

GeoJournal of Tourism and Geosites

Year XIII 2020/no. 1 vol. 28





GeoJournal of Tourism and Geosites

Oradea University Press

Editors in Chief:

Dorina Camelia ILIEŞ, University of Oradea, Romania Wojciech RATKOWSKI, Gdansk University of Physical Education and Sport, Poland

Associate Editors:

Doriano CASTALDINI, University of Modena and Reggio Emilia, Italy Olivier DEHOORNE, University of Antille and Guyanne, France

Technical Editors:

Ioana JOSAN, University of Oradea, Romania

Scientific Committee:

Janne AHTOLA, University of Turku, Finland

Irasema ALCANTARA AYALA, University of Mexico, Mexic

Alina BĂDULESCU, University of Oradea, Romania

Dan BÄLTEANU, Romanian Academy - Institut of Geography of Bucharest, Romania

Huhua CAO, University of Ottawa, Canada

Pompei COCEAN, "Babeş-Bolyai" University of Cluj-Napoca, Romania

Denes Lorant DAVID, Shakarim State University of Semey, Kazakhstan

Stefan DESZI, "Babeş-Bolyai" University of Cluj-Napoca, Romania

Ross DOWLING, Edith Cowan University, Australia

Brahim EL FASSKAOUI, University of Moulay Ismail, Meknes, Morocco

Allessandro GALLO, "Ca' Foscari" University of Venice, Italy

Michael C. HALL, University of Canterbury, New Zeeland

Tutut HERAWAN, Technological University Yogyakarta, Indonesia

Thomas A. HOSE, University of Bristol, United Kingdom

Gábor KOZMA, University of Debrecen, Hungary

Zoltan KOVACS, University of Szeged, Hungary

Ioan IANOŞ, University of Bucharest, Romania

Corneliu IAŢU, "Al. I. Cuza" University of Iași, Romania

Alexandru ILIES, University of Oradea, Romania

Alan A. LEW, Northern Arizona University, United States of America

Ionel MUNTELE, "Al. I. Cuza" University of Iași, Romania

Mario PANIZZA, University of Modena and Reggio Emilia, Italy

Elisa PASTORIZA, Universidad Nacional de Mardel Plata, Argentina

Christian ROGERSON, University of Johannesburg, South Africa

Emmanuel REYNARD, University of Laussane, Suisse

Maria Luisa RODRIGUEZ, University of Lisabona, Portugal

Jarkko SAARINEN, University of Oulu, Finland

Stanisław SAWCZYN, Gdansk University of Physical Education and Sport, Poland

Tang YA, Sichuan University, China

Luca ZARRILLI, "G. d'Annunzio" University of Pescara, Italy

Graciela Iris ZUPPA, National University Mar del Plata, Argentina

Dallen J. TIMOTHY, Arizona State University, United States of America

Jan WENDT, University of Gdansk, Poland

Krysztof WIDAWSKI, University of Wroclaw, Poland

Allan M. WILLIAMS, London Metropolitan University, United Kingdom

The Journal is issued under aegis and with financial support of:



University of Oradea, Romania Department of Geography, Tourism and Territorial Planning Territorial Studies and Analysis Centre

1 University St., 410087, Oradea, Romania



Gdansk University of Physical Education and Sport, Poland Faculty of Tourism and Recreation
ul. Kazimierza Górskiego 1, 80-336 Gdańsk, Poland



Year XIII, no. 1, vol. 28 Oradea - Gdańsk 2020

PUBLICATION REQUIREMENTS OF ARTICLES IN THE GEOJOURNAL OF TOURISM AND GEOSITES

The Editorial Board goes trough each article, which in then submitted to two referees' judgment. Names of referees are confidential to the Editorial Board. Authors may be asked to make revisions to their manuscript. If substantial revision is required manuscripts may be re-reviewed before a decision to accept/publish is made. Final acceptance of manuscripts for publication is at the discretion of the Editors.

Authors alone are responsible for the opinions expressed in their papers.

