of tourism encourages the community to participate in tourism activities and heritage conservation programmes and to support tourism development, whereas focusing on the perceived negative effects reduces their support for tourism development [6,7,11]. Therefore, community participation in WHS conservation programmes and tourism development processes depends on the concerns, interests, and perceptions of residents regarding the impacts of tourism development [6,7,11,46,47]. Bearing this in mind, the inscription of a destination as a WHS and development of tourism can positively influence the lives of local residents, with increased income, employment opportunities, improved standards of living,

improved public infrastructure, increased availability of recreational and entertainment facilities, and the promotion and preservation of local culture [50–56]. However, tourism also has the potential to negatively impact local communities by increasing the cost of living, raising property prices, overcrowding and traffic congestion, and increasing the prevalence of crime and drugs [9,50,52,53,57,58].

Several studies have highlighted the significant effect of destination residents' perceptions of WHS inscription and tourism development on community involvement [6,11,46,47,59]. These studies suggest that residents who perceive the positive impacts of WHS inscription and tourism development to outweigh the negatives are more eager to participate in WHS conservation programmes and tourism development. However, for most residents of rural destinations, this interest in participation is limited to engaging in predefined activities, with power-holders enabled to make decisions on the behalf of the community with respect to how the destination will be promoted and what economic opportunities will be available for the local community [9,16,26,30]. These studies suggest that residents in WHS destination communities tend not to be interested in participating in the decision-making processes.

The aforementioned opportunities refer to preconditions, such as the political will, rules, and channels that make possible the participation of residents in tourism activities and conservation programmes [46]. These opportunities, therefore, are a reflection of the extent to which current circumstances are conducive to community participation [49]. Without open channels of communication between community members and correspondence organisations, community participation in conservation programmes and tourism development is impossible [26]. Therefore, the extent to which local political structures allow for and facilitate the participation of community members constrains the participation of local residents [26,33,46]. In most developing countries, political structures are centralised and top-down, with political parties and decision-makers unlikely to share power with the public. In such an environment, spontaneous community participation may be difficult, if not impossible, hence the propensity toward coercive community participation and public hearings in developing countries [16,26,30].

If local residents assume that authorities and government officials are interested in hearing their voices and will provide them with opportunities to become involved in the decision-making process, they will be encouraged to participate. Ultimately, residents will participate in conservation programmes and tourism development to the extent to which they believe that local authorities will allow [26,33,46]. However, in underdeveloped and rural destinations, particularly in the developing world, residents assume that the centralised political structure and the tendency of local decision-makers to shun power sharing will work against them [16, 26,30]. As such, participating in the decision-making process is often a completely alien concept for many rural residents in developing countries; consequently, their first preference is simply to undertake economic activities.

Moreover, the ability of the community to participate in conservation programmes and tourism development is contingent upon various factors, including knowledge, skills, and financial resources [46]. Several studies have identified a lack of knowledge among residents as an obstacle to their participation, particularly in rural destinations [30,60–62]. Community

participation requires, in one form or another, a certain level of skill and knowledge, and community members must be prepared to improve these skills to participate effectively. To address this issue, Tosun and Timothy [62] suggested public media campaigns to train and educate people, thereby improving their awareness and readiness for involvement in tourism development.

Notwithstanding, most tourism-related jobs do not require a particularly high level of skill or specialised knowledge [63]. As such, rural residents can easily transition into tourism-related economic activities with minimal investment in education and upskilling. For example, rural residents can often easily establish themselves as accommodation providers, operate restaurants, and provide recreational/entertainment activities.

4. Conclusion and recommendations

This study reviews and synthesises the community participation literature related to rural WHS destinations. Community participation plays a significant role in reviving and sustaining the status of WHSs, leading to economic development and subsequent improvements in the quality of life of local communities [3,7,63]. However, in the context of tourism planning, the community participation literature revealed varying levels of community involvement, ranging from participation in decision-making to involvement in economic activities [29,32,33]. The findings of the current study reveal that the residents of rural destinations prefer to limit their involvement to economic activities to participation in the decision-making processes [19,20,33]. The inscription of a site as a WHS enhances the location's international visibility, thus serving as a magnet for tourism development and the economic development of local communities [8,26]. The support of local residents in conservations programmes, therefore, is important in terms of maintaining the site's WHS status to attract more tourists and increase the range of benefits available to the local community through their continued economic involvement. In addition, the findings in relation to the factors influencing community participation reveal the importance of ability (as a function of awareness and knowledge) and motivation (as related to perceptions and interest) in compelling rural residents toward involvement in economic activities compared to participating in the executive-level decision-making. Moreover, in rural WHSs, particularly in developing countries, the political structure often restricts the participation of community residents to planned economic activities and heritage site promotion, throwing up barriers to their involvement in the decision-making processes [16,26,30]. Therefore, economic involvement is the preferred type of community participation in rural WHS communities, particularly in the developing world. These findings mark a significant theoretical contribution of the present study to the community participation literature. Notwithstanding, this study is also limited by the fact that only existing literature was reviewed to shed light on community participation in the rural WHS context. Case-base rural WHS studies, in developed and developing countries, would go a long way toward clarifying some of the issues identified in the present study.

This study has a number of practical implications for local authorities and correspondence organisations responsible for the management and development of rural WHS destinations. To sustain the development of rural WHS destinations, the local authorities should aim to facilitate the participation of the community. The participation of local residents in WHS conservation and tourism development is critical to future sustainable development. However, based on the results of this review, local authorities should focus on the economic involvement of residents and look to maximise the residents' benefits from tourism to attract further support among the local community for conservation programmes and tourism development. Local authorities should undertake to improve residents' awareness, knowledge, and skills with respect to tourism development, conservation, and the importance of maintaining the WHS status. Such activities would facilitate the effective involvement of local residents. Moreover, by enhancing the positive impacts and mitigating the negative impacts of tourism, local authorities can increase community members' motivation to become involved. Enhancing the perceived positive impact of tourism encourages the community to participate in tourism activities and heritage conservation programmes, whereas the perception of negative effects reduces local residents' participation and support for tourism development. Increasing the number of opportunities for the local community to become involved will entail a review of existing policies, rules, and regulations to ensure the removal of barriers to community participation, employing a more transparent and egalitarian political structure and maximising the capacity of communication channels. Local residents will involve themselves in conservation programmes and tourism development only to the extent to which they believe that local authorities and government officials will allow; therefore, maximising what is allowed will invariably benefit plans for gaining the most out of community involvement.

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Community Development Strategies for Tourism Development in Langkawi Islands, Malaysia

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Abstract

Community capacity building is widely acknowledged as a crucial tool to foster the process of tourism development. In Langkawi, rapid transformation of the island leads to the marginalisation of the rural economy. As a result, various strategies and tools have been attempted to empower local community participation in tourism activities. This article aims to examine the existing strategies adopted by related stakeholders in Langkawi to work with local communities. For this purpose, in-depth semi-structured interviews were conducted among 20 local stakeholders including government and non-governmental agencies, community leaders, and tourism business operators. Results of the interviews indicated that the existing strategies and tools of capacity building approach include (1) education and training, (2) small and medium-sized enterprises (SMEs) projects, (3) environmental conservation strategies, and (4) partnership building. In conclusion, related authorities and tourism planners need to consider local residents' opinions into the implementation process to ensure positive outcomes from the community development strategies.

Keywords: capacity building, tourism stakeholders, local community, Langkawi Islands, Malaysia

1. Introduction

Tourism and economic growth have been determined to be strongly and positively related [1] when tourism is seen as a local resource by the local community [2]. According to [3], tourism has been identified as an important factor in many contemporary island economies, and in most developing countries, it has become a double-edged sword [4]. Economically, tourism is an option for enhancing rural lifestyles and inducing positive changes in the distribution of income

in underprivileged regions [5]. By enhancing local involvement in the tourism sector, local communities will have a high degree of control over the activities taking place, and a significant proportion of the material benefits would accrue to them [5].

However, there are also many hidden negative impacts from rapid tourism development. Benefits of tourism to local residents have been perceived as being very limited [6], and the negatives included substantial environmental damage, cultural erosion, and community conflicts. For example, Langkawi Island in Malaysia is currently facing an oversupply of hotel rooms and chalets due to over projected data, creating unnecessary competition among the resort operators, with some eventually abandoning the islands, leaving unwanted scars to the landscape [7]. These issues arise due to the limited involvement of the private sector and local community in tourism planning, since public involvement in the planning (without consideration of the design) process in Langkawi has been very limited [8]. By reviewing Malaysia's regulations and policies implemented by the Federal Government, for example, in the 10th Malaysia Plan period (2011–2015), one of the key agendas was the empowerment of local community, especially women, to enable them to utilise their full potential to participate in economic and social activities effectively [9].

Furthermore, consistent with the Malaysia Five Year Plan, the Langkawi Tourism Blueprint 2011–2015 was prepared by the Federal Government and the Langkawi Development Authority (LADA), aiming to redevelop Langkawi Island into one of the 10 best island destinations in the world tourism map. Among the three themes in the blueprint which included 'Products', 'Infrastructure', and 'Enablers,' the last theme was focused on efforts toward local community capacity building. For instance, one of the initiatives was to establish the Langkawi Tourism Academy in order to produce more graduates to enter the tourism industry and cope with the issue of talent shortages in Langkawi. In order to place more emphasis on local participation in tourism development, community capacity building strategies may be a good start for the tourism industry in Langkawi towards sustainable tourism development as it allows more community engagement in the management and control over their resources [10]. Under the circumstances, monopoly of power in the local tourism businesses can be reduced via the capacity building approach to help the underdeveloped communities to improve their ability to participate in the tourism decision-making processes [11]. Ultimately, this approach can lead the local communities' move towards sustainable tourism.

2. Community capacity building in tourism development

In the tourism development context, building capacity among local communities is seen as a 'win-win approach' that describes 'community' effort, time, resources, leadership, and commitment directed towards 'community' identified goals and change [12, p. 7]. This approach is the essence of 'community development' that helps local community to improve their ability to participate in tourism decision making and increase their influence as well as enhance local knowledge to access external resources [13, p. 31, 14]. Community development occurs at multiple levels, including individual, organisational, and community, and all levels

can overlap during the empowerment process to strengthen their unexplored skills [15]. Over a period of time, each level will have the ability to manage their own affairs to meet their development priorities [11]. The ability of all individuals, organisations and communities to manage change to incorporate tourism development and to work collectively can foster and sustain actions for strengthening community benefits and welfare [16, p. 33]. Initially, community capacity building at the micro level approach focuses on the individual component and is the target group concerned with programme for education, skills, job training, and social well-being [17]. At the organisational level, community capacity building refers to the resources, knowledge, and processes associated with local workers, technology, management programmes, networks, and financial resources aimed to improve performance and achieve sustainable goals [17]. At the macro level, community-based empowerment refers to comprehensive capacities of indicators of natural resources, people, socio-cultural factors, budgets, policy, political system, education, and socio welfare in tourism activities [17]. Several tools and strategies were introduced to facilitate community capacity building process, which include community leadership, ecotourism partnerships, community-based entrepreneurship (CBE), training and education, and external support.

Community capacity building has emphasised the importance of community leadership [18], partnerships through collaboration between government agencies, non-governmental organisations (NGOs), the private sector, and local people [19–21]. Leadership can be used as a strategy to increase capacity when the leaders can ensure active involvement of a diverse network of community members, thus enabling those with disparate interests to take collective action by forming a unit of solution [22]. One of the best mechanisms used towards capacity building is through community-based ecotourism partnership [23]. In fact, the partnership of multi-stakeholder at all levels can determine the kind of tourism that a community wants without causing negative impacts [24]. Three ecotourism partnerships have been suggested that can be either community-NGO partnership, community-private company partnership, or federation-private company partnership [25]. A true partnership can therefore be an effective mechanism to transfer ownership entirely to local communities and obtain mutual material benefits through the joined resources and skills to develop ecotourism [26].

Furthermore, CBE has been considered as one of the successful approaches in benefiting the community. As the small entrepreneurship became an essential characteristic of the tourism industry across the world, this approach was adopted to empower local community [27]. The involvement of the local entrepreneurs from new enterprises that operate within the local community is vital for short-term and long-term benefits [28]. In addition, education and training programmes are needed in the tourism industry to educate residents about the impacts on their community [29]. According to [30], this strategy is able to increase the community's understanding on tourism development, establishing foundation for local tourism leadership, and most importantly, create tourism knowledge awareness. Education and training programmes are best introduced at the early stage of community capacity building as it helps to create tourism knowledge and awareness [30, p. 76]. For example, some of the training programmes can provide exposure for participants to understand some of the concerns a tourist might have [30].

According to [15], external support for community capacity development can take different forms including provision of financial resources, technical expertise, training, information, political negotiation, and facilitation of capacity development processes. The approach emphasises on the transfer of knowledge, assistance by small private and community investors with product innovation, assistance with access to markets among the local community; creates spaces and social networks for local people to communicate; provides information on markets, marketing, and technology; and assists local authorities to develop support mechanisms to small tourism related businesses in the destination [31]. Therefore, capacity building strategy is crucial for Langkawi communities because it allows them to have the right to control over resources such as property, money, skills, natural resources, and knowledge in tourism development. This approach can also encourage them to recognise their strengths, values, and local knowledge that will enable them to contribute to sustainable tourism.

3. Research approach

The qualitative research approach was used and Langkawi Island selected as the case study; data collection was conducted from 7th January 2014 until 16th January 2014. Time frame for primary data collection was 10 days with a total of 20 respondents that were asked open-ended questions. Each interview was individually tailored to draw out information from which interviewees could freely express their ideas [32] and make comments regarding community capacity strategies in Langkawi Island. Purposive sampling and snowball sampling were used to identify respondents in the data collection process. Through qualitative interviews, data were collected with four different categories of stakeholders encompassing government officials, local leaders, NGOs, and private companies in order to obtain 'representative characterization' [33]. The semi-structured interviews were recorded and analysed with the framework techniques. All recordings of the interviews were transcribed verbatim and categorised into keywords, followed by indexing, coding, and classifying by themes. Data coding commenced at the beginning of the fieldwork and categorisation of the data into themes was conducted repeatedly and frequently during the analysis phase [34].

4. Existing strategies and tools of capacity building in Langkawi

While analysing the data, several mechanisms were adopted by related stakeholders to work with communities in Langkawi currently. These mechanisms relate to education and training programmes, small and medium-sized enterprises (SMEs) project, environmental conservation activities and partnership building, all of which could contribute to achieve sustainability of local communities in Langkawi.

4.1 Education and training programmes as capacity building tools

Although review of literature showed that community leadership is the main ingredient that makes community capacity building happen [35, 36], yet, findings showed that community

leadership is difficult to be realised in the Langkawi environment because local communities may not be equipped with adequate capacities to make a difference. All respondents suggested that in order to be able to work together with local residents effectively, leaders need to equip themselves with sufficient knowledge and skills. The findings support [29] that implied education and training programs were needed in the tourism industry to educate residents about the impact tourism is having on their community. Education and training are the most common forms of strategies in tourism development. The Langkawi Tourism Academy is an educational institution funded by the Ministry of Education combined with Taylor's College in a joint venture to produce more human resources and stimulate workforce preparation in hospitality programs. *'We make efforts to encourage local communities to attend courses and obtain certificates to upgrade themselves within 16 months'*, said a directory officer from Langkawi Tourism Academy (Respondent 3). She added, *'Compared to those without certificates, students with certificates will have higher salaries...Four and Five-Star hotels require employees with maximum educated background today'*. The college is intended to prepare local people to work in the tourism line by offering four courses covering Certificate in Culinary Arts (CCA), Certificate in Food and Beverages (CFB), Certificate in Rooms Division (CRD), and Certificate in Tourism. *'After 16 months of full-time courses all graduates will have to attend practical training arranged by college,'* explained the directory officer (respondent 3).

In addition, short courses such as Basic Pastry and Culinary Art, Marketing Strategy, Computer and Language courses are offered for local communities with age ranging from 12 to 70 years old. This was further explained by respondent 3 from the college, *'Sometimes volunteer lecturers here will go outdoors to teach in rural areas upon local request.'* Before allowing more local communities to step into the tourism industry, education and training remain fundamental mechanisms to create ethical awareness as well as to avoid exploitation. Basic English and Chinese classes were also conducted by LADA Tourism Division for Homestay operators and other small and medium scale entrepreneurs to improve their communication skills and certificates awarded to all attendees. For the homestay industry, education and training are seen as mechanisms that are closely linked to the success of the homestay business, because operators need skills on management courses and basic marketing strategies for their products. Respondent 9 disclosed that *'for those who want to apply for license, the Ministry of Tourism provides a 5 day course called "Kursus Asas Pengurusan Homestay" at the beginning stage and the purpose is to instil the right concept about Homestay. At the next stage are courses related to tourism such as "Think Tourism" and "Act Tourism", and eventually continue with English language classes.'*

Hence, better education and training provided by the government and relevant agencies are essential tools for rural villagers to ensure the sustainability of homestay businesses. To improve language capabilities, several plans, and programs have been implemented by NGOs to help their members. For example, for KPSP in Tanjung Rhu, English training classes have been organised since 2008 to improve communication skills of local fishermen to help them to become part-time boatmen. Respondent 13 remarked that *'seasonally we invite school teachers to come to our village and give all boatmen a one-week English course...so that they can provide explanation to tourists while conducting mangrove tours.'* Another NGO such as Hock Kean Hoay Kuan Association also put efforts to encourage their members from the younger generations to learn

Mandarin and *'special rewards are given to those who perform well in Mandarin'*, said the secretary from the society (respondent 14). For the Langkawi Tour Guides Association (LTGA), tour guides including nature guides and city guides are required to undergo 1200 credit hours of CTRE (Continual Tourism Related Education) courses to qualify as licensed tour guides. *'Once the tour guides pass the oral tests and practical exams, they must sign on as members of LTGA. To empower all tour guides, role play sessions have been conducted under the guidance of senior guides and the aim is to increase their understanding in cross cultural divides and teach them how to handle challenges while dealing with different customers,'* explained respondent 11.

Numerous hotels and private companies are using the top-down approach by providing internal training for staff or knowledge transfer sessions from the executive level staff to save training costs. According to respondent 15, the Underwater World Langkawi (UWL), *'this year, some animal-care takers were sent to Singapore for training sessions on animal-care management courses regularly. For example, penguins care management. Once they complete their courses, they are required to come back and pass on what they had learnt to their subordinates.'* Respondent 19 explained further that *'they initiate knowledge transfer programs and English training for our staff, but it is for front line staffs only.'* Companies like Langkawi Orchid Farm, Langkawi Frangipani Resort, and UWL, although profit-oriented, also function as knowledge hubs for local communities. For example, *'by involving in Corporate Social Responsibility (CSR), the UWL functions as a center for research and development in the fields of zoology, botany and marine biology to provide training for students from local universities'* (respondent 16).

In addition, the Langkawi Orchid Farm also opened the farm to provide edu-tourism for local students by organising camping activities at camp sites, and *'it is also a place where visitors can go to appreciate the peacefulness and beauty of our farm,'* said respondent 15. Results revealed that the education and training are important tools to increase local people's exposure to tourism development. Several respondents explained briefly about the capacity building tools and strategies adopted by them, which included hospitality courses in Langkawi Tourism Academy, Homestay program courses funded by the Ministry of Tourism, English training classes, tour guides training, internal staff training from private companies and also local entrepreneurs' workshop and environmental conservation campaign conducted by LADA. All the educational projects allow the local communities, especially inexperienced youngsters, to increase their employability in the tourism industry.

4.2 Small and medium-sized enterprises (SMEs) projects

The development of small entrepreneurship should be supported because it has potential to have a larger multiplier effect in stimulating the local economy, according to [27]. Several SMEs projects have been developed by LADA for entrepreneurship development among local communities. *'20 local entrepreneurs are expected to be produced based on Key Performance Indicators (KPI) through the 'Pasar Malam Transformation' program...help them to discover what kind of potential business that bring profit, assist them in promotion and marketing'* (respondent 1). A Langkawi Committee Board was also set up by LADA to involve local people as committee members, with its function as a consulting team to plan and assess the needs of communities. Through the committee board, *'programs such as "Jom Niaga Belia" and "Pemimpin bersama*

Rakyat” which targets young entrepreneurs were carried out while “YB Corner” is for those interested to start their own business such as food stalls’ (respondent 6).

Initiatives to develop homestay programs are one of the effective ways of enabling local communities in SME projects. As part of government initiatives to boost local economy, a homestay program is a form of family business operated by some certified homestay operators approved by the Ministry of Tourism. Initiatives of developing small scale enterprises that are locally owned by families or village communities will be able to promote product creativity and innovation in tourism services [37]. Homestay operators were trained and granted licenses after a series of courses. Licenses would only be issued after inspections by the Ministry of Health on cleanliness and safety of bathroom, kitchen, and rooms. Subsequently, for infrastructure aid, *‘the government gives subsidies by building activity halls for special activities with guests,’* claimed a community leader from Homestay Sungai Itau (respondent 7). Respondent 9 also added that *‘they helped us to build extra washrooms for guests’*. Through proper planning and management, homestay programs would be able to help local communities to achieve sustainable development.

In order to strengthen entrepreneurial and develop tourism capacities of fishing communities in Kilim and Tanjung Rhu, local people also carry out complementary activities to tourism and catering business. Local fishermen can supplement their regular income by selling their catches to tourists. Chairman of *Komuniti Pengurusan Ekosistem Perikanan (KPSP) Tanjung Rhu* (respondent 13) explained that *‘we conduct other businesses related to fishing activities such as project “Bela Siput” to have more seafood products to sell to tourists in the local seafood restaurants’*. Also, members from NGOs are encouraged to create more tourist-orientated products to fulfil the needs and expectations of tourism destination.

In addition, Secretary of Hock Kean Hoay Kuan Association (respondent 14) also agreed with the view by saying that *‘locals need to sell unique products that tourists cannot get in other states in Malaysia or other places; we cannot just keep importing products from Thailand or else Langkawi will lose its own identity eventually’*. An orchid farmer shared his view that the existence of orchid farms can generate a new tourism product—Agro-tourism by *‘bringing new life for Langkawi tourism...enhance the attractiveness and provide a memorable farm experience for visitors, as a new form of tourism to help locals economically and increase employment rate’* (respondent 15). In response to the development of the new and innovative tourism product in Langkawi, respondent 11 has different views compared to other respondents, when she opined that, *‘the existing tourism products are adequate to cover tourists’ demand and requirement currently, the local community just needs to focus on proper maintenance and periodic improvement of tourism products and destinations.’* Respondent 19 also gave his view by stating that *‘instead of focusing on first-class infrastructure, the local government needs to improve livelihoods of locals by providing more basic infrastructure to fulfil the needs of tourists such as public toilets, parking lots and signages’*.

Capacity building in terms of bringing innovation in tourism will enable the introduction of new products to the market, or open up new markets through combining strategic orientation with innovative behaviour and process: new products, new services, opening new markets, new sources of supply, and new ways of management practice [38]. Therefore, for the purpose of strengthening community capacity in tourism activities, related stakeholders such as

government officials, NGOs, community leaders, and private companies have been increasingly putting efforts into entrepreneurship development and tourism products innovation to spur the local economy and fostering a healthier entrepreneurship climate in Langkawi.

4.3 Environmental conservation programmes towards sustainable tourism

According to [39], Langkawi Island has been acknowledged as the 52nd Global Geopark under the auspices of UNESCO's Global Geoparks Network. The geopark gave emphasis to local community involvement in conservation efforts [40] and LADA Geopark Division plays an important role to promote the involvement of local communities in environment conservation. Several awareness projects were designed in collaboration with villagers, students, and other NGOs. For example, activity *Gotong-royong* was held to overcome soil erosion and to stop the habit of littering the rivers. Respondent 5 said that *'We also try to organise Geo-tours or educational based talks to explain the importance of sustainable socioeconomic development and increase appreciation of our geological heritage resources.'* Initiatives for the integration of green practices into business management are able to maintain profitability while encouraging communities to be committed in environmental conservation.

One of the strategies implemented by the government relate to the 3R (recycle, reuse, reduce) practices that were designed to encourage local communities to produce handicrafts made from recycled materials, *'LADA will then help them to repackage and promote the handicrafts'* (respondent 6). The stakeholders' interviews also revealed that respondents from the private sector such as Langkawi Orchid Farm, the Frangipani Langkawi Resort and Spa, and the UWL are all environmentally responsible companies. These companies practice management imbued with the principles of responsible tourism, with due consideration to their workers, customers, and local communities. Furthermore, the farm owner (respondent 15), resort operator (respondent 16), and manager of UWL (respondent 17), were serious in wanting to raise awareness about issues linked to environment and climate change. For example, *'we make efforts to reduce water, energy usage, recycle waste and planting organic food, and we want our staffs to remember the principles of reuse, reduce and recycle,'* said respondent 16 from the Frangipani resort.

According to respondent 12, conservation and sustainable tourism need to be prioritised by the government because *'Langkawi is supposed to be a nature-based island with full of greenery and beaches, not just luxury resorts and hotels.'* One of the members from *Koperasi Komuniti Kampung Kilim* (respondent 13) raised his concern on the environment conservation in order to ensure sustainability for the sake of future generation, noting that *'we realize that everyone needs to manage the place for the betterment of our community and bearing in mind that natural resources is our treasure, not just for Langkawi people, but all Malaysian'*. In short, local residents need to be educated in order to be aware of the fragility of natural resources and to be more responsive to environmental issues.

4.4 Langkawi Tourism Blueprint 2011–2015

The government, at all levels, the private sector, entrepreneurs, and the local populace have played essential roles as catalysts in the island's progression, with the federal government notably being the chief player from the very beginning [41]. For instance, the launching of the Langkawi Tourism Blueprint 2011–2015 should be a further catalyst to increase community capacity building strategies. Respondent 1 revealed that *'since the launch of Langkawi Tourism Blueprint 2011-2015, we are setting up a series of community development strategies that are implemented by the Community Development Unit (UPK)'. In line with the blueprint, 'we are currently drafting a Management Proposal for Langkawi Geopark and one of the elements called "SEMANGAT-KAWI" which is to encourage local involvement in tourism industry', as proposed by respondent 5 from LADA Geopark Division. The implementation of the blueprint is seen as a tool to boost the local economy and bring in more tourists to Langkawi. Respondent 18 further said, 'The RM5 billion worth of investments unveiled by the government to boost the economy of Langkawi is something everybody is excited about especially businessmen like us...several investors have already committed to build hotels and resorts.'* To the contrary, however, some respondents from NGOs and private companies have raised their concerns upon the implementation of the blueprint, about the issues of private control on free open beaches. Respondent 14 expressed the problem faced by local people when LADA came out with the blueprint:

'LADA promised us that the Chenang Beach will be properly managed, but now what we see is environmental degradation by removing all of the trees and over-building of those hard-ware buildings. The developer just focuses on self-interest, big corporates are invited to Langkawi to set-up businesses, some of them build their properties on agricultural land, forcing out the rural communities who eventually lose their land. A lot of businesses are not going through proper channels; developers merely want to conduct their projects through fast track.'

Respondent 14 agreed with this view, noting that, *'now we have various people from various countries and states working here and the local culture will slowly lose its identity.'* The various points of view showed that many decisions made by the developers and foreign investors do not fully consider the local interests and result in negative impacts that may eventually affect the local community's livelihoods. In some developing nations, balancing national and local priorities are always challenging in the present competitive economic and political circumstances [42]. Respondent 15 indicated his concern that *'although the top authorities who implement the blueprint have the right to have vision, with plans for Langkawi, but all the planning and strategies are decided by top-level authorities without involving local communities'*. Further concern was added by respondent 16 noting that *'before the launch of the Blueprint, LADA invited all the local communities to attend a talk whereby all the communities were asked to give suggestions and comments on the blueprint. However, issues we raised about the blueprint and questions we asked about public beaches were all not addressed'*.

Relating to the vision of the blueprint, a head of department (respondent 6) explained, *'We expect poverty and rate of illiteracy to be reduced to 0% by year 2015...we consider our programs to be very successful because you will hardly find poor people in Langkawi as there are a lot of employment opportunities. We are facing shortage of manpower because of the high economic growth.'* However, respondents 15 and 16 argued that *'there are still a lot of dropouts after Form 3 in Langkawi and they are hardly involved in the tourism industry.'* Respondent 11 stated that, *'for the blueprint, I*

think that not all the community are ready to accept the changes and transformation, and overdevelopment might cause UNESCO to revoke Langkawi Geopark's World Heritage Status when it faces the second audit by UNESCO in the coming 2015'. Moreover, respondent 14 rightly stated that, 'the blueprint prints a good picture but it is too idealistic, it shows the best picture but still on the paper only. The blueprint needs to take account the local view, not just political view.' Thus, local communities in Langkawi hope that *'this iconic blueprint will not degenerate into "white elephant projects" because of its poor design and ill-defined criteria of success',* as opined by respondent 14.

The perspectives of related stakeholders imply that the implementation of Langkawi Tourism Blueprint 2011–2015 may not fully meet the policymakers' expectations. Evidences can be traced from the feedback of some respondents regarding the negative impacts of the Langkawi blueprint which need to be properly considered. Since 1957, Malaysia has been maintaining a top-down system of governance until today. Most of the time, the decision making processes can be dominated by external consultants, government staffs, and development or aid agency personnel, whose knowledge of both the proposed development and of the decision-making process gives them an advantage over the local residents [43]. For instance, top-down governance with one-way communication will only result in the local communities bearing the negative consequences brought about by the over-development in Langkawi.

4.5 Partnership programmes

Partnerships between government agencies, non-governmental agencies, private companies, and local residents can become a tool for the integration and facilitation of tourism development and sustainability. Based on the findings, partnerships such as public–private partnership (PandP), public–public partnership, community-NGO partnership, and private-NGO partnership have been able to bring the various parties together to address challenges and provide solutions on tourism impacts. Referring to the theme of 'Enabler' in the Langkawi Blueprint, one of the initiatives realised was the Langkawi Tourism Academy formed via a public and private collaboration (PandP) with Taylor's College. The purpose is to initiate a new curriculum by adapting Taylor's hospitality courses into LTA tourism courses. The directory officer (respondent 3) remarked that *'as we know, Taylor's College offers the best hospitality courses in Malaysia; they play their role as academic advisor by monitoring syllabus and sharing their knowledge and technologies'.*

Taylor's College has also formed partnerships with a total of 75 four- to five-star hotels in Langkawi to allow students to participate in practical apprenticeship programs for skills training in their chosen field of work. *'Through the apprenticeship program, students will be the "anak angkat" of the hotels and they will be paid a monthly allowance,'* said respondent 3. Also, public and private partnership (PandP) was formed between LADA and Frangipani Resort to contribute to the tourism industry. Respondent 16 explained that *'we are currently building partnerships with LADA and more than 30 local schools to increase local awareness on environmental issues'.* Further, Sandy Beach Resort has an established partnership with LADA to organise the Water Festival event in Chenang Beach, the main purpose of which is *'to have more interaction with the tourists through water sports activities and to enhance our reputation'* (respondent 19). In 2012, the UWL signed a Memorandum of Understanding with two Malaysian universities,

Universiti Kebangsaan Malaysia (UKM) and Universiti Malaysia Terengganu (UMT), with *'its mission to establish marine and wildlife research and education centre'* (respondent 17).

Public-public partnerships were formed between LADA and other government agencies such as TEKUN, MARA, Bank Pertanian, MARDI, PELADANG, and PERIKANAN to provide financial support for the local communities to be involved in small and medium industries (SMI). According to respondent 6 from Community Development Unit, the main purpose of building these partnerships is to give opportunities for local people to do business. He explained that *'LADA is a moderator between people and the related agencies, we give consultation for locals to improve their business...improve their products through marketing and promotion strategies. While government is helping the locals, we also develop tourism products'*. In addition, partnerships between private companies with several NGOs were formed, for example, respondent 16 explained that Frangipani Resort has collaborated with *MareCet* group in marine mammals' conservation, and *Ecoknights* in environmental education. *'The sea is polluted and all the stakeholders should cooperate and solve the problem,'* said respondent 16. For partnerships between NGOs and NGOs, the LTGA has collaborated with Kilim NGOs and *'every year on 1st of February which is the National Tourists Guide Day, the LTGA provides free tours to local students to encourage more youngsters to be involved in the tour guide industry,'* explained respondent 11. At the same time, partnership between *Komuniti Pengurusan Ekosistem Perikanan (KPSP) Tanjung Rhu* and *Koperasi Orang Muda (Komuda)* was formed with the aim to *'solve the issues faced by our communities in resource management'*, stated the chairman of KPSP (respondent 13).

In order to ensure effective communication between all levels of stakeholders, a strong partnership is crucial as a mechanism to gain trust among communities. Communities' trust is significant for policy and project implementation as it refers to *'confidence that political institutions will not misuse power'* [44, p. 478]. Once trust is established, partners are willing to commit more time and resources to develop the relationship and thereby reduce conflicts in the planning and development processes [45].

5. Conclusion

In the case of Langkawi Island, there is an increased movement towards community development by local government, entrepreneurs, and practitioners as the various parties begin to understand the importance of community capacity building in tourism planning and development. Local government agencies such as LADA have been working with related stakeholders encompassing community leaders, NGOs and private companies to implement community development strategies such as partnerships, education, and training programmes as capacity building tools, to implement the Langkawi Tourism Blueprint 2011–2015, to promote SMEs projects to spur entrepreneurship and also to introduce environmental conservation activities towards sustainable tourism. Based on the findings as provided by respondents, the strategies constitute the facilitating mechanisms to improve the living standards of the local communities. However, the findings also revealed that although the tools and strategies were implemented, not all were effective as both public and private institutions

relied on the traditional 'top-down' approach. The findings further indicate that community development projects need continuous dialogue between government officials and local residents as a strategy to strengthen capacity building among local residents, and that all levels of stakeholders' involvement would invariably increase the effectiveness of community capacity building approaches. Undoubtedly, the Langkawi tourism environment requires more professionals and skilful workers who are equipped with managerial and entrepreneurial skills to reduce the over-reliance on foreign workers as well as to increase productivity in tourism product development. Local communities that are equipped with sufficient knowledge will tend to be more supportive and cooperative of capacity building strategies implemented by public and private institutions and all levels of organisations. Collaborative endeavours between all stakeholders in tourism planning process will be instrumental in producing a comprehensive development plan as the foundation of sustainable tourism.

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Ecotourism and Its Role in Sustainable Development of Nepal

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Additional information is available at the end of the chapter

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Abstract

Ecotourism helps in environmental protection, wildlife conservation, poverty alleviation and socio-economic development. It affects environmental, social and economic components of the community and the whole country. It has different forms which are named according to the preference of the country. Developed as well as developing countries, such as Nepal, are promoting ecotourism for sustainable development of the nation. Different methodologies are applied throughout the world by different researchers for assessing ecotourism. This chapter focuses on review of ecotourism researches throughout the world. It has both positive and negative impacts on environmental, social and economic aspects of the country. Due to the high rate of beneficial impacts, it is helping in the overall development of the community, country and the whole world. There is need of cooperation among different stakeholders, training of ecotourism to tourism entrepreneurs and appropriate management policy for sustainable implementation of ecotourism projects.

Keywords: Ecotourism, environmental conservation, economic enhancement, social development, Nepal

1. Introduction

Ecotourism is one of the fastest growing segments of the sustainable tourism industry [1–3], which focuses on wildlife conservation, environmental protection, poverty alleviation and economic development [4,5]. Hector Ceballos Lascurain coined the term, “Ecotourism” in 1983 to describe the nature-based travel to relatively undisturbed area with an emphasis on education [1]. There is no such universally accepted definition of ecotourism. It is differentiated from nature-based tourism as it helps in sustainable rural development and makes biodiversity

conservation economically viable for local communities [2]. Ecotourism is one of the preferred tools for conservation and community development in many rural areas. Its effectiveness depends in its potential to provide local economic benefits by maintaining ecological resource integrity through low-impact and non-consumptive use of local resources [6].

Ecotourism is an alternative form of tourism which embraces tourism in the biophysical environment in natural areas. It incorporates ecologically sustainable activities, conservation supporting measures and involvement of local communities [7]. It neoliberalises nature and focuses on capitalist development, community development, poverty alleviation, wildlife conservation and environmental protection [4]. Traditional economic bases like agriculture, livestock and hunting are not compatible with protected territories so change in traditional economic activities can be done by shifting cultural attitudes [8], towards ecotourism enhancement [9].

Ecotourism provide jobs for the local people and a market for local products. It encourages cultural sensitivity in guest–host relations and acts as a catalyst for ecologically sustainable development. But, planning is required to address the issues of ownership, management and coordination of protected areas. It enhances wildlife conservation and equitable sharing of benefits from ecotourism [10]. It helps in the conservation of natural, cultural and built resources and maintains the quality of life of local area [11]. With an objective of environmental conservation, it creates sustainable economic development and balances the conflicting goals of economic development and biodiversity conservation [2,5,12]. Considering the sustainable principles and practices, it fulfills goals of biodiversity conservation, poverty reduction and business viability [13]. In ecotourism, local people realize the importance of conservation and protect the environment in active manner. They maintain national standards of atmospheric quality, sound quality, drinking water, sewage, lampblack and all kinds of establishments [14].