	The GeoJournal of Tourism and Geosites is indexed in:	
-	SCOPUS: http://www.scopus.com/	
-	GEOBASE: https://www.elsevier.com/	
IC Value:	CRNICUS: http://journals.indexcopernicus.com/karta.php?action=mast 121.25 - 2018; 109.97 - 2017; 88.82 - 2016; 84.53 - 2015; 68.79 9 - 2013; 2012; 4.84 - 2011; 4.83 - 2010; 4.15 - 2009; 3.91 - 200	9 - 2014;
Review accredited by C	Z.N.C.S.I.S., "C" Categoryhttp://vechi.cncsis.ro/cenaposs/2008/Arhiv	a/reviste_cat_C_o8.pdf
http://www.ulrichsweb.com/	ULRICHSWEB — GLOBAL SERIALS DIRECTORY ulrichsweb_news/uu/newTitles.asp?uuMonthlyFile=uu201003/new_titles.	txt&Letter=G&navPage=9&
WORLDCAT: h	ttp://www.worldcat.org/search?q=GeoJournal+of+Tourism+and+Geosite	s&qt=owc_search
	SCIPIO: http://www.scipio.ro/web/geojournal-of-tourism-and-geosites	
-	EBSCO: http://www.ebscohost.com/titleLists/hjh-subject.pdf	
HOSPITALITY	Y & TOURISM COMPLETE: https://www.ebscohost.com/titleLists/	hjh-coverage.xls
HOSPITALI	TY & TOURISM INDEX: https://www.ebscohost.com/titleLists/hoh	-coverage.htm
-	CAB Abstracts: https://www.cabi.org/SerialsCited/1429.txt	
ERIH PLUS	https://dbh.nsd.uib.no/publiseringskanaler/erihplus/periodical/info.action	on?id=495196
DOAJ -	DIRECTORY OF OPEN ACCES JOURNALS: https://doaj.org,	/search
-		
	Price of journal:	

Address of the Editorial Office:

Institutional Annual subscription

University of Oradea Department of Geography, Tourism and Territorial PlanningTerritorial Studies and Analysis Centre 1 Universității St., 410087, Oradea, Romania, Phone/fax: +40 259 408 475 e-mail: gtg.uoradea@yahoo.com

On line version:

CONTENTS

Windi NR WARDANI, WIDODO Antecendent and Consequence Destination Innovation DOI 10.30892/gtg. 28101-448	9
Karim CHENIKI, Amel BAZIZ Evaluating the Ability of Local Municipalities to Promote Strong Brand Image in Algerian Cities DOI 10.30892/gtg.28102-449	21
Imanaly AKBAR, Zhaoping YANG, Ordenbek MAZBAYEV, Aday SEKEN, Madeleine UDAHOGORA Local Residents' Participation in Tourism at a World Heritage Site and Limitations: A Case of Aksu-Jabagly Natural World Heritage Site, Kazakhstan DOI 10.30892/gtg. 28103-450	35
Ebrahim SHARIFZADEH AGHDAM, Barat Ali KHAKPOOR, Mohsen AHADNEJAD REVASHTY Tourism in Border Cities: Case Study From Iran DOI 10.30892/gtg. 28104-451	52
Bayan S. KERIMBAY, Kulchikhan M. JANALEYEVA, Nurzhan N. KERIMBAY Tourist And Recreational Potential of Landscapes of the Specially Protected Natural Area of Sharyn of the Republic of Kazakhstan DOI 10.30892/gtg. 28105-452	67
Risa BHINEKAWATI, Liza Agustina Maureen NELLOH, Oman ABDURAHMAN The Analysis of Entrepreneurial Intention in Rural Area: A Case Study of Bukit Peramun Geosite in Indonesia DOI 10.30892/gtg. 28106-453	80
Corina-Florina TĂTĂR, Tomasz STUDZIENIECKI, Klara CZIMRE, Janos PENZES Marketing Awareness of Crossborder Destination - The Case Study of Bihor - Hajdu/Bihar Euroregion DOI 10.30892/gtg. 28107-454	95
Galymbek AZHAYEV, Dinara ESIMOVA, Seedou Mukthar SONKO, Ruslan SAFAROV, Zhanat SHOMANOVA, Alphonse SAMBOU Geoecological Environmental Evaluation of Pavlodar Region of the Republic of Kazakhstan as a Factor of Perspectives for Touristic Activity DOI 10.30892/gtg. 28108-455	104
Tafadzwa MATIZA Delineating the Place Brand Factors Influencing South Africa as an Emerging Business Tourism Destination DOI 10.30892/gtg. 28109-456	114