1.1. Different forms of ecotourism

Community-based ecotourism is the best option in an area which is conserved, owned and managed by a community to gain income by operating a tourism enterprise [1]. There will be direct and indirect participants and beneficiaries looking after environmental conservation, business enterprise and community development [1]. Local income, biodiversity conservation and cultural preservation are necessary for tourism intervention in such areas. Successful implementation of such ecotourism requires improvement of accessibility, liberalization of pricing policy, empowerment of community, development of tourism facilities and incorporation of nature-based tourism products [15]. Community-based ecotourism is associated with basic accommodation and facilities marketed for independent and low-budget travelers who do not expect high-end tourism facilities. There is high degree of public participation but sometimes exclude interests of communities and benefits narrow elite. Wildlife and landscapes are sold in multiple ways as images, products and destinations in such tourism [4].

Ecosystem tourism is supply-led tourism strategy that enables sustainable development with the central theme of ecosystem integrity. It does not exclude tourist and commercial exploitation of the ecosystem but the entire ecosystems or the specific biological diversity are managed in relation to the tourism experience. The main resource base or capital stock for tourists is the

ecosystem which is the assemblages of organisms, physical environment and an array of interactions and feedbacks. In such ecotourism, the ecosystem is able to absorb or adapt the pressures of tourists until it develops a more urban character [16].

Rural tourism is a form of tourism originated in Europe which takes place in rural environment based on the rural resources reflecting rurality, traditional folkcustom and agricultural products. In such tourism, tourists enjoy staying in the yard, strolling and looking around flowers, green plants, gardens, old architecture and playing cards. It enhances the profit from agriculture and provides peasantry with more profit, more employment opportunities and better living conditions by combining agriculture and tourism. It plays a positive role in prompting the development of rural economy and rural culture. Rural tourism is in a primary stage by giving priority to agricultural sightseeing, farming experience and close quarters leisure with accommodations and simple entertainment [14].

Cultural tourism preserves cultural traditions and enriches the quality of the life of local communities. It is necessary to provide education and training programs of ecotourism and nature reserve for tourism operators, employees and tourist to develop and promote minority cultures and cultural traditions. Research opportunities should be provided to attract scientists and students to conduct research in the region [17].

Nature-based tourism is a large growing global industry which depends upon the natural environment occurring in parks and protected areas. It depends on appropriate levels of environment quality and suitable levels of consumer service. Nature-based tourism has been a key component of tourism industry in several countries [18].

1.2. Ecotourism in global and national scenario

Protected area-based tourism in parks and protected areas constitute a significant proportion of international tourism in developing countries. It has generated substantial revenue for the state and improved the local livelihoods which are directly dependent on tourism. Many state governments and international conservation agencies provide sufficient funds for the establishment of protected areas and their long-term viability. Countries such as Kenya, Zimbabwe, Tanzania, Costa Rica and Nepal are only a few examples where protected area tourism constitutes a significant proportion of international tourism [11].

There is nature-based tourism in Australia, Tanzania and New Zealand. The national ecotourism strategy for Australia had focused on ecotourism in regional areas to generate foreign exchange earnings, employment, and other economic and social benefits. For the aggressive and successful policy development in the country, Australia is taking advantage with its spectacular and diverse natural features, unique flora and fauna, and diverse cultural heritage [18].

After the coronation of 1974 in Bhutan, small groups of tourists were allowed into the country and given permission to visit dzongs and goembas in Thimphu and Paro. Government established a quota of 200 tourists a year in which tourist have to travel in a group of six or more. The cost was set at US\$130 per day and all the guests had to stay in government-approved hotels, guesthouses and lodges. Bhutan's rich heritage and vibrant culture has its

distinctive traditions and customs demonstrated in its religious festivals and architecture. Towering crags and highly diverse forests is also home to takin, snow leopard, golden langur, red panda, tiger and elephant. Trained trekking guides are provided periodic knowledge and services to accompany trekking groups. Gross expenditure of US\$14 million provides significant foreign exchange earnings in Bhutan. The present policy consists of a fixed price set by government with quality of service and visitor experience maintained by market share competition between tour operators and government regulation. Ecotourism in Bhutan was able to limit environmental and cultural impact of Western countries. But, a large number of Indian tourists would cause a major challenge in maintaining cultural and environmental carrying capacity [19].

In Small Islands of the South Dodecanese, local communities contribute in ecotourism program and help to minimize the conflicts. The islands' geomorphology and geographic position provides opportunity in nature trekking, mountain climbing and sailing. It contributes to the elongation of the tourist period and the increase in tourist revenues. Adverse ecological effects of adventure tourism activities such as underwater fishing by free-divers are negligible [20].

Ecotourism is already the largest source of foreign exchange in countries like Costa Rica and Guatemala. It is one of the meaningful sources of economic development and job creation. Cross country evidence demonstrates that tourism is labor intensive and offers a variety of small scale opportunities creating jobs for poor, women, young and indigenous communities [1].

Community-based ecotourism in southern Thailand is only partially successful. The benefits of ecotourism in Phuket are more than the costs in terms of community development. Environmental sensitivity and responsibility promoted by ecotourism can increase the political, economic, social and environmental interests of host communities. The relationship between community-based ecotourism and empowerment is complex and incomplete. The economic and psychological empowerment of individuals is accomplished by the political and social empowerment of communities [21]. Tourism operators in countryside of Thailand had also focused in nature-based tourism [11].

In Kuscenneti National Park of Turkey, the park administration encouraged local bodies to organize youth camps in the park along with some additional facilities. By allowing nearby communities to provide infrastructure and services to visitors, visitor expenditures are able to flow more easily into the local economy. Locals have positive views towards tourism development and have established some restaurants and guest houses. These activities have provided sources of extra income for families who depend on traditional activities. Economic benefits of tourism have changed the attitudes of local communities and there is good relationship between the national park and the local community [22].

Tourism in Kerala was promoted as a major agenda by government for employment opportunities and foreign exchange earnings. Accommodation industry provides more subsidies, tax cuts, concessions, promotional packages and soaps which contributes to the growth and development of the economy. In spite of the positive benefit to the economy, tourism projects have adverse environmental effects [23].

Implementation of Sitakunda Botanical Garden and Eco-park project in Chittagong, Bangladesh, had enriched the area with natural regeneration, new plantations, infrastructure development, new destination for visitors and nature-based tourism. Tourism is also providing revenue to the park authority and income to local people [24].

Tourism had provided alternative mechanism of resource utilization in China's nature reserves but it is causing adverse impact on environmental resources. Litter problems, water pollution, noise pollution and air pollution are the major problem occurring in nature reserves [25]. Local government officials had a great role for conservation, development and logistical functions towards tourism development in Wuzhishan Mountain Region of China. Participation of local communities and cooperation between local governments, local communities, NGOs and the private sector was important for development and management of the nature reserve [17].

Lugu Lake region is one of the most important areas for ecosystem conservation and cultural heritage protection in China [26]. Shangri-La County in China has abundant tourism resources and products but the natural resources were exploited beyond the carrying capacity. There is need for sustainable use of tourism resources, proper handling of tourism demands, repartitioning tourism flow and digital system for tourism management [27]. Appropriate measures by government were conducted in Xishuangbanna Biosphere Reserve (XBR) to protect the core area from over-exploitation and unsustainable human use. But, simple life and material needs of traditional local people is vulnerable to Western influence [28]. Visitors as a knowledge seeker, leisure traveler and nature lover are preferring good-quality information, tour guides and low impact activities. They are selecting the destination with high ecological value and good site management in the case of Hong Kong [29].

1.3. Ecotourism in Nepal

Ecotourism as a component of green economy contributes greatly for Gross Domestic Product (GDP) for government and private organizations [30]. Developing countries such as Nepal have advantage in ecotourism as they have unique natural environment and culture. It generates employment for the unskilled workforce in rural area through community-led tourism activities for preserving natural ecosystems [3].

Nepal is a small country with an area of 147,181 sq. km., having great diversity of topographic and eco-climatic features rich in natural and cultural heritage. It is renowned for its physiographic and eco-climatic variations, Himalayan ranges, natural beauty, protected areas, rich bio-diversity, spectacular landscape, extraordinary cultural heritage and mosaic of ethnic diversity [31]. It is one of the most adventurous cultural and ecotourism destinations in the world which depends on the quality of the natural environment [11,32]. Its main attractions are the highest mountain range in the world and many cultural and natural attractions [32]. There are many trekking routes and sites for ecotourists to explore natural beauty throughout Nepal ranging from the Kanchenjunga Conservation Area and Illam in the east to Khaptad and Shuklaphanta National Park in the west [5].

Nepal has a total population of over 23 million and consists of 59 ethnic groups and 101 spoken languages. It is the birthplace of Lord Buddha, the Light of Asia. It has a rich cultural heritage, where more than 1250 heritage sites have been identified and documented from 72 districts. Within Kathmandu valley, Kathmandu Development Committee has listed a total of 870 religious and cultural shrines and monuments. It consists of eight World Cultural Heritage Sites: Bhaktapur, Patan and Kathmandu Durbar Squares; Swayambhunath; Baudhanath; Pashupatinath; Changunarayan and Lumbini (the birth place of Lord Buddha) combined with two world's Natural Heritage Sites: Sagarmatha and Chitwan National Parks [31].

These resources are the major attractions for the foundation and acceleration of tourism industry in Nepal. It is necessary to manage these tourism resources properly by mobilizing the local participation with sufficient considerations on the quality of supply side of tourism in order to attract the maximum number of tourists from different parts of the world. Nepal is one of the countries that receive the largest number of international tourists with rapid growth of tourism [31]. Trekking and mountaineering are creating opportunities in the operation of tea houses and lodges along the trails [33], which has direct impact on livelihoods [5,34–37]. Nepal Government has also identified ecotourism as a strong sector contributing significantly to environmental conservation, employment generation and socioeconomic development [38].

Community-based rural tourism in protected areas had supported livelihood of local communities by providing opportunities to the national and international visitors in community activities [11,38]. So, Nepalese government has developed national parks, wild life reserves, buffer zones, conservation areas and cultural heritage sites for conserving wildlife and enhancing ecotourism [39]. Ecotourists enjoy its Himalayan ranges, natural beauty, protected areas, biodiversity, landscape, cultural heritage and ethnic diversity [31]. Having 8 out of the 14 high mountains over 8000 m elevation in the world is also making Nepal a main source of tourist attraction [32]. Tourism had already been an alternative source of income generation in the villages of Kaski, Tanahu, Syangja, Lamjung and Gorkha districts in Western Nepal through rural tourism initiatives [5,38].

Tourist can enjoy scenic beauty, trek and Climb Mountains, view Sagarmatha and encounter wilderness in Sagarmatha National Park (SNP). Ecotourism and its sustainability in SNP require the inclusion of local participation, economic viability, education dissemination, tourist satisfaction and tourism impact reduction [32].

Annapurna region is one of the world's most popular trekking destinations which comprises a variety of ecosystems from sub-tropical lowlands and temperate forest to some of the world's highest alpine peaks [7]. To save the region's biological diversity from growing environmental crisis, conservation area was set up handling management by government to National Trust for Nature Conservation (NTNC), formerly King Mahendra Trust for Nature Conservation (KMTNC) [11]. Considering local people as a custodian of natural and cultural heritage, participatory natural resources conservation method was implemented for making project financially sustainable [11]. With a goal to lessen the adverse impacts and strengthen the positive benefits of tourism, bottom up approach based on local management was implemented in Annapurna Conservation Area Project (ACAP) [7]. While trekking through Annapurna

Conservation Area (ACA), visitors can enjoy hiking, mountaineering, viewing wildlife and visiting cultural sites, ethnic museums and natural photography [39]. For this, ACAP collect entry fees from international tourist for community development projects on health and sanitation, education, environmental protection, etc. [11]. Also, to increase community ownership and participation, management committees have been formed which enhance ecotourism for conservation and development activities by implementing fuel-efficient stoves, back boilers, kerosene and electricity [5,7].

Homestays in Barpak, Nepal, are helpful in addressing socioeconomic, political, ethnic and gender disparities. They have experienced cleaner pathways, yards and junctions with shops full of a variety of cleaner products, water taps and public toilets [38].

Total number of tourist arrival in Nepal in 2012, 2013 and 2014 was 803,092, 797,616 and 790,118, respectively. Annual growth rate of tourists during these years was 9.1, -0.70 and -0.95 and their average length of stay was 12.16, 12.51 and 12.44, respectively. But from 2009 to 2012, annual growth rate of tourist and average length of stay was in increasing trend. Out of total tourist arrival in Nepal, 57.8 percent tourist arrives for the purpose of holiday in 2011 and this trend decreases to 47.3 percent in 2012. In 2013, tourist arriving for the purpose of holiday was again increased to 51.5 percent. The arrival of tourist for trekking and mountaineering, business, pilgrimage, official and other purpose was 12.8, 3.5, 9.0, 4.7 and 6.8 percent, respectively in 2013 [40].

2. Methodological issues of ecotourism

Different studies are conducted to assess the issues of ecotourism. There is a need to find out the issues raised in these researches and find out the methodologies applied by them. It would help the researchers to find the subject of research with appropriate methodology. It would be easier and faster to select appropriate literature for them. This part of the chapter reviews the location, aim and methodology of different researches throughout the world.

2.1. Challenges of ecotourism

Nianyong and Zhuge [25] conducted a study in China's nature reserves to assess the opportunities and challenges of ecotourism. Questionnaire survey was implemented between July and December 1997 to identify broad issues on ecotourism development in China's nature reserves.

Schellhorn [41] conducted a study in Indonesian Island of Lombok to understand the constraints and barriers of ecotourism in indigenous communities with the help of census survey of the local hospitality sector, semi-structured interviews with local tourism stakeholders, participant observations and analytical mapping of tourism infrastructure and services.

Bertella [42] conducted a study in Norway with an objective to assess the challenges and the critical factors for the development and management of wildlife tourism based on the knowledge of natural sciences. The study was conducted with the help of secondary data from the

internet and primary data through informal conversations and semi-structured interviews with the firm leader in June and August 2009.

Becken and Clapcott [43] conducted a study in Fiji and New Zealand with the help of a research to make appropriate policy to cope with impacts of climate change. Stakeholders of climate change, tourism and both the field were involved in policy-making process.

2.2. Impacts of ecotourism

Okello [44] conducted a research in Kuku Community Conservation Area (KCCA) in Kenya to assess ethical, ecological, economic and management issues at community level with the help of semi-structured questionnaire to visitors and tour companies.

Degang and Xiaoting [14] conducted a study in Nongke Village of Chengdu City to assess the concepts and criteria of rural tourism and ecotourism with the help of field work, small-scaled informal discussion, unstructured interviews and data from local tourism management.

Genzong et al. [17] conducted a research in Wuzhishan Mountain Region of China to identify the information that incorporates ecotourism related values. Sixty-seven questionnaires were administered to assess how the local government officials saw the development of tourism as an important priority in the region through four phases: profiling the community, analyzing trends, creating the vision, and developing an action plan.

Hitchner et al. [45] conducted a study in Kelabit Highlands of Sarawak, Malaysia, and the Kerayan Highlands of Kalimantan, Indonesia to examine the current state of community-based transboundary ecotourism. The study was conducted with the help of interviews with local guides, homestay owners, urban-based tour operators, tourism promotion centers and agencies; intercommunity dialogues regarding transboundary ecotourism and analysis of promotional materials on ecotourism; comments in the visitors' books of lodges, tourists' websites and travel blogs.

Beaumont [46] conducted a study to identify ecotourists' environmental concern for sustainability in Australia. For this, 243 respondents having ecotourism experience were surveyed based on the nature and learning criteria of previous segmentation studies. Pro-environmental attitudes were measured as an indication of their sustainability.

Zhuang et al. [47] conducted a study in Laojunshan area of Northwestern Yunnan Province in Western China to examine an ecotourism demonstration project. They analyzed the strengths and weaknesses of the primary actors such as government, private business, NGO, and local people to evaluate the potential for the development of ecotourism in the current institutional environment in China. In the first stage, government documents and GEI reports from the Laojunshan Ecotourism Project were reviewed to develop a guide for semi-structured interviews. Key stakeholders from different institutions were identified in collaboration with GEI staff. Field interviews were conducted by the first author using a fairly open framework for focused conversations with a core set of questions. Strengths, Weaknesses, Opportunities, and Threats (SWOT) analysis and an analytical hierarchy process (AHP) were used to analyze the data.

K.C. et al. [5] conducted a study in the Ghandruk Village Development Committee of Annapurna Conservation Area, Nepal to assess the impacts of ecotourism on environmental conservation, social and cultural heritage preservation, economic development and enhancement of livelihoods. Two hundred and forty two households were interviewed, followed by three focus group discussions and five key informant interviews.

2.2.1. Environmental impacts of ecotourism

Obua [48] conducted a study to assess the environmental impacts of recreation on camping sites and nature trails in Kibale National Park in Uganda. Nine physical parameters were assessed in camping sites and four parameters on nature trails of the national park.

Kelkit et al. [9] conducted a study in Kazdagi (Mt. Ida) National Park, Turkey to assess tourism activities sensitive to the environment and spread ecotourism by protecting biological species in Turkey and neighboring countries. Strength, Weakness, Opportunity and Threat analysis of the Park was done to derive strategic proposals for future development.

Winson [49] conducted an empirical case study to examine efforts on the Island of Cuba to establish environmentally sensitive and sustainable tourism. The study was conducted with face-to-face interviews with key informants from semi-autonomous agencies organizing ecotours, personnel at government ministries, management personnel involved in ecotourism and government park managers involved with tourism operations.

Ballantyne and Pickering [50] conducted a scoping assessment to identify the loss of orchids by tourism activity in the wild by directly collecting, habitat clearance and trampling and indirectly by weeds, pathogens and climate change using data on Australian threatened orchids.

Coghlan [51] assessed the relationships between natural resource management and tour operators' inputs and outputs with the help of quantitative and secondary data collection methods. Input data were collected from a variety of secondary sources whereas output data were collected through 4800 surveys of reef visitors from November 2006 to December 2008. Analysis of data was carried in SPSS 16.

2.2.2. Social impacts of ecotourism

Maikhuri et al. [52] conducted a study in Nanda Devi Biosphere Reserve, India with the help of detailed household survey and interviews with buffer zone villages to collect information on socio-economic conditions and population structure.

Clifton and Benson [53] conducted a study to identify the nature and causes of socio-cultural impacts of ecotourism from Indonesia with the help of semi structured interviews with local residents and ecotourists.

Dicken [54] conducted a study in Pondoland Marine Protected Area, South Africa to assess the recreational aspects of the boat-based tourism industry focused on the sardine run and estimate the economic value to the local communities with the help of face to face questionnaire survey.

Gezon [55] conducted a study in Ankarana protected area, Madagascar using a qualitative and longitudinal approach focusing on the social impacts of tourist intensification by comparing and contrasting communities nearby the protected area.

2.2.3. *Economic impacts of ecotourism*

Brunet et al. [19] conducted a study in Bhutan to assess the relationship of tourism, development, culture and environment. Primary data was collected through field visit, participant observation and interviews with stakeholders while secondary data was collected from electronic and printed texts.

Maroudas and Kyriakaki [20] conducted a study in two small islands of Dodecanese to describe and assess the relations and interactions between local development and ecotourism.

Boxill and Severin [56] conducted an exploratory study on tourism development and its impact on the caribs of Dominica.

Silva and McDill [57] conducted a study in Pennsylvania and Maryland in the United States to compare agency and business perspectives on barriers affecting ecotourism suppliers. Data were collected through forty five face to face key informant interviews with business owners, tour operators and outfitters, state and local government personnel, natural resource managers working on public lands and conservation leaders.

Nath and Alauddin [24] conducted a study in Sitakunda Botanical Garden and Eco-park, Chittagong, Bangladesh to assess the impact of park in rural community. Socio-economic survey, personal observations, informal discussion and key informant interviews was conducted using a semi-structured questionnaire with visitor and park managers.

Duffy [4] conducted a study in Madagascar to observe the development of ecotourism in the wider debates of neoliberalism and commodification of nature. Thirty six semi-structured interviews with key interest groups involved with environmental policymaking were conducted during a two months of fieldwork in Madagascar in 2004.

Lacher and Nepal [58] conducted a study to document and examine local-level strategies employed to reduce leakages of tourism revenue in three peripheral regions of Northern Thailand. The study was conducted between October and December 2006 by conducting informal interviews with tourism entrepreneurs, local tourist guides, village officials and village headman.

Zambrano et al. [59] conducted a study in Osa Peninsula of Costa Rica to assess social and environmental effects of ecotourism. The study was conducted with the help of socioeconomic data from owners, operators, managers, team leaders and locals gathered during the field work from June–August 2005.

Gallagher and Hammerschlag [60] conducted a study to examine the distribution, frequency and economic value of shark based ecotourism. In 83 locations of 8 geographic regions, 376 shark ecotour operations were identified. A socioeconomic case study of shark tourism in South Africa was conducted from October to November 2010 by taking information on

customer served and cost per trip. Consumptive and non-consumptive values of shark resources was compared and discussed. The relative economic importance of shark-based tourism at global scale and potential implications of the industry was evaluated.

Amati [30] conducted a study in Kimana Community Wildlife Sanctuary, Kenya to explore individual and household experiences of long-term participation with the help of in-depth interviews, a survey, participant observation and secondary data.

Wood et al. [61] evaluated sustainability of behavioral changes associated with the agreements and development activities supported by the grants and identified determinants of success and lessons in around Kerinci Seblat National Park in Indonesia. They conducted focus-group discussions with village leaders, farmers and others involved in the ICDP and semi structured interviews with villagers, park staffs and local NGO representatives and District Head's office in three Districts.

Acharya and Halpenny [38] conducted a study in Barpak, Gorkha, Nepal, to assess the role of homestay tourism in sustainable community development. The study was analyzed through community-based action research and evaluation methodologies. The primary information was generated through ethnographic observations and semi-structured interviews with politicians, social workers, officials, members of youth clubs, NGO workers and women from the homestay households.

K.C. and Thapa Parajuli [36] conducted a study in Manaslu conservation area (MCA) in Gorkha district of Nepal to assess the impact of ecotourism on livelihood of local people. Seventy-six household surveys, three focus group discussions and five key informant interviews were conducted to get the primary information. Graphical, correlation and regression analysis was carried out for analysis of collected information.

2.3. Visitors attitude towards ecotourism

Stem et al. [6] conducted a study in Costa Rica to assess ecotourism benefits, impacts and its potential for promoting conservation and community development with the help of semi-structured individual and group interviews and direct observation.

Puhakka and Siikamaki [62] examines nature tourists' environmental values and perceptions of ecolabels in PAN Parks certified Oulanka National Park in northeastern Finland. The method includes 273 surveys, 212 to Finnish tourists and 61 questionnaires by foreign tourists of 13 European and 3 other countries.

Cheung and Jim [29] conducted a study in four remote ecotourism hot spots in Hong Kong to understand the resource base and visitor attitude and expectation. The study was conducted with the help of 456 questionnaire surveys with visitors to evaluate the preferences of ecotourism services.

With an objective to identify the local tourism resources and calculate the ecotourism carrying capacity, Shi et al. [27] conducted a study in Shangri-La County in China. The information related to ecotourism related aspects and a resource was gathered with the help of seminars,

randomized surveys and consultations with local authorities between September and October 2011.

Nepal [63] conducted a study to find the areas of satisfaction and concerns that tourists expressed on their stay in the lodges of Annapurna Conservation Area and its effect on their total ecotourism experience. The study was conducted in May 2004 for a period of three weeks based on on-site exit interviews with 130 trekkers in the Annapurna region by in-depth qualitative discussions.

Baral et al. [39] conducted a study in Annapurna Conservation Area (ACA), Nepal to evaluate ecotourism and rate their level of satisfaction from their ecotourism experience. For this, a sample of 315 international visitors were surveyed in April and May of 2006 in Ghorepani. Statistically valid and reliable confirmatory factor analysis ecotourism evaluation scale containing seven items was applied to assess visitors' perceptions of the socio-economic and environmental outcomes of ecotourism.

2.4. Role of local guide in ecotourism

Black et al. [64] conducted a study on range of Ecotour guide training in less developed countries with the help of literature review and emailed questionnaire survey to 240 individuals. The research was based on training models, program aims, structure and content of existing training, trainers and trainees assessment methods and program evaluation.

Ormsby and Mannle [65] conducted a study in Masoala National Park, Madagascar focusing on ecotourism benefits and the role of local guides in promoting conservation awareness with the help of interviews, participant observation, and archival research to park's guide association and residents.

Serenari et al. [66] conducted a study in Garhwal, Uttarakhand from May-June, 2009 with a goal to predict guides' intentions on environmentally significant behaviors on their expeditions in Garhwal. The study was conducted with the help of 68 questionnaires by snowball sampling to guides and visiting adventure tour companies, guide agencies and storefronts.

2.5. Ecotourism certification

Matysek and Kriwoken [67] conducted a study to assess the nature and ecotourism program in Tasmania with the help of in-depth structured interviews with a key informant group of operators, industry representatives, government officials and academics. A qualitative research was conducted on an individual and personalized basis.

Catibog-Sinha and Wen, [28] conducted a study in Xishuangbanna Biosphere Reserve (XBR), South China to assess the importance of effective tourism planning and management through the integration of the social, economic and environmental goals. The study focuses on the planning stage of the 7Es model, Environment, Economics, Enforcement, Experience, Engagement, Enquiry and Education.

Chung [68] conducted a study in Hong Kong to assess the problem of implementing international ecotourism certification at local level with the help of face-to-face interviews, tele-

interviews and mailed-questionnaires. The views of stakeholders on international certification for ecotourism in Hong Kong were diversified.

Deng et al. [69] conducted a study in West Virginia to create a point evaluation system to rate and rank forest-based ecotourism areas in West Virginia, USA based on input from academics and ecotourism operators using the Delphi method. It involved one hundred ecotourism academics and sixty one ecotourism operators. Twelve criteria having several indicators were pre-identified from the literature while criteria and associated indicators in the second round were redesigned to reflect the destination conditions and the destination management.

Deng and Selin [70] conducted a study for the development of a point evaluation system for ecotourism destinations. It involves first round of panel discussion for generation of ideas and the second round for ranking and scoring of measurement items.

Different issues of ecotourism were raised by different researchers throughout the world. Issues such as challenges to ecotourism, impacts of ecotourism focusing on environmental aspects, social aspects and economic aspects, visitors attitude towards ecotourism, role of local guide in ecotourism and ecotourism certification were raised by the researchers. Primary and secondary sources of information were analyzed by researchers through literature reviews, questionnaire survey, semi structured interviews, key informant interviews, participant observation, Strengths, Weaknesses, Opportunities, and Threats' (SWOT) analysis and qualitative researches. This chapter identified location, objectives and methodologies implemented in the ecotourism researches. Methodologies implemented by different researchers were quite similar but the objectives and study area were different.

3. Ecotourism and its role in sustainable development

Infrastructures for tourism have given many benefits for local residents [14]. The ecotourism industry is taken as the driving force to accelerate the socio-economic development, change the traditional growth patterns and construct a harmonious and environment-friendly society [71]. Ecotourism and its impacts on environmental aspects, social aspects and economic aspects throughout the world are described briefly in this part of the chapter with the help of literature review of the researches on impacts of ecotourism.

3.1. Environmental impacts

3.1.1. Positive impacts

Ecotourism is supply led tourism strategy that enables sustainable development with the central theme of ecosystem integrity. It is dictated by the ability of the ecosystem to absorb the impacts but does not exclude the tourist and commercial exploitation of the ecosystem. Ecotourism does not set limits on tourist numbers from the notion of carrying capacity but only controls the nature and extent of their activity [16]. Atmospheric quality, sound quality, drinking water, sewage, lampblack and all kinds of establishments should meet the relative ordains of the national standards of environmental conservation [14].

It has significant potential to generate direct community benefits from conservation. It protects the environment, saves unique species and helps to earn money from tourists [65]. Parks helps in combining conservation and development through a program to bring tourism benefits to local committees [65]. Commercial hiking and trekking encourage development where guest facilities and businesses are located [41]. Local people realize the importance of conservation and protect the environment actively [14]. Conservation of nature attracts tourist and provide high level of satisfaction by exploring the nature and provide partnerships between protected area managers and tourism operators [51]. Forest coverage rate can be increased which provide solid foundation for developing ecotourism [71]. Ecotourism emphasized the protection of natural resources and biological diversity during the tourism development. It also requires maintaining the sustainability of resource use and transforming the advantages of regional tourism resources into industrial and economic advantages [71].

Ecotourism positively influence conservation near protected areas and decreases deforestation and hunting rate. Alternative ecotourism provide economic benefits and discourage the conversion of forest to agricultural and pastoral land. Resource management and financial components play a great role in conservation. Its attractiveness rests in its potential to provide local economic benefits while also maintaining ecological resource integrity through low-impact and non-consumptive use of local resources. Ecotourism has pushed its way to the forefront as one of the preferred tools for conservation and community development in many rural areas [6].

Ecotourism is a strategy that has been used to create sustainable economic development, while pursuing conservation objectives. It is a tool that may balance the conflicting goals of economic development and biodiversity conservation [2]. It is developed for the benefit of communities and for conservation activities [4]. In ecotourism, natural resources are not threatened and local people are encouraged in park protection. Rich natural resources are protected together with the recreational and tourist potential which creates a center of attraction [9]. Ecotourism project enriches the area with natural regeneration, new plantations, infrastructure development and new destination for visitors and nature-based tourism [24].

Ecotourism has a positive impact on education, job training, hunting, and deforestation [59]. There is also positive benefit to flora and fauna [49]. It is able to limit environmental and cultural impact of Western countries [19]. By encouraging both ecological sustainability and grassroots development, community-based ecotourism hope that the environmental sensitivity and responsibility promoted by ecotourism can serve the political, economic, social and environmental interests of host communities [21]. Ecotourism supplies real experiences of natural environments [16]. Environmentally and culturally sensitive ecotourism programs can play a key role in justifying the rationale for the existence, maintenance and future benefits of protected areas worldwide. They may also serve to mediate conflict by explaining to local residents the purpose of conservation and the roles of park personnel, and can be a means of strengthening park staff's community visibility and credibility [65]. It is an excellent solution to increased tourists and increased degradation to natural areas [72].

Concentration of ecotourism services within a region can marginalize neighboring human communities without causing environmental degradation. Multi-sector planning efforts can

maximize profits, distribute benefits equitably and minimize adverse environmental impacts as tourist numbers increase [55]. The environment-friendly characteristic of ecotourism not only brings more economic benefits but also has notable ecological benefits [71].

3.1.2. Negative impacts

Tourism is an industrial activity that exerts a series of impacts that are similar to most other industrial activities. It consumes scarce resources, produces waste by-products and requires specific infrastructure and superstructure to support it [73]. Ineffective management of tourism causes negative impact on protected area resources [18]. It provides an alternative mechanism of resource utilization which may bring adverse impact on environmental resources. Litter problems had occurred in 44% of the nature reserves, water pollution in 12%, noise pollution in 11% and air pollution in 3% of the nature reserves in China [25]. Camping sites felt environmental degradation in both wet and dry seasons but more in dry season. Environmental degradation is a common problem which increases with increase in visitor number in a protected area open to recreational use [48].

Camping and caravanning zones will add increased levels of pollution to the nearby river [9]. The ecosystem may become less stable and local pollution may have drastic effects, such as fish kills [16]. Ecotourism will require more space for tourists and increased clearing of land [72]. Farmers' extensive farming methods can bring some negative effects, such as sharp drop of forest, vegetation damage, desertification and soil erosion [71]. Successful ecotourism initiatives may draw increasing interest and a correspondingly higher number of tourists, thus intensifying negative impacts such as solid waste generation, habitat disturbance, and trail erosion. Such impacts could seriously threaten the resources upon which ecotourism depends [6].

3.2. Social impacts

3.2.1. Positive impacts

The social impacts of tourism are minimal but are largely positive [56]. The growth of tourism led to migration of people to the area [41]. Guest houses provide food and beverages and are located along the main access route to the National Park [41]. Economic benefits of tourism are successful to stop political opposition to economically unviable and environmentally harmful tourism projects [23].

The local residents show traditional hospitality and their honest folkway in spite of the modernization. The traditional culture has been strengthened in the course of economic development [14]. Ecotourism operators may organize cultural tours with different community groups to ensure experience of both the tourists and community members [6]. The rich culture of the neighborhood can be introduced to visitors [9]. For sustainable ecotourism, lodges should behave as good neighbors to the local people and visitors [6]. Tourism is conducive to the social stability and harmony [71].

Ecotourism offers diverse products and services that can be categorized as both a service and an experience. Ecotourism sites, such as historic houses or theme parks, are primarily consumed for their experiential/ emotional dimensions, which is more a representation of consumption of service experiences rather than relating to their functional properties. Thus, the psychological benefits gained by ecotourists are deemed more relevant and important in this context [74]. There is no conflict between development of planting and conservation of environment. The development of rural tourism provides the villagers with second revenue [14].

3.2.2. Negative impacts

Tourism intervention has the potential to promote social conflict and challenge cultural values [15]. It may result in conflicts between the locals and government authorities [52]. There is an increase in alcoholism, drug addiction and prostitution as a result of tourism [59]. Foreign cultures brought by tourists have an impact on local traditional and plain cultures [71]. Due to tourism, traditional local people having simple life but material needs are vulnerable to Western influence [28]. Copy of Westerners clothing by wearing vests by young people is intolerable in some place [53]. Younger generation conduct between sexes and consumption of alcohol is inappropriate to local norms [53]. There is conflicting experiences of participation in conceptualization and operation of their communal ecotourism initiative. Community members do not share same understanding and appreciation of financial growth [30].

3.3. Economic impacts

3.3.1. Positive impacts

Ecotourism enhances conservation and development by providing environmental and economic benefits [6]. There was socio-cultural change from subsistence to market economy and changes in traditional land resource rights and institutions [52]. Economic benefit in ecotourism comes from direct employment, rental of accommodation for visitors and the sale of handicrafts and food [53]. Ecotourism provides local economic benefits such as employment, improved infrastructure, increased business for local stores and also maintain ecological resource integrity through low-impact, non-consumptive resource use [6].

Rural tourism provides peasantry with more profit, more employment and better living conditions by promoting the linkage of agriculture and tourism [14]. It develops rural economy and rural culture. It brings a lot of economic income for the local villagers and provides second revenue [14]. It can attract developed region's funds to invest in periphery regions through construction, bring revenue through flows of passengers, transportation, and accommodation and solves the poverty problem. It helps to transfer the rural surplus labors to non-agricultural industries, change the traditional rural lifestyle and productive style, increase the income of farmers and improve the welfare [71]. It had great contribution to the regional economy [71].

The environment-friendly characteristic of ecotourism brings economic and ecological benefits [71]. Population having experience and skill for highland tourism business takes ecotourism

as the most desirable and important economic opportunity. The major sources of revenue generation in tourism are restaurants, souvenirs shops, guiding services, accommodation and entrance fees [58]. Additional sources of income from ecotourism might include sale of traditional handicrafts or agricultural products [2]. Traditional local handicrafts can be sold to tourist to increase economic gains of local communities [9]. Communities try to enhance economic importance and wanted to develop a greater involvement in the future [54].

Many parks work as government agency to collect revenue from fee and license, retention of budget surpluses, set prices to overcome the cost of production and coordinate with corporate and non-profit entities [18]. Ecotourism financially supports protected areas through tourism-related park fees [6]. It provides revenue to the park authority and income to local people [24]. Ecotourism is already the largest source of foreign exchange in many countries [1].

Ecotourism generate foreign exchange earnings, employment, and other economic and social benefits in the areas so it helps in developing thoughtful economic policy and institutional development [18,23]. Accommodation industry are provided more subsidies, tax cuts, concessions, promotional packages and soaps to contribute for the growth and development of the economy [23]. Ecotourism can be an integral part of the master development strategy of a developing nation [75].

Half of park visitor entrance fees are allocated to local management committees for development projects of their choice such as road improvements, construction of tables for a primary school, well and public toilet construction and building rehabilitation [65]. Due to the increase in tourist number, infrastructure for tourism and tour guiding have been developed [55]. Tourism can have both environmental and social consequences [55].

Other than the cultural centre and resource access, tourism creates jobs for community members, helps in socio-economic development and generates revenue from conservation [44]. Tourism is an important source of employment for the people in the territory [56]. Economic benefits for local residents rates the direct employment of locals in the tourism industry, including hotels, lodges, tourist restaurants, and tourist chauffeuring [75]. It should be taken as the important way to increase employment and release environmental pressure [71]. It helps to transfer the rural surplus labors to non-agricultural industries, change the traditional rural lifestyle and productive style, increase the income of farmers and improve the welfare [71]. It provides more native employment in lower job status and income [1,41,59]. Women make up to 45.3% of all staff working in guest houses and restaurants. Nearly 80% of the helping staff is family members with 50% women helpers. But most of the tourism businesses are owned and operated by male migrants or old established noble families [41]. It is labor intensive and offers a variety of small scale opportunities creating jobs for poor, women, young people and indigenous community [1]. Tourism and recreation inside the park provides employment and new business opportunities [9]. The guides working in the tour companies come from local villages and other settlements and know the environment well [9]. In some cases, community involvement is rudimentary and limited to temporary employment (3–4 weeks) in the form of maids, cooks, entertainers, porters and security guards [54].

3.3.2. *Negative impacts*

Ecotourism can bring negative social, cultural and economic impacts. In addition to its potential environmental drawbacks, it often fails to provide widespread economic benefits [6]. There is major impact on the local economy due to ban on trade and mountaineering/expeditions and trekking activities [52]. Ineffective management of tourism causes negative impact on park resources [18].

From the above discussion, environmental, social and economic benefits of ecotourism were observed. Ecotourism has helped in environmental conservation, natural regeneration, new plantations, increase in forest cover, protection of natural resources and biological diversity, conservation of flora and fauna and decrease in deforestation and hunting rate. In spite of these positive environmental impacts, it consumes scarce resources, produces waste by-products, requires specific infrastructure and superstructure, causes litter problem, air pollution, water pollution, noise pollution, destruction of fish, increased clearing of land, drop of forest, vegetation damage, desertification, soil erosion, habitat disturbance and trail erosion.

Increase in traditional hospitality and honest folkway, social stability and harmony, development of rural culture are positive social aspects while negative aspects includes promoting social conflict by challenging cultural values, increase in conflicts between the locals and government authorities, increase in alcoholism, drug addiction and prostitution, adverse impact on local traditional and plain cultures and also makes simple life vulnerable to Western influence.

Economic benefit in ecotourism comes from direct employment, rental of accommodation for visitors, sale of handicrafts and food, improved infrastructure, increased business for local stores, better living conditions, promotion of linkage between agriculture and tourism, development of rural economy, transfer of rural surplus labors to non-agricultural industries, change in traditional rural lifestyle and productive style and increase in income of farmers. Negative impact on the local economy is due to ban on trade, mountaineering/expeditions and trekking activities and negative impact on park resources.

4. Ecotourism and its role in sustainable development in Nepal

Ecotourism helps in sustainable development of the country. As, Nepal is rich in biological, cultural and social diversity, there is a great scope of sustainable development from ecotourism. By observing these benefits, this part assesses the impacts of ecotourism in environment, society and economy with the help of researches conducted in Nepal.

4.1. Environmental impacts

Ecotourism helps in natural resource management and biodiversity conservation in Ghandruk. Increase in forest cover, conservation of flora and fauna, increase in greenery and use of alternative energy sources are the positive environmental impacts of ecotourism. Floral and faunal diversity had also been increased [5].

In ACA, there are clean and comfortable stays, good local cuisine, outstanding natural scenery and positive interactions with host communities. Satisfaction rating of living room comfort, overall cleanliness, views, peaceful atmosphere, host friendliness, price, and local food exceeded the importance attached to them while bedroom options, toilet, shower, menu, Western food, lodging recommendations and environmental quality did not exceed the importance rating. But the satisfaction of environmental quality was rated very high [63].

4.2. Social impacts

Ecotourism had helped in increasing mutual help and cooperation, controlling antisocial activities and conserving religious and cultural heritage in Ghandruk. It had also played a great role in maintaining peace and prosperity in the society. There is increase in cooperation of people with religious beliefs and religious tolerance [5].

The local people felt that the presence of visitors in remote area enhanced their pride in Barpak. Increased excitement of children was the positive outcomes of ecotourism. Success of ecotourism is due to coordination of local community members, line agencies and various levels of government, transparency in the development of the homestay program, clear guidelines and standards, hospitality training and monitoring of environment and bottom up approach of women taking local level ownership and control. Also, ecotourism entrepreneurs sit in a meeting every month reviews the activities and takes feedback to improve their services. Ecotourism addresses gender inequities by the active involvement of women in economic activities associated with tourism [38].

4.3. Economic impacts

Government of Nepal recognizes tourism as a priority sector and major contributor to Nepal's economy. The total foreign exchange earnings from tourism in Nepal in fiscal year 2010/2011, 2011/2012 and 2012/2013 was Rs. 24,611.0, 30,703.8 and 34,210.6 million, respectively. The tourism sector contribution in GDP was 1.5, 1.4, 2.3, 2.8, 2.4, 1.8, 2.0 and 2.0 percent in 2005/2006, 2006/2007, 2007/2008, 2008/2009, 2009/2010, 2010/2011, 2011/2012 and 2012/2013, respectively. The highest total foreign exchange earnings from tourism were Rs. 34,210.6 million in 2012/2013 [40].

Ecotourism is one of the meaningful sources of economic development and job creation in Ghandruk. It had encouraged people to establish hotels, restaurants, tea shops, bakery cafes, grocery and gift shops. It has brought a lot of economic income for the local villagers [5]. Ecotourism provides fixed price of available services in a package as per the choice of the tourist in the format of a menu in Barpak [38].

Ecotourism participation had increased household consumption in MCA. By participating in ecotourism activities, people are able to generate more income and are increasing their household consumption [36].

Ecotourism has been widely recognized for its role in employment generation and contribution to the national economy. Trekking is recognized as a major part of this industry in Nepal. It

can generate jobs directly through hotels, restaurants, taxis, souvenir sales, local guides and indirectly through the supply of goods and services needed by tourism related business. The impressive growth of Pokhara is a good example of how tourism can contribute to economic growth. Similarly, settlements along the trekking routes in ACA have received tourism benefits, which have contributed to development of the region [76].

Ecotourism has immense potential to help in poverty alleviation in Nepal. It had made significant contribution to rural development, agricultural transformation, community enrichment and social empowerment of women in ACA. Because of higher incomes, many parents of Manang District of ACA can now afford to send their children to high schools and universities in Kathmandu [77].

From the above findings, it is observed that ecotourism helps in natural resource management, biodiversity conservation, increase in forest cover, conservation of flora and fauna and increase in greenery and use of alternative energy sources in Nepal. It develops mutual help and cooperation, controls antisocial activities, conserves religious and cultural heritage, maintains peace and prosperity in the society and increases cooperation of people with religious beliefs and religious tolerance. Tourism is a major contributor to Nepal's economy and helps in economic development, job creation, increase in household consumption and poverty alleviation. Also, it had made significant contribution to rural development, agricultural transformation, community enrichment and social empowerment.

5. Needs of ecotourism

Self-reliant communities have greater chance of progress in ecotourism [78]. There is need for sustainable use of tourism resources, proper handling of tourism demands, repartitioning tourism flow and digital system for tourism management [27]. Expertise in park management and finance management lowers negative environmental impacts and increases positive economic impact. There will be major shift in park management, tourism management and financial management which will help in sustainable development of tourism [18].

Local income, biodiversity conservation and cultural preservation are necessary for tourism intervention in remote areas. There is need of improvement of accessibility, liberalization of pricing policy, community empowerment, and development of tourism facilities and incorporation of nature-based tourism products. To generate social, economic and environmental benefits, tourism intervention in protected areas must make a multi or interdisciplinary and interdepartmental effort. This requires strengthening collaboration between the conservation and tourism authorities to develop ecotourism inside the park [15]. Cultural tourism need to be developed to preserve cultural traditions and enrich the quality of the life of local communities. It is necessary to develop and promote minority cultures to support preserving cultural traditions and education and training programs of ecotourism and nature reserve for tourism operators, employees and tourist [17].

Ecotourism requires four tradeoffs: success and survival at the expense of ecotourism's spatial isolation and structural independence; local employment and benefits at the expense of local

initiation and control; social status and mobility at the expense of social cohesion and harmony; and incipient environmentalism at the expense of ecological sustainability [21]. Successful ecotourism ventures depend on an integrated management philosophy that considers beneficiaries, socioeconomic constraints and impacts on the resource base within a realistic spatial and temporal scale. It requires that entire ecosystems, or at least the biological diversity that they contain, are managed in relation to the tourism experience [16]. Ecotourism and its sustainability require the inclusion of local participation/benefits, economic viability, education dissemination, tourist satisfaction and the minimizing of tourism impact [32].

5.1. Cooperation of communities

Parks and protected areas need people's effective participation for meaningful resource management [78]. If locals are actively involved in tourism planning and development, it becomes much easier to get their support for conservation and avoid serious conflicts with the management [22]. Support and participation of local communities is important for development and management of the nature reserve [17]. Community participation is needed to make ecotourism sustainable [56]. Community-based programs such as community organizing, environmental education and leadership training should be done with the involvement of relevant stakeholders in a collective manner [28].

After privatization of tourism facilities and services, park management encouraged the local communities to involve directly in delivering tourism activities. Nature guiding training is provided to local communities to enhance themselves in this sector. Local tourism provider associations are established to secure local interest in tourism participation [79]. Local economic diversity is also important to the sustainability of community-based ecotourism projects [2]. Mechanisms for managing conflicts between protection and development faced by the nature reserves should be clearly addressed [25].

Establishment of the National Network of Protected Areas needs sound management and should ensure long-term maintenance and achieve the goal of promoting local economic development within the communities [22]. The management committee should be formed which include all government agencies responsible in natural resources management and economic development. There is need of cooperation between local governments, local communities, NGOs and the private sector [17]. Development of park management framework for staff and finance management play a key role in running a park effectively [18].

Local government officials had a great role for conservation, development and logistical functions towards tourism development [17]. Local governments should develop fund from provincial and national governments or NGOs for managing the reserve [17]. Appropriate measures to protect the core area from over-exploitation and unsustainable human use need to be conducted by government [28]. Macro-scale institutional organization and coordination, both at the national and international levels, are important for the sustainability of community-based projects. Multiple government departments, including ministries of tourism, natural resources, and rural development, should coordinate policies and programs in order to pursue the success of ecotourism projects. International organizations, which often fund ecotourism projects, must also coordinate with government agencies and local non-profits [2]. Planning

and management need to be supervised by a council, advisory board, association, or program, which would be a not-for-profit NGO. The roles of the various stakeholders involved in the project, as well as the hierarchy of the people involved, will need to be clearly articulated, since the success of the ecotourism network will depend on appropriate levels of leadership, cooperation and coordination amongst the involved parties [80].

Conservation agreements effectiveness depends on appropriate role of local circumstance. An agreement between community and park management is beneficial when people are encouraged to abandon behavior that brings conflicts with conservation. Conditional link between the obligations of the community and benefits is created by agreement with external monitoring and enforcement. If the livelihoods are directly dependent on legal and sustainable use of park resource and services, an agreement for internal control is relevant to regulate access to benefits and prevent selfish behavior [61].

5.2. Skill and capacity

Tourism agencies need to enhance their skill and capacity to address climate change. Development of strong leadership, commitment and sufficient resource is necessary to cope with impact of climate change on tourism sector [43]. Knowledge and experience of local community can improve planning and decision making of tourism, conservation and economic development. For the smooth operation of tourism in protected areas, it is important to have trained staff, more efficient administration and better coordination with the contributions of various stakeholders [28]. Hence, trainings on skills, knowledge and quality development is necessary. For appropriate training approach, research on evaluation of formal training and follow up training is necessary. Systematic evaluation of existing informal and formal training is needed to assist in developing new programs and improve existing ones [64].

Positive attitude of guide is important to show pro-environmental behavior while guiding [66]. Visitors prefer good quality information; tour guides and low impact activities and select the destination with high ecological value and good site management [29]. To promote conservation, education programs should be developed for local residents related to nature reserve [17]. Overall planning for ecotourism development is necessary in most nature reserves [25]. There is need of competent staff as tourist guides with good management experience [25].

5.3 Ecotourism policies

It was recommended to develop environmental friendly policies focusing on research to understand the motivations and expectations of qualified co-workers for a successful recruitment process and conduction of longitudinal studies to investigate the lifecycle of the individual firms [42]. Management strategies should focus on ways to achieve sustainability by involving local people [54]. Strategic planning, financial analysis, and business plan development are needed to improve the quality and viability of ecotourism [13]. Also, climate change and tourism sector requires a strong policy framework led by a government agency to convert private into public and global flow into local flow in the current time [43].

5.4 Challenges of ecotourism

The main challenge for adoption of natural sciences knowledge in wildlife tourism was lack of competent and dedicated human capital and difficulties in networking. Differences in gender, culture and professional background and difficulties in local networking act as barriers to cooperation within the local context [42]. Lack of education and English language skills is a major obstacle for tourism business development and direct employment [41,53]. The main challenge is to increase the length of stay of visitors which could be done by hiking and camel safaris [44].

6. Conclusions

Ecotourism has environmental, social and economic impacts to the community, nation and the whole world. For assessing its issues and impacts, social tools such as questionnaire surveys, focus group discussions, key informant interviews and review of literature were applied by different researchers. It has helped in sustainable development of Nepal and the whole world by conserving environment, increasing employment, enhancing livelihood and promoting the culture and traditions. There is need of cooperation among different stakeholders, training of ecotourism to tourism entrepreneurs and appropriate management policy for sustainable implementation of ecotourism projects.

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Tourism Carrying Capacity for Beaches of South Andaman Island, India

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Additional information is available at the end of the chapter

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Abstract

The Andaman and Nicobar Islands (ANI) is one of the largest tourist areas in India attracting both the international and domestic tourists each year. The Island Administration has a vision to develop the islands as an upmarket island destination for ecotourism. Among the island group, the South Andaman region is the most visited tourist destination and beaches of these islands have great potential for tourism attractions. The present work is an attempt to understand the potential of these beaches by assessing the carrying capacity in terms of number of visitors that can be allowed over a period of time, which will further help with better tourism management. The methodology used to estimate the tourism carrying capacity (TCC) is based on the physical and ecological conditions of each site and the existing infrastructure. The total effective carrying capacity (ECC) estimated for the beaches of Port Blair area (126,301 visitors/day) reveals that the current tourism activity is in lower level compared to its carrying capacity. Such carrying capacity assessments can be used as an input into the regular planning process. Preliminary estimates suggest that A&N Islands can be promoted for high value-low volume, eco-friendly, and environmentally sustainable tourism.

Keywords: Andaman, beaches, carrying capacity, tourism, islands

1. Introduction

Tourism is one of the driving forces of global economic growth and has become increasingly competitive in the global arena. Tourism accounts for almost 10% of global GDP, generates more than US\$ 1.5 trillion in trade income or 30% of the world's services exports, and provides one

in eleven jobs worldwide [1]. As per the India's Tourism Statistics Report (2014), India's foreign exchange earnings from tourism is US\$ 20.24 billion at annual growth rate of 4.0%. India's position in the World Tourism Receipts is at 15th place, and in the Asia and Pacific Region, India retains seventh place. During 2014, the number of Foreign Tourist Visits (FTVs) to the States/ Union Territories (UTs) was 22.57 million as compared to 19.95 million in 2013 and 18.26 million in 2012 and registered a growth of 13.12% over 2013 as compared to a growth of 9.24% in 2013 over 2012 (MoT, 2014). The top 10 source countries for Foreign Tourist Arrivals in India in 2014 include United States (14.57%), Bangladesh (12.27%), United Kingdom (10.92%), Sri Lanka (3.20%), Russian Federation (3.51%), Canada (3.50%), Malaysia (3.41%), France (3.20%), Australia (3.12%), and Germany (3.11%) and other countries (38.44%).

Similar to the Foreign Tourist Arrival, "domestic tourism also plays an important role in overall tourism development in the country. The number of domestic tourist visits increased from 462 million in 2006 to 740 million in 2010. In 2009, when the country witnessed a negative growth of 2.2% in foreign tourists arrivals, domestic tourist visits registered a growth of 18.8%. This growth of domestic tourist visit sustained tourism infrastructure during the lean period of tourism sector [2]. There has been a continuous increase in India's domestic tourist visit to its all states/UTs from 1991 to 2012, with the Compound Annual Growth Rate (CAGR) being 13.96%.

India is one of the few countries that offer a wide range of destinations for potential tourists. Tourism has grown in leaps and bounds over the years with each region of India contributing to its splendour and exuberance. In India, the Ministry of Tourism (MoT) is the nodal agency for the development and promotion of tourism in the country and also responsible for international cooperation in tourism (Government of India (Allocation of Business) Rules, 1961 as amended up to 12th Feb 2016). The MoT formulates national policies and programs and coordinates activities of various government and private agencies for the development and promotion of tourism in the country. The National Tourism Policy, formulated in the year 2002, aims for tourism development in India in a systematic manner, positioning it as a major engine of economic growth and to harness its direct and multiplier effects for employment and poverty eradication in an environmentally sustainable manner.

National Council of Applied Economic Research (2014) [3], using the data from International Passenger Survey 2010–2011, observed that monuments, forts, palaces, museums, hill stations, and beaches are some of the motivational factors that are influencing the decision of potential tourists visiting India. The ANI is one of the largest tourist areas in India that provide for a unique combination of terrestrial, mangrove, coastal, and marine ecosystems. The bays, coral reefs, mangroves, seagrass meadows, beaches, and caves make these islands special and attract both international and domestic tourists each year. "The Island Administration has the vision to develop the islands as an upmarket island destination for ecotourism through environmentally sustainable development of infrastructure without disturbing the natural ecosystem with the objective of creating more employment opportunities and synergize socio-economic development of the islands" [4]. Tourist visit including foreign visitors to ANI is on the increasing trend. The year 2000 witnessed a total number of 86,066 visitors to ANI which has grown up to 146,990 in the year 2007 and 218,035 in the year 2011 and 256,237 in the year 2012

[5]. The tourist arrival to ANI for the year 2013–2014 is 258,418 (with 17,811 foreign tourists). With the continuous increase in tourist flow to Andaman Islands and subsequent population pressure, there is a need to understand the tourism carrying capacity (TCC) for various tourist destinations in the island in addition to the importance given toward environmental protection, while planning for tourism development particularly in areas such as wildlife sanctuaries, beaches, and other fragile ecosystems.

2. Tourism carrying capacity: A review of concept

The concept of TCC, though emerged in the 1970s and 1980, has received significant attention in recent years as part of an effective strategy to address environmental, economic, and social issues [6–8].

There have been many attempts to define carrying capacity. It was stated that TCC is a specific type of environmental carrying capacity and refers to the biophysical and social capacity of the environment with respect to touristic activity and its development [9–10]. Middleton and Hawkins (1998) [11] defined carrying capacity as “a measure of the tolerance a site or building are open to tourists activity and limit beyond which an area may suffer from the adverse impacts of tourism.” TCC can also be defined as “the maximum number of people that use tourism site without unacceptable effect on environmental resources while meeting the demand” [12].

Chamberlin (1997) [13] defines it as “the level of human activity an area can accommodate without the area deteriorating, the resident community being adversely affected or the quality of visitors experience declining.” Clark [14] defines carrying capacity as a “certain threshold level of tourism activity beyond which there will occur damage to the environment, including natural habitats.” He also states that the “actual carrying capacity limit in terms of numbers of visitors or any other quota or parameter is usually a judgement call based upon the level of change that can be accepted, regarding sustainability of resources, satisfaction of resource users, and socio-economic impact” [14]. The TCC represents “the maximum level of visitor use that an area can maintain, that is, the limit of human activity: if this level is exceeded, the resource will deteriorate” [15].

The UN World Tourism Organisation (WTO) defines TCC as “the maximum number of people that may visit a tourist destination at the same time, without causing destruction of the physical, economic, socio-cultural environment and an unacceptable decrease in the quality of visitors’ satisfaction.” Tourism operations in protected areas need to be planned carefully and monitor regularly to ensure their long-term sustainability. Otherwise, such operations will have negative consequences and tourism will contribute to the further deterioration of these areas. Many of the protected areas have promoted tourism for their social, economic, and livelihood opportunities of the local residents [15–19].

Individual tourist destinations were studied assessing the TCC all over the world [20–24]. It has been suggested that development of a tourist destination should be based on their innate

capacities for tourism. TCC was considered as an appropriate tool for management and remains one of the most useful and applied techniques for tourism and recreation planning, if combined with other management tools [25, 26].

Coccosis and Mexa [6] showed that carrying capacity assessment remains a powerful concept that can be used for planning and management of sustainable tourism. Many studies calculated carrying capacity using physical, ecological, psychological, and economical approach. Because of expanding degree of environmental threat with growing tourism, a suitable method needs to be carried out and carrying capacity stays one of the applied and effective methods [27]. Hamed and Fataei [28] estimates the TCC to Fandoqloo forest in Iran using physical, real, and effective carrying capacities. Results of their study showed that each tourist spot has its specific priorities and the carrying capacity of each region differs according to the environmental conditions. Nghi et al. [23] assessed the environmental carrying capacities for Phong Nha-Ke Bang and Dong Hoi using three basic components: ecological, economic, and social. The authors have calculated the TCC in Dong Hoi and Phong Nha centers by using the adjustment from physical carrying capacity (PCC) to real carrying capacity (RCC) based on various limiting factors such as infrastructure and management capacities. Their results show that Dong Hoi center has the highest TCC and Phong Nha has a lower TCC than other centers in Quang Binh.

Lagmoj et al. [29] in their study evaluated TCC in three ways viz., PCC, RCC, and ECC, and found that "ECC is in low range due to lack of required facilities and infrastructures as well as manpower for management and providing tourism services for tourists." They estimated the "PCC in Khorma forest as 3712 persons/day while RCC, considering limiting factors including the number of very hot days and the number of wet days, is 2001 persons/day. The ECC, taking the management capabilities including the number of manpower and the budget, 69 persons/day was calculated for Khorma forest". Armin and Calichi [30] in their study of PCC, the factors viz., tourist flows, the size of the area, the optimum space available for each tourist and the visiting time, were considered. Their results showed that the total visitors to the park in 2012 were 220 visitors per day that actual average park visitation are higher than the estimated carrying capacity and stated that the expanding recreational use would affect production and other forest benefits in the long term and suggested that a recreational forest use plan must be adjusted by the planner to keep the park more exploiting.

3. Andaman and Nicobar Islands (ANI)

The ANI form an important group of oceanic islands, situated in the Bay of Bengal, extending between 92° to 94° East and 6° to 14° North latitude, with rich biodiversity and high degree of endemism. It is presumed that these islands had a former land connection from Cape Negrin at south part of Burma to Achin Head (Cape Pedro) in Andalus (Sumatra). Since pre-historic times, these islands were the home of aboriginal tribes. The vulnerable tribal groups who have been identified in the Andaman group of islands are the Great Andamanese, Onges, Jarawas, and Sentinalese, all of Negrito origin, while the tribes in the Nicobar group are the Nicobarese and Shompens, both of Mongloid origin. These islands have the total geographical area of 8249

km² and total coastline of 1962 km. These islands have been designated as one of the “Endemic Bird Areas” of the world [31–35].

“The Chinese knew of these islands over a thousand years ago and called it the ‘Yeng-t-omag’ in the First Millenium” [36]. These islands also find a place in the first map of the world drawn by Ptolemy, the renowned Roman geographer during the second century [36]. The famous Forester Champion has passionately remarked, “If tropical rain forests are to be seen in their pristine glory anywhere in the world, it is in the Andamans.” The forests are quite rich with tropical evergreen, semi-ever green, moist-deciduous and littoral forests, mangroves, bamboo, and cane brakes. Mr. Jacques Coustoue, the famous marine explorer, who made a film on these islands titled “The Invisible Islands,” said that he had never come across such clear waters during his many voyages across the globe, as in Andaman he could see live corals even at a depth of 60–100 m off the Narcondam Islands.

To preserve the rich natural, cultural, and wilderness areas of the ANI, the UT Administration is bringing ecotourism policy guidelines. A tourism management plan was prepared for various islands of the UT of A&N by the MoT, GoI, in 2003, indicating the potential tourism sites and recommending various options for the development of the tourism sector keeping in view of environmental protection. In a study conducted by Sridhar et al [37], it was observed that tourism sites in Andaman region exhibit a cluster distribution pattern. They suggested that tourism activities need to be promoted and expanded in other potential areas of Andaman through the establishment of necessary infrastructure. However, there have been little or no study on assessing the TCC of these islands. The main objective of this paper is to assess the recreational carrying capacity of some popular beaches around South Andaman by means of assessing the PCC (assuming that every beach has a limiting size of people that it can accommodate), RCC, and the effective carrying capacity (ECC).

4. South Andaman Islands

The South Andaman Island is the third largest island in the island group, located at latitude of 11° 47’N and longitude 92° 39’E and immediately south of Middle Andaman Island, from which it is separated by a narrow channel, a few hundred meters wide. The island is 93 km long and 31 km in width with an area of 1348 km². According to 2011 Census, the total population of the South Andaman District is 238,142, of which South Andaman Island (part) of Ferragunj Tehsil has a population of 53,560 and South Andaman island (part) of Port Blair Tehsil is 155,937. The town of Port Blair, the administrative headquarters of the Union Territory of the ANI, is situated at the south east coast of South Andaman. The population at Port Blair is steadily increasing. The main tourist season in the region is between the months of November and April. Being the entry point, Port Blair has a constant stream of visitors and tourist accommodation facilities are available both of the government and private sector.

5. Methodology

In the present study, the methodology followed for carrying capacity assessment is based on Cifuentes's methodology [9]. This framework developed by Cifuentes [9] was also applied by several authors [15, 23, 26, 38–42]. This methodology was also followed by Ceballos-Lascurain (1996) for estimating protected area carrying capacity (IUCN Publication 1996 "Tourism, Ecotourism and Protected Areas"). This methodology is traditionally followed for the many TCC studies such as Zacarias et al. [26] for beach recreation. Sayan and Atifk [15] used this methodology for recreation carrying capacity of protected areas. The approach is to establish the capacity of an area for a maximum visits based on the physical, biological, and management conditions through the PCC, RCC, and the effective or permissible carrying capacity [39]. TCC is divided into the following levels:

5.1. Physical carrying capacity (PCC)

PCC is the maximum number of tourists that can physically fit into or onto a specific area, over a particular time.

$$PCC = A / Au \times Rf$$

where PCC is the physical carrying capacity; A is the size of the study/visited area; Au, area required per user; Rf, rotation factor, is the number of visitor visiting per day.

An optimum area required per tourists (Au) is 5 m².

Rf = daily open period / average time of visit

Rf = 12 hours / 3 hours

Rf = 4

5.1.1. Geospatial techniques

The area between the shoreline and landward extent of the sandy beach was taken for estimating the PCC. The satellite images of the LISS IV for the year 2013 with spatial resolution of 5.8 m were used for calculation of the beach area along with extensive field verifications. Onscreen digitization of beaches was made using visual interpretation techniques. The field surveys were carried out using GPS track mode in each of the beaches for calculating exposed areas of beaches during high and low tides.

5.2. Real carrying capacity (RCC)

The RCC was determined using equation

$$RCC = PCC \times (Cf1 \times Cf2 \times Cf3 \dots Cfn)$$

where RCC = real carrying capacity; PCC = physical carrying capacity.

Cf1...Cfn = correction factors. The correction factors were determined using the equation

$$Cfx = 1 - Lmx / Tmx$$

where Cfx = correction factor of variable x, Lmx = limiting magnitude of variable x,

$$Tmx = \text{total magnitude of variable x.}$$

The correction factors are obtained by considering the biophysical, environmental, ecological, social, and management variables. Tourism is dependent on nature, so some variables are considered as correction factors for this study which include rainfall, sunshine, strong winds, cyclone, and beach quality. These factors limit the tourism activities and measurement of the sustainability level of a tourist destination [9, 39]. Therefore, correction factors are also known as limiting factors of tourism. Calculations of correction factors for different limiting variables are described below.

5.2.1. Correction factors

5.2.1.1. Rainfall (Cf1)

The ANI are situated in the equatorial belt and experiences warm and moist tropical climate. These Islands are exposed to both the monsoons, viz. Southwest monsoon from May to September and northeast monsoon from October to December. The average rainfall period of the ANI is 152 days in a year [43, 44]. The total magnitude is the total number of days available in a year (365 days). The correction factor for rainfall was determined by:

$$\begin{aligned} Cf1 &= 1 - Lmx / Tmx \\ &= 1 - 152 \text{ days} / 365 \text{ days} \\ &= 1 - 0.4164 \\ &= 0.5835 \end{aligned}$$

5.2.1.2. Strong wind (Cf2)

In ANI under normal condition, the wind speed is fairly constant (9.5 km/h) but during cyclonic events it may go as high as 200–240 km/h. The Islands receive north-easterly wind between the month of May and October, during the time wind speed may exceeds 25 km/h, but the usual range is 5–15 km/h in different months [43, 44].

$$\begin{aligned}
 \text{Cf2} &= 1 - \text{Lmx} / \text{Tmx} \\
 &= 1 - 62 \text{ days} / 365 \text{ days} \\
 &= 1 - 0.1698 \\
 &= 0.8301
 \end{aligned}$$

5.2.1.3. Excessive sunshine (Cf3)

Sunshine is the most important factor for beach tourism. In ANI, the months of March to May are considered as summer season. During the dry summer period, ANI has recorded the highest temperature. High temperature is recorded consistently during summer between 11 am and 3 pm. This high sunshine may lead to sunburn so the tourist arrival in this time period is almost negligible. Thus, excessive sunshine in the summer season can be considered as a limiting factor for the study area. The limiting magnitude for this parameter was determined as 92 days \times 4 hours = 368 hours of excessive sunshine per year. The total magnitude was determined as the total day of the year i.e. 365 days \times 12 hours = 4380 hours. Therefore, the correction factor for excessive sunshine was determined as:

$$\begin{aligned}
 \text{Cf3} &= 1 - \text{Lmx} / \text{Tmx} \\
 &= 1 - 368 \text{ hours} / 4380 \text{ hours} \\
 &= 1 - 0.02840 \\
 &= 0.916
 \end{aligned}$$

5.2.1.4. Cyclone (Cf4)

Cyclone is also an important correction factor that rarely occurs during tourism seasons. The wind speed in normal condition is fairly constant (9.5 km/h) but during cyclonic events wind speeds as high as 200–240 km/h are prevalent. Generally in ANI, monsoon (between May and November) is one of the important limiting factors of tourism. Island to island ferry services and various tourism activities are affected by cyclonic storms during these months. The limiting magnitude for this parameter was determined as 61 days, the total magnitude was 365 days, and the correction factor for cyclone was calculated by

$$\begin{aligned}
 \text{Cf4} &= 1 - \text{Lmx} / \text{Tmx} \\
 &= 1 - 61 \text{ days} / 365 \text{ days} \\
 &= 1 - 0.1671 \\
 &= 0.8328
 \end{aligned}$$

5.2.1.5. Beach quality (Cf5)

Beach quality is one of the most important parameters which may put direct impact on the quality of beach tourism. Beach quality has negative impact on the tourist's mind and may reduce the satisfactory level of tourists. Beach quality assessment was done taking reference from Nghi et al. [23] who used various geological criteria namely tide, near shore current, mud/sand, thickness of sand layer, slope, clean sand, and quality of sea water. For the present study,

the beach quality assessment was carried out based on seven parameters, namely, beach materials, beach slope, tide action, beach length, beach color, litter, and seawater quality. The thickness of sand could not be measured. The results of beach quality assessment and correction factor for beach quality were determined separately for all the beaches chosen for the study. The Cf5 varies among different beaches and the results are shown in **Tables 1** and **2**. The estimation for beach quality for South Cinque Island is given below as an example.

$$\begin{aligned}
 Cf5 &= 1 - Lmx / Tmx \\
 &= 1 - 2 / 7\text{parameters} \\
 &= 1 - 0.29 \\
 &= 0.7142
 \end{aligned}$$

Island		Area A =		A/Au	PCC	Correction factors					Cf	RCC	Mc	ECC
		(ha)	Area (m)			Rain fall	Strong wind	Beach quality	Sun shine	Cycl one				
South Andaman (Port Blair surroundings)	South Cinque	6.27	62,720	12,544	50176	0.58	0.8	0.71	0.91	0.83	0.25	41,646	0.37	15424
	North Cinque	4.26	42,607	8521	34,085	0.58	0.8	0.86	0.91	0.83	0.30	28,291	0.37	10,478
	Chidyatapu	0.90	8996	1799	71,97	0.58	0.8	0.86	0.91	0.83	0.30	5973	0.74	4425
	Jolly Buoy	2.33	23,272	4654	18,618	0.58	0.8	0.86	0.91	0.83	0.30	15,453	0.56	8585
	Barabalu	2.56	25,563	5113	20,450	0.58	0.8	0.57	0.91	0.83	0.20	16,974	0.22	3772
	Burmanala	2.49	24,912	4982	19,930	0.58	0.8	0.43	0.91	0.83	0.15	16,542	0.22	3676
	Wandoor	3.80	37,971	7594	30,377	0.58	0.8	0.86	0.91	0.83	0.30	25,213	0.85	21,478
	Carbyns Cove	1.48	14,754	2951	11,804	0.58	0.8	0.57	0.91	0.83	0.20	9797	0.67	6531
	Kurmadera	5.90	58,977	11,795	47,182	0.58	0.8	0.71	0.91	0.83	0.25	39,161	0.19	7252
	Ross Island	0.20	2041	408	1632	0.58	0.8	0.43	0.91	0.83	0.15	1355	0.33	452
	Badagadi	3.78	37,802	7560	30,242	0.58	0.8	1.00	0.91	0.83	0.35	25,101	0.70	17,570
	Jahaji Dera	11.05	11,0500	22,100	88,400	0.58	0.8	0.70	0.91	0.83	0.27	73,372	0.19	13,941
	Colinpur	1.26	12,612	2522	10,089	0.58	0.8	0.57	0.91	0.83	0.20	8374	0.19	1551
	North Bay	1.03	10,326	2065	8261	0.58	0.8	0.43	0.91	0.83	0.15	6856	0.81	5587
	Shoal Bay	1.87	18,681	3736	14,944	0.58	0.8	0.43	0.91	0.83	0.15	12,404	0.07	919
	Red Skin	0.90	9000	1800	7200	0.58	0.8	0.81	0.91	0.83	0.28	5976	0.78	4661
Total		50.07	50,0733	10,0147	400,587							33,2487		12,6301

PCC = physical carrying capacity; Cf = correction factor; RCC = real carrying capacity; Mc = management capacity; ECC = effective carrying capacity.

Table 1. Tourism carrying capacity of beaches of South Andaman.

Island	Beach type	Beach quality							Total Estimated		
		Material	Slope	Tide	Beach length	Beach Colour	Litter	Quality of Water			
South Andaman (Port Blair surroundings)	South Cinque	Sandy beach with exposed Corals	+	+	-	-	+	+	+	2/7	0.71
	North Cinque	Sandy beach, corals	+	+	-	+	+	+	+	1/7	0.86
	Chidya tapu	Sandy beach, corals	+	+	+	+	+	-	+	1/7	0.86
	Jolly Buoy	Sandy beach, corals, mangroves	+	+	-	+	+	+	+	1/7	0.86
	Barabalu	Sandy beach, Corals	+	+	-	+	-	+	-	3/7	0.57
	Burmanala	Sandy beach, corals, mangroves	-	-	-	+	+	-	+	4/7	0.43
	Wandoor	Sandy beach with coral deposits	+	+	+	+	+	-	+	1/7	0.86
	Carbyns Cove	Sandy beach, Corals, Seaweeds, Mangroves	+	+	-	+	+	-	-	3/7	0.57
	Kurmadera	Sandy beach with exposed rocky shore	-	+	+	+	-	+	+	2/7	0.71
	Ross Island	Pebble beach with sand gravels and coral deposits	+	-	-	-	+	-	+	4/7	0.43
Badagadi	Sandy beach, mangroves, with coral deposits	+	+	+	+	+	+	+	0/7	1.00	
Jahaji Dera	Sandy beach	+	-	-	+	+	+	+	2/2	0.70	
Colinpur	Sandy beach and	+	+	-	+	-	-	+	3/7	0.57	

Island	Beach type	Beach quality							Total Estimated	
		Material	Slope	Tide	Beach length	Beach Colour	Litter	Quality of Water		
	exposed rocks									
North Bay	Sandy beach with exposed rocky shore	+	-	-	+	+	-	-	4/7	0.43
Shoal Bay	Sandy beach, corals	+	-	-	+	-	+	-	4/7	0.43
Red Skin	Sandy Beach, Corals	+	+	+	+	-	+	+	1/7	0.81

'+' denotes good quality; '-' denotes low quality.

Table 2. Beach quality assessment matrix of beaches of South Andaman.

5.3. Effective carrying capacity (ECC)

ECC is the maximum number of tourists that a site can sustain, given the management capacity (Mc) available. The Mc indicates the present condition of tourism management in the respective beaches and was estimated based on the available infrastructure, facilities, and amenities. Zacarias et al. [26] stated that the ECC is a result of the combination of the RCC with the Mc of the area, as described by the following equation:

$$ECC = RCC \times Mc$$

where ECC = effective carrying capacity; RCC = real carrying capacity; Mc = management capacity. Mc was determined using infrastructure and equipment's available, assessed by means of tourist perception and evaluation during the survey period.

6. Results and discussion

Estimation of total area, area required per tourists, PCC, RCC, and ECC for various beaches of the South Andaman was worked out based on the methodology described above and the results are shown in **Table 1**. The beach quality assessment of matrix of each locations and the management measure analysis are given in **Tables 2** and **3**, respectively. **Figures 1** and **2** provide the assessment of TCC for beaches of Port Blair region. The beaches chosen for the present study are the existing tourism sites declared by the Andaman Administration.

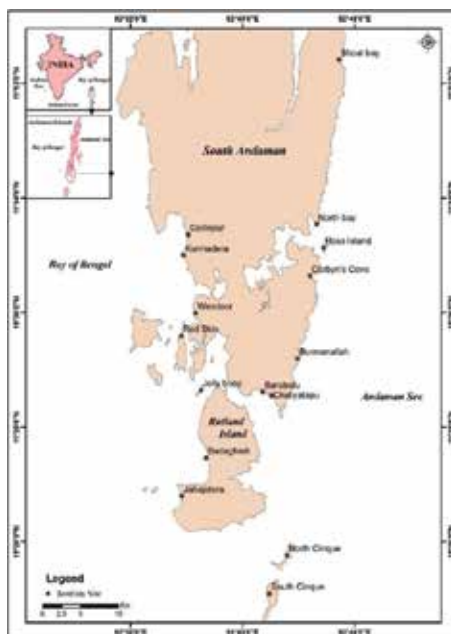


Figure 1. Study area map showing the locations of the beaches in South Andaman.



Figure 2. Tourist favorite beaches in South Andaman. A—Shoal Bay; B—Colinpur; C—Jahaji Dera; D—Barabalu; E—Burmanala; F—Kurmadera; G—South Cinque Island; H—North Cinque Island; I—Chidyatapu; J—Red Skin; K—North Bay; L—Badagadi; M—Jolly Buoy; N—Carbyns Cove; O—Wandoor.