GeoJournal of Tourism and Geosites ISSN 2065-1198, E-ISSN 2065-0817

Vasilisa Valeryevna GOROCHNAYA, Andrey Sergeevich MIKHAYLOV, Anna Alekseevna MIKHAYLOVA, Angelina Petrovna PLOTNIKOVA Tourism Clusters and Innovation Security: Dialectics in the Western Border Regions of Russia	
DOI 10.30892/gtg. 28110-457	127
Anna WIŚNIEWSKA, Wioletta SZYMAŃSKA Educational Activity of Agritourism Farms in Poland (On Examples From the Pomeranian Region) DOI 10.30892/gtg. 28111-458	140
Nicolae POPA, Mădălina GLONȚI Tourists' or Residents' Priority? A Double Perspective on an Emerging Tourist Destination DOI 10.30892/gtg. 28112-459	151
Fakhri RAFI, Herdis HERDIANSYAH The Impact of Koja Cliff Development on Social-Cultural and Economic: Case of Community-Based Tourism, Banten, Indonesia DOI 10.30892/gtg. 28113-460	164
Jung NAM-SICK Management of Commons as a Tourism Resource: Case Study of the Darangyi Paddy in Gacheon, Namhae, South Korea DOI 10.30892/gtg. 28114-461	175
Mauricio CARVACHE-FRANCO, Orly CARVACHE-FRANCO, Wilmer CARVACHE-FRANCO, Cesar VILLAGÓMEZ-BUELE From Satisfaction in Eco-Tourism to Loyalty in a National Park DOI 10.30892/gtg. 28115-462	191
Mathur SAURABH, SUDHANSHU, Singh SURAJ KUMAR, Mathur, S. C. Paleontological Resources for Geotourism in Barmer Area of Western Rajasthan, India: Implication for a National Fossil Park Development DOI 10.30892/gtg. 28116-463	203
Nicholas IMBEAH, Aniko KHADEMI-VIDRA, Zoltan BUJDOSO Assessment of Tourists' Perceptions on Safety at the Cape Coast Tourist Destination in Ghana DOI 10.30892/gtg. 28117-464	217
Mohsen RANJBARAN, Syed Mohammad ZAMANZADEH, Farzad SOTOHIAN Geotourism Attractions of Hormuz Island, Iran DOI 10.30892/gtg. 28118-465	232
Elan JAELANI, Lukiati Komala ERDINAYA, ROHANDA, Susie PERBAWASARI The Religious Meaning of Equestrian and Archery Sport Tourism: A Phenomenological Analysis DOI 10.30892/gtg. 28119-466	246
Bence MONYÓK, Tibor KECSKÉS, Gábor KOZMA The Relationship Between Heritage Products and Tourism in the Development Documents of Towns in Hajdú-Bihar County DOI 10.30802/gtg. 28120-467	257

Issam Mohammad AL-MAKHADMAH The Role of Virtual Museum in Promoting Religious Tourism in Jordan DOI 10.30892/gtg. 28121-468	268
Tatiana LITVINOVA North Caucasus Image Inside Russia in the Context of Tourism Cluster Development DOI 10.30892/gtg. 28122-469	r 275
Louardi KHERROUR, Sofiane HATTAB, Mohamed A. REZZAZ Archaeological Sites and Tourism: Protection and Valorization, Case o Timgad (Batna) Algeria DOI 10.30892/gtg. 28123-470	o f 289
Bivek DATTA Perception of Business Travellers Towards Technology Adoption: An Empirical Study of Online Travel Portals DOI 10.30892/gtg. 28124-471	n 303
Gabriel ESHUN, Tembi M. TICHAAWA Community Participation, Risk Management and Ecotourism Sustainability Issues in Ghana DOI 10.30892/gtg. 28125-472	y 313
Andrey V. LEVCHENKOV, Yuliya N. GRISHANOVA Specially Protected Areas of the Kaliningrad Region: Continuity or a New Beginning DOI 10.30892/gtg. 28126-473	v 332
Christian M. ROGERSON, Jayne M. ROGERSON Camping Tourism: A Review of Recent International Scholarship DOI 10.30892/gtg. 28127-474	349
Bettina TÓTH, György VIDA, Gábor LADOS, Zoltán KOVÁCS The Potentials of Cross-Border Tourism Development in the Lower-Tise Valley DOI 10.30892/gtg. 28128-475	a 360

* * * * * *

ANTECENDENT AND CONSEQUENCE DESTINATION INNOVATION

Windi NR WARDANI

Sultan Agung Islamic University (UNISSULA), Faculty of Economics, Department of Management, Jl. Raya Kaligawe Km.4 Po.Box. 1054/SM Semarang Indonesia, e-mail: bilqin.09@gmail.com