Island		Management activities			Tourism activities						Esti.	Mc
		Transportation	Security/safety	Dining/refreshment	Bay watch	Swim ming	Snorkel ling	Scuba	Kaya king	other water sports		
South Andaman (Port Blair)	South	+	-	-	+	+	+++	+++	+	-	10	0.37
	Cinque											
	North	+	-	-	+	+	+++	+++	+	-	10	0.37
	Cinque											
	Chidyatapu	++	++	+	+++	+++	+++	+++	++	+	20	0.74
	Jolly Buoy	+	+	-	+++	+	+++	+++	++	+	15	0.56
	Barabalu	+	-	-	+++	+	+	-	-	-	6	0.22
	Burmanala	+++	+	+	+	-		-	-	-	6	0.22
	Wandoor	+++	+++	++	+++	+++	+++	+++	++	+	23	0.85
	Carbyns Cove	+++	+++	+++	+++	++	-	-	+	+++	18	0.67
	Kurmadera	+	-	-	+++	+	-	-	-	-	5	0.19
	Ross Island	++	+	++	++	-	-	-	+	+	9	0.33
	Badagadi	+	-	-	+++	+++	+++	+++	+++	+++	19	0.70
	Jahaji Dera	+	-	-	+++	+	-	-	-	-	5	0.19
	Colinpur	++	-	-	++	+	-	-	-	-	5	0.19
North Bay	++	++	++	+++	++	+++	+++	++	+++	22	0.81	
Shoal Bay	-	-	-	++	-	-	-	-	-	2	0.07	
Red Skin	++	++	+	++	+++	+++	+++	++	+++	21	0.78	

+++ = Fine; ++ = Moderate; + = Low; - = Not available.

Table 3. Management measure analysis and tourists activities for beaches of South Andaman.

PCC includes the maximum number of tourists that can physically be present at a certain time and place and shall not exceed this range. Rotation factor is considered as an important indicator for the development of management strategies for beach tourism, as it influences the tourism capacity of a certain place. The numbers of the PCC are only theoretical and RCC was calculated to check the extreme value of PCC considering some correction factors. Correction factors that have been considered for this study include rainfall, strong wind, sunshine, cyclone, and beach quality. Excluding beach quality, all correction factors considering for RCC are same on all over the islands.

The total RCC of Port Blair area is 332,487 visitors/day, which in other words is the maximum permissible number of people that should be allowed in the concerned area. Port Blair region (including Ferragunj) spreads over an area of 3106 km² with ~45% of ANI's population. Port Blair, besides being the only town in ANI, is also the only entry point. Being the capital city,

Port Blair houses all the government and administrative offices of the UT. The main tourist season in the region is between the months of November and April. Port Blair has a constant stream of visitors (almost all the current tourists arrivals happen through Port Blair). The tourists arrival for the year 2013–2014 was 258,418 (with 17,811 foreign tourists). This translates to an average of ~700 visitors a day.

The places of tourist interest in the south Andaman district include place of historical interest such as Cellular Jail and Rose Island (Port Blair), creeks, beaches, trekking, anthropological museum, forest museums, emporiums and garden and parks. Cellular Jail is located on the North East of Port Blair town was completed in 1906 and is a National Memorial. It derives its name for its individual cells for the solitary confinement of India's freedom fighters and prisoners. Ross Island was the original capital during the British regime and this tiny island (0.6 km² area) is 10 minutes ferry journey from Port Blair. This island has remnants of the ball room, chief commissioner's house, government house, church, cemetery, hospital, bakery, press, swimming pool, and troop barracks all in extreme dilapidated condition reminiscent of bygone British era. Chatham Saw Mill is the Asia's largest saw mill and is located North of Port Blair and in the Chatham Island. The mill is the storehouse of a variety of wood species. Carbyn's Cove is a beach located 7 km from Port Blair. Historical Japanese bunkers can be seen here. Snake Island is also located in the vicinity and it is recommended for scuba diving. Red Skin and Jolly Buoy Islands are located southwest of Port Blair and can be approached from Wandoor jetty. The Mahatma Gandhi National Park, it offers tourist attractions on coral marine life which can be best viewed with the help of the glass bottomed boats. The North Cinque Island is located south of Port Blair and linked to the South Cinque Island by a sand bar. North Cinque Island has a wildlife sanctuary and underwater coral is the main interest of the tourists.

The Mc was estimated for various beaches based on the analysis of the tourism activities and facilities available at each tourist destination. It varied among the different destinations ranging from 0.07 to 0.85. It is observed that the beaches of the Port Blair region, namely, Shoal Bay, Colinpur, Jahaji Dera, Burmanala, Barabalu, Kurmadera, and Cinque Islands, with low Mc (<0.5), may be given priority for infrastructure development such as transportation and hotel facilities and tourist's safety to be ensured. The other beaches (having Mc > 0.5) such as Chidyatapu, Red Skin, North Bay, Badagadi, Wandoor, Carbyns Cove, and Jolly Buoy have adequate facilities for tourism operations and such activities need to be continued (**Table 3**).

Beach quality is one of the most important parameters, which may have direct impact on the quality of beach tourism as it has negative impact on the tourist's mind and may reduce the satisfactory level of tourists. The beach quality of the study site was examined based on several indicators viz., material of the beaches, slope, tide, beach length, beach color, litter, and quality of water. It was observed that the beaches of Badagadi, Jahaji Dera, Chidaytapu, Jolly buoy, Wandoor, Red Skin, Kurmadera, and Cinque islands (Mc > 0.7) have good beach quality, support tourism activities (**Table 2**).

7. Effective carrying capacity (ECC)

Analysis indicates that each level constitutes a corrected capacity level of the preceding level and showed that PCC is greater than the RCC and RCC is greater than the ECC. ECC seems more acceptable than two other types of carrying capacity and is useful for development of policy for beach tourism management, as it indicates the optimum number of tourists that should be allowed on the beach with existing conditions and Mc. The total ECC for beaches of Port Blair area is 126,301 visitors/day. But the available tourist accommodation in these islands is well below the ECC of the region and needs to be increased considering the overall environmental quality. Tourist accommodation facilities are available both from the government and private sectors. There are approximately 2840 beds available comprising 16 private hotels affiliated to State Tourism Department, 19 government accommodation affiliated to State Tourism Department, and 45 budget accommodation affiliated to State Tourism Department [45]. There is a need for comprehensive survey on existing accommodation facilities at ANI to update the status. The tourist arrival at ANI is constantly increasing every year. The total tourist arrivals including domestic and foreign, for the year 2013–2014, is ~2.5 lakhs and it was around 9596 in the year 1980 and 33716 in the year 1990 and 86,116 in the year 2000. The international tourist arrivals have grown at a compounded annual growth rate of 4.1% p.a. over the last 20 years. The Port Blair Master Plan—2030 prepared by the A&N Administration states that the average occupancy rate of organized accommodation has hardly reached 65% and the peak occupancy rate records 2667 beds as against available 2837 beds (94%). It also states that tourism has not reached its full potential in generation or acceleration of economy in the Island though it offers vast scope for development. Considering the total ECC as well as the yearly tourist flow (2.5 lakhs approximate), it can be concluded that the TCC is preserved to accommodate a higher level of yearly tourist infiltration with adequate accommodation provisions and management facilities in future. The assessment of TCC is also being refined by us, based on local socio-economic, cultural, and ecological considerations to achieve a balance between ecotourism development and safeguarding ecological conservation.

8. Conclusion

Assessment of carrying capacity is imperative for the coastal zone of India which is facing rapid changes due to various developmental activities. Broadly, the concept of carrying capacity refers to the ability of a system to support an activity or feature at a given level. Coastal zones provide a variety of services and tourism is being practiced increasingly along many coastal states of India. The tourism industry has environmental, social, cultural, and economic impacts. Tourism carrying capacity assessment remains one of the most useful tool when measures taken for management of coastal areas. Overall measuring TCC does not have to lead to a single number (threshold), like the number of visitors. Even when this is achieved, this limit does not necessarily obey to objectively, unchangeable, everlasting criteria. An upper and a lower limit of TCC can be of more use than a fixed value. They are dependent on

technology, preferences, and the structure of production and consumption. They are also varying with the changing nature of interaction between the physical and biotic environment.

The present assessment of the TCC for the beaches of south Andaman showed that the tourism activity is in lower level with its carrying capacity. This type of carrying capacity assessment can be used as an input into the regular planning process. The ANI can be promoted for high-value low-volume eco-friendly and environmentally sustainable tourism. There are other issues related to water supply, sewage disposal, electricity and energy which are to be given additional importance on a sustainable basis while planning for tourism development in these islands, as tourism activity will add additional burden with regard to available infrastructure and resources. The present requirement of water for Port Blair is 28.80 MLD. At present, only 90% of the total demand is available for supply. Sewerage and drainage system in Port Blair and surrounding region is challenges in terms of land availability, rainfall runoff to the sea because of the terrain. Sewage discharge has been projected to be 45 MLD for Port Blair surrounding region by the year 2041 [45]. A comprehensive analysis on land use and water availability, fresh water management, alternative sewage disposal methods considering the island sensitive ecology, biodiversity extent and status, seawater quality and pollution level for every island would further help for developing better tourism development strategies. The Administration should ensure that the tourist resorts and homes and related establishments should promote (i) self-generation of electricity using renewable energy sources such as solar panels, bio-gas systems, etc.; (ii) development of additional freshwater resources through rain water harvesting; and (iii) provisioning for sewage treatment plants.

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Assessing Potential Areas of Ecotourism through a Case Study in Ilgaz Mountain National Park

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Additional information is available at the end of the chapter

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Abstract

The changing demands of tourism provide greater benefits to tourists and generate competitive advantages that develop diversity in tourism. Elements of ecotourism fit within this context, and such tourism includes, but is not limited to, activities such as visiting natural and cultural resources without destroying nature, which are carried out with an aim toward sustainability. Ilgaz Mountain has a wealth of natural, cultural, historical, and recreational features, and its location near the Black Sea gives the area significant tourism potential. In order to evaluate the impact, potential, and possibilities of ecotourism in this protected area, we used geographic information systems (GIS) to determine the nature of protection required based on implementation availability. In this study, we used ecology-based identification of the natural and cultural values to characterize the features. The study consists of four parts: (1) the concept of ecotourism, (2) discussion of sustainable growth of tourism, (3) sustainability of ecotourism using GIS and how this is related to sustainable ecotourism in protected areas, such as in Turkey, (4) results and evaluation. By assessing these results, we aim to determine potential areas for ecotourism in terms of sustainable development, and we expect the results to provide useful ideas for further research.

Keywords: Ecotourism potentials, Impacts, Possibilities, Protected area, Sustainability, SWOT

1. Introduction

Ecotourism is an abbreviation of ecological tourism, which refers to understanding and protecting the freedom of tourism in nature. According to the International Nature Conservation Union (IUCN), the definition of ecotourism includes having fun while supporting the

protection of the natural and cultural resources. This involves maintaining a low visitor impact and providing the local community with socioeconomic benefits. Furthermore, ecotourism refers to traveling in environmental-responsible ways to limit the impact to the areas visited. According to the International Ecotourism Society, which protects the environment and oversees the welfare of the local people in the tourist area, travel is defined as a sensitive activity in natural areas. It is recognized that ecotourism involves the preservation of both natural and cultural values, and keeping that responsibility in mind, the areas should remain open to tourism. The concept of ecotourism bears a strong connection to both natural and social responsibility. Ecotourism, which links tourism activities with the natural environment, refers to a tourist activity based on the incentive to act with responsibility, considering the potentially negative effects of tourism on the environment. Additionally, ecotourism involves ensuring the sustainability of the earth's natural resource areas while supporting the economic development of local communities, an approach aiming toward preserving their social and cultural integrity [1–5].

Ecotourism contributes to the conservation of biological diversity and protecting local people's welfare, and such tourism helps raise awareness of local people's needs, ensuring the movement responsible for tourism, providing services to small-scale enterprises by groups of tourists, and consuming a low level of nonrecyclable resources. Tourism management business provides opportunities to local residents in favor of development. Actions that directly affect ecotourism activities include the area's natural resources, increased capacity of ecotourism areas, and ensuring social and environmental development in order to contribute to the livelihood of the local people [5–9].

Rapid economic and political changes and technological developments in today's world are parallel to the increasing size of the tourism industry. This makes tourism an increasingly important component of a nation's economy. Tourism spending in all sectors serves toward stimulating the economy. New concepts such as sustainable tourism are developed because of both, the tourist profile in a nation as well as the natural changes that occur in consumption patterns, which in this case involve protecting the natural and cultural features and maintaining a balance while engaging in tourism [1, 9–11].

The concept of ecotourism and the importance of sustainability within tourism have become popular and are being implemented frequently. As an alternative to mass tourism, ecotourism was developed in the 1990s. This form of tourism contains elements of rural and cultural tourism and is referred to as the most appropriate type of tourism that can be developed in sensitive natural and cultural areas. Developing environmental tourism and ecotourism in today's world, where massive destruction of nature is common, is significant to the society and seen as an important tool in achieving sustainable development and avoiding uncontrolled movement of tourists. Ecotourism and sustainable tourism are used interchangeably, although the difference between them is noteworthy, as sustainable tourism is a subtype of ecotourism. Ecotourism protects the environment and oversees the welfare of local people during tourist trips to sensitive natural and cultural areas. It exists through sustainable tourism policies. In today's world, ecology and economy are treated in combination; both the economic and ecological efficiency of activities that are undertaken are tied to one another [1, 11–13].

In particular, central governments need to accurately guide the land use and infrastructure decisions within local tourism regions. Constraints in infrastructure bring along the danger of destroying the natural environment. When taking decisions, the most important task to consider related to tourism other than generating more revenue is understanding the necessity of preserving the natural, cultural, and historical values of the sites in question.

2. Sustainable growth and tourism

The sustaining capabilities of a particular ecosystem involve how continuous and uninterrupted that system is without distortion and without excessive usage of the main resources. For a sustainable structure, resources should be continuously evaluated, and the foremost factor for such evaluation should be conservation and protection. Today, sustainable development is necessary, so that the natural and cultural resources remain available to both the current and future generations [1, 13–15].

The sustainability of tourism requires a knowledge on the regional and national values, with a focus on preservation as a means to ensure the continuity of development and attractiveness for each generation. In order to achieve sustainable tourism, the natural and cultural values of the site should be protected during interactions between humans and the environment. As a result, the value of the site will be transferred to future generations. Successfully accomplishing this transfer requires changes to the current consumer understanding of tourism to meet the ecotourism criteria. For sustainable tourism, ecotourism and responsible tourism are the primary concepts. Sustainable tourism refers to the relationship between the environment and the tourist. Protecting the assets in the environment requires the tourism industry to be constructed around sustainability with a long-term strategy in place. Otherwise, the benefit of the tourist site to future generations, and even to the present generation, will be lost. Identifying, implementing, and evaluating sustainable tourism are difficult processes. The tourism industry has, in recent times, made a strong effort to create green identities. Our densely populated world, natural and cultural richness, as well as the sharing and transfer of living in a particular fair profit is seen as an important area for ecotourism [15–18].

In sustainable tourism, tourist events are intertwined with the activities of the local people, and the local tourist facilities as well as the natural and cultural values all show the mutual relationship of an infrastructure based on sustainability. These interactions are important in terms of sustainability. Basically, an active management approach is needed to maintain this kind of interaction, planning, organization, coordination, direction, and control. The sustainable development of tourism products, which would not be possible without the local tourist destination, should contribute to local needs; the local human social environment should improve the self-esteem of the people, help extrude them from poor living conditions, and expand their freedom. National economic growth that results from ecotourism should also accelerate regional and local economic development. In this context, attractions and local amenities, and the basic infrastructure should be developed based on long-term local and leisure activities. These activities, which are the underlying components of any tourist product,

and the use of the natural environment for tourism, should ensure damage prevention and poverty reduction at the forefront of their management and marketing approach [18–20].

3. Ecotourism sustainability

Natural habitats are naturally occurring places of value that should remain unchanged due to people's activities. These include mountains, plains, valleys, forests, lakes, rivers, seas, and natural monuments, and the geological conditions of each habitat vary with climate and landscape. These habitats are covered with natural assets. The number and diversity of such natural assets within a country are the major factors contributing toward attracting tourists to that country. Therefore, the natural environment and assets, a continuous flow of travelers to these destinations, and raw materials are indispensable factors for the tourism industry. However, without assessment, these natural assets provide no economic benefit. In order to learn about the natural environment and the local people's lives, tours are carried out in these natural areas, either for individual tourists or for small groups [1, 9, 13, 14, 20].

The principle of sustaining the natural environment, however, refers to protecting the natural environment from degradation during these tours. This kind of tour involves implementation of certain plans and programs within the framework of the chosen route, following predetermined rules, and involving trained experts serving as guides [21, 22].

Ecotourism also requires that the overall tourism policies, regulations, and plans are available. However, in order to avoid repeating the mistakes of mass tourism, a number of goals must be established. These goals include the protection of the natural and cultural heritage of the site and improvement of local people's living standards. Furthermore, when promoting ecotourism, the natural, cultural, and recognized local characteristics should be promoted, protected, and adopted to help guarantee sustainability in the long term. The methods and techniques of disseminating tourism information should generate greater credibility and carry the certification of quality systems in order to generate greater competitive significance. Additionally, the involvement of society, politicians, as well as institutions and organizations in ecotourism will all be very beneficial in terms of ensuring sustainability in tourism. A prerequisite to ecotourism development is that the natural areas should be protected and that the tourism should contribute to the sustainable development of the society. The specific policies and strategies surrounding ecotourism should be developed at the national and regional level, and an absolute determination of specific policies and strategies should be discussed within the applicable local area [22–24].

To be considered an ecotourism activity, an event must involve the development of environmental ethics, protection of leisure areas, and use of balance regarding which area is open to tourism, taking into account the maximum capacity of an area, in order to prevent erosion or damage by consumers. The main goals of ecotourism are to provide tourists with a look into the culture and natural resources, and as ecotourism is about people participating in nature and cultural environment, such tourists would not want to be responsible for damaging or destruction of the site. Displaying the natural environment in an ecological and culturally sustainable way and educating the tourists at the same time are the cornerstones of ecotourism

that provide economic benefits at the local level. National parks and protected areas are the main sources of ecotourism. Ecotourism can have important consequences on rural development through the effective management and understanding of sustainable tourism promotion. Various policies must be created that result in sustainable tourism, the specifics of which will depend on the nature of tourist accommodations. These policies might involve the meals at ecotourism facilities, transportation that generates the least amount of pollution, especially noise and air pollution, in the environment. Building materials, furniture, and decoration should be in accordance with local regulations and should utilize such types of energy that create less pollution. Ecotourism should promote creation of sustainable job opportunities for the local population, which should include a large part of the indigenous people's income, and the purpose of protecting the environment should be explained to the tourists. To participate in all ecotourism potential stages of the local community, ecotourism activities should provide planning, monitoring, management, and supervision in making the ecotourism potential areas. These areas to be managed in accordance with ecotourism principles are also valid for sustainable ecotourism in the country [1, 13, 20–24].

4. Using GIS to find ecotourism sites

GISs allow for more ecology-based identification of flora and fauna in order to determine the nature of protection required based on application availability. In this study, GISs were used to characterize the habitats and create spatial data that form the basis of planning and managing the use and protection of land. Nature conservation and landscape ecology are carried out via practical applications in different areas, which require interdisciplinary study. Using GIS provides support for these applications and helps researchers solve their problems and achieve their goals [9, 13, 14, 19, 24–26].

Using GIS spatial location to generate a geographic and ecological inventory is finding increasing use in planning and management studies. GIS spatial data can be used to detect the potential areas and work on digital media. It also allows the research data to be saved, reorganized, modeled, and analyzed, and the data can be presented alphanumerically or graphically. In conjunction with this data, GIS users can employ geometric and nongeometric data to help them determine the spatial relationship of complex and logical content. This feature is important for the transformation of an objective and measurable level of complex structures and spatial relationships in phenomenal form located in ecological studies [9, 13, 14, 19, 24–28].

5. Ecology-based detection, analysis, evaluation, and planning as a tool for GIS

The implementation of GIS in the field of nature conservation and rural landscape offers technical and scientific support to researchers. GIS applications are found in areas involved in the following kinds of work:

1. Processing and interpretation of digital images
2. Identification of species, habitats, and biodiversity
3. Detection, analysis, and evaluation of landscape structures (biotope, land use, ecological areas, etc.)
4. Protecting and monitoring of detected valuable ecological areas
5. Creation of maps of these studies

Because of advances in hardware and software, GIS applications offer convenient, high-resolution digital image interpretation methods. The application allows for remote sensing and GIS data production, evaluation of a combination of data, as well as querying and presenting data, all of which are mutually complementary. At present, an integrated remote sensing and GIS analysis of the landscape allow for holistic planning and management, which is considered as the most important feature of the GIS tool. The tool increases the availability of data obtained remotely with GIS. Subsequently, the data is obtained by remote sensing, and the current environmental and ecological conditions of identified areas are recorded in the GIS database. This feature can also be used to update the database through monitoring [9, 13, 14, 19, 28–33].

Type of habitat and climate are used to map habitats, soil, geology, topography, and so on. Inferences are made based on the statistical relationships between biogeographic features. Spatial inference based on the potential distribution area of a species or the statistical relationships are mapped as habitat suitability. Mapping the biogeographic features with GIS, which also involves the production of new map types (topographic humidity index, sun radiation indices, land position index, land surface temperature, etc.), is also an important part of this work. Besides this feature, the remote sensing data provides researchers with various vegetation indices, including a leaf area index and normalized vegetation index. As a result of this data, the accuracy of this thesis was increased. The types of species–area relationships at work are necessary for making statistical analysis and evaluation. Analysis of the types and principle components of multivariate analysis is the primary statistical analysis used in mapping habitats, linear regression, geographically weighted regression, canonical associated correlation, generalized collective models, generalized linear models, etc. [33–37].

Based on the conservation of biodiversity and supply of spatial data management, GIS provides data management and analysis. Biological diversity of land use and land cover change in conjunction with the high areas of remote sensing data that are provided systematically. By better understanding the dynamics of these changes in GIS, conservation and management based on effective monitoring can be accomplished. In particular, biodiversity can be identified and conserved using remote sensing data through environmental and ecological features. These features are based on the diversity of information supported by improved research techniques and GIS [19, 38–40].

The use of space and hot spots for a variety of species are mapped on the basis of common analysis. Yet, species and other methods can be used to determine the abundance of key species, indicator species, functional taxonomic groups, and so on. The model used for this

study was mapped using similar habitat requirements of common species, and many possibilities were considered in certain habitat types.

6. Determination of landscape structure, analysis, evaluation, and use of GIS as a tool in planning

GIS is used to characterize the landscape on the basis of landscape ecology and has widely been used for typing rural landscape habitats, biotopes, ecosystems, land use, ecological regions, and so on. Structural formation detection, analysis, evaluation, planning, and monitoring at locations have given GIS an increasing importance for the past several years. This use of GIS is important especially for research in which an explanation of spatial relationships is needed in the form of thematic maps. The spatial relationships of the past have been used to develop scenarios and models for the future, and these relationships and models of current or future public squares have proven the GIS system's ability to interpret future changes [19, 41–45].

Since the late 1980s, structural diversity has been determined using GIS, and since the early 1990s, spatial and temporal landscapes have been used in GIS analysis. During this period, the landscape metrics for detecting and analyzing landscape structures were formed. These metrics were developed through naturally occurring and anthropogenic changes in the landscape structure, habitat quality, biodiversity, and ecosystem assessment, which expressed the effect of the nutrient loop. Subsequently, GIS-based and integrated forms of software have been developed [19, 40–46].

7. Ecology-based inventory, conservation, and GIS applications in planning and management studies

In this study, based on the data type of the raster digital elevation map of the forest, the stand type map was overlaid with the forest. Height of each step size distribution space was also given. In another study, which identified bird species, diversity mapping was carried out in the national park. This study carried out biotope mapping, which was then combined with the previous bird observation results. Bird species identified in the previous studies from observation points, and the habitat characteristics derived from these points, were then illustrated in a biotope map that was overlaid to form a model of the diversity of bird species that have been mapped in the national park. The vegetation types in the habitats of these bird species at each observation point were brought together into an altitude-dependent properties list in MS-Excel. Furthermore, biotope types were generated of the bird species distribution, depending on the altitude. The digital elevation model and biotope type were then superimposed. Here, the distribution before the height of the biotope types, which depended on the number of bird species and the potential spread of bird species, was entered using GIS. Thus, the minimum and maximum flora and fauna can be found in the study area with a biotope type. The number

of bird species has been mapped out for all types of biotopes. The number of equally spaced areas between bird species was listed as the values very high, high, medium, low, and very low. This new map was created using the sequence values [19, 46–48].

Biotope type map planning of the required fields, including conservation and management of protected areas in particular, is of great importance as a fundamental base of potential areas. GIS mapping of biotopes and quantitative studies for the nonprinted combination of geometric and nongeometric data, or of vector–raster data sets, make it possible to evaluate potential areas separately. Satellite images of the classification of the pixels in size printed digitized with the resulting raster data map geographical data in the resulting raster or vector data set of GIS in land use are to be stored in the database of characteristics, such as vegetation and habitat features, querying and then stratification is to ensure the acquisition of new areas. The data is recorded in the database of the new field space with reference numbers of the biotope type characteristics, which is of great importance in demonstrating the line or point of the ecotourism potential areas. In particular, the resolution of the remotely sensed images, based on the height scale in the hierarchical environment, which is used to classify half of the biotope types has been derived with fully automated analysis used for switching or coding systems. The new layers with the identification of the different semantic layers of various hierarchical scales are used to name the biotope type [9, 13, 14, 19, 44–48].

8. Determining the type of mapping and function of the landscape

In this section, the contents of the project were determined by mapping the landscape types, and the functions that were carried out will also be described. Database creation and management were performed using GIS in this project, which involved spatial analysis and mapping features such as the determination of the characteristics that make up the landscape, analysis, and assessment. The mapping of landscape types was used in the analysis of landscape functions and areas of conflict. The characteristics that make up the landscape were classified separately, and the database was created for them in the GIS environment. Each type of property was mapped to form the landscape. Classified thematic maps from satellite images supported by terrestrial reception and other digital maps (terrain model, vegetation, and land use maps) were the main types of GIS data that were used to map the landscape. Determining the potential ecotourism areas in the database in the GIS environment by developing geological and geomorphological techniques, water areas, topographic terrain, vegetation, and landscape characterization, and typing methods based on the land use were provided. Land use data obtained through the evaluation of data sets provided the areas of social and cultural importance, vegetation types, maps of hydrological and geological characteristics (water areas, wet and dry areas, and lithological formations), and topographic features (slope, aspect, and elevation). Maps that obtain a homogeneous type were used [9, 13, 14, 19, 30–32].

First vector and then polygon-based maps (geology, stand types, age, site map, etc.) were used. Land use was derived from the classification of satellite images, and based on the type of vegetation raster data sets and height, slope data was overlaid in the GIS. Techniques that were

used include registration in tessellation, selecting, dissolving, the clip, intersecting, and multiple Boolean queries such as overlay. The basis for registration was the presence of characteristics in a landscape that will characterize the type, and the areas were used in dominant Umeda typing. The determination of each landscape type regarding its ecological functions was evaluated by the social–cultural and economic functions and subfunctions of the title at the top of the areas. Landscaping was determined by criteria and indicator functions that belong to them. Some criteria were prioritized by interest groups. Each function can be used to convey the criteria. Evaluations were conducted using ordinal values ranging from 3 to 5, where 1 is high, 2 is moderate, and 3 is low, or 1 is high, 2 is high, 3 is average, 4 is low, and 5 is little or none. Each function was mapped by the value used to represent it. The results obtained for all functions intersect in a 50×50 cell in a raster-based and mainly of potential areas. In accordance with the assessment of landscape types based on the functions between the priorities of the interest groups, a map was created for the conservation and use of landscape types in the field [14, 30–32].

GIS-based inventories of ecology now have high-capacity utilization in planning and management studies. In this study, ecological GIS-based inventory levels mentioned in the literature regarding the planning and management practices in place are thought to be explained by some of their practices. Here, the above-mentioned techniques and application methods were combined with GIS to make a good combination for determining potential areas. The most important component of these studies is the use of GIS, through which field and types produce measurable data and can be visualized as concrete levels of the complex relationship of potential areas in the future. The continuation of the new assessment for the planning and management practices for conservation and land use were seen in the making of potential areas. A database can be created for that particular query that generates a new map by overlaying the different maps. Additionally, statistical analysis is necessary to increase the accuracy of the study [6, 9, 13, 14, 19, 30–32, 44–49].

In this study, a majority of the examples discussed are from our country, but they have a common application. Their use as a fundamental base of practical planning and management efforts can be applied in many countries, especially European countries, although presently, this is only at the academic level. In our country, achieving digital or printed data is different due to the different characteristics of the natural resources and land use here. As a result, GIS-based assessment is one of the most important constraints for this kind of research. In addition to an ecology-based inventory in our country, a better level of GIS application use in planning and management will require standardization. This will also require correction of some basic data and geographic coordinates. Disseminating these corrections will be crucial.

9. Materials and methods

Occupying 1088.61 hectares in the Ilgaz Mountain National Park Western Black Sea Region, Kastamonu and Cankiri are located within the boundaries of the province as shown in **Figure 1**. Hosted naturally, these regions hold an important position in the regional and

national scale of cultural and recreational resource values. Ilgaz Mountain National Park, comprising 750.86 hectares of Kastamonu and 337.75 hectares of Cankiri, is located in the province. The national park has a forest cover dominated by coniferous trees. Scots pine and fir are the common tree species. Thrush may also occur in public areas. In the field, wild animals such as wolves, foxes, deer, roe deer, lynx, and wild boar are known to be found [50–52].

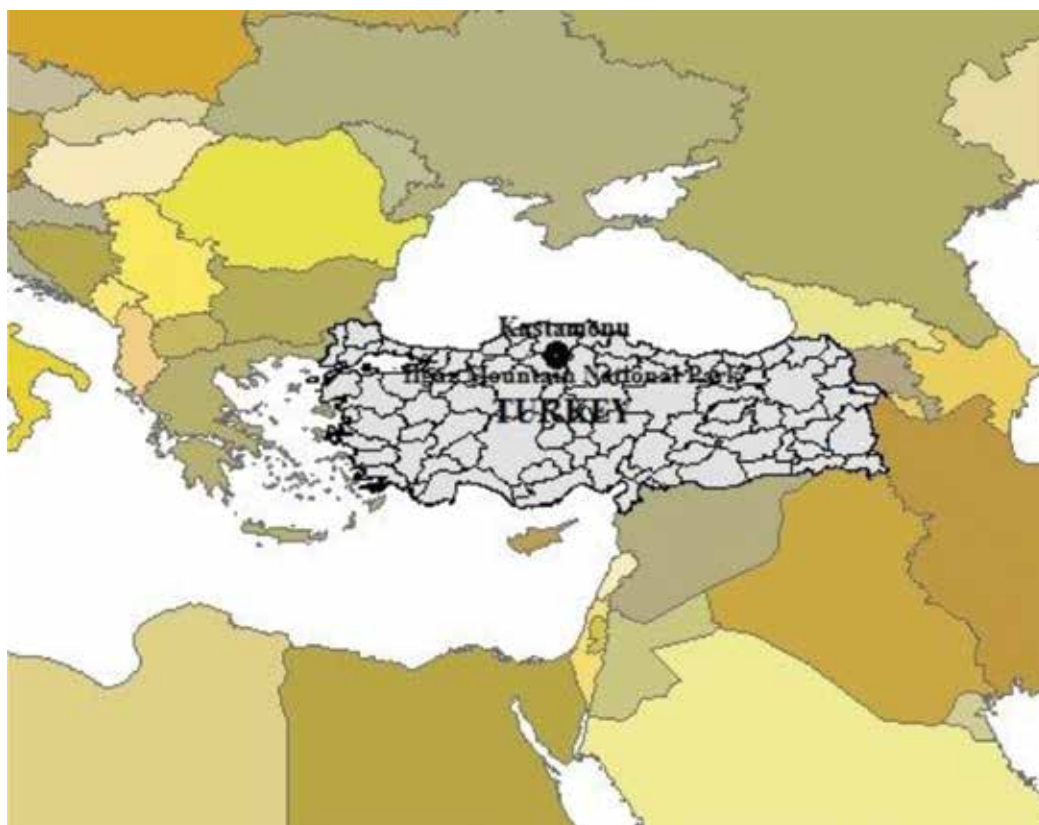


Figure 1. Location of the study area.

The Ilgaz Mountain region is the work area and constitutes the material of study. Areas with natural and cultural elements carry attractive features and provide the potential for tourism and recreational activities. The study was used to create a map using the Arc GIS software. A topographic map of the area of assessment as indicated on the map in **Figure 2** was obtained in the present study of Ilgaz Mountain, and can be developed for tourism and recreational activities. To reveal areas of natural and cultural structure, the observations were made from the photographs taken of the place. Evaluations for research included ecotourism and recreational areas under development, and recommendations were made in light of sustainability.

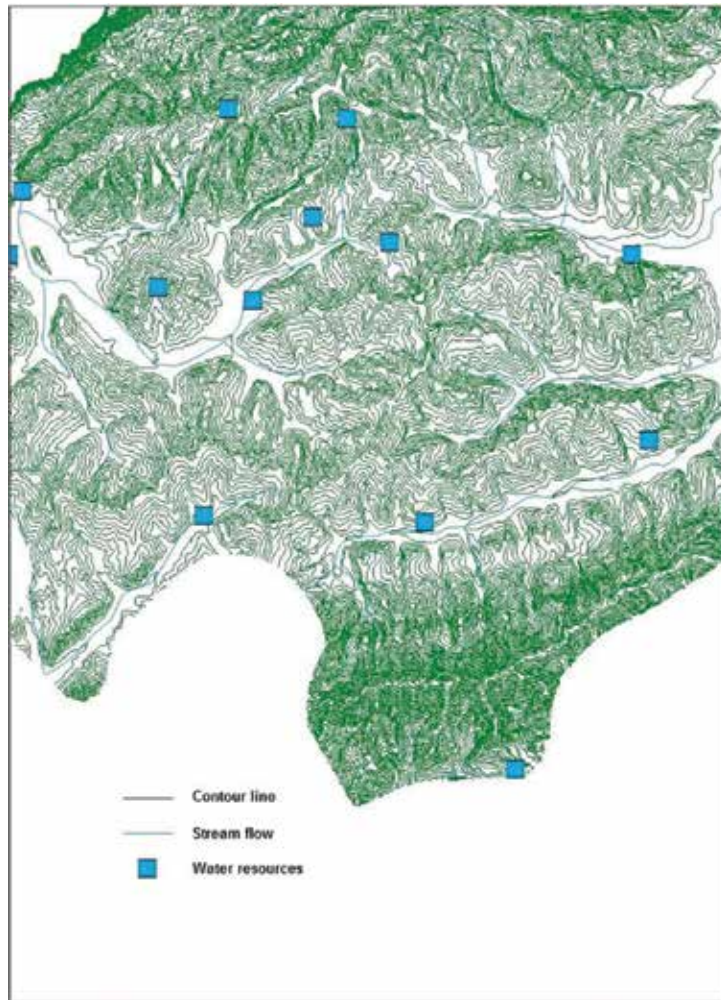


Figure 2. Ilgaz Mountain National Park's topographic map.

Ilgaz Mountain's natural and cultural heritage has been reviewed, and ecotourism has been carried out for inventory study. There are two basic methods of the study that provide additional content. One of them is applying the methodology of the GIS application to be performed in a computerized environment, and the other involves the land where they work. Land studies and the GIS graph database created in 1/25000 scale topographic maps were used. Then, the collected data and ecotourism models for Ilgaz Mountain along with the analysis were proposed.

First, this study examined the awareness levels of tourists on the conservation status in Ilgaz Mountain sporting opportunities. The information about the source values and general status of Ilgaz Mountain was given by performance data. Second, opportunities, threats, strengths, and weaknesses were identified by performing a SWOT analysis [53].

Data collection, analysis of natural and cultural values, and surveys to determine awareness were carried out together by SWOT analysis [54]. Results and suggestions of Ilgaz Mountain ecotourism were reached out by planning and management of it after evaluation of the survey, SWOT, and GIS maps.

The region has been pushed forward by the expression of research and ecotourism potential of the immediate environment and the protection of ecotourism resources in the framework of sustainable tourism approach of the population, and identified ideas for planning and development proposals were presented.

10. Results and discussion

A national park's history, archeological structure, topography, flora and fauna, vegetation, and recreations are quite favorable in terms of natural beauty. Ilgaz Mountain National Park is home to many extreme sports like mountaineering, canyon rafting, camping, hiking (hiking), caving, and rock climbing. Ilgaz Mountain National Park, Central Anatolia, North Anatolian transition zone forming the North West Anatolia, the largest mountain range is located on the Ilgaz Mountains. The national park area from the highway is 200 km away from Ankara, 75 km from Cankiri, and 25 km away from Kastamonu. The area is at an altitude of 800 m between 1600–2000 meters and 1500 m. The park involves two ski slopes in lengths. Ilgaz National Park's area is ideal to respond to recreational needs such as excursionist botanical trips, nature walks, bicycle tours, mountain climbing, running, shooting, skiing, and so on [13].

When looking at the major national parks in terms of recreational use, Kastamonu Mountains National Park of biological diversity and geological structure increase the diversity of recreational activities. The national park's recreation options such as wildlife viewing, hiking, canyoning, rafting, caving, landscape watching, photo safaris, climbing, and so on offer a very suitable environment for camping activities.

In national parks, forest areas, forest openings, accommodation and recreational facilities, a river forms a border with the ski slopes. Because of its rare landscape value, rich vegetation and wildlife, Ilgaz Mountain was declared as a national park on June 2, 1976. The total area is 1088.61 hectares. The location of Ilgaz Mountain on a map of Turkey is shown in **Figure 1**, and the topographic maps are shown in **Figure 3**. The Ilgaz Mountain terrain consists mostly of serpentines, schists, and volcanic rocks. Soil groups in the area are shown in **Figure 4**. The geological structure of the area has interesting properties for up mountain formations. Different geomorphological character movements in the valley are characterized by ridges and peaks. Slope conditions in Ilgaz Mountain National Park are shown in **Figure 5**. This geomorphological structure creates an extraordinary natural landscape combined with lush forests [50].



Figure 3. Ilgaz Mountain National Park between Kastamonu and Cankiri.

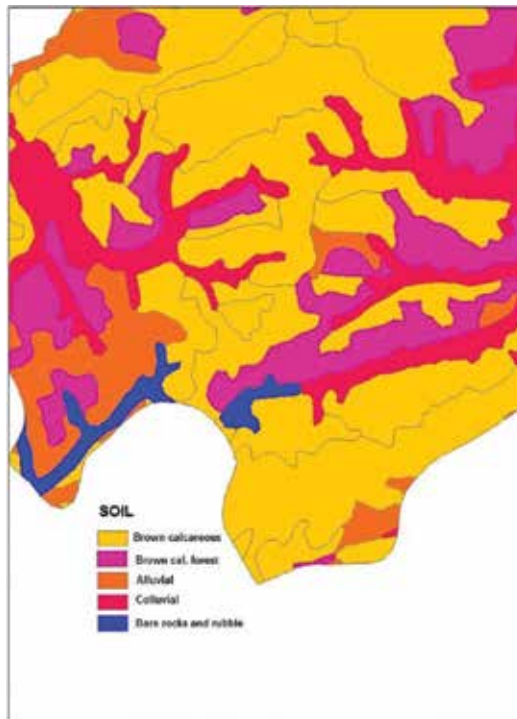


Figure 4. Ilgaz Mountain National Park soil groups.

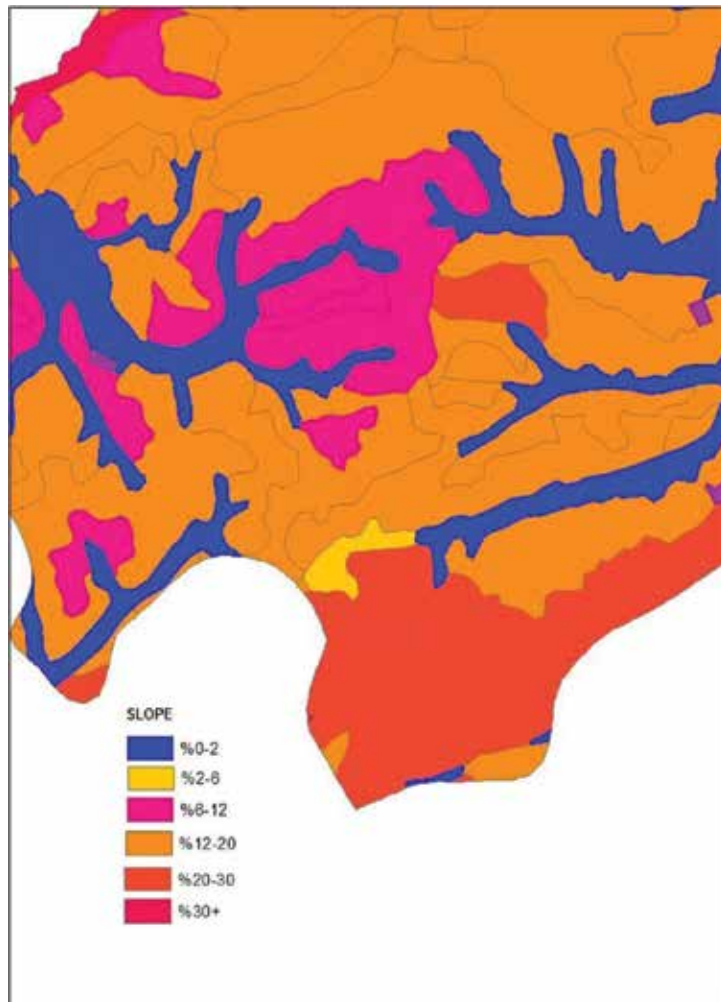


Figure 5. Ilgaz Mountain National Park slope conditions.

Ilgaz Mountain is noted for its natural, cultural, and archaeological values. These floristic regions with specific climatic advantages allow the growth of plant species with endemic features. Kastamonu is a province benefiting from land and air transport. Ilgaz is on the Ankara–Cankiri highway. Ilgaz Mountain can be reached from Kastamonu at approximately 25 km by road.

The Ilgaz Mountains' humid Black Sea is situated on the transition zone between the Black Sea climate and the terrestrial climate of Central Anatolia. The transition zone between the Black Sea and the Central Anatolia region of Ilgaz Mountain has provided a rich diversity of species and habitats.

National parks, topography, rich forests and vegetation, high wildlife potential, unique natural beauties, rich recreational resources, and winter tourism facilities provide a potential area for

a recreational atmosphere beneficial to health tourism, which focus on medical treatments and the utilization of healthcare services. Due to the transition area between the inner regions and areas, the park is rich in habitats. The national park has geomorphological and geological features, rich textures of plants and forests, interesting sights, and high recreation facilities which attract attention with clean air, winter sports, and tourism facilities [51, 52].

The average annual temperature is 9.8 °C in Ilgaz Mountain National Park. **Figure 6** shows Ilgaz Mountain National Park's annual average temperature. The highest temperature in July is 19.7°C and that in August is 20°C. January is the coldest month with -0.8°C. The average annual precipitation is 65 mm rainfall in Kastamonu, which is 110 mm lower than that in the national park, and 1200 mm at the mountain peaks. **Figure 7** shows Ilgaz Mountain National Park's average annual precipitation. With the features of continental mountain climate, the maximum precipitation is in spring and early summer is harsh. The northern slope gets more rain. The summit consists of up to about 1 m of snow for 6 months of the year and remains in place.

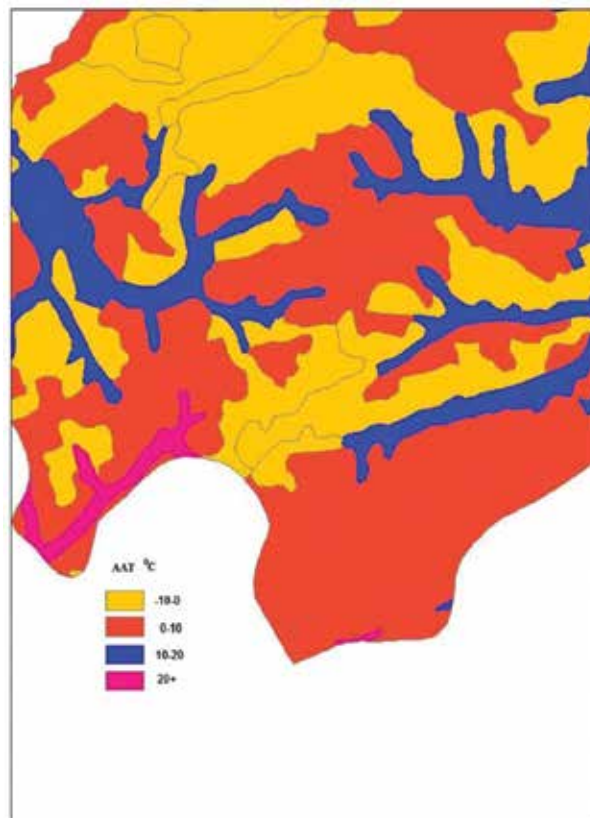


Figure 6. Ilgaz Mountain National Park annual average temperature.

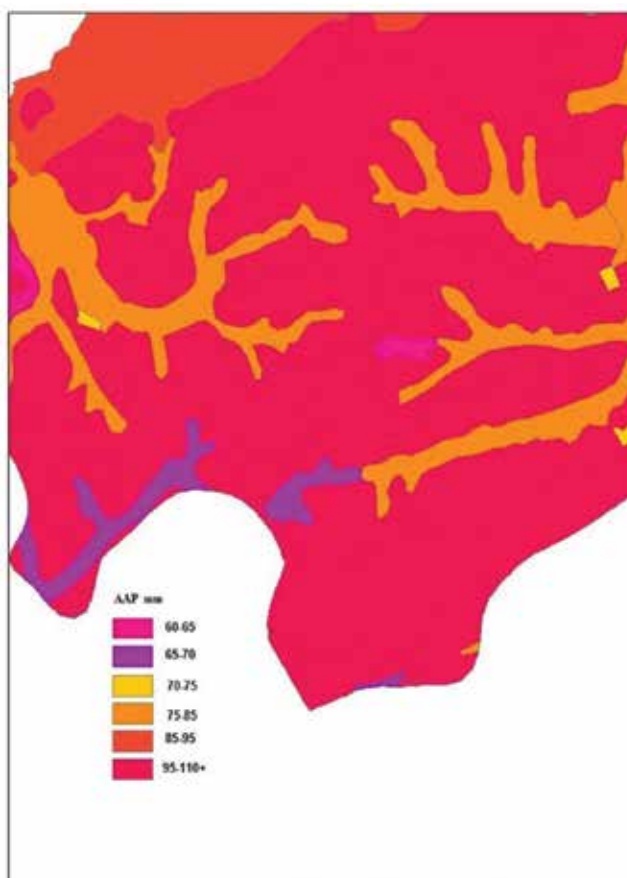


Figure 7. Ilgaz Mountain National Park annual average precipitation.

In the Ilgaz Mountains, the Euro-Siberian region of great flora is included in the lower region. Uludag fir and pine forests are the main trees in the region. Around the national park forest, shrub and grass formations of 617 taxa were identified. Floristic research conducted in national parks included groups of 51 families in which 234 species and subspecies-level taxa have been identified. Out of these 37 species in Turkey (15.8% rate of endemics), 4 are endemic to the Ilgaz mountains. Two of the endemic class are gravely endangered—*Arabis abietina* and *Barbarea trichopoda*. *Ornithogalum wiedemannii* with *Corydalis wendelboi* are the other endemic species.

Mountains overlooking the northern slopes of the Black Sea, compared to the southern side, get more rain and are damp. Larch is seen on the southern slope. In general, coniferous tree species up to a height of 2000–2200 m are common. Alpine plants can be seen at the upper limit of the forest. In the northern slope, with the broad-leaved oak trees, beech trees can also be seen. Pine and fir dominate the heights.

Mammals common in the forest include brown bear, red deer, roe deer, wolves, lynx, fox, wild boar, dwarf bats, hares, Caucasian squirrel, falcon, and lesser spotted eagles. Flora and fauna are shown in **Figure 8**.



Figure 8. Ilgaz Mountain National Park flora and fauna.

A one-to-one survey was conducted randomly in Ilgaz Mountain National Park in order to determine the awareness level of the protected areas. The number of visitors coming to the park daily during the tourist season reached 100 in 2015. The national park offers many recreational activities such as skiing, hiking, camping, photo safaris, trekking, cycling trips,

amateur line fishing, botanical tourism, and air sports, along with its unique natural beauty. SWOT analysis was carried out and was used in the decision-making, planning, and management phases by predicting the opportunities and threats that can be encountered in the future along with the present strengths and weaknesses. **Table 1** provides the results of the SWOT analysis.

Strengths	Weaknesses
<ul style="list-style-type: none"> • Still retains the natural character of the forest areas • Historical, archeological, and cultural values • A variety of different ecotourism activities in all seasons • The climate and geomorphology • Ecosystem diversity and richness • Easily accessible due to its geographical location • The presence of diversified products • Having uniquely beautiful and natural landscapes • Its borders are being protected by multiple conservation statutes • Offers many activities such as cave tourism, hiking, mountain sports, photo safaris, bird and butterfly watching, nature walks, study tours, skiing, etc. 	<ul style="list-style-type: none"> • It cannot be adequately protected while people unconsciously use the natural resources • Lack of social awareness about protected areas • Lack of qualified staff • Lack of recognition of the imagined and the destination • Environmental, economic, and social consequences which can lead to different results with the apparent lack of eligibility criteria of ecotourism activities • The lack of an institutional structure for monitoring and controlling ecotourism activities consisting of uncontrolled entry • Protectionist awareness of tourism is not developed well enough • Lack of inspection • Lack of infrastructure and superstructure at the desired level could threaten ecotourism services • Lack of adequate work on the potential of the region despite rich fauna and flora • Lack of sufficiently developed local public awareness of natural protection • Lack of structure required to perform many of the top and bottom of ecotourism activities • Lack of accommodation
Opportunities	Threats
<ul style="list-style-type: none"> • Turkey’s increasing demand for ecotourism 	<ul style="list-style-type: none"> • Expansion of ecotourism has adversely

Strengths	Weaknesses
<ul style="list-style-type: none"> • Natural and cultural landscape values being preserved • Local communities providing new job opportunities in the field of ecotourism generating revenue • Unspoiled areas • The formation of new investments in the ecotourism sector and subsectors • Different geographical structures • Local in nature conservation, national and global consciousness development opportunities • Having a wide variety of different recreational and tourist activities • Developing transportation facilities and development of long-distance travel opportunities accordingly • Rich in flora and fauna with its natural structure • Landscape beauty • Nature can be considered as an alternative type of tourism besides tourism • The increased interest of the individual and the community ecotourism issues worldwide and in our country • Increase the quality and quantity of natural areas protected by law 	<ul style="list-style-type: none"> • affected the raid and increased destruction of biological diversity • Destruction of flora and fauna at protected areas • Unplanned increases with endemic or economic value as a result of the growing ecotours of plant and animal species and the illegal trade for the increase in smuggling • Exceeding the carrying capacity • Solid waste pollution • Air and water pollution • The corruption of natural and cultural texture • Uncontrolled and increasing notoriety and unconscious eco-tours at the end of life and property lose tourists • The monotony of ecotourism activities can bring trouble everywhere along with the implementation of similar activities • Threats made for promoting ecotourism which led to excessive construction in natural areas of investment

Table 1. SWOT analysis of Ilgaz Mountain

11. Conclusions

The importance of sustainable tourism activities carried out in different countries with an ecological approach for development and economic growth is huge. Sustainable ecotourism can only be achieved with the appropriate approach to the ecological features of tourism development and management plans. Tourism and recreational activities in the region need

to be organized and implemented with good planning to establish an ecotourism strategy. The study area has quite a high tourism potential in terms of tourism and recreation. Rare resource assets owned by Ilgaz Mountain allow for different tourist activities in different seasons.

Ilgaz Mountain National Park is rich with ecotourism activities, which include photography, bird watching, adventure and sports tourism, historical and cultural tourism, wildlife tours, cave exploring, camping, picnic activities, horseback riding, cycling, and fishing.

Ilgaz Mountain National Park is an important recreational area for hiking for the realization of the scope of the regulation of ecotourism; however, planning is required for these trekking activities so that they do not affect the natural habitat of the area. Trekking guide for the cultivation of the field is another issue to be resolved. This, along with the local people, is a critical guideline that needs to be considered to be selected. This will ensure raising awareness about the value of natural resources, which in turn will create jobs for the local people. An alternative course of arranging the necessary cultural and archeological sites in determining the trekking routes may be another suggestion.

Ilgaz Mountain is rich in vegetation and provides a significant contribution to the tourism potential of the mountain. Some plants can be grown in spaces such as arboretums, and dead plants can be showcased in herbarium museums, providing an important educational aspect and adding value to tourism. In addition, the area also contains interesting examples of the different geological and geomorphological structures. Nature or hiking trails that can be installed in the museum with samples of these rocks can be displayed in the field.

Ilgaz Mountain prevents excessive use of resources in the area covered by natural transhumance activities, protection from pollution and prevention of waste. Erosion work is of great importance in terms of the continuity of nature values. Unconscious agricultural and livestock activities are of great risk to the ecosystem and other areas in the highlands, and the local people should create environmental awareness to inform others about this.

Bird watching refers to observation of birds in nature and is recognized in the world of sports. Finding birds in all types of habitats is the best indicator of a healthy environment. The total number of bird species found in Turkey includes the bird species of the whole Europe. One of the most important reasons that our country is rich in bird species is the rich wetlands which are located on major bird migration routes.. Ilgaz Mountain is also located in the bird migration route. Bird watching is spreading rapidly in Turkey in recent years, especially in the Ilgaz Mountain National Park. The park is home to bird species unique to this region and that are rare. Rare birds and bird species can be spotted in the area, which attract many bird watchers. **Figure 9** shows the bird observation stations in the region. The incubation period should be traced and cooperation sought with associations for this purpose.

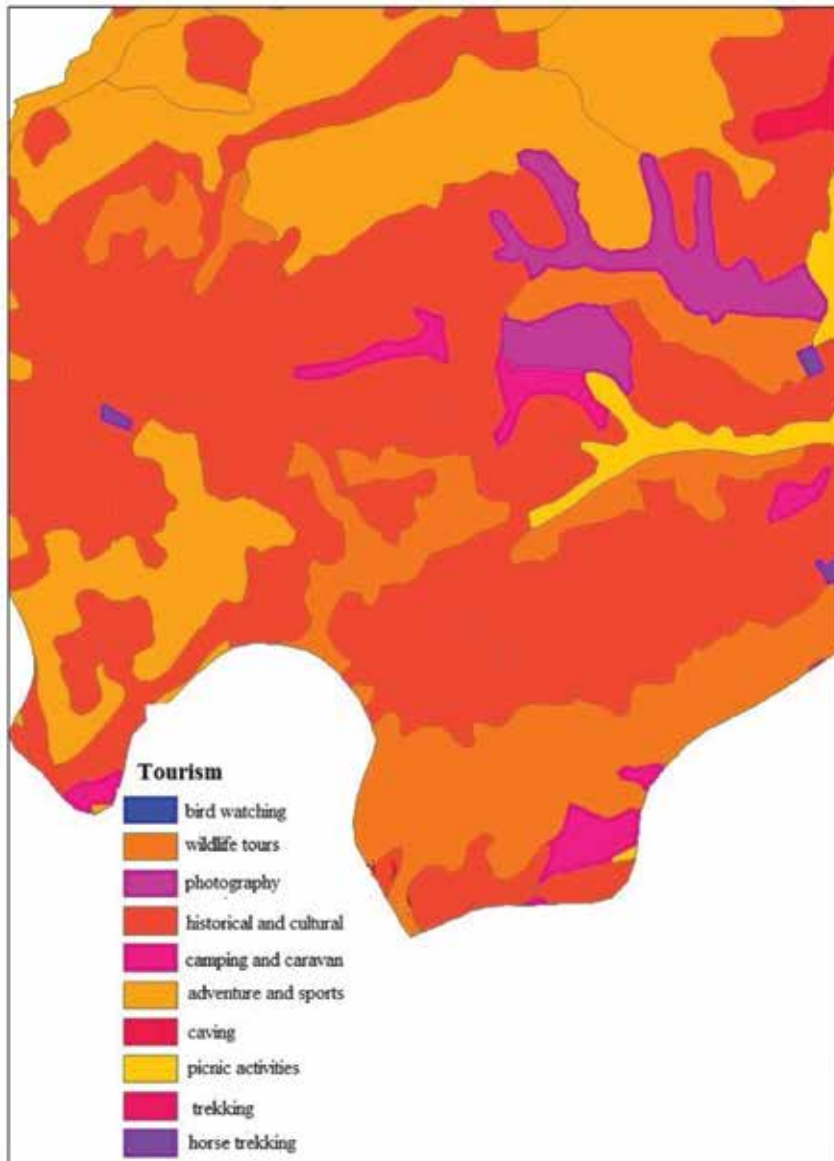


Figure 9. Existing and potential tourism and recreation activities for Ilgaz Mountain National Park.

Suitable areas for camping and recreational vehicle use in the park are shown in **Figure 9**. These areas, as well as those intended for daily use, allow visitors to stay in their tents and motorhomes. At the same time, areas for picnicking are also available, which are preferred by both tourists and local people. In such areas, ecotourism infrastructure, planning studies, site selection, planning, design, transportation, lodging, as well as sewage management should be implemented for the protection of the natural environment and wetlands.

Figure 9 shows a natural park for equestrians, with the potential for horseback riding trails. However, groomed and trained horses, their status as careers and local people trained work should be done. The resting places for visitors should be set at a good time and should not be selected if they create negative impact for the wildlife.

Mountainous areas have many features like spatial untouched areas, fresh air, rich biodiversity, and appeal to hosts for various reasons such as land forms and cultures. Therefore, this environment is a perfect getaway from boredom and offers options to appeal to the masses for new pursuits. As an alternative to regular day-to-day activities, in recent years, there has been an increased interest in sports such as rock climbing and hiking. Many regions of Turkey represent a suitable environment for such activities. Mountaineering is a physical challenge which requires a certain economic strength and technical knowledge; the relatively limited number of reasons such as natural adaptation to the living conditions of people with disabilities could be attracted.

National park is an area of natural and historical features. The visual beauty of natural areas other than the visual beauty of the historic sites is also an important feature of the park. Especially in Spring, rich color of vegetation, endemic plants, wild texture, abundance of animal species living in the park, and historic buildings in the area draw attention to photography. Photography can be held in all national parks as a part of recreational activities.

Historical and cultural tourism resources have been identified and shown in **Figure 9**. These resources must be registered, and illegal excavations should be prevented. This should be considered to allow tourism without damaging the position of ecotourism measures.

The natural park offers significant opportunities for wildlife tours, which is ideal for the observation of wild animals. Ideal areas with plateaus for wildlife tours are shown in **Figure 9**. A wildlife observation deck that does not disrupt the wildlife of the area should be established, along with proper protection and employment of local people as guides.

The area contains many caves useful for cave tourism, as shown in **Figure 9**. The natural and cultural landscape values are indicated as well. The entrance should be controlled and protected from the point of view of access. A natural park with a transportation network can be defined as a park with high standard of forest roads. In terms of cycling tourism, the natural park is of sufficient quality and standard and is ideal for cycling tourism. Appropriate resting areas and drinking water fountains that visitors can use to relax are sufficient to meet the needs and specifications of the area. Proper studies can be conducted for the purpose of landscaping bike paths, as route selections should not adversely affect wildlife.

The number of tourists visiting the natural park should be increased with the improvement of existing sites, and the ecotourism concept should be used to meet these needs; however, this will also require constructing new spaces to accommodate demand. For this purpose, the upper structure is created, depicting the zones in **Figure 9**, which can be chosen according to the centers and the creation of spaces that reflect the local architecture and culture. With this creation, a great number of tourists will be attracted to the park.

Regional transportation is available in the area, in addition to various facilities along the road that allow for seamless transportation. Moreover, the region is very safe. A homogeneous

social structure, with highly hospitable locals, leads to almost no crime in the region. This feature is important for researchers who want to conduct research in the field. Ilgaz Mountain can invite researchers from universities, research centers, and natural scientists to the natural park.

At the entrance of the parking area, a map of the area, along with information panels should be placed when necessary. Similarly, in accordance with the opinion of the expert guidance of the natural park space and wildlife habitat, the area should be prohibited from placing of advertisements.

While preparing introductory materials to increase awareness for tourists who come to ski in areas of this region, information about Ilgaz Mountain was provided as a gift. Lack of direction signs to the natural park, despite its close proximity to a major highway, complicates accessibility to the park, and therefore, steps should be undertaken to rectify this situation. The natural park is the responsibility of two provinces. This makes it mandatory for the coordination of development strategies, and hence, establishment of a joint working committee on this subject would be useful. Due to its proximity to many other cities, Ilgaz Mountain's location and accessibility by various transportation facilities make it an excellent alternative for weekend and day trips. Ilgaz Mountain should be added to the tour itineraries of surrounding areas to ensure the promotion of the mountain and the range of sports clubs and other activities. The existing accommodation should be used more effectively in the modern ski area close to the reorganization, and introduction of sports facilities will be positive.

Creating pedestrian places open to tourism in the area, including local product outlets, cafes, restaurants, tea gardens, living and recreation areas, and areas with realization of cultural activities to stimulate social performance will add charm to the area. Routes suitable for walking and hiking should be identified, and wooden walkways should be added to give the tourists the opportunity to walk in all seasons. Areas depicting the activities of transport, road maps containing information and images, advertising billboards, posters, brochures, and booklets should be prepared. Construction of the high-point cableway line to access difficult areas will be an important tool, enabling the discovery of different points of attraction. The traditional way of life and the protection of the culture of the Ilgaz Mountain plateau should be depicted.

People think of spending their free time in nature, involving in many recreational activities. Most research on the protection of national parks and recreation areas considers the activities carried out in these areas. According to the characteristics of the activities, the Ilgaz Mountain National Park hosts and classifies many recreational activities. A study to determine the recreational potential of Ilgaz Mountain National Park conducted in recent years has determined the areas to be suitable for recreation, as shown **Figure 10** [13].

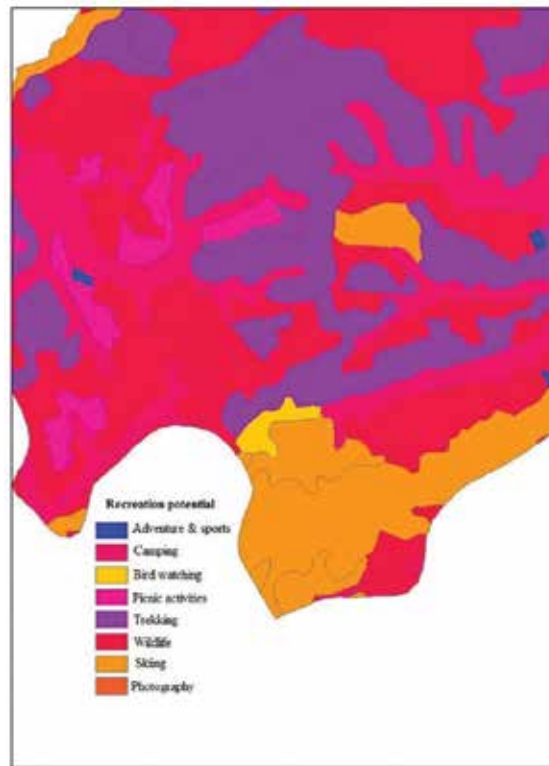


Figure 10. Recreational potential for Ilgaz Mountain National Park [13].

In this protected area that hosts recreational activities, leisure time, as a getaway from boredom and hectic life of citizens resulting from urbanization plays an important role in evaluating and renewing themselves. Especially today, due to difference in recreational preferences of the citizens of this state, and the increase in the number of natural areas, it is possible to say that there are reasons to shift to recreational activities. The purpose of national parks and protected areas is to promote education about nature and ethical behavior toward nature in the community and to instill awareness of the environment and nature's protection. For these reasons, services and activities will be offered in these areas, which will determine the circumstances in which they can be used. The introduction of the National Park visitors will inform the unit that directs trips to the field, with the information explaining the resource values guide. Maps will be provided to get to know the area, and the importance of protecting these resource areas will be highlighted. So, it will have space and will protect society.

Quick return of value to natural and cultural resources of the area in the national park of recreation understanding that the implementation of development that cannot be given damages. Hence, for tourism, recreation activities have negative effects on the sustainable development of the national park, and for this, a number of criteria need to be identified and applied. These criteria, appropriate for the nature and continuity of national parks and park

resources, are of great importance in terms of sustainable development. Fun, relaxation, and recreational activities in nature are more closely defined as self-renewal functions, and the benefits of such activities include nature conservation and increase in environmental awareness. However, recreational activities lead to soil compaction, damage to the vegetation, disturbance to fauna, creation of solid waste, noise, and other adverse effects due to tourism. Therefore, they need to be planned so as not to disturb the natural environment. Protection of users in order to understand the expectations of the user relationship for healthy walks and taking management decisions in this direction are required. For the protection and use, the relationship should first be clarified with the purpose of identifying the ecotourism potential of Ilgaz Mountain. This is shown in **Figure 10**. User stability in the context of the national park protection requires modifications. The definition of national park tourism cases where a decision granting. While keeping international development in mind, the requirements of Turkey and Ilgaz tourism to shape national park tourism must be fully described. Thus, after determining the ecotourism potential of the area, recreation should be permitted within these limits.

The fact that ecotourism depends on natural resources is indisputable. Therefore, the environmental sector, to be sustainable, social, and cultural, must predict the effects that may determine plans and strategies to counter these effects. However, sustainability depends on retaining the original value of the resources by using them rationally.

Ilgaz Mountain must first assess the protection needed to better preserve its resources. Sustainable tourism in the area with the purpose of economic activity and income of the local people will enable better preservation. The fundamental attractiveness of ski tourism offers potential for ecotourism. In terms of tourism, the national park has the possibility to encourage the alternative tourism movement. However, while currently the park offers a wealth of potential, its utilization is limited. The recommendations made for the transformation of the national park's economic value should be implemented. At this point, along with the joint efforts of the local people—especially in the private sector—and the local and central government, managing ecotourism activities in this region is of great importance.

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Tourism, Competitiveness and Economic Growth: A New Analytical Model

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Additional information is available at the end of the chapter

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Abstract

This study reviews the theories relating to competitiveness and the indicators used for its measurement on the one hand and the studies that relate tourism and growth on the other, with the purpose of establishing the links that exist between both concepts. This enables a model to be defined in which some factors that affect tourism competitiveness combine with capital and work to determine economic growth. The provision of inherited tourism resources, together with the provision of productive resources, and the links between them are the determining elements of the capacity of an economy to produce and therefore to grow.

Keywords: Tourism, Economic Growth, Competitiveness, Model, Review

1. Introduction

The attraction or the motivation by which individuals decide to go to certain destinations or others, has inspired the study of tourism competitiveness. Among the theoretical studies, it is possible to highlight the models of [1–4]. The studies of [5–9] can be mentioned among the empirical. In these studies, it is shown that there is no single determining factor of tourism attraction, but that tourism competitiveness is related to the sum of many factors. Consequently, various indicators have been developed that attempt to summarise the competitiveness of the destination by a number. Basically, several elements are included in these indicators, which are found with various methodologies [10]. Among them are those related to the provision of physical resources or those *inherited* from the past.

The interest of these analyses is focused on determining which factors influence the growth of tourism. Concurrently to these studies, other economists have focused their interest on the empirical analysis of the relationship between tourism and growth. Initially, these analyses were focused on the empirical confirmation of the so-called *tourism-led growth* (TLG) hypothesis, since [11] made the first empirical study on the causal relationships between both variables. Other, more recent, studies put emphasis on knowing through what mechanism, or how or in what quantity, tourism generates economic growth, and they empirically analyse the relationship between tourism and economic growth, including tourism demand variables in the production functions, because as [12] affirms, it is necessary to consider other productive factors when the relationship between tourism activity and economic growth is analysed.

This study reviews the theories relating to competitiveness and the indicators used for its measurement on the one hand, and the studies that relate tourism and growth on the other, with the purpose of establishing the links that exist between both concepts. This enables a model to be defined in which some factors that affect tourism competitiveness, combine with capital and labour to determine economic growth. Those factors are included in this study, under the name of *inherited* tourism resources.

With this objective, the present study is structured as follows. After this introduction, the competitiveness models are reviewed in Section 2, including tourism competitiveness. In Section 3, a review is made of the international indicators used to make estimations of tourism competitiveness. In Section 4, a review is made of the studies that analyse economic growth and tourism, putting emphasis on the limitations or difficulties of these models and their relationship to tourism competitiveness. This analysis allows the definition of an alternative model of study, which includes the concept of inherited tourism resource. Finally, conclusions are made in Section 5.

2. Tourism competitiveness: measurement indicators

Since the last decade of the twentieth century, an increasing number of researchers have focused on knowing the causes that make a geographical enclave become a preferred tourist destination above others, and the reasons for their greater or lesser tourist attraction potential. In the past decade of the present century, the proposals have been focused on producing models that measure, by means of a specific empirical methodology, the competitiveness of the tourism destinations [1–4].

In agreement with [5], there are three main reasons why the mentioned scientific interest has been inspired: firstly, the increasing importance that the tourism sector has in the regional, national and global economies; secondly, the increasing competition between tourism destinations, although they have hardly changed over the years [13,14]; and finally, the benefits of tourism for the economies seem to be clear in the short term, but their effects in the long term do not appear to be as great, or at least there is insufficient empirical evidence that supports it [15–17].

The first section of this chapter reviews the conceptual models of tourism competitiveness. This is followed with an examination of the empirical studies developed to date, highlighting the main existing indicators on tourism competitiveness that have come to be used at the international level, putting emphasis on the applied methodology.

2.1. The conceptual framework of tourism competitiveness

The conceptual framework of tourism competitiveness is based on the pioneering studies that began to be published at the end of the twentieth century and the start of the twenty-first, fruit of the scientific activity of [2,18–20], among others. In [19], the competitiveness of one tourism destination with respect to another is defined as its increasing capacity to attract visitors, together with the increase in total tourist spending, offering them rewarding, satisfactory experiences. These authors also specify that an improvement must be produced in the well-being of the residents of the tourism destination, as well as continuity in the growth of the natural capital of the destination for future generations.

However, and despite the ease there may be a priori when exploring the registry of data that allow the determination of the degree of attraction of a geographical location, the measurement of tourism competitiveness is a complex task, as, in agreement with [21], it is an abstract concept, not directly observable and with a multidimensional character resulting from the sum of variables, many of them compared to those of another tourist destination that is taken as a reference. Therefore the measurement of competitiveness can be subjective and depend on factors such as the approach of the researcher, the aim of the research, etc., thereby enabling the existence of diverse models of competitiveness. In agreement with [2], to suitably measure the competitiveness of tourism destinations, it is advisable to distinguish between the comparative and competitive advantages of a tourism destination. In [22] the comparative advantages are defined as the tourism heritage of the destination, as opposed to the competitive advantages which are those that arise when planning, management and marketing policies are applied to the comparative advantages.

From this differentiation between comparative and competitive advantages, different authors have proposed several models to explain tourism competitiveness. In [22], the competitiveness model of [1–4] is indicated as being among the most significant. A commonality of these models is an interrelated set of diverse elements that influence tourism competitiveness, thus recognising that competitiveness is a clearly multidimensional fact, which can be characterised by indicators of both an objective and subjective nature, as stated in [23].

2.1.1. Porter's model

Porter's [1] model of competitive advantage, also called "*Porter's Diamond*", presents a methodology for establishing enterprise strategies to achieve greater competitiveness in a globalised economy. In this model, the competitiveness of the companies of a country does not depend only on the natural and favourable factors that the country may have a priori, but also on those that can doubtlessly be generated by positive or negative synergies and which have the ultimate goal of productivity growth. Thus, the competitiveness model of [1]

establishes that the competitive position of the companies is very much influenced by their surroundings, which in turn depend on certain “*primary factors*”, these being understood as the state of the productive factors; the existence of qualified human resources; the conditions of the demand, such as tastes and their variations; the characteristics, existence and development of the associated sectors; as well as the enterprise strategies. There are also “*secondary factors*”, which influence the primary factors, which are the actions of local government and fortuitous events.

2.1.2. *The Crouch-Ritchie model*

The Crouch-Ritchie competitiveness model [2] was the first of the models presented to evaluate the tourism competitiveness of the ‘long-haul’ destinations. It can be considered, in agreement with [8], to be the main reference model on tourism competitiveness made to date. This claim is based on the fact that the model includes all the important factors that may determine the competitiveness of a tourism destination. In [8], it is considered that this model is neither predictive nor causal, but simply a conceptual model, as its intention is nothing more than to explain the determining factors of tourism competitiveness, by using abstract concepts and relationships.

The authors of this model consider that the competitiveness of the destination is primarily conditioned by both the competitive environment (micro) and by the global environment (macro). With the first concept, the authors refer to the immediate environment to which the destination has to adapt to compete, and which is composed of the different agents which operate in the tourism sector. The second concept is shaped by those global forces which change the composition and nature of tourism practice in the destination.

The main resources and attractions of the local geographical enclave are established as the third theoretical element of the model. This component includes all the assets that motivate the visit to the tourism destination. These resources are grouped into six large categories: the physiography; the culture and history; the market restrictions; the range of leisure activities; special events; and, the tourism superstructure.

The fourth element is made up of the so-called complementary factors and resources, which form the base on which the tourism industry must develop. They include the general infrastructure of the destination, the enabling resources, the vitality and the enterprise sense, as well as the accessibility of the destination.

The fifth element of the model refers to the management of the destination. This includes those activities which increase the interest in the main resources. Among these activities can be mentioned the marketing actions, such as promotions or the marketing of package tourism. Lastly, local endogenous determinants are established as elements of the model.

2.1.3. *Kim’s model*

The third of the basic models of tourism competitiveness is that of Kim [3], which considers four sources of tourism competitiveness:

1. The economic agents that are involved in the tourism process, the environment and tourism resources which make the place attractive to the tourist.
2. The tourism policies: the planning, management, investments made in the sector, taxes applied to tourism activities and the prices of the services of the sector or the prices of other sectors directly related to it.
3. The tourism infrastructure, the system of accommodation of the visitors, the publicity and the qualification of the human resources.
4. The tourism demand itself, the employment generated by the sector, the tourism behaviour and the tourism export, which are the result of the three first sources of competitiveness.