WIDODO*

Sultan Agung Islamic University (UNISSULA), Faculty of Economics, Department of Management, Jl. Raya Kaligawe Km.4 Po.Box. 1054/SM Semarang Indonesia, e-mail: widodo@unissula.ac.id

Citation: Nr Wardani, W. & Widodo (2020). ANTECENDENT AND CONSEQUENCE DESTINATION INNOVATION. GeoJournal of Tourism and Geosites, 28(1), 9–20. https://doi.org/10.30892/gtg.28101-448

Abstract: This article aim of developing the competitive advantage of Tourism Competitive Advantage which emphasizes the development of tourism in knowledge quality and destination innovativeness by increasing entrepreneurship learning. The sampling method is using purposive sampling technique, meaning that based on population characteristics that is the leader of the tour the owner is government or private and operates for at least 5 years. Then the sample size of 120 out of 200 population. The analysis technique uses Strutural Equation Model with AMOS software. The results of this study indicate that four hypotheses are proposed, three are significant and one hypothesis is not significant. Therefore, the tourm competitive advantage development model can be improved through innovative destinations that are built with indicators of assimilation, differentiation and integration.

Key words: Destination innovation, tourism competitive advantage, knowledge quality, entrepreneur learning

INTRODUCTION

The condition of leisure economy has been a trend for the community to switch from buying products to buying "experience". From this point, tourism becomes a very prospective sector to be developed. Tourism is one of the driving forces of business in the service sector. Compared to other sectors, tourism has had supporting potentials. The tourism industry triggers an increase for the state revenue. In a dynamic global tourism industry, destination competitiveness turns to be very important to improve its performance, facilitate more effective destination management as well as to inform overall sustainable economic development (Chin et al., 2017). The attractiveness of a

_

^{*} Corresponding author

destination is also considered as an amalgamation of tourism products which offer integrated experiences and memories for tourists (Chin et al., 2017). Thus, tourism competitive advantage is something strategic and substantive. Competitive advantage is closely related to the ability of a destination to use available resources which involve the distribution of resources (Crouch & Ritchie, 1999). Tourism Competitive advantage refers to the ability of a destination to attract and satisfy potential tourists (Hall, 2019).

Innovation is considered very important in the development of the industry to achieve sustainable competitive advantage, yet innovation in tourism has remained a topic which is still being researched and innovation is undervalued in tourism (Zehrer, 2016, Monteagudo & Maria, 2018; Politis & Jonas, 2015; Cowdean et al., 2018; Gjedia & Ndou, 2019). The research gaps related to innovation in the tourism industry lead to insufficient understanding of important elements in innovation for the tourism business (Gjedia & Ndou, 2019). Destination innovation research is a new phenomenon. The tourism industry is different from manufacturing and many other services, and destination innovation must be based in part or in full on the various angles and other research instruments. Therefore, a new methodology must be developed regarding with destination innovation research (Hjalager, 2010). Schumperian's approach to innovation emphasizes the role of visionary entrepreneurs (Sundbo et al., 2007).

There are challenges in adopting this approach in tourism, recalling that SMEs are largely widespread and have high in-and-out streams. What motivates entrepreneur innovators and what knowledge they carry are very essential to consider. Knowledge quality helps companies do better jobs, develop useful products or services, reduce costs and improve performance (Dong et al., 2011). Since organizations are required to improve the quality of knowledge, knowledge quality has been an important issue in creating competitive advantages and dealing with a rapidly changing business environment.

The perspective of using knowledge means that knowledge is not only obtained but also integrated to all different sources of special knowledge (Majchrzak et al., 2004). Human resources are willing to spend time and energy to pursue knowledge if the knowledge seems to have value and can cause benefits (Davenport & Prusak, 1998).

The study of Valae & Rezaei (2016) explains that the quality of knowledge is a new concept and there is little research in the tourism industry. Entrepreneurship learning, therefore, is strategic in developing organizational performance. Entrepreneurship learning problems are not only related to entrepreneurs who are learning during the process of exploring and exploiting entrepreneurial opportunities to creating new businesses or existing company management, but also, more importantly, specific learning processes which occur (Wang & Chugh, 2014). In short, how the learning process takes place and when learning takes place are very important to understand the entrepreneurial process. Entrepreneurship is a learning process and entrepreneurial theory strongly needs learning theory. The consequence of increasing organizational learning is the increasing number of individuals behaving proactively. The study of Stinglhamber et al., (2015), however, recommends that future studies be assessed on individual factors, so as to improve organizational performance comprehensively.