2.1.4. The Dywer-Kim model

The model proposed by Dywer and Kim [4] is a comprehensive model, which suggests an outline for determining the competitiveness of a country as a tourism destination. This model has many points in common with the model of [2], although some important new features are introduced:

1. Firstly, it establishes that the base of the tourism competitiveness is supported by three elements: the *inherited* resources, the created resources and the complementary resources, in turn grouping these into one superior structure because they provide the characteristics that make a tourism destination attractive to the visitors.
2. Secondly, governmental management of the destination is an important point to consider in its competitiveness. Therefore, all those factors are included which, in one way or another, strengthen the attractiveness of the local tourism resources and which adapt to their particular conditions. Although the model of [2] already made reference to these questions, the model of [4] introduces questions relating to the conditions of demand as a determinant of the competitiveness.
3. Thirdly, the model considers that although the competitiveness of the destination depends on the previously mentioned determinants, these also influence socioeconomic prosperity in the sense that the competitiveness of the destination is, in itself, also an intermediate objective towards the socioeconomic well-being of the residents. **Table 1** contains a summary of the main components of each of the mentioned models of competitiveness.

Porter	1990	Elements of the model
		Conditions of the productive factors
		Conditions of the demand
		Related and support industries
		Rival strategies, structures and companies

Crouch-Ritchie	1999	Elements of the model		
		Competitive environment (microeconomic)		
		Competitive environment (macroeconomic)		
		Main factors and resources		
		Complementary factors and resources		
		Management of the destination		
		Local determinants		
Kim	2001	Elements of the model: competitiveness sources		
		Primary sources: agents (politicians, employees, travel agents, etc.), environment and resources (historical, cultural and natural)		
		Secondary sources: tourism policy, planning and management of the destination, investments, tourism taxes and prices		
		Tertiary sources: tourism infrastructures, system of accommodation of the visitors, attraction of the resources, publicity and qualification of the human resources		
		Quaternary sources (resulting from the previous ones): tourism demand, employment generated by the sector, tourism behaviour (growth rates, balance of payments of the sector, participation of the sector in the GNP of the country or region, etc.) and tourism export		
Dywer-Kim	2003	Kim's model + New features		
		Factors that influence the competitiveness of the destination:		
		Basis of the competitiveness of the tourism destination	Inherited resources Created resources Complementary resources	Competitiveness of the destination: intermediate objective
		Local conditions	Management of the destination Conditions of the demand	
		Factors influenced by the competitiveness of the destination:		
		Socioeconomic prosperity: productivity levels of the economy, added levels of employment, income per capita, rate of economic growth, etc.		Socioeconomic well-being of the residents: final objective

Source: own production from [1-4].

Table 1. Summary of the main elements of the Porter, Crouch and Ritchie, Kim and Dywer-Kim competitiveness models.

3. Empirical advances of tourism competitiveness: international indicators

Those theoretical or conceptual models of tourism competitiveness have also brought about a very considerable empirical advance [5–9,20,24–28]. The models proposed in those works have emphasised the need to define tourism competitiveness by means of a set of interrelated variables, which necessarily have to be measurable to be able to assess that competitiveness. This has led to interest in a large variety of indicators that are being proposed in the economics literature. These indicators are those that make reference to inputs and other results, or outputs and other instruments [6], those that are directly linked to competitiveness with other tourism areas, and those that are related to more general elements that can affect this competition. There are authors who offer a list of indicators of competitiveness of tourism destinations [26, 29].

The case study of [29] lists more than 150 indicators of competitiveness of tourism destinations, grouped into different categories (inherent resources, 11; created resources, 21; complementary factors and resources, 28; management of the destination, 34; local conditions, 25; conditions of the demand, 4; and other indicators of a macroeconomic nature and of socioeconomic prosperity, 32). Also, the study of [26] lists a lower number of indicators (68), although it is sometimes difficult to find the value of those indicators in all the analysed destinations.

Along this line, some institutions have echoed the need to provide data for the construction of tourism competitiveness indicators, and it is possible, above all, to highlight the World Travel and Tourism Council (WTTC) and the World Economic Forum (WEF).

3.1. Indicators of the World Travel and Tourism Council

In 2001, the WTTC, in collaboration with the Christel DeHaan Tourism and Travel Research Institute (TTRI) of the University of Nottingham, put into practice a Competitiveness Monitor (CM), with 65 tourism competitiveness indicators classified into eight dimensions (competitiveness in prices, human tourism, infrastructure, environment, technology, opening tourism, social development and human resources), to measure the degree of tourism competitiveness of almost 200 countries, by means of the production of multi-variant reference indicators [10]. The methodology used began with the standardisation of 23 previously selected indicators, calculating the standardised value (y_{ij}) for each of them.

$$y_{ij} = \frac{x_{ij} - \min(x_{ij})}{\max(x_{ij}) - \min(x_{ij})}$$

The indicators vary between 0 and 1; with the 1 value corresponding to countries with the maximum value of the indicator, and 0 to the countries with the minimum value. In the case that the relationship between the indicator and the degree of competitiveness is inverse, a procedure of inverse standardisation is applied.

$$y_{ij} = \frac{\max(x_{ij}) - x_{ij}}{\max(x_{ij}) - \min(x_{ij})}$$

Once the indicators are standardised, an aggregate index of the eight dimensions of the previously defined competitiveness is defined. This index is an arithmetic mean of the standardised values of the indicators of each dimension:

$$S_i^{(k)} = \frac{\sum_{j=1}^m y_{ij}}{m}$$

where $S_i^{(k)}$ is the value taken in country i with aggregate indicator from the group k , which is made up of m simple indicators; that is, superscript k ($k = 1, 2, \dots, 8$) reflects eight dimensions and m the number of indicators necessary to measure them.

The simple indicators that comprise each aggregated indicator are shown in **Table 2**.

	Indicators
Competitiveness of prices	Hotel price index PPP (Purchasing Power Parity Index)
Human factor	Participation index Tourism impact index
Development Infrastructures	Highway Index Health facilities Drinkable water facilities
Environment	Population density CO ₂ issues International Treaty relations
Technological development	Internet terminals Telephone and mobile lines High technology exports
Human resources	Education index
Opening tourism	Visas Opening tourism Opening trade Rates of international trade
Social development	Human development index Newspapers

Indicators
Personal computers
Television sets

Table 2. WTTC indicators of competitiveness.

This methodology, in spite of obtaining eight aggregate indices, does not synthesise all the information in a single competitiveness index, because each of the eight aggregate indices corresponds to a different competitive dimension. In general, two disadvantages are attributed to it: i) the index $S_i^{(k)}$ does not use all the indicators available due to the deficit of statistical information on them, many countries being excluded from the global calculation; and ii), each $S_i^{(k)}$ is obtained as a simple sum of the standardised indicators, without the indicators having been weighted in the calculation of the aggregate indices.

With the aim of constructing a weighted aggregate index of tourism competitiveness, in [30] a definition is given for the aggregate index Z_i for each dimension (I), from the weighted average of the indicators proposed by the WTTC. The weight (ω) of each of these is obtained by means of a confirmatory factor analysis, with those weights or weightings being the slopes of the confirmatory factor analysis: $Z_i = \sum_{k=1}^8 \omega_k I_i^{(k)}$.

It is possible to say that, in [30], the simple arithmetic mean is used in the construction of the indicators of the groups, where as for the construction of the synthetic indicator, they use the weighted mean, where the weightings are constructed from the value of the slopes of the confirming factorial analysis. The weights or weightings of the indicators obtained in [30] were as follows: Technology (0.220), Social Indicator (0.217), Human Resources (0.153), Price (0.147), Opening (0.126), Infrastructure (0.101), Human Factor (0.033) and Environment (0.003). From this synthetic indicator, in [30] it was concluded that the more competitive tourism destinations were, in sequence, the following: The United States, Sweden, Norway, Finland and Australia.

This proposal, although allowing a comparison to be made between a large number of countries, presents the following two main disadvantages: one resides in the results themselves, because, with the exception of the United States, none of the other countries indicated as the most competitive from the tourism point of view, appear in the list of the most visited countries of the world; the other is that it grants a very secondary role to the environmental factor [25]. Nevertheless, numerous studies, such as those of [2,31], indicate natural and environmental resources as one of the main attractions of a destination.

3.2. Indicators of the World Economic Forum

The other competitiveness model initiative, relatively accepted throughout the world since 2007 [6], is the Global Travel and Tourism Competitiveness Index (TTCI) proposed by the WEF. This index appears structured into three sub-indices. Each sub-index is composed of a series

of pillars composed of variables, which measure the competitiveness of each of those three blocks.

1. Sub-index A. *Regulatory Framework*. Pillar 1. Regulation. Pillar 2. Environmental sustainability. Pillar 3. Security and protection. Pillar 4. Health and hygiene. Pillar 5. Prioritisation of the tourism activity.
2. Sub-index B. Business and infrastructure environment: Pillar 6. Air transport infrastructure. Pillar 7. Terrestrial rail and road transport infrastructure. Pillar 8. Tourism infrastructure. Pillar 9. CIT infrastructure. Pillar 10. Competitiveness of prices in the tourism sector.
3. Sub-index C. Human, cultural and natural resources: Pillar 11. Human resources. Pillar 12. Compatibility of the tourism activity. Pillar 13. Natural resources. Pillar 14. Cultural resources.

The indicators result from the combination of hard data from various official data sources, and soft data or “survey data”, which come from opinion surveys of executives from leading companies in each country. These data are included in the *Executive Opinion Survey of the World Economic Forum*.

The hard data are rescaled between one and seven, directly or inversely based on the influence that the variable exerts on the competitiveness of the tourism destination, increasing it or reducing it.

The numeration of the rescaling is identical for the surveys. The value of the index is from one to seven, calculated as the arithmetic mean of the three sub-indices, where the value of each of these sub-indices is calculated as the arithmetic mean of each one of the pillars, and these also, as the arithmetic mean of each of the individual variables of which it is composed (a total of 73 variables), all rescaled from one to seven. Among the main disadvantages of this proposal is that it always uses the simple arithmetic mean, which is why all the individual indicators (pillars) take part with the same weighting in the production of the sub-index, and all the sub-indices with the same weighting in the construction of the index.

In agreement with the latest Global Competitive Report [32], Switzerland takes first place in the ranking of countries with greater tourism competitiveness, followed by Singapore, Finland, Germany and the United States.

4. Tourism competitiveness and economic growth

As previously stated, the importance of tourism activity as a source of development and growth has been highlighted by numerous institutions at global level [33,34]. Nevertheless, this visibility has not rested there, as a strong scientific interest has arisen in the academic sphere regarding the study of this subject. Thus, some economists, such as [35], and more recently [36], suggest that tourism activity can promote the growth and development of countries, especially because international tourism can bring in foreign currencies that are used

for the financing of capital assets, which allow improvements to be made in the production of goods and services. In that sense, in 2013, the international income through tourism represented 30% of global export services, and 6% of the total global exports of goods and services [37].

For other economists, however, tourism activity can generate growth simply because it is a “*large industry*”. It is more — it can be considered the largest industry at global level [38]. As such, in agreement with [34], in 2013, the total contribution of tourism to the global economy reached 9.5% of global GDP (7 trillion U.S. \$), generating a total of almost 22 million jobs, which represents one in ten jobs on the planet, of which 9 million jobs, 4.1% of the total global employment, can be considered jobs directly related to tourism.

Therefore, the sector has a large capacity to generate employment and to increase the value of its production and tax revenue, as stated by different authors [39–45]. These tax revenues, can promote economic development policies, by seeking efficiency through greater competition between the local companies and others of different tourism destinations [46,47], thereby facilitating the use of economies of scale [48].

In many studies, the role of tourism activity is recognised as a driving force of economic development [14,15,49–52]. However, most of these studies do not analyse whether this growth is later translated into an improvement of the economic progress or the well-being of the population. They do agree, however, that the growth of the well-being is noticeably inferior to the growth of the GDP, admitting that the increase of tourism production contributes to development, at least up to a certain level of income, to which very few countries could have arrived without the tourism activity [53]. Therefore, these scientific shortcomings suppose a broad and important field for analysis and study.

In other more recent studies, tourism competitiveness is linked with growth in certain economic areas [2,4,54–57]. This has generated new research giving rise to an academic debate about the manner of measuring this competitiveness [9,58]. Beyond these measurements, a number of emerging studies emphasise the role of some factors, generally linked to economic growth, as determinants of a greater tourism competitiveness, and therefore of the improvement or growth of the tourism sector [59,60]

All this seems to highlight that tourism competitiveness, the growth of tourism activity, the economic growth and the production factors are variables that can be related.

4.1. Tourism activity and economic growth

Ever since [11] originally analysed the hypothesis known as tourism-led growth (TLG), i.e., tourism generates economic growth, studies have proliferated which, although agreeing in linking tourism activity and economic growth, present clear differences in the scale of this link. The scale seems to be related to the methodology used, the temporal and territorial framework of study, and the form of measuring the tourism activity in each case [61].

In [61], it was shown that most of the studies are based on the use of time series [62–70], other studies were based on a cross section analysis [49,71–73], and finally some studies used panel

techniques, such as those of [12,74–77]. In the afore-mentioned study [61], it was shown that, up to the start of 2013, 87 studies that empirically analysed the relationship between tourism activity and economic growth had been published. Of those, 55 showed the existence of a causality relationship that runs from tourism activity to economic growth, whereby the TLG hypothesis is verified or supported. Of the other published works, 16 identified a two-way relationship between the variables, 9 found a causality relationship between economic growth and tourism activity, and 4 did not find any type of relationship between both variables.

However, the authors state that, even though most of these studies show that there is a link between tourism activity and economic growth, there are clear, simultaneous, differences between the different studies in the magnitude of this link. This magnitude variation seems to be associated with the methodology used, the temporal and territorial framework referred to in each study, and the form of measuring the tourism activity in each case

In a similar direction, the methodological strategies used in the studies that analyse the TLG hypothesis have recently been reviewed, also showing differences in the magnitude of this link based on the methodologies used, as well as on the variable used to measure tourism activity [78]. These conclusions have been ratified by the meta-analysis made in [79]. In that study, important differences are demonstrated referring to the short or long term, the use of additional variables of economic growth in the explanation of the model and the use of different methodologies to measure the tourism activity.

In this regard, the study significantly shows that the value of the effect of tourism on economic growth in the long term, depends on whether the effect of other economic variables on growth is also taken into account, such as physical or human capital, in which case, the effect of tourism activity on growth diminishes remarkably. Thus, these variables should not be excluded from the analysis, if it is required to adequately show in which way tourism activity contributes to economic growth.

4.1.1. The measurement of tourism activity in studies of economic growth

Tourism activity has been measured in various ways to be able to make econometric estimates that serve as the basis for the study of the relationship of that activity with economic growth. There are researchers who use the income obtained by international tourism as a measure of tourism activity [62,65,80–83]. Others use the number of non-resident tourists who visit the country [84–86]. The choice of indicator is of special importance, because, as stated in [79], the way in which tourism activity is evaluated will also affect its elasticity of productivity. Thus, if tourism activity is measured by the income that it generates, then the elasticity will tend to be greater than if it is measured based on visitor numbers.

Additionally, other studies use the people registered in hotels [87], the number of overnight stays of foreigners in hotels [88], the income obtained by the hotel industry [89], the sales income in hotels and restaurants [90], or the cost in tourism [91]. All these ways of measuring tourism activity have the commonality that they are measured from the point of view of demand, which supposes that economic growth is linked to demand. A perspective that has

been criticised by several economists, as it does not allow the contribution of tourism to economic growth to be suitably demarcated [92].

In this regard, new approaches [93] have recently appeared that use the TTCI to measure the contribution of tourism activity to economic growth, analysing if this activity stimulates economic growth in the most competitive destinations. However, this study does not consider the role that other productive factors, such as capital investments, have in economic growth.

4.1.2. Tourism activity, economic growth and other productive factors

The need to consider other productive factors when analysing the relationship between tourism activity and economic growth has been demonstrated by [12]. Despite this, there has been little inclusion of additional factors in the study of the contribution of tourism activity to growth. Thus, of the 87 studies reviewed in [61], only 16 include other determining factors of economic growth, with only 5 studies incorporating these variables when the analysis is made using a time series [12,63,68,94,95]. The economic factors that are included refer to private or public (infrastructures) capital stock, human capital and technological capital. There are only a few studies that also include other factors, such as the indicators of freedom [96] or life expectancy [97].

In spite of the small number of studies that introduce these factors into the analysis, in [79] the importance of their inclusion is shown for suitably measuring the contribution of tourism to growth. Thus, these authors indicate that the inclusion of additional variables tends to diminish the value of the elasticity of productivity with respect to tourism activity.

4.2. Competitiveness, tourism and economic growth

From the previous analysis, it is deduced that the increase of tourism activity seems to contribute positively to economic growth, although the way in which it does so, its magnitude, as well as the generalisation of this contribution to the growth of all the countries or time periods, are questions that remain open today. It is possible that this is because the factors that favour economic growth and the relationships among them are not always suitably taken into account.

Tourism is usually seen as an element that favours the economic growth and development of countries and regions [98]. It is assumed in the extensive literature on competitiveness and tourism, as affirmed in [93], that the more competitive a tourist destination is, the more tourists it will attract, bringing an increase in income through this sector, which will lead to an increase of production and economic growth. However, this link does not seem to be so clear for some other economists, for whom a greater number of tourists also supposes greater imports of goods to satisfy their needs, the repatriation of profits to other countries when the tourism companies have foreign capital, or the sale of tourist objects at very inferior prices to those of the market or under very favourable conditions [99–101].

In this regard, recent studies do not find empirical evidence in favour of the argument that a greater tourism competitiveness generates a greater contribution to economic growth [93],

which seems to suggest that, by not assessing the relationship between tourism and other productive factors, their conclusions may be biased. Several aspects can be taken into account when analysing these relationships.

Firstly, the indicators of tourism competitiveness include a wide number of economic variables that form part of the public capital, private capital, and human capital. This is why those competitiveness indicators are influenced by productive factors that determine economic growth. Secondly, the relationship between tourism and growth also involves some difficulties in its study. These occur when tourism is measured by income or by number of tourists, thus making reference to demand variables, or when physical and human capital and infrastructure are used to explain the effects of tourism and economic growth, when the studies seem to suggest that tourism depends on competitiveness, which in turn depends on productive factors.

Also, and in relation to this question, it is possible to say that the study of these effects of tourism on economic growth are affected by other essential variables to explain the growth, such as the physical and human capital, and the infrastructure. Therefore, if they are not included to explain the growth, the study will be biased, but if they are included it will also be biased if it is thought that tourism depends on competitiveness, and this on the productive factors.

Figure 1 shows the relationships between competitiveness, tourism and growth, where competitiveness depends on tourism, tourism generates growth and the growth depends on the productive factors which affect tourism competitiveness.

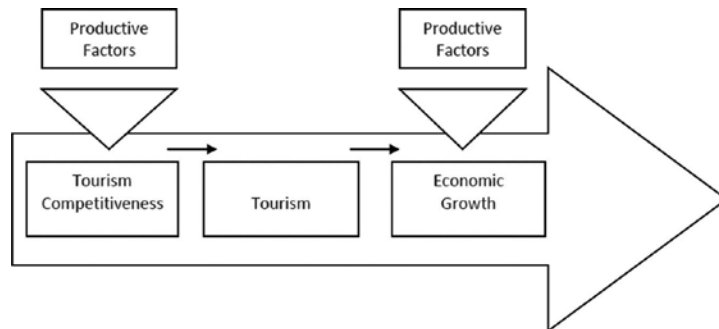


Figure 1. Relationships between competitiveness, tourism and growth in previous studies. (Source: Own production).

Alternatively, in this study, a new conception of those relationships between competitiveness, tourism and growth is proposed, where the provision of those inherited resources, together with the provision of productive resources and the links between them are the determining elements of the capacity of an economy to produce, and therefore to grow. **Figure 2** presents this new conception of the relationships between competitiveness, tourism and growth. The analysis of this new conceptual framework involves the need to determine or to evaluate the productive factors, on the one hand, and on the other to determine those tourism resources, by means of some type of indicator, which can be called *inherited*, and which are not directly

affected by the productive factors. This analysis can be based on the methodologies that have previously been developed to define tourism competitiveness.

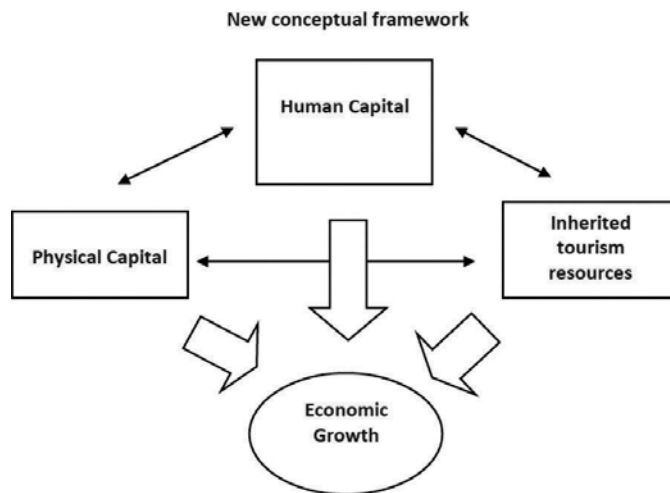


Figure 2. Relationships between competitiveness, tourism and growth: New conceptual framework. (Source: Own production).

The tourism variable that is included in the model does not depend on demand factors, as in the previous models in which tourism is measured by tourism derived income or number of tourists [62,65,80–86]. Neither does it depend directly on productive factors, such as physical and human capital. This variable refers to the conditions of the territory that motivate the tourism offer of a geographic zone. However, what should be included in the concept of inherent tourism resources is an undefined question, as has been shown in the measurement of tourism competitiveness in previous studies. Thus, the Crouch and Ritchie [2] model of competitiveness refers to the main resources and attractions of the local geographic enclave, which include landscape and climatic characteristics and the monumental and historical-artistic heritage. The model of Kim [3] refers to the tourism resources which make the place attractive to the tourist. The model that Dywer and Kim [4] propose establishes the term of inherited resources. Dywer et al. [55] highlight the so-called inherent resources among the tourism resources. The WEF Indicator includes factors such as environmental sustainability and natural and cultural resources [34].

In general, it seems that in certain territories a series of elements exist that make those places interesting for the tourist, and which seem to be related to the culture, the environment and the climatic situation. These resources are numerous, and some of them have been protected throughout the last century, for their interest, showing that they are recognised as elements of attraction for some of the reasons indicated previously. Therefore, from the measurement of those elements, it can be possible to produce an indicator, with the tourism competitiveness measurement techniques indicated previously, such as those applied in the TTCI or CM, including only the elements related to culture, environment and climatic situation.

Additionally, the proposed model of study includes other productive variables, such as human and physical capital. In this model, these variables interact with the tourism variable, in such a way that relationships of complementarity or substitutability can be defined among them. All these variables and their relationships finally affect the economic growth. Thus, the definition of this model includes other productive factors for analysing the effect of the elements relating to tourism on economic activity, following the studies of [12] and [79]. Although, the inclusion of these other productive factors in this model does not generate biased results, as the definition of the tourism variable in this case does not include, nor depend upon, those same productive factors.

Therefore, this model considers that the territories have a series of resources that are attractive for tourists, and which, based on their interaction with the physical and human capital existing or developed in the territory, can positively affect the economic growth. These tourism variables thus have an effect on the economic growth, although that effect would additionally depend on the relationships with the other productive variables of the territory.

5. Conclusions

From the start of the present millennium, an increasing number of studies have been analysing the causes that determine the competitiveness of tourism destinations, this being understood as the capacity of certain territories to attract visitors.

However, the measurement of competitiveness and its analysis are not simple, as it is a concept that is not directly observable and has a multidimensional character. In order to suitably measure the competitiveness of tourism destinations, the comparative and competitive advantages of a tourism destination are distinguished, thus differentiating between the factors and resources which a destination has and the measures implemented by the destination to efficiently manage its resources. From this differentiation between comparative and competitive advantages, several models have set out to explain tourism competitiveness. Among them are highlighted Porter's model of competitiveness, the Crouch and Ritchie model of competitiveness, Kim's model of competitiveness and the Dwyer-Kim model of competitiveness. All these models have an interrelated set of diverse elements or factors that influence tourism competitiveness.

These conceptual models have brought about a very considerable empirical advance in recent years. These applied models have the commonality of the need to define competitiveness by means of a set of interrelated variables, which are to be measured in some way to be able to evaluate this competitiveness. Thus, a large variety of indicators have been used as a means to measure competitiveness. From different spheres, numerous institutions have been offering data which allow the production of these indicators; along this line can be highlighted mainly the WTTC and the WEF at international level.

The most commonly used methodology for the production of the different indices of competitiveness can be synthesised in two stages. In a first stage, the indicators are selected and usually

ordered into groups, they are typified and directly or inversely standardised. In a second stage, an aggregate index is calculated for each of the previously defined groups. Later, another aggregate index is calculated from the indices calculated for each group. There are two main procedures for calculating the aggregate indices. The simplest one is calculated as the arithmetic mean of the standardised indicators. Alternatively, this aggregate indicator can be calculated from a weighted mean of the proposed indicators, where the weight of each of these is obtained by means of a confirming factorial analysis.

The interest shown in measuring tourism competitiveness is related to the economic income that tourism can generate and, with it, the boost to the economic growth of its territories. Thus, there are many scientific studies which recognise the role of tourism activity as a driving force of growth and economic development. An important and increasing number of scientific studies have been made on this subject since 2002, showing that there is a link between tourism activity and economic growth, although a clear differences exists between the different studies in the magnitude of this link. In this sense, there are two key elements. Firstly, that the different ways to measure tourism activity play a key role when determining the magnitude of its relationship to economic growth, and, secondly, that the results of the analyses that study the relationship between both variables depend on the consideration of other variables or factors that affect economic growth.

In these studies, all these forms of measuring tourism activity have the commonality of measuring from the point of view of demand, which supposes linking economic growth to demand, a perspective that has been criticised by several economists. On the other hand, if it is required to suitably measure the way in which tourism contributes to economic growth, it is considered necessary to observe other productive factors when analysing the relationship between tourism activity and economic growth. However, there has been scarce inclusion of additional factors in the study of the contribution of tourism activity to growth.

Thus, the increase of tourism activity seems to contribute positively to economic growth, although the way in which it does so, its magnitude, as well as the generalisation of this contribution to the growth of all the countries or time periods, are questions that remain open today. Therefore, it seems that a relationship can be defined that links greater tourism competitiveness with an increase of tourism activity, and another that relates an increase of tourism activity to greater economic growth.

However, several aspects have to be considered when analysing these relationships. Firstly, the indicators of tourism competitiveness of the destinations include abroad number of economic variables that are comprised of the public, the private and the human capital of the territory. Thus, the competitiveness indicators are influenced by productive factors that directly affect economic growth. Secondly, tourism is usually measured by income or number of tourists, which involves linking a demand variable with economic growth. In addition, this relationship between tourism and economic growth is affected by other variables, such as physical and human capital and infrastructure again. Therefore, if these variables are not included to explain the growth, the study will be biased, but if they are included it will also be biased if it is thought that tourism depends on competitiveness, and this on these productive factors.

In these chapter, it is considered that these relationships can be seen from an alternative point of view, in which the territory has a series of qualities or resource provisions that make it especially attractive to tourists, and which are not themselves affected by the productive factors, which are called *inherited* resources. The provision of those resources in a territory, together with the provision of productive resources, such as private or public capital and human capital, and their linking together, that is to say, the relationships of complementarity or substitutability that exist between them, are the elements which determine the capacity of an economy to produce, and therefore to grow.

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Interaction between Cultural/Creative Tourism and Tourism/Cultural Heritage Industries

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Additional information is available at the end of the chapter

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Abstract

The chapter presents a review of the conceptions of cultural and creative tourism, their resources, objectives and their benefit and damage to the nature and the society. It is very important in the postmodern society to not only develop cultural tourism that is one of the most rapidly growing branches of economy, but also to employ cultural heritage and does not always develop the common heritage and tourism industry. This is an especially sore point because the common cultural heritage and tourism industry has an opportunity to create added financial value for cities, regions, and it also develops a responsible conserving cultural tourist. Creative tourism is different from cultural tourism in that it provides tourists with experiences through their direct participation in offered tourism activities. Another idiosyncratic feature is that creative tourism travel packs are created by not only tourism organisations, but also communities that have authentic tangible and intangible heritage. It is important to note that cultural tourism can transform into creative tourism. Heritage tourism is of great importance as well because it relates to the aforementioned types of tourism. 'Red' tourism can be distinguished as a type of heritage tourism that attracts tourists' attention.

Keywords: Cultural/creative tourism, heritage tourism, cultural heritage, tourism industry, benefit

1. Introduction

In the twentieth-century modern global society, it is especially important to discuss the change of information, rapid pace of life, the ever-changing generations of people with the features particular to them; however, what is even more important are national identities and cultural

differences which are crucial to stand out from the crowd by attracting the attention of other cultures, attracting investments and developing economy, strengthening culture and national identity as well as the image of a particular country. Tourism is a branch of economy which, according to the data of the World Tourism Organisation and UNESCO, should be developing very rapidly, especially the alternative branches of tourism, i.e., cultural and creative tourism.

In the second half of the twentieth century, a massive tourism industry was generated globally. Alongside this industry, cultural heritage industry operates. They both employ the same resources, i.e., cultural heritage and natural heritage; however, they do not always cooperate, even though they should.

2. Cultural, creative tourism and its industries

2.1. The concept of cultural tourism

Generally, cultural tourism is classified according to motivational factors that indicate the dominating motif which promotes travelling. Based on the literature, the following six types of tourism are distinguished with regard to the goal of a trip: business tourism, professional tourism, leisure and entertainment tourism, cognitive-cultural tourism, sports tourism, rural tourism and wellbeing tourism [1].

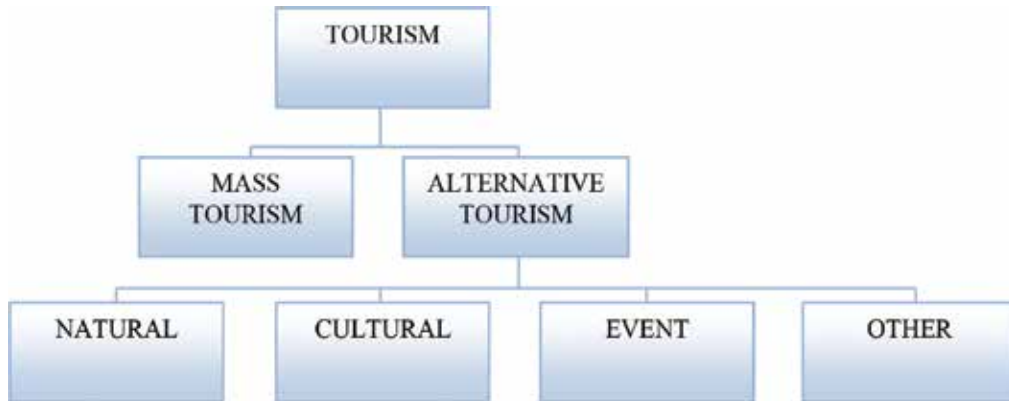
Cultural tourism is especially closely related with special demands of tourists because the desire to explore, “test out” other authentic cultures, explore artefacts of extinct cultures, and the goal to familiarise with “other” cultures are an especially important motif [2]. This encourages developers of heritage tourism and heritage to create a complex outlook towards cultural artefacts: an object itself cannot function without its target environment because together they form cultural landscape, e.g., the urbanist landscape of Vilnius Old Town (Lithuania). In 2009, it was included into the UNESCO heritage list. The Kernavė (Lithuania) archaeological site is a unique territorial complex of archaeological and historical values (194.4 hectares) included in the UNESCO heritage lists in 2004.

Cultural tourism is equally important in aiming to preserve cultural and historical heritage: the higher number of tourists interested in cultural heritage, the more financial support it attracts. Cultural tourism remains important in creating a positive image of a country or city on a global scale.

Culture has always been the main goal of any trip since the Great Travels in the sixteenth century. In the twentieth century, a notion that culture was no longer the goal of tourism appeared. In any case, however, cultural values play a very important role on the scale of both heritage tourism and the entire tourism industry.

Over a certain period of time, the types of tourism became more concentrated and oriented towards a certain area. Traditional mass tourism which Hall [3] describes as a temporary, short-term trip to and from a certain place where the traveller does not live faces an alternative – tourism that satisfies specific needs of travellers, i.e., cultural, educational and other. Accord-

ing to McKercher [4], cultural tourism is undoubtedly the oldest type of the ‘most modern’ types of tourism: people have been travelling for the so-called cultural reasons from the Roman times; the difference is that they were not treated as exceptional travellers until today. Pilgrim travels, visits to historical locations, special events, festivals, and rituals have been known for ages. Today it is called alternative tourism (**Figure 1**).



Source: created by the author based on [5]

Figure 1. Types of tourism. Source: created by the author based on reference 5.

According to Newsome, Moore and Dowling [5], alternative tourism is responsible or specific interest-related tourism that includes small numbers of tourists under authentic, natural or cultural conditions, and that encompasses natural tourism (i.e., tourism in a natural environment), cultural tourism (i.e., heritage, religions, etc.), event tourism (i.e., sports, festivals, etc.), and other (i.e., educational, farm tourism and so on).

By the end of the twentieth century, cultural tourism becomes one of the main fields of academic research and topics of discussion.

The concept of new tourism can be described by employing one of Craik’s [6] statements about the recently popular forms of tourism that are more flexible, often complemented by the terms ‘communication-enriching’, ‘satisfying’, ‘adventurous’, and oriented towards individual needs. Satisfaction of cultural needs becomes not only a component of holidays, but also the main catalyst of travelling. Due to different conflicts in the world and xenophobia based on misunderstandings, cultural tourism may often help cultures to communicate and encourage mutual understanding. Knowing the culture of other nations, we understand each other better and experience a rising wish to cooperate. This promotes communication and integration [7].

It is easier to find descriptions of various activities of cultural tourism in scientific literature than the conception of it itself. These activities are often described as visiting historical

structures and localities, museums, galleries, heritage territories, castles, churches, etc., and observing modern arts, sculptures or visual arts [8].

Table 1 introduces more definitions of cultural tourism.

Author	Description
UNESCO	<i>Cultural tourism stands for a trip in order to get to know cultural environment including landscapes, visual and performing arts, exceptional local lifestyle, values, traditions, events and other processes of creative and cultural changes [9].</i>
World Tourism Organisation (UNWTO)	<i>Cultural tourism is a trip for cultural purposes. This can include cognitive trips, cultural excursions, familiarisation with performing arts, trips to festivals or other cultural events and visits to certain locations and monuments [10].</i>

Source: created by the author.

Table 1. Definitions of cultural tourism.

UNESCO and the World Tourism Organisation describe cultural tourism as a trip that includes cultural and cognitive purposes. It is a way to know, improve, preserve and use cultural resources, landscape, architecture, artistic activities and unique features of a certain place. Creative tourism also aims at familiarising with a country yet creating immediate communication and cooperation with local citizens by obtaining experience of a certain kind.

2.1.1. Benefit of cultural tourism

Cultural tourism provides a sense of discovery, intercultural understanding, and enriches a personality. Cultural tourism helps to know the world, familiarise with the cultural diversity, traditions, customs, find out about different lifestyles, etc. Feeling, interacting, tasting, discovering, travelling, meeting, participating and finding out – all these elements comprise simple human well-being.

UNESCO supports cultural tourism as a measure to **preserve cultural values**. In a world of conflicts, cultural tourism for people divided by distrust and xenophobia may often help to communicate and lead to mutual understanding. Cultural tourism thus adds to the dialogue between cultures. Miscellaneous experience enriches an individual's perception and educates their ability to understand and feel for others. People learn from one another and thus acquire diverse skills to solve their own problems. This at the same time promotes communication and integration.

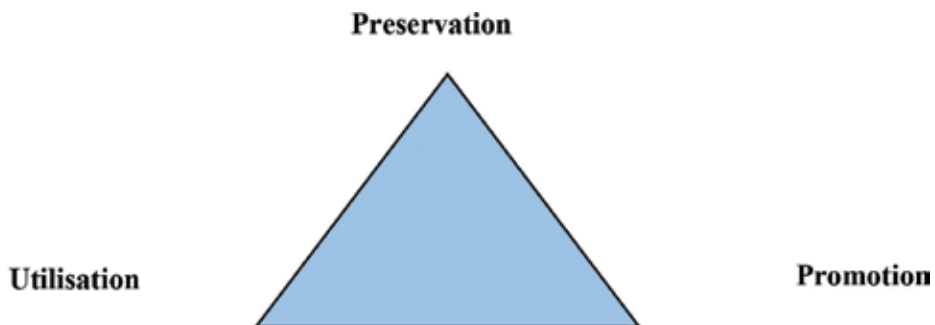
In localities that are frequently visited by tourists, **employment of residents increases** and it becomes easier to keep people in the region that has a **positive effect on the development of the country and the region**. This improves the demographic situation because the youth are provided with more opportunities. This type of tourism provides many opportunities for not only tourists, but also the hosts of a country for better life conditions, and its activities encompass the entire target territory. Moreover, **cultural tourism helps to create new ideas**

and invites local residents to cooperate, which in turn encourages economic and social development of a country [7].

Tourism is one of the channels via which countries may reveal their identity to the international society.

The European Commission supports cultural tourism as the main branch of industry that brings **economic profit**. Tourists tend to buy more local production. Moreover, 'cultural' tourists travel longer than local tourists and spend more money; thus, cultural tourism creates income for culture itself and supports it. Cultural tourism becomes the source of seeking income.

With regard to all these benefits of cultural tourism, it can be said that all of these cannot be achieved without management. Therefore, every country must invest large amounts of money into cultural tourism management. **The aim of cultural tourism management is to create and introduce** a unique product, and offer a consumer tourist an experience which would catch their attention on the basis of the following three main principles: *preservation, utilisation, and promotion*. According to them, the society can achieve other goals. First of all, it can encourage conservative use of values and develop and improve a personality, i.e., a new tourist who belongs to the postmodern, consumerist society must understand that cultural values should not only be consumed, but also be preserved for future generations (**Figure 2**).



Source: created by the author

Figure 2. Principles of cultural tourism. Source: created by the author.

Feedback of cultural tourism stands for positive response of foreign guests and tourists who encourage close friends to visit that locality and that country; it also stands for spreading the name of a country, locality or object on the global scale, attracting investments and finances, cultivating a country's national heritage. International organisations such as UNESCO and ICOMOS see cultural tourism as one of the most important guarantees of subtle growth and heritage preservation.

2.2. Creative tourism

Creative tourism has developed from cultural tourism as the needs and wishes of people to discover something new changed.

Creative tourism is a new form of tourism that includes very high potential to change existing models of tourism and contribute to the appearance of new experiences. Creative tourism may help to encourage social and cultural development and the rise of local economy. This type of tourism includes not only incoming tourists into the life of a country, but also its society which creates and helps to preserve traditions and old values.

With regard to these factors that have determined the rise of creative tourism, a high degree of influence was created by the existence of the consumerist culture. People were forced to think about what was there and then, and that it had to be preserved. The appearance of creative tourism was mostly influenced by the altering thinking and a larger portion of free time, which influenced the human wish to discover something other than what had been discovered by mass tourists.

Table 2 introduces definitions of cultural tourism. The first definition of creative tourism was created in 2006 by UNESCO during the first international conference on creative tourism held in October 2006 in Santa Fe (USA).

AUTHOR	DEFINITION
UNESCO	<i>Creative tourism is a trip directly oriented towards participation and acquisition of authentic experience, gaining certain knowledge in the field of arts, heritage and particular kind of locations where immediate communication with local community is possible, which would allow creating a 'live' culture [11].</i>
Catriona Campbell	<i>Creative tourism is tourism that offers visitors certain creative activities including observation of arts, acquisition of authentic crafts, participation in cooking seminars, and a possibility to stay in high quality residential locations and communicate with the local community without any obstructions [12].</i>
Crispin Raymond	<i>Creative tourism stands for acquisition of certain skills during holidays, which becomes a part of the culture and community of a target country. Tourists develop their creative potential and become closer to the local community through informal participation in interactive seminars and acquisition of experience [13].</i>

Source: created by the author.

Table 2. Definitions of creative tourism. Source: created by the author.

The main idea of the concepts includes the tourist's participation in activities and acquisition of authentic experience, which is the main aim of creative tourism. It can also be said that this form of tourism aims at not only a tourist's participation, but also the participation of a local community. In cultural tourism, community plays a marginal role as only the most beautiful cultural routes and most popular locations are shown; in the case of creative tourism, it also encourages to leave mass tourism behind and aims at observing old traditions and authentic culture rather than what has already been discovered or is new.

Catriona Campbell, a creative tourism marketing specialist, also identifies this type of tourism with various activities and participation in them. It aims at introducing tourists with specific foreign types of arts, various authentic crafts and traditional food. Every tourist would be able to choose the most interesting activity. Even though people's desires and goals would differ, in any case, they would have to communicate with local communities and learn from them [12]. Campbell emphasises that tourists would be provided with an opportunity to live in high quality residential locations. This statement can be interpreted as follows: tourists would be accommodated together with a community that organises various seminars and practice, which would create immediate communication and mutual cooperation. Living with the locals allows getting to know local culture fully, learning various crafts or just feeling like one is a part of the society [12].

Crispin Raymond [13] is one of the founders of creative tourism in New Zealand. He states that this type of tourism has existed since the beginning of tourism and that it has only acquired an individual title.

One of the most important features of creative tourism is informal communication. In order for the guests to become a part of the society, it is necessary to provide them with an opportunity to communicate in informal environment and create conditions that we live in. This would allow tourists to empathise and not be afraid of observing deeper traditions. Crispin Raymond distinguishes informal participation as the most important aspect, which other authors do not emphasise [13]. The aim is to make tourists feel at home and become closer to the community through various seminars and experiences. In Lithuania, an exceptional example of creative tourism that has become a well-known event of international inbound tourism is the mushroom festival entitled "Grybų karas Varėnoje" (En. "Mushroom War in Varėna"). It takes place annually on the last Saturday of September. The festival includes entertainment and many activities for different segments of tourists.

Moreover, the concept of creative tourism is inseparable from the concept of creative city because cities that invite such tourists organise various seminars, teach them how to apply theoretical knowledge practically and allow them integrating into the local culture and are called creative cities.

2.2.1. Forms of creative tourism

Creative tourism could not do without creative development; therefore, the following two main ways of implementing creative tourism are distinguished:

- 1) Using creativity as one of the activities of tourism;
- 2) Using creativity as a certain background for tourism.

The **first way** is a more traditional model of creative tourism because it emphasises active participation of tourists in creative activities. More and more communities believe that their creative life and activities may make their city attractive for tourists even if they only want to look around instead of taking up activities.

Moreover, there are various types of experience and products that can be attributed to a creative tourist from active involvement into activities, learning specific skills, to looking around galleries and browsing creative product stores (**Table 3**).

Activity	Type of experience
Learning	Workshops – attending specific courses and exchanging experiences
Tasting	Experiences Open workshops
Observation	Routes, trip notes
Shopping	Galleries, shops

Source: reference 14.

Table 3. Typology of creative tourism experiences.

In the case of the **second variant**, creativity is used as a certain background only. In this case, tourist creativity is achieved in a less direct way than during participation in all activities. Here the aim is to create a common atmosphere which consists of the entire creative sector and environment. In order to attract as many tourists as possible not only creative spread of information is important, but it is also claimed that all of these may be used as a certain specific bait for people. An example of such creative background is cuisine of a certain country as it may attract tourists who want to taste the food and know various cooking secrets rather than those who want to learn to cook. Lithuania includes active routes of “Bread”, “Cheese”, “Beer” and “Wine” (these are thematic excursions during which tourists not only taste these products, but also participate in their production). A large number of tourists bake bread in Anyksciai (Lithuania).

2.2.2. Differences between cultural and creative tourism

Creative tourism anticipates attracting tourists by means of various cultural values, aims at developing the creative community, promoting development of creative industries, and local economics would be significantly improved from income obtained from tourism. The differences between cultural tourism and creative tourism are introduced in **Table 4**.

Cultural tourism	Creative tourism
1. Oriented towards sightseeing, events and their preservation	1. Oriented towards the development of creativity in cities, preservation of tradition, learning
2. Improves local economics through taxes received, tickets sold, souvenirs	2. Improves local economics directly through the financial support for communities
3. Products of tourism are exported to other countries	3. Products of tourism are sold within the country

Cultural tourism	Creative tourism
4. Cultural tourists want to rest and see a country	4. Creative tourists travel having an aim of learning and gaining experience

Source: created by the author based on reference [15].

Table 4. Differences between cultural and creative tourism.

As Table 4 shows, cultural tourism and creative tourism are based on different resources. Cultural tourism is oriented towards visiting famous structures, big events, and lively maintenance of culture. What is important here is to preserve what is more tangible and may bring more profit. On the other hand, the resources of creative tourism are related with intangible values such as learning, gaining experience and development of traditions. Contrary to the cultural tourist, the creative tourist does not have to see impressive historical buildings, places included in the UNESCO lists, or big events; the aim of creative tourism is to develop all cities and countries creatively.

Income and its distribution differ as well. Cultural tourism makes profit for the local economy through tourism taxes, fees for tickets to various museums, events and souvenirs; however, creative tourism steps over all these payments. In order for this type of tourism to exist, there is no need to collect various taxes and fees that go into the hands of officials and the country. Creative tourism encourages the development of local communities, and tourists provide financial support and pay for services directly to the community. Cultural tourism includes the major part of export is carried out in the outgoing market where travel organisers and agencies sell their products. Only a small part of cultural tourism is carried out in the country [15]. Moreover, very little profit from all the travel products sold goes directly to local communities because major part of taxes and profit must be given to the country. Contrary to cultural tourism, creative tourism directly contributes to improving local economy and the life of the community.

Another problem that separates these two types of tourism is the main aim of tourists, i.e., what tourists wish to achieve during a trip, if they just want to rest on the beach, see many churches or gain certain skills. A major part of tourists are the so-called 'random cultural tourists': these are tourists who use the product of cultural tourism with the aim of seeing a country, famous places and resting. The creative tourist travels because of motivation to see the country as well as learn something, participate in creative activities and communicate with local people. All these help to separate a common tourist from a creative tourist.

Cultural tourism is more oriented towards tangible values than creative tourism is. In this case, creative tourism is fully oriented towards intangible resources, their development and preservation; thus, tourists have different travelling goals. Some find it important to see the most famous buildings, beautiful nature, and others want to be included in the social life and learn from it.

2.2.3. Benefit and results of creative tourism

Creative tourism provides two-fold benefit, i.e., tangible and intangible. Tangible benefit from creative tourism may be easily measured as expenses before, during and after a trip, and those expenses are related with the trip and objects to be visited. Scholars R. Ohridska-Olson and S. Ivanov analyse creative tourism and point out its tangible benefit as follows: cultural capital, market development, innovations, preservation of cultural heritage, endurance, visibility of the producer, creation of work places, and export [15]. It is important to note that not only creative tourism, but also cultural tourism is a branch of economy like other types of tourism; thus, it is an important part of GDP of all countries.

Scholars R. Ohridska-Olson and S. Ivanov have distinguished intangible benefit generated by creative tourism as well, i.e., local identity and peculiarity, social capital, preservation of cultural values, human interaction and cultural exchange, and adding variety to local culture [15].

Creative tourism brings much benefit in every sense, helps to preserve both tangible and intangible values, preserves heritage, protects the old traditions, promotes a country abroad and creates new work places for residents, which is especially important in the context of the today's recession. Moreover, it creates immediate cooperation between people of different nationalities and forms a new market of tourism. All these factors allow contributing to the improvement of local economy through income to local residents, companies and municipality budgets by means of various taxes.

2.3. Heritage tourism

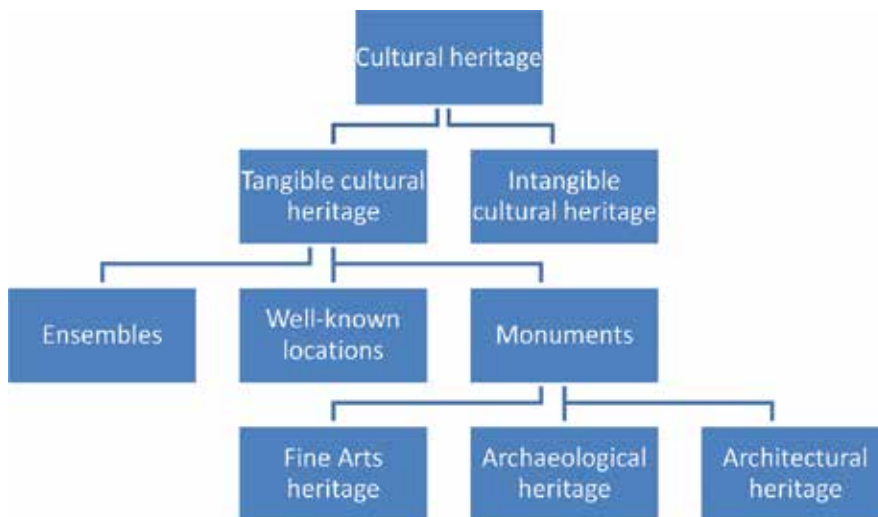
The concept of cultural heritage has been developing over a long period of time. Throughout different periods, the concepts of monumental and resource culture heritage can be distinguished. The concept of monumental heritage can be traced back to the Renaissance concepts of *monumento* (En. monument) and *antichitá* (En. antique). Since the twentieth century, the change of this concept has been influenced by a change of the concept of an ethnic country, the forming international society, international law, legislative processes, processes of industrialisation and the historical events of this century that have shown that cultural heritage is fragile and irreversible. The second concept of cultural heritage formed several decades ago. According to this concept, heritage should not be identified with memorial signs because it plays a different role, i.e., it is a foundation on which modern culture – and inseparable part of human lifestyle and environment – grows and develops [16]. The concept of resources is used to define this conception of heritage. According to this conception, if heritage is defined by resources of the past, then they are limited and irreversible, which is why they should be preserved and spread onto future generations. The change of the conception of heritage was determined by various legal acts where the meaning and understanding of heritage underwent specification and explanation.

Recently, heritage is more and more often seen as a process which objects undergo or as a marketing tool [17]. It is mostly valuable to include those objects into the lists of heritage that

are seen as valuable by people; therefore, much depends on the outlook of people and their disposition.

According to the UNESCO classification of heritage, there are seven main categories of heritage: *nature, landscape, monuments, artefacts, activity, people* and *locations*. None of these categories are perfectly defined because there are many objects of heritage that could be attributed to several categories. One of them is cultural heritage. According to the Charter for the Conservation of Places of Cultural Heritage of New Zealand, cultural heritage includes regions, landscape and features, structures, constructions and gardens, archaeological and traditional locations, sacred places and monuments that have long-term value and can be legally assessed, that teach people about the past and the culture of those who lived before, that give context to the identity of the society according to which people relate themselves to the world and to those who lived in the past, that provide the modern world with diversity and contrast and are a measure according to which people can compare modern achievements [18].

All cultural heritage objects are divided into intangible (movable) and tangible (immovable) (Figure 3 [19]).



Source: created by the author based on [19].

Figure 3. Classification of cultural heritage. Source: created by the author based on reference 19.

Intangible cultural heritage was first defined in 2003 during the UNESCO General Conference, 32nd session in the adopted *Convention for the Safeguarding of the Intangible Cultural Heritage*. In 2003, UNESCO announced the tradition of the Estonian, Latvian and Lithuanian Song festivals as a masterpiece of human oral and intangible cultural heritage.

On the international scale, the conception of tangible cultural heritage was first validated in the *Convention concerning the Protection of World Cultural and Natural Heritage* adopted during the 1972 UNESCO General Conference. According to this convention, *tangible cultural heritage* stands for intangible objects that remain from the past and related locations; they have a historical, archaeological, mythological, memorial, religious, architectural, urban, artistic and scientific value (*Convention concerning the Protection of World Cultural and Natural Heritage* 1972).

The following are the objects that belong to tangible cultural heritage:

- Monuments (architectural, monumental sculptures and paintings, archaeological elements and structures, inscriptions that have exceptional value from the perspectives of art, history and science);
- Groups of buildings (groups of separate and related buildings whose architecture, homogeneity or situation in the landscape gives them exceptional universal value from the perspectives of history, art and science);
- Places (human or mixed nature and human creations, territories; also, archaeological locations that have exceptional universal value from the perspectives of history, aesthetics, ethnology and anthropology).

Tangible cultural heritage includes ensembles (isolated or related groups of buildings whose architecture also relates to the landscape), well-known places (creations of human beings and nature) and monuments divided further into the heritage of fine arts, archaeology and architecture which is especially important when analysing the aspects of the applicability of tangible cultural heritage.

According to M. Robinson, the concept of cultural heritage within the context of cultural tourism has changed and is still constantly changing [20]. Former industrial cities are now frequently visited by tourists. For instance, in Germany, the Ruhr region, former steel production and coal mine regions have become a tourist attraction network with museums, modern art galleries, publicly displayed works of art, parks and other facilities necessary for relaxation and leisure time of tourists. Moreover, locations of social trauma and former military conflicts are more and more frequently visited by tourists of any generation. Foreign tourists prefer going to residential districts in Belfast, North Ireland, where they can see colourful drawings left by members of militarised organisations; these drawings tell stories about not so old violence of political-religious groups in that location [21].

The application of cultural heritage objects to cultural tourism is more and more developed in different countries; cultural tourism is the most rapidly growing market segment. For example, in Finland, just as in the entire region of the Baltic States, castles are perceived as local, regional or national monuments and function as museums that have become tourist attraction centres. Currently, Finnish castles join local and international networks. Such networks include cooperation between castles and museums, local councils, companies and schools. Most of the exhibitions are directed towards the young visitors: "Heroes or Villains?" in the Turku castle; "The Good, the Bad and the Cool" in the Hamme castle. Another form of activities – happenings – introduces multidimensional local history, e.g., events "Epiphany of the Three Castles",

“European Days” and special “Holiday Fair Days” [22]. Examples of application of various cultural heritage objects can be found in every country of the world where tourism becomes one of the main reasons and instruments in preserving heritage.

As the conception of cultural tourism is gaining popularity in Lithuania, the local government is beginning to value and cultivate heritage as an asset that is capable of helping to develop tourism and national identity.

Moreover, globalisation is gathering momentum, efforts to protect and nurture national cultural idiosyncrasy, identity and architectural heritage are becoming stronger. The preserved past and modern architecture directly reflects the state of a country, the progress of its culture and technics; it also influences the cultural consciousness of the society and social psychology. It is important to manage and preserve architectural heritage because it determines the level progress and sociability of the society and ensures social and economic stability of the country (Table 5 [20]).

Heritage equals	Notes	Example
... Prestige	Historical buildings, related symbols and narratives create the image of historical solidness and cultural and artistic diversity which has become important in joining various European projects that provide actual profit. However, application of heritage poses a conservation-related problem for new functions because the principles of marketing often clash with the regulations of heritage protection.	Elements of heritage employed in a creative way help various service business branches. The advantage of restaurants or recreation locations is related to not only the standard facilities, but also redecorated premises, their design and symbols of nobility.
... Entertainment	Heritage helps to give life to a city – heritage environment attracts people to spend leisure time.	Celebrations and festivals organised in historical centres or objects of heritage are interesting to local residents and tourists. Places of heritage are more attractive to organise innovative cultural projects in.
... Business	Architectural heritage is employed in designing new buildings and districts. The price of certain structures is determined by the proximity of the old town, a possibility to observe the view of the old town or historical structures.	With appropriate coordination, new construction acquires higher value and attractiveness, and provides the city with unique features and value thus increasing its overall attractiveness.

Source: created by the author based on reference [20].

Table 5. Benefit provided by heritage.

According to Graham, heritage may be employed to realise the role of at least another three aspects that are important from the perspective of marketing [23].

Analysing international studies on the **topic of Soviet heritage**, separate directions are evident. First of all, it is important to note that the literature provides two main **types of Soviet cultural tourism**:

- **the red tourism** (trips to 'active' communism countries);
- **communist heritage tourism** (trips in the former communist countries and the former republics of the Soviet Union) [26].

This conception has been formed by the scientist of the University of Bucharest A. Caraba [24] who claims that the heritage of all communist countries (both former and existing) cannot be analysed on the basis of the same method because their histories are very different, especially because the European communist countries (excluding the former republics of Soviet Union) possessed regimes that have left a big scar in the societies of those countries, which in turn aggravates research of that particular period and objective evaluation of the communist period. According to the aforementioned author, China has experienced different fate; therefore, the communist heritage of this country is analysed separately; this is the first direction of Soviet heritage studies that comprises the absolute majority of all the studies and publications on the topic of the Soviet period [24]. The second direction which is mostly focused on cultural heritage tourism analyses the regime of such countries like North Korea or Cuba and its influence on tourism.

Discussions on the cultural value of objects – acknowledgement-negation, peculiarity-foreignness, change-permanency, etc. – are especially important in evaluating the Soviet architectural heritage. Emphasising the meaningful aspect allows making an assumption that most of the problems that arise from assessing architecture from that period are mostly related to the architectural duality rather than issues of artistic value.

Therefore, in order to achieve a more objective assessment of architecture, it is very important to emphasise the viewpoint that the impact of the Soviet past is not one-sided, i.e., despite the extremely political assessment of Soviet architecture, the architectural assets of that entire period cannot be bluntly related to the connotations of 'alien/strange/foreign'.

It is especially important to note that turning the architecture of the second half of the twentieth century into heritage is related to not only ideological context of the Soviet period, but also with factors that are more shared when a psychological problem of assessing the twentieth century architecture is faced: the society often fails to see the specific aesthetic value in these structures that were built not that long ago. Because this construction period is still alive in many people's memory, they do not feel any sentiments they should feel if they wanted to preserve them [25].

As Lithuania faces a strictly conservative attitude towards cultural values (cultural values that are newer than 50 years can be included into the registry of cultural values only as an exception), other similar European countries (neighbouring Latvia, Estonia, Poland, also Romania, Bulgaria, Czech Republic, former Yugoslavian countries, Albania) have been actively re-

searching the impact of the Soviet period, the communist regimes and the benefit of its heritage on the development of the so-called 'red tourism' for almost 15 years, and they have also amended the architectural heritagisation practice [26].

2.4. Significance of the interaction between cultural tourism and cultural heritage

On the one hand, cultural tourism gives the background and meaning to the existing heritage institutions. On the other hand, it causes threat to their existence. In fact, the main task is to find the balance between heritage and cultural tourism.

Most often, the experts in the management of cultural tourism and cultural heritage act separately. The dialogue between them seems not to be taking place even when there are common interests. Instead of working together and producing really good products they collaborate too little.

The world tourism organisation claims that the specialists of cultural tourism and heritage might make an agreement useful to both sides. Thus, the objects of heritage would receive necessary financing for their restoration and become available for tourists, and cultural tourism would become fully meaningful: it would evoke the feeling of discovery, intercultural knowledge and initiate the spiritual richness of a personality.

The development of cultural tourism is one of the main reasons for heritage protection. The facts state that sooner or later some objects of heritage (for instance, Lithuanian mansions or parks), if they are not available for tourists and a wide society, get ruined. They are damaged by people and various natural phenomena. The heritage that does not bring any economic profit is not restored and looked after. In this case, the local community loses respect for the local cultural values and symbols. On the other hand, the objects of heritage that are applied for cultural tourism are restored and looked after. The managers of heritage take care that the objects are properly presented to the society. The means obtained from cultural tourism are used for their maintenance and repair. However, the main benefit received from cultural tourism is that it gives an opportunity to get acquainted with the history of a country and/or a particular locality, which most probably they would not ever come across. In such a way, the image of a locality or a state/country is constructed. R. Dapkus posits that cultural heritage is one of the essential elements of the image and development of the country or region [27]. Cultural tourism is also claimed to be an important factor for the protection of cultural traditions. More than that, cultural tourism may improve the quality of life. It should be stressed that visiting very important cultural, historical and natural places is strictly controlled: various restrictions have been determined, and the schemes of the locality management have been worked out.

2.5. Culture tourism industry

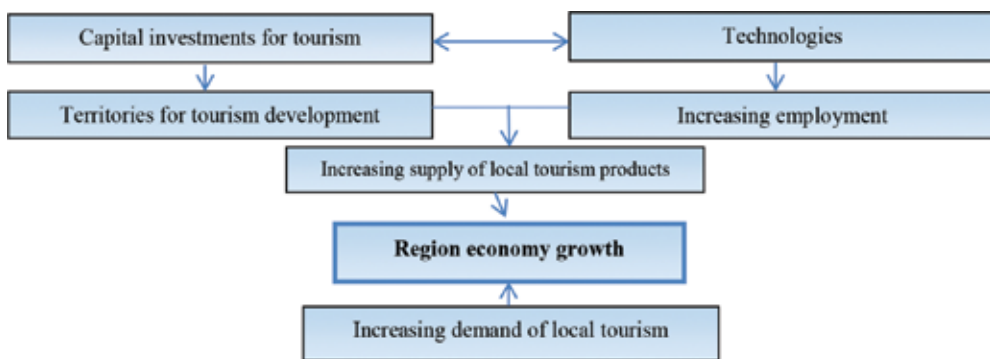
In 1969, during a conference in Brussels, the declaration of cultural tourism was adopted [28]. This document encouraged to accept the Helsinki declaration (1996) on cultural heritage in Europe. These documents were the first to identify cultural tourism as a separate part of the tourism industry.

Nevertheless, the world has not agreed on a common and universally recognised definition. ICOMOS recommends that cultural tourism is defined by the importance of tourism, tourist motivation, experience and purpose so that we can see a full set of elements of cultural tourism, which will reveal how to interrelate tourism and heritage.

Cultural tourism is very much related to the specific needs of tourists because the desire to explore, try other authentic cultures, examine artefacts of extinct cultures, and aims to feel the “other” cultures is a very important reason. So, one can argue that cultural tourism is a purposeful journey during which the tourists get acquainted not only with the other party’s cultural environment (heritage, lifestyle, traditions, customs, values, history, art, etc.), but also actively participate in various cultural events that provide new experiences and excitement [2]. Cultural tourists must travel through the land in order to have the opportunity to observe and understand the changes in human activities and natural resources over time and access nature in the region [28].

National or regional cultural tourism development has been driven by economic factors. The economic impact of cultural tourism relies on earned income. K. Meethan [29] argues that cultural tourism, unlike other forms of tourism and development tools, has one unique advantage – this form of business requires relatively low capital investment and generates much higher return – the local production increases because of tourism activities closely related to other economic branches.

Foreign tourists enjoy the supply created by local businesses, use natural resources and pay for utility services, etc. All of these have a positive effect on the local economy. Tourist spending increases domestic trading volumes, financial revenues, creating jobs, helping to collect more taxes and encouraging other economic activities. Foreign tourist expenditure-based economy can be regarded as a real proof that tourism has a significant impact on economic growth (Figure 4).



Source: [25].

Figure 4. Tourism impact on economy growth. Source: reference 25.

As it can be seen, the basic elements of tourism supply are the capital investments, increasing labour productivity, efficient use of sites and innovative technologies. As a result, tourism is seen as highly capital-intensive economic activities. This causes the complex structure of tourism: tourism development cannot be separated from the overall national economic development because the investment in tourism is closely related to investments in other sectors of the economy [30]. So, tourism is becoming more economically important in promoting the development of structurally weaker regions. Therefore, cultural tourism development should be encouraged because of its specific advantages, especially in environment, transport, agriculture, local business, culture, education and scientific fields.

2.6. When is the industry of cultural heritage formed?

The investigators of heritage maintain that the main circulation and consumption of historical objects and knowledge occur and undergo growing when traditions and collective memory are dying out and globalisation as well as mass or pop culture expand with the development of information technologies. However, in various countries, these processes take different directions. For instance, in the United Kingdom, the appearance of the heritage industry is paradoxically related with the economic decline when the past is viewed as a better entity than the chaotic present and obscure tomorrow. The products of heritage industry that appeared under the described conditions turn to be more advanced than the authentic ones since they were revived or created for people and adapted to their demands. Heritage industry has its own labour market. It requires designers, managers and constructors. Unfortunately, it does not show any demand for archaeologists or historians.

The emergence of **heritage industry is closely related with the so-called heritage boom** (i.e., a rapidly growing interest in heritage) that is a necessary condition for the formation of the industry of heritage, since any industry must meet the demands of consumers. With the growth of heritage demand, a favourable opportunity to develop the industry of heritage emerges. **Western Europe has developed two theories of the heritage boom.**

The **first theory** relates the heritage boom with the growth of the purchasing power of the potential consumers (i.e., with the growth of the country's economic power; more enriched consumers of cultural production appear from a wider spectrum of social layers) and the fact of the heritage protection growing into entertainment of the elite (concerts, exhibitions, etc.). For instance, from 1998 onwards in Lithuania, similar to other countries of the European Union, heritage faces mass consumption, but not exclusively for the educational purposes since the very economic situation turns to be favourable for heritage industry. The traditional Lithuania heritage has been rediscovered, and the search for the novel means of heritage protection has been activated: the ideas of living history, 'live' archaeology and practical learning of the ancient crafts get more and more popular. In Lithuania, the intensiveness of the desire for the reconstruction of an entirely destroyed heritage may be illustrated by the reconstruction of the Royal Palace in Vilnius (Lithuania). In addition, it is marked by the establishment of the Park of Soviet Monuments (1998) (Druskininkai, Lithuania), the organisation of the so-called days of living history, 'live' archaeology and 'live' craft learning, the erection of the restaurant nets offering traditional dish heritage from 1999 onwards. It shows that the Lithuanians have

rediscovered the importance of the history of Lithuania and its heritage and have started showing a considerable interest in it.

The **second theory** discusses the heritage boom in relation to the nostalgia for the past evoked by the economic recession, social decline and spiritual decadence. The analysis of the economic indices reveals that in Lithuania the highest inflation took place in 1991–1993; the lowest expenses were observed in 1993; the smallest alterations of the gross domestic product, if compared to the earlier years, in 1992–1994 and the smallest number of students in 1994–1995. A more distinct leap in the number of museums and their visitors was observed only in 1997.

With the growth of economy, the consumer purchase power is growing, and consumers spend more time and money for their leisure activities and cultural explorations. These are favourable conditions for the formation of heritage industry. Moreover, it initiates the improvement of culture financing by the government which in turn helps to increase the number of museums and their visitors.

Hence it might be argued that in Lithuania consumption has been growing rapidly. It has been determined by the postindustrial, postmodern consuming alterations of life conditions and perspectives. Heritage consumption (by developing tourism or in other ways) is a part of this insatiable growth. Researchers claim that since the number of cultural heritage tourists will be growing nearly in every country, they will consume more and more various heritage products, and the variety of heritage areas will also expand [17].

The market of cultural heritage reinforces the awareness of society. There is no doubt that it is a fruitful vehicle for the expansion of the social and economic wealth of a country or region. Cultural tourism also encourages preserving the universal authenticity and uniqueness of history, customs and traditional values, i.e., it shows the direct relationship with cultural heritage.

To sum up, it might be claimed that in the age of globalisation cultural tourism based on the consumption of cultural heritage is one of the commercial activities demonstrating the highest growth all over the world. At present, cultural tourism is one of the most attractive forms of tourism that may offer many interesting discoveries and novelties. However, popular culture and mass consumption has a growing impact on further development of cultural tourism.

3. Conclusions

Creative tourism is related with cultural tourism yet they possess many differences. Creative tourism is oriented towards the development of creativity, conservation of traditions, education, and is more directed towards individual clients or small groups, whereas cultural tourism focuses on visiting known structures, various events, and is oriented towards mass tourists.

Creative tourism is important in that it focuses on the past, present and future. What becomes of importance is not only the final products, but also the entire participation in the creative process. Passive consumption of cultural products becomes active through communication, education and participation, and the resources of creative tourism are renewable.

The industry of heritage in Western Europe started forming when heritage became a product of mass production; it was started to use in the entertainment business, and business began using heritage in marketing. Nowadays, the industry of heritage is a part of creative industry, even though it is slightly different from other industries of culture: heritage is not only hereditary, but it is also created, constantly reproduced and realised. The process during which inheritance becomes heritage is frequently called interpretation. Resources, i.e., inheritance, become heritage by means of interpretation. Inheritance is interpreted tuning it into heritage, and the object of heritage is interpreted once again introducing it to the society. Only then inheritance does become (or not become) heritage.

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Tourism and Immigration: The European Contribution to the Invention of Landscape and Hotel Industry in the Atacama Desert During the Nitrate Epoch, 1880–1930

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Additional information is available at the end of the chapter

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Abstract

This paper deals with the relation between European immigration and tourism industry in Atacama Desert. The period studied ranges from 1880 to 1930, coinciding with the greatest boom of the nitrate industry in Chile until the great nitrate crisis and world depression. Europeans arrived in Antofagasta Region between 1895 and 1920, developing different productive activities related to the nitrate exploitation and business, mainly by British, German, and Yugoslavian immigrants, and to a lesser extent by Spanish and Italians. The lodging industry, from hotels to boardinghouses, grew tremendously owing to constant migration flows, both European and Latin American. As recreation sites were discovered on the coast, along with unexplored spaces in the hinterland, the possibility of a tourist landscape emerged and sustained by various European photo studios. The publicity of these recreation places was accompanied by gastronomy data and transportation by sea and earth, through different business guides issued since 1894.

This paper is based on documents from regional and national archives and also several secondary sources.

Keywords: immigration, European, hotels, tourism, desert

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1. Introduction

During the 1860s, the Chilean citizen, José Santos Ossa, discovered sodium nitrate in Atacama Desert. The discovery of this mineral, and later Caracoles silver mine in 1870, made a big change in the desert territory. The first effect was the consolidation of Antofagasta city, whose settlement began in 1866, its official foundation being in 1868. After a few years, its basic institutions had already being established the City Hall and the fire station. After the Pacific War (1879–1883), Chilean dominion over the territory coincided with political and economic liberalism, along with the world directions that gave rise to the so-called “first globalization,” which historiography dates from 1880 to 1914, when three relevant factors came together: the increase of foreign trade, capital flow, and mass migration [1].

The first globalization was basically related to four factors of regional tourism, which are interesting to highlight. The first factor was the strong European presence in the region. The social capital was British. Germans established the main stores internationally connected and the most relevant investments in the nitrate industry. This strengthened Antofagasta as a cosmopolitan city combining elements converging in the globalization aforementioned and, at the same time, as the counterpart of an important population segment and labor market more peripheral to the positive effects of globalization. The second factor was the change of the natural space of its hinterland in a few decades. A natural, unhospitable, and unknown space gave rise to a cultural space in the intermediate depression where *the nitrate mines* and their mining camps settled, followed by *Chuquicamata*, the main copper mine in Chile and the continent, with a demographic relevance of about 100,000 inhabitants and a wide connectivity of roads, public and private railways both local and international, several paved roads, and paths. Air connection was established at the end of the nitrate cycle. The nitrate ports of Antofagasta, Tocopilla, and Taltal were essential for communication. They were connected to the nitrate cantons, that is, groups of the nitrate mines located in a certain geographic space. They were also located in Coloso and Mejillones. These places had a sudden change in port infrastructure—more piers, boats, and seamen—and also more shipping tons, steamships from different countries, and sailing boats that were used for cargo and passengers.

The third factor was the establishment of small hotels since the 1870s, involving greater complexity of services such as gastronomy, along with new restaurants and cafes to serve a floating population traveling to Bolivia or the nitrate and copper industry, with the specific need to learn about the landscape of the world’s driest desert and the purpose of providing it with the world’s most advanced railroad technology and metallurgical processes from the European industrial world.

The fourth factor was the presence of business communication elements. Since its beginning, Antofagasta counted on European and local photo studios which, together with those in Valparaíso, the administrative city for the main nitrate companies offered postcards of all the territory, posters, and pictures of famous characters at that time. Later, business guides were published on a local and regional basis. They included text and pictures related to hotels, restaurants, transportation, parity, money exchange based on sterling pounds, unknown places, others clearly identified owing to progress, and remote inaccessible places. These

guides contained information to influence the aesthetic and emotional sensitivity of tourists, travelers, or foreigners.

2. European immigration and its impact on the region.

The European presence became evident since the beginning of regional productive activity. Europeans came from the most industrialized nations of northern Europe. They were English, Germans, and Scandinavians and also from meridional countries such as Spanish, Italians, and Greeks. There were also French, Portuguese, and Polish.

The census in November 10, 1878 in Antofagasta [2] county refers to Chilean population hegemony (6554 out of 8507), 104 English, 47 Spanish, 40 French, 35 Italians, 32 Germans, 23 Austrians (mostly Croatians), 18 Scottish, 15 Portuguese, 7 Greeks, 3 Danish, 1 Swiss, 1 Irish, and 2 Norwegians.

Most of them lived in the city (5608), but there were meaningful groups in the hinterland, such as Carmen Alto (2297), where the biggest nitrate companies were located, Salar del Carmen (390), Salinas (160), Punta Negra (28), and Mantos Blancos (24).

The dispersion of European population between the city and mining companies in the desert can be clearly perceived toward begin of the twentieth century, as shown in **Table 1**.

Nationality	Total population	Urban population	Rural population
Germans	752	668	84
Austrians	651	548	103
Belgians	16	14	2
Spanish	919	662	257
French	252	216	36
British	1,422	1,226	196
Greek	114	110	4
Italians	695	590	105
Norwegians	109	107	2
Portuguese	22	14	8
Swedish	70	68	2

Source: [3].

Table 1. European population in the Department of Antofagasta in 1907.

The mass phenomenon of European immigration, which reaches its greatest expression on a regional and national basis in Census 1907, is shown in **Table 2**.

Nationality	Census 1895	Census 1907
Germans	137	1.178
Austrians and Slavians	227	890
Belgas	2	20
Danish	6	61
Spanish	230	1.198
French	76	328
Greek	13	116
Dutch	3	66
English	583	2.051
Italians	162	968
Norwegians	22	138
Portugueses	7	30
Russians	5	115
Swedish	–	86
Swiss	16	29

Source: [3,4].

Table 2. Europeans and their increased population in Antofagasta province.

But, from the 1920s, European population decreased as registered in Census1920 [5]. Data about the Department of Antofagasta reveal the following.

Foreigners in the Department of Antofagasta. Germans were 274 people (235 men and 39 women), Austrians 104 (67 men and 37 women), Danish 23 (19 men and 4 women), Slavians 2, Spanish 1,218 (954 men and 264 women), French 131 (103 men and 28 women), Greek 237 (210 men and 27 women), English 788 (611 men and 177 women), Italians 362 (257 men and 177 women), Norwegians 54 (52 men and 2 women), Swiss 34 (24 men and 10 women), Swedish 17 (16 men and 1 woman), Russians 70 (54 men and 16 women), Portuguese 16 men, and Finnish 25 men. The disintegration of the Austrian–Hungarian Empire made it possible for Slavish immigrants registered as Austrian citizens recover their nationality; Serbians totaled 993 inhabitants (720 men and 273 women); Montenegrins were 11 (8 men and 3 women).

Toward the end of the 1920s, the end of the nitrate industry crisis, mainly Shanks technology and the consequences of the world's economic crisis 1929–1930, had a greater impact on Chile and Antofagasta Region, as shown in the 1930 census [6].

Germans decreased to 216 people, Austrians to 12, Belgians to 3, Bulgarians to 5, Danish increased to 27, Spanish showed the greatest decrease to 453 inhabitants, and French totaled 13 people. This also affected the Greek colony, with 139 people. The decrease of commercial and industrial activity was shown by 238 British; Italians lost half of their colony with 119

people; Russians reduced to a third as compared with 1920; Swedish 9, Yugoslavians also decreased to 506; and Norwegians amounted to 35.

The European presence could be observed in different areas, mainly between 1895 and 1920. For example, German Nitrate Company, successors of Folsch and Martin, owned nine mines in Taltal canton in 1904, with a production quota of 11%, and the nitrate company owned by Henry Barens Sloman had five mines in Toco canton [7,8]. Since the nineteenth century, the main investments were British and increased during the early nineteenth century [9]. Pascual Baburizza, the Croatian investor that controlled a third of the nitrate production during the 1920s, appeared later [10], along with Spanish minor investments [11].

Europeans, mainly British, worked hard to spread the landscape and its change through letters, postcards, and, in several cases, established hotels or “guest houses” in the nitrate mines, which contributed to a unique architecture in certain buildings of Antofagasta, Tocopilla, and the nitrate pampa.

They also invested in certain hotels in Antofagasta city and consolidated commerce with restaurants, recreation venues, and cafes [12].

Apart from changing the desert landscape and contribute to road infrastructure and lodging, perhaps, Europeans also became the main tourists of the zone. Available statistics from the 1895 census shows that the floating population (travelers, tourists, etc.) in the territory included 326 British, 56 Germans, 59 Swedish and Norwegians, 48 French, 28 Italians, 26 Spanish, 11 Danish, 7 Austrians, 2 Dutch, 2 Swiss, 3 Belgians, and 4 Portuguese [4]. After 1930, European statistics tried to make a difference between tourists and other travelers [13].

3. From a natural scenario to the possibilities of a tourist image: The dialectics of host and guest

The first maps of the desert were made by European scientists hired by the Chilean government, such as those of the German citizen Rodulfo A. Philippi in 1860 and the French citizen Pedro A. Pissis in 1877, and later, Alejandro Bertrand in the 1880s and Francisco J. San Román in 1892, who also established during his scientific mission in 1883 the toponymy of the main geographic accidents (from sierras to cordilleras, hills, and volcanoes) [14].

The impression of engineers Bertrand and San Roman about the indigenous populations of the pre-Andes was characterized by the ethnocentric optics of establishing primitive societies with barbarian customs. This led to the consideration of space in Antofagasta Region—that became a province in 1888—from three perspectives:

(a) The anthropological view of European explorers and travelers; (b) the archaeological vestiges of the region exhibited in different European museums, and (c) notes about the landscape.

Marc Boyer [15] pointed out that the British coined the neologisms “Tourist” and “Tourism,” deriving from the term “Tour” used by the aristocratic sectors of their society when traveling to Italy for educational purposes, Rome, and the centers that could feed natural curiosity about

the legacy of classical Old Times. Afterward, there were changes in goals, patrimony, the rescue of springs and swimming places, and sacred pilgrimage. In the early twentieth century, the seaside and the Mediterranean sun encouraged mass tourism.

Exploration trips to the New World were due to man's new sciences, archaeology, and anthropology. Amanda Stronza points out the different reasons that have made anthropologists get interested in tourist trips, new life styles, belief systems, shared experiences, the construction of the puzzles of different places, stories and, at the same time, reflected the deepest values of a society. Following Graburn, Stronza states that tourism is "as a kind of ritual process that reflects society's deeply held values about health, freedom, nature, and self-improvement" [16]. Several travelers who went through Atacama Desert mixed notes about indigenous population with impressions about the landscape, sometimes with Darwinistic underlying concepts in fashion or accepting definitions of culture, such as the one by Edward Tylor, which showed an ethnocentric view of civilization stages. The French citizen André Bresson, who experienced the impact of Caracoles mine on coast villages and the appearance of mining camps in the middle of the paramo in the 1870s, could not avoid making notes about indigenous changos on Paposo coast. "We could observe Indians from changos tribe, curious remnants of primitive population. Changos are all fishermen" [17]. Changos were those inhabitants who went around fishermen's wharfs to the north and south of Antofagasta during the nitrate cycle. An old neighbor of the city, Aníbal Echeverría y Reyes, reported that some changos were confused with the mythic "Chango López," Antofagasta's first citizen.

Bresson's observations were published in one of the French most popular magazines, *Le Tour du Monde*. Several writers/explorers sent their work to this magazine which, as Chaumeil pointed out, in mixing text and pictures "it became the most popular adventure newspaper of the time. Many travelers published here and were so successful that they were offered to publish their accounts in a book" [18].

The accounts about excavations by European scientific missions concerning the indigenous populations of the pre-Andes, Atacameños, and changos on the coast began to spread the area in the showcases of the main European museums. These were inaugurated before the time we are concerned about by the French citizen Alcides D'Orbigny, *L'Homme Americien*, in 1839. The German citizen Dr. Otto Aischel collected several archaeological pieces from the coast of Antofagasta city, exhibited his collection in Santiago in 1908, and donated it to Kiel Museum, where he was a director. The French citizen Barón Albert de Dietrich made excavations in Chiu Chiu in 1894 and donated the collection to the Musée d' Ethnographie du Trocadéro from Paris. This also occurred with the important "Mission Francaise dans le Désert d'Atacama," which explored the Atacama area during the first five years of the nineteenth century. The pieces were exhibited in the Palacio du Trocadero [19]. The so-called "Father of Andean Archaeology," the German citizen Max Uhle, explored Calama gentiles during the 1920s, donating the pieces collected to the recently created Museum of Natural History in Santiago in May 1911. Englishman Ricardo E. Latham, who collaborated with Uhle, also made excavations, thus increasing the collection in Santiago museum.

The showcases displaying the archaeological pieces of Atacama Desert, both in Europe and Chile, opened the door of the so-called "cultural tourism." According to the evolution theories,

European museums exhibited the “samples” of the world’s peripheral cultures. There was eagerness to learn about “other cultures,” in a convergence between the exotic and the experiences of travelers from other parts of the world. There were all kinds of tourists who searched the desert, those who looked for the life styles of indigenous populations, and those who wanted to learn just for curiosity.

But the desert territory was also a three-dimensional place: On the coast, progress, positivistic mentality, and connectivity with the world. In the intermediate depression, the space for dominating, for being part of the world’s circuits with nitrate and copper, where nature adversity gave ground to culture, expressed in the materiality of industrial installations, human dwelling, and the account of events that told the story of those places—nitrate mines—and finally the pre-Andes, the Andean piedmont, where villages were unknown and space undiscovered.

Meanwhile in the cities, following Linde and Labob’s distinction mentioned by Certeau [20], urban ordering, blocks, and rules were a map for tourists. In the nitrate pampa, in the middle of Atacama Desert, it was necessary for the tourist to take a tour through ephemeral paths, roads, and cart tracks to find the nitrate mines. Antofagasta city map was clear and actually guided visitors/tourists. The map referring to pre-Andean locations and mining companies in the desert only contained references to the connections of telegraph posts belonging to the Antofagasta–Bolivia Railway network.

On the coast, foreigners started leaving testimonies of their experiences. In the main South American metallurgical complex of the late nineteenth century, Huanchaca, which operated between 1890 and 1902, located to the south of Antofagasta, the son of the Polish mining expert and second president of Universidad de Chile, Ignacio Domeyko, together with the German geologist Luis Darapasky, administrated this institution and could exhibit pictures. Its installations and machinery, designed by an American engineer, were presented in a geological congress in the USA, as reported by San Román. Darapasky published one of the most important achievements in Berlin in 1900: the **Department of Taltal**.

Further south, the Spanish citizen Matías Granja opened the port of Coloso and the railway to Aguas Blancas nitrate canton in the beginning of the twentieth century. Pictures of this minor port were widely spread abroad. Europeans such as Theodor Plivier, German, who visited the port, published one of the most appreciated novels about the place in the 1930s: **Revolt on the Pampas**. Meanwhile, an English descendant, Carmen Smith de Espinosa, married to the port administrator, evoked the experiences of a selected woman belonging to regional society and the opposing reality of the city and the territory in **My Memories**.

British immigrants inaugurated one of the most popular places between Antofagasta and Coloso, for both the mystery of what they used to do there and the fact that it was far from the world noise, “Gringos Beach,” frequently visited by travelers who stayed in Antofagasta–Bolivia Railway installations or in the different ranches they owned in the city.

The beginning of a kind of internal mass tourism was possible due to the concessions to European descendants for habilitating the first beaches in the city. José Sfeir, whose parents were German, was one of the main beneficiaries of these concessions, with Rhin Beach, along

with Jorge Sabioncello, a Croatian nitrate company owner and one of the main merchants of the city. Manzano Beach and Maury Hotel, whose fiscal sites were rented to Jorge Sabioncello from April 29, 1910 to October 1930 by the Marine Ministry, extended for 5 years due to a future expansion [21]. The so-called Danubio Beach was the most visited. Its concession finished in 1932 [22] and was later replaced by the City Hall Beach, built by Jorge Tarbuscovic, a descendant of Croatian immigrants, the most important colony outside Europe, together with that in Punta Arenas.

Also, companies undertook the change of beaches. Concessions favoring The Nitrate Agencies Limited in Antofagasta, located to the north of Sucre Street, whose site was 915 m² and Caleta del Cobre, 3 km to the north of Antofagasta, were renewed at the end of the 1930s [23].

The “incomparable beautiful” beaches and the “marvelous” climate were the main attractions published in the **Official Guide of the Industry, Art, and Commerce Exhibition and Fair**, during the first 5 years of the 1930s [24].

The marginality of modern life, poor houses, streets not included in the regulation map, poor people, and children going about the streets could be seen in the pre-Andes, nitrate pampa, and ocean cities because the law of compulsory primary education was passed in 1920. Some pictures and postcards briefly show this other reality, far from the central focus of the card, unlike letters and accounts about the socioeconomic reality of the territory. Was then a possibility of slumming tourism? A piece of data may be revealing. Englishmen had their own hospital and medical personnel in Antofagasta. When the Chilean State built a modern hospital with all the implements necessary for different operating rooms in 1912, the British colony refused to close the Antofagasta–Bolivia Railway hospital because a British citizen could not get involved with native population, let alone accept a non-British physician [25]. Probably, British and Germans, the colonies with the highest endogamy indexes in their social relations, may have taken the so-called “reality tours” or “social tours” that G. Weltz considered as “negative sightseeing,” a practice born in Victorian England “as a leisure activity pursued at the time by the upper and upper-middle classes” [26]. The recurrent crises of the nitrate industry affected the whole territory: The nitrate mines stopped working, hundreds of unemployed people were hosted in suburban sectors to later travel to the south of the country, etc. This panorama was published by the press in pictures that showed pain.

Every nitrate company, British, German, Yugoslavian, Spanish, and certainly Chilean, made their own maps of their belongings and also counted on the maps of the Nitrate Fiscal Delegation. Unprecise latitudes and longitudes were solved only in 1910 when there was support from the Astronomy Observatory in Santiago, operated by German scientists.

It is interesting to note that how Europeans, owners of the nitrate mines, hosted their visitors. Some letters reveal the pride of introducing the progress of modernity in the houses provided to the administration or in guest houses. Here, they recreated the same comfort as in their own countries and also showed productive process innovations. By contrast, this space thoroughly demarcated in the nitrate mines of the Shanks system and later in the American nitrate mines of the Guggenheim system, classical in character and sometimes confused with ethnical/classical, and had as a counterpart workers’ rooms without electricity, sewerage, and furniture

[27]. European pictures showed machinery, power plants, workshops, etc., and to a lesser extent, administrative personnel. They also enjoyed exhibiting the frenzy of pier work with ships at the ports of Antofagasta, Taltal, and Tocopilla, steamships, and the famous clippers, that is, sailing boats that made modern time stop to look at romantic times. The biggest and most famous of these clippers was *Preussen*, whose presence was frozen in a Tocopilla port postcard. There were many postcards and pictures about the nitrate mines and piers from the three first decades of the twentieth century [28,29].

There were some curious data about the space used by the nitrate industry in the varied technical books published in Europe from 1885 to 1910, particularly those of the German citizen Dr. Semper and Dr. Michel, such as three earthquakes every week, which were caused by volcanoes in the Andes [7]. In 1907, the great installation of the nitrate mines and the desert resettlement began, coinciding with the greater presence of immigrants in Antofagasta province.

A territory whose exploration began toward the end of the nineteenth century was the pre-Andes and the villages of San Pedro de Atacama, Chiu Chiu, Toconao, etc., which had been previously visited and reported by the French Jesuit Emilio Vaisse, particularly *Atacameños* and their Kunza language [30]. Then, it was time to look at oases space. The first **Antofagasta Guide**, in 1894, referred to the green oases, water currents, and peaceful life, far from the frenzy affecting men living on the coast. They were an idyllic image foreigners would reaffirm, but now in a relation between nature and man. If Alejandro Bertrand and Francisco San Román [31] made a comparison between civilization and barbarity, they also observed the relation of what anthropology has named the distinction between the host and the guest, established by Valene Smith [32,33]. The Andean towns near Vegas de Turi called Earl Hanson's attention was ruined in 1926. He pointed out that "lie the ruins of an old city of copper workers, in which the Spaniards had evidently built a few adobe houses. What do these ruins mean to the present population? Absolutely nothing, as far as I could find out" [34]. Other locations such as Toconce, Aiquina, and Caspana were "out-of-the-world villages."

The pre-Andes offered an adventure field. Hanson traveled in a car, but the Italian–Arabic engineer Luis Abd-El-Kader organized mule and horse caravans in 1907 to explore these towns, which he confused with Inca Empire ruins. The pictures that he showed in the **Antofagasta Business Guide 1907** [35] still refer to the anthropological dichotomy of civilized beings and men in an inferior state, denoting an asymmetric relation between the host and the guest, particularly when pictures give a testimony of the arrival at a predetermined tourist destiny and the contrast with native people. The English archaeologist Ricardo Latcham had the same confusion about towns in the mid-1930s. He made observations and took pictures of his trips [36].

4. From emerging lodging facilities to European-type gastronomy: Business guides—Photographers' work

Since its foundation, Antofagasta started establishing hotels when dividing the land. Entrepreneurs saw the need of lodging facilities due to the increasing number of people who began to arrive attracted by the nitrate discovery and later Caracoles silver. Antofagasta map, made by Adolfo Palacios in 1873 [37], shows Hotel Chile owned by José Tomás Peña, on one side of the main square, while Hotel Vidal owned by Augusto Vidal, a former government employee, was located close to the fiscal pier, being the first “business of this type founded in Antofagasta” [38].

However, **Antofagasta Guide 1894** published a piece of news about another hotel belonging to the first epoch: Hotel Sudamericano, founded in 1873, whose owner was Juan Delgado in 1894 [39]. The hotel had been established by the French citizen Eduardo Wolff, who transferred it to Delgado, according to Arce.

Arce [38], a witness of Antofagasta development, mentions Grand Hotel in the nineteenth century. It was located in front of Colon Square, on the north side of the Catholic temple. The Portuguese citizen, Antonio Magallanes, called his hotel María, to honor his daughter. Hotel Buenos Aires was established in the adjacent Street, Ayacucho (currently Baquedano). In the 1890s, Hotel de Francia e Inglaterra was established in Prat Street.

Simultaneously, photo studios appeared to give testimony of pioneers' stories who went into Atacama Desert and the construction of industrial facilities for the nitrate mines. But, there was a vision for starting registering urban progress, streets, buildings, piers, and pictures of people in transit in the city: Postcards and studio pictures of travelers appeared together with Antofagasta beginnings. In addition, the first tourist images appeared.

At that time, the inexistence of *marketing* made hotels offers their attractions directly to their guests in their ads [40]. These were based on a basic publicity criterion, that is, offering market differences.

Hotel Sudamericano indicated that all their apartments had ventilation and there were pool salons and a canteen well-stocked with the most “legitimate liquors.”

Grand Hotel Colón pointed out three outstanding aspects in its ads, papers, and stampers—there is a sample from 1904—revealing that its administration was in European hands: First, they spoke German, English, French, and Italian; second, they were located near banks, the telegraph, shopping stores, piers, and the railway station; and third, to a privileged view of the square and the sea, a varied cuisine, a bar with excellent liquors, and a bathroom were added, making it a first-class establishment.

Hotel del Comercio, owned by Marcos K. Tonsich, pointed out in ads in 1894 that the doors of its salons faced Plaza Colon and these, “May provide buffet services, be a brochure for travelers, and offer comfort for passers-by who could stop to rest for a while.”

It had special rooms, apartments for families at good prices, good wines, and all the liquors in the canteen are legitimately foreign [39].

In general, hotels began to be concerned about appearing in local business guides in 1894, pointing out the services they offered, and highlighting the comfort European tourists and travelers could enjoy. Some of them advanced in publishing pictures of their semi-public rooms—dining rooms—preventing themselves from publishing something they did not offer, that is, providing the data needed to meet the host's expectations, desires, and likes [41]. In the period studied, they were still far from the idea that the "tourist image" printed in the booklet or guide creates a tourist destinations [42], but the postcard did work, posing an aspect of the rural or urban landscape that could encourage visiting it. They still insisted in showing "something" genuine to the traveler, not the complexity of the "tourism world" [43]. There were possibilities to look for natural or cultural places at that time, not only through the opening of new routes or connections to the hinterland. According to Census 1885, there were 18 places among cities, towns, villages, and mining camps. They increased to 80 places, according to Census 1907.

Photographers played an outstanding role. On the 1873 city map, there is a photographer's studio located in a privileged place, at half a block from the square and hotels [37]. Among European photographers of the nineteenth century, we can mention the German citizen Enrique Dohrn and Cia with his business "German Studio" from 1878 to 1882 and Lassen Brothers in 1893 [44]. Other photographers were Bovek brothers from 1903 to 1905; Emilio Gutiez, Stephan and Bazar from 1910 to 1920, and Alberto Motta in 1930. **Guide 1894** [39] includes Lassen Hnos. in Prat Street, **Guide 1907** [35] still includes one of the Lassen brothers, and R. Boock, who took good pictures of picnics at the seaside for **The Illustrated Journal** of Antofagasta in February 1904 [45]. Most probably, he was the photographer who most insisted in "tourist shots" to show the relation between nature and recreation. The Spanish citizen N. García owned the studio "Modern Photography" in Calama. In 1911, Silva Narro wrote "It contains views of the nitrate mines of Bolivia and Aguas Blancas cantons... and also the seaside and public buildings of Antofagasta" [46]. In 1919, he moved to Matta Street in Antofagasta.

Nevertheless, there were slow changes, from "reporting" an exotic place surrounded by certain romanticism in describing the landscape—pre-Andean towns—in the **Guide 1894** to showing their "image" in **Guide 1907**, where adventure was strengthened, which may mean learning about other realities—people and culture—and getting personal experience. However, the next guides focused on hotel publicity, which lacked the main tourism component. What is going to be found in that landscape? What is the reason for choosing it as a tourist destination? [47].

Regulations about the functioning of hotels and stores for selling food and alcohol were in charge of the City Hall. In this way, the work of Antofagasta City Hall, since its creation in 1872, was directed by the members belonging to European colonies, British, German, and Spanish. Orders and regulations, after the 1880s, followed these rules, making Antofagasta the "lettered city" of all the Atacama Desert [48]. The State support to tourism began at the end of the 1920s. So, the fiscalization of tourism-related stores was done during those dates.

In 1894, the **Antofagasta Guide** of Mandiola and Castillo mentioned three first-class hotels, whose fees were 200 pesos per day: Grand Hotel de France et d'Angleterre, owned by Marcos Vuscovich, at 46 Prat Street; Hotel del Comercio, owned by Marcos Tonsich, at 114 San Martin

Street; Hotel Sudamericano, owned by Juan Delgado, at the corner of Prat Street and San Martín Street. And a second-class hotel, at 100 pesos per day: the one owned by Clara Clorinda Q. de Stanford, at 86 Prat Street [39]. So, the main hotels were owned by Europeans, mainly Cro-
atians.

In 1907, **Antofagasta Business Guide** reported the existence of eight main hotels, more than half of which were owned/administrated by Europeans: Hotel Edén, on Brazil Avenue, owned by S. Ganci; Hotel Colón, at the corner of Sucre and San Martín Streets, owned by F. Siverio; Hotel Inglés, in Sucre Street, owned by Ramsay and Carter; Hotel Coloso, in Angamos Street, owned by Rivas & Co; and Hotel Central, in Latorre Street, owned by J. Pacci [35].

This quality manifested itself in European hands, between first-class restaurants: América, owned by Delissalde and Pray, at 59 Prat Street; Antofagasta, owned by P. Illich, in Sucre Street; Central, owned by J. Pacci, at 158 Latorre Street; El Rhin, owned by A. Córdova, located at *Rhin Beach*, by the piers; The Office, owned by F. Ansolda, at 34 Bolívar Street; and Casale Orchard, owned by C. Gallegos, in Uribe Street. The presence of Europeans in the 48 second-class restaurants decreased to 20%, including owners of other restaurants, such as José Pacci, with a restaurant next to the main one at 152 Latorre Street [35]. It is quite curious that hat stores were also owned by Europeans or their descendants such as: Capellaro Hnos, at 156 Angamos Street; Caffarena and Simonelli, in Prat Street, and Evans and James at 69/71 Prat Street. The same occurred with jewelries: All of them were located in Prat Street and in the same block such as: Nicolás Palaversic, Carlos Past, Arnoldo Dreyse, and Enrique Mosella.

Statistics from 1909 refers to the existence of 40 hotels in Antofagasta, 3 in Tocopilla, and 8 in Taltal [49].

The publication of **Antofagasta Business Guide Map** written by the Italian Roberto Bertini and with Italian–Argelian engineer and architect Luis Abd-el-Kader [50], one of the most influential city planners and builder of some of its emblematic buildings, included 18 hotels owned by Europeans, the main ones being Italian (6), Spanish (4), Yugoslavians (Croatians) (3), German (1) Greek (1), British (1), and French (2).



Plano Guía Comercial de la Ciudad de Antofagasta [51].

In examining the records of foreigners arriving from 1880 to 1930, most of them from 1910 to 1925, lodging preferences were hotels, residential homes, and boarding houses. The records include a list of them and the frequency of use, and the owner’s nationality being attractive for a local citizen. **Table 3** shows five European nationalities: German, British, Croatian, Spanish, and Italians and lodging establishments indicating the earliest and latest date of stay.

Establishment	German	British	Croatian	Spanish	Italian
Hotel Panamá	1915–1921	1888	1892–1929	1907–1918	1915
Hotel Londres	1912–1926	1926–1927	1910–1926	1923	1898–1926
Hotel Gran Avda.	1928		1922–1928		
Hotel Maury	1904–1930	1885–1925	1904–1917		
Hotel Roma	1927		–		1910–1924
Hotel Suizo/ Suisso	1923		1905–1930		1900–1905
Grand Hotel	1904–1925	1881–1926	1915–1924	1891	1929
Hotel Belmont	1911–1914	1886	1907–1926		1923
Hotel N. York	1923		1913–1921		1913
Hotel Esbis	1914				
Hotel Balkan	1930		1926–1929		1888–1924
Hotel Bs. Aires	1920	1890–1907	1921		1930
Hotel Central	1926	1881	1928	1912–1930	
Hotel Español	1917	1910–1929	1895–1921	1912–1928	1898–1914
Hotel Milano	1909	–	1922–1927	1928	1929
Hotel Iberia	1925		1925		1903–1927
Hotel Alemán	1930				
Hotel Royal	1912–1914				
Pensión Alemana	1928	1906–1930			
Hotel Francia				1922	1925
Hotel Plus Ultra				1928	1908
Pensión Española				1927	1927
Hotel Europa				1897	1927

Source: [52].

Table 3. European travelers and lodging establishments, 1880–1930.

Apart from the list of hotels used at some time by all Europeans, German travelers made exclusive use of the following establishments: Pensión Colón (1927), German Bank Ranch

(1923), Rancho Gildemeister (1912), Rancho Viña del Mar (1915), Rancho Mitrovich (1916), Club Alemán (1924), Quinta Montalbán (1905–1921), and Quinta Latrille (1914).

British travelers used the following exclusive lodging facilities: Casa del Ferrocarril de Antofagasta a Bolivia (1887–1929), Rancho Banco Anglo (1919–1929), Rancho Williams (1895–1897), Rancho Nitrate—also known as Lautaro Nitrate—(1891–1926), and Rancho Buchanan (1902).

Croatians preferred the following : Hotel Baquedano (1930), Hotel Rosales (1924), Hotel San Marino (1930), Hotel Aranda (1929), Hotel Bellavista (1900–1926), Plaza Hotel (1924), Hotel Washington (1911–1920), Hotel América (1929), Hotel München (1928), Hotel Barros Luco (1905), Hotel Aurora (1929), Hotel 21 de Mayo (1924), Hotel Araucano (1902–1914), Hotel Imperial (1930), Hotel Brasil (1929), Hotel Asgran (1910), Hotel Belga (1919), Hotel Splendid (1928), Hotel Renault (1924), Hotel Nacional (1928), Pensión Chillán (1929), Pensión Limache (1920), Hotel Italiano (1922), Rancho Lautaro (1906), and Residencial Marina (1924).

Spanish travelers chose the following lodging facilities: Hotel Prado (1916), Hotel California (1907), Hotel Antofagasta (1914), Hotel Portugués (1914–1929), Hotel Leber (1907), Hotel Colón (1920), Hotel Nuevo Norte (1896), Pensión Osorio (1924), Pensión El Prado (1927), Pensión Señorita Rosa (1919), Pensión La Estrella (1928), Pensión La Pajarita (1913), Pensión Las Heras (1928), Pensión Riojanita (1928), Pensión Flor de Lira (1916), Pensión Argentina (1918), Pensión Santa Rosa (1919), and Pensión Internacional (1928).

Italians preferred Hotel La Flora (1919), Hotel Centricia (1924), Hotel Yugoslavo (1928), Hotel Chile España (1927–1930), Hotel Oriental (1910), Hotel Palermo (1908), Hotel Sudamericano (1914), Hotel Concordia (1913), and Hotel Mejillones (1929–1930).

The list shows three realities: One of them is related to the economic status of the traveler, determining, as expected, the selection of the main hotels, regardless of owner or administrator and those located in places far from the symbolic-social center of the city; in the second one, lodging hierarchy is not only associated with its category—first or second class—but also its location related to a bigger urban space and its added value: The highest social sectors were located to the southwest in the following order: hotel, residential home, and boarding house. Some denominations are unique, for example, German Boarding House is a nice building located on the southwest sector, as compared with Pension Limache. The so-called *Ranches*, where people from Antofagasta–Bolivia Railway Co. or Lautaro Nitrate Company stayed, both British, are similar to other British institutions: shopping stores such as Buchanan, or Banks such as Banco Anglo. Guest House of Antofagasta–Bolivia Railway Co. was better than *Ranches* (Table 4).

In the nitrate pampa, there were also hotels with different capacities and comfort. In the 1920s, hotels were distributed as follows: Hotel Popular was located in Rica Aventura nitrate mine located in Toco canton. It offered plenty of food and recreation. There was a hotel in Chile nitrate mine in Taltal canton and Aguas Blancas canton; the only nitrate mine with a hotel was Rosario. The so-called Central canton concentrated the most nitrate mines with hotels such as: Lina, Araucana, Luisis, Cecilia, Arturo Prat, Aurelia, José Francisco Vergara, and Chacabuco with the best hotel [53].

During 50 years, there were changes in the Antofagasta lodging facilities. Some first-class hotels disappeared to give rise to urban remodeling processes. Others closed due to economic crises, and many others could not improve their services due to increasing City Hall fiscalization and sanitary demands, or maybe, they could not face the market competence of other hotels, etc.

In the fateful year 1929, the year of the world's crisis and the first signs of the nitrate crisis, sanitary reports made in the province and the city were issued after the fiscalization of all establishments related to tourism, from lodging to gastronomy. Reports pointed out the conditions of hotels, boarding houses, and restaurants. The number of hotels, their owners and addresses, and the general status of the property are stated in observations made.

Hotel names	Owner	Address	Observations
Hotel Francia	José Giménez	Baquadano 347	Bad conditions in bedrooms. They lack ventilation. It has one bathroom and is not clean. Solution: Closing.
Hotel Central	Gregorio Riaño	Baquadano 361	Excess number of beds. It lacks ventilation; the second floor is ruinous. Solution: closing.
Hotel Español	Ignacio Carold	Baquadano 433	Needs a bathroom on the first floor. Must install white floor in the kitchen. Solution: Repair.
Hotel Milano	José Camps	Baquadano 447	Must install bathrooms on the second floor. The kitchen is dark and not clean. Solution: Repair in a given time.
Gran Hotel	Gregorio Samani ego	Baquadano 559	Improve general cleaning; whitening personnel floor. Solution: Improvements.
Anexo Gran Hotel	Gregorio Samani ego	Baquadano 444	No observations.
Hotel Maury	Augusto Brubacher	Playa	No observations.
Plaza Hotel	Juan Simunovic	Prat 540	Install staircases inside; better ventilation in bedrooms and better lighting. Solution: Improvements.
Hotel Londres	Iván Razmilic	Latorre 447	Inadequate kitchen. It has no marble counter. Same thing in food storeroom.

Hotel names	Owner	Address	Observations
			Solution: Improvements.
Annex to Hotel Londres	Iván Razmilic	Prat 382	Change wall paper and paint. Solution: Improvements.
Hotel Portugués	Atilano Gonzalves	Condell 706	Install two bath tubs; Paint the staircase; put metallic grids in the kitchen. Solution: Improvements.
Hotel Europa	Fabián Becovich	Condell 551	Eliminate apartments on the first floor because they are unhygienic. Put metallic grids in the kitchen. Solution: Repairs.
Hotel New York	Emilio Mañey	Bolívar 240	Improve ventilation in some bedrooms and put wall paper. Solution: Improvements.
Hotel Panamá	Francisco Elezovic	Bolívar 274	Some bedrooms need painting. Change bathrooms and improve the conditions of personnel bedrooms. Solution: Improvements.
Hotel Suisso	Mateo Solic	Prat 730	Beds must be renewed. The kitchen is too narrow. Rooms on the first floor need better ventilation and skylights. Solution: Improvements.
Hotel Balkan	José Goles	Baquadano 652	Demolish rooms built for employees. Solution: Improvements.

Source: [54].

Table 4. List of hotels owned by Europeans and their status in 1929.

Sanitary reports reveal that some hotels had been sold, such as Hotel Suisso, owned by the German citizen Otto Kutz in 1914, the new owner being the Croatian citizen Mateo Solic, or Hotel Panamá, owned by the German citizen Titus Forray in 1914, which had been bought by the Croatian citizen Francisco Elezovic. Others, such as Gran Hotel was still owned by the Spanish citizen Gregorio Samaniego.

After the First World War, the German presence in the territory decreased due, in part, to British pressure to limit nitrate production, retaining German nitrate clippers in Chilean ports, thus influencing its commercial activities and migration flow. In addition, the sudden decrease of European migration during the second half of the 1920s also resulted in demographic stagnation in the city of Antofagasta: From the big jump in 1907 with 32,496 inhabitants (from

7588 in 1885 to 13,530 inhabitants in 1895), it decreased to 51,531 in 1920 and to 53,591 inhabitants in 1930 [6].

In the last, **Guide** published during this period on a national basis, **The Travelers's Friend in Chile. Modern Baedeker**, in 1925 [55], complained about the scarce publicity made by the country, unlike Argentina, Brazil, and México, with a private effort made by The National Society of Tourism, founded in Santiago on February 16, 1917, which was located in the National Library and wanted to support special guides describing the country [55]. This important guide gave little importance to lodging in Antofagasta: "It has splendid hotels whose prices range from \$14.00 to \$20.00" [55].

5. Connectivity in Atacama desert: Routes and means of transport

An important factor for such a distant landscape, at the end of the world, as geography texts indicated, was how to arrive there. Until the opening of Panama Canal, transport was provided via the Atlantic to the ports where ship companies arrived, mainly Valparaíso, and later Antofagasta or Iquique in the north.

Since the bay where piers were located—five of them at the end of the 1890s, one owned by The Pacific Steam Navigation Co. in 1910, and another one belonging to West Indian Oil in 1921—were shallow, boats and longboats (chalupas) were used for tendering passengers from the ships to the piers and vice versa. The construction of the fiscal port began in 1920. At the end of the decade, most of the carcass had been finished.

So, German, British, and Italian shipping lines stopped periodically, twice a month, in Antofagasta. The work done by longboats and freight boats was very important for this traffic until the fiscal port was finished. In 1919, these charged per passenger, either one-way or return tickets, or for a package, depending on size or weight [56].

As to railway connections, the network—Antofagasta–Bolivia Railway Co.—communicating Antofagasta with Potosi in Bolivia, went through Central canton. It left on Tuesday and Saturday and arrived on Thursday and Sunday. It stopped in Baquedano station, where it intersected the longitudinal railway belonging to the State Railway Company, created in 1919. This was the link between the central and southern provinces of Chile and Tarapaca in the north. Salinas station was the place for embarking and disembarking toward the pampa and Antofagasta. There were also connections to Aguas Blancas canton.

Roads were improved, coinciding with the introduction of mechanization in the nitrate mines and the expansion of copper production in Chuquicamata. Asphalt became a reality in the main road network of the territory [57].

The so-called "mass tourism" associated with seaside and seashore in Europe and the railway network in the USA in the period studied was not reviewed, as it was done in another source [58].

Concerning urban transport, ticket charges were based on the distance within urban perimeter, whether it was a work day or a holiday, and also according to the type of vehicle: 5-seat cars

or 7-seat cars. They ran to Coloso port along the paved road and “speed was 20 km, children paid half the fees” [56].

In this way, the so-called attraction places in Antofagasta could be accessible for travelers and tourists: La Chimba, Coloso, and Auto Club, which were quite far from downtown, and the different recreation orchards and rides to the seaside or the seashore.

6. Conclusions

European immigration in the city of Antofagasta and Atacama Desert meant that various elements fostering non-chimney industry got together during the nitrate cycle, 1880–1930. There were hotels, gastronomical venues, photo businesses, and studios, and also commercial guides and hundreds of postcards of the city. In addition, there was unique connectivity with the most relevant European ports due to the nitrate production for the Old World agriculture. This resulted in a significant flow of Europeans, considering that Chile was not a destination for European immigration. However, the crisis of the nitrate economy introduced a key of instability in economic activities, mainly services, affecting the hotel circuit and gastronomical venues. In addition, easy accessibility to certain geographic areas with tourist potential, such as the Andes, its hot springs, colonial towns, oases, material culture, was not possible at that time. The means, such as pictures, postcards, and irregular local guides used, did not help to establish clear tourist images of the good things for tourists. European immigrants made efforts to establish the attractive conditions of the Atacama Desert to meet the expectations of Europeans who had the same hopes as them to settle in Antofagasta, that is, a landscape that was daily built in a struggle with nature and also subjected to international market swings, concerning the main resource supporting its presence and life in the desert: nitrate.

7. Methods and sources

To establish the relation between European immigration and tourism, several sources were used so as to determine the elements that currently define tourism activities. One of the sources with the most data was the Archive of Foreign Affairs belonging to Antofagasta Civil and Identity Registrar Service containing thousands of European records, kept at the Historical Archive of the Catholic University of the North. The records of the five most numerous and influential European colonies in Antofagasta were reviewed: Great Britain (Record Boxes 129–138), Germany (Record Boxes 30–36), Yugoslavia, the most numerous (Record Boxes 12–29 plus another one not numbered), Spain (Record Boxes 102–116), and France (Record Boxes 127–128). The records contain personal and family data, place of birth, profession, date of immigration, and address. Statistics of subjects who stayed in hotels were done. These indicated their location and the year they stayed.

These data led to the Archive of Antofagasta Regional Government, kept at the National Archive in Santiago, to determine their owners and maintenance and sanitary conditions at

the end of the 1920s. This, together with the use of several business guides from Antofagasta and the country during the nineteenth and twentieth centuries, reviewed at the National Library and the Congress Library, both in Santiago, allowed relating publicity, images, and the description of urban and natural places to the presence of European photo studios that spread postcards and diverse pictures in the guides. These libraries also provided data on means of transport and connectivity in Antofagasta Region. These data were complemented with the authors' specific work on the topic.

The revision of national population censuses 1885–1930 kept and digitalized by the National Institute of statistics was important to determine the occupations/professions related to tourism.

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Tourism is that area of activity of contemporary man that touches on various fields of human interest. Representatives of numerous academic disciplines find it intriguing for its exceptionally interdisciplinary character. Conditions for and consequences of the development of tourism are investigated, among others, by economists, geographers, sociologists, experts in culture, anthropologists, management and social policy specialists and even by representatives of some natural sciences. Researchers dealing with tourism need to meet strict methodological requirements, but they get access to a very interesting subject of scientific inquiry, which combines social, cultural, economic and environmental aspects to create an ontologically new quality offering epistemological challenges.

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