LITERARY REVIEW

Tourism Competitive Advantage

The sustainable competitive advantages are the results provided by rare, valuable and unique human resources; customer relations, and systems which serve organizations with a position of on going competition (Abreu et al., 2016). The basic thought of creating a competitive strategy starts from how the business will be developed, what exactly the goal is and what policies will be needed to achieve that goal (Musetescu, 2013). The

concept of sustainable development is adopted into the concept of developing sustainable tourism development (Armenski et al., 2018). Sustainable tourism development is defined as a tourism development process that is oriented to the preservation of resources needed for future development and does not have a negative impact on the development of local culture, as well as the existence of such cultures must be maintained for future generations (Aydin et al., 2018). Tourism Competitive advantage refers to the ability of a destination to attract and satisfy potential tourists (Hall, 2019). Tourism Competitive advantage is also the ability of objects and the attraction of tourist destinations to maintain market position, share and improve it in the long term (Abreou et al., 2015).

Tourism Competitive advantage is the ability of objects and attractiveness of tourist destinations to preserve existing natural capital for future generations (Wong, 2015), create and integrate value-added products that maintain their resources (Al Bayrak et al., 2018) and when referring to competitiveness, tourism destinations must also include the sustainability of local resources to ensure maintenance of long-term success and the achievement of equitable resource returns which are used to satisfy all stakeholders (Martinez et al., 2015) and competitiveness refers to the ability of tourism destinations to improve high living standards for the surrounding community (Aydin et al., 2018). In strategic management, the main objective of all processes carried out by the organization is to achieve sustainable competitive advantage (Añaña et al., 2018).

The development of the tourism sector must realize sustainable competitive advantage as the main destination with the main variables such as Value of Destinations, Tourism Destinations, tourist destinations that are not owned by other regions and able to become regional tourism identities (Corte & Massimo, 2016). The three general dimensions of Tourism Competitive Advantage include the dimensions of attractiveness associated with the ability of destinations to attract and satisfy potential tourists; the economic dimension which is related to the ability to change favorable positions into economic benefits with the ultimate goal of increasing the wealth of the local population; and finally the sustainability / sustainability dimension that is related to the long-term sustainability of a destination (Abreu et al., 2015). Thus, it can be concluded that the Tourism Competitive advantage covers the ability of objects and the attractiveness of tourist destinations in maintaining the sustainability of local resources, creating and integrating value-added products, raising high living standards for surrounding communities and attracting and satisfying potential tourists. Tourism Competitive advantages must be economically, ecologically, socially, culturally, and politically sustainable. The indicators in this study are environmental sustainability, the welfare of the surrounding community (social wealth), visitor satisfaction, and attractiveness (Abreau, 2015).

Destination Innovativeness

Destination innovativeness is the sustainable competitiveness of destination objects and tourist attractions in facing the competition and collaborating with similar objects to synergize strategies to attract the flow of tourist visits (Zach & Hill, 2017). The tourism sector and industry must have uniqueness (differentiation) that is not owned by other regions and in order to establish this uniqueness, tourism marketers must have a high strategy and innovative power (Fatima et al., 2017). In tourism and hospitality companies, innovation has proven to be more complex than general management (Kalmuenzer & Andreas, 2018). Hjalager (2010) states that innovation in tourism occurs in the form of products / services, processes, managerial, marketing or institutional innovation. There remains little doubt, however, about the relevance of innovation for the survival of tourism and hospitality companies (Hjalager, 2010). Previous researches have so far largely concentrated solely on exploring the innovative capabilities of tourist destination actors, without testing the effect on the importance of innovation as a

competitive advantage (Kalmuenzer & Andreas, 2018). The current paradigm shift in the meaning of innovation is compared with the development of product packaging, distribution, marketing and strategy (Martinez et al., 2015). There are many methods used to classify destination innovativeness but generally destination innovativeness revolves around the emphasis on object design and tourist attraction, market research, and advertising and promotion (Hjalager, 2010), Destination Innovativeness is an important component in achieving sustainable excellence in the tourism sector for it reflects the important means of which organizations are able to capture new opportunities (Lee, 2016). Destination Innovativeness reflects the tendency of a tourist destination in supporting new ideas, updates, experimentation, and creative processes that can produce new products, services, or playground developed (Kallmuenzer & Andreas, 2018).

Destination Innovativeness is defined as the willingness of tourism companies to innovate (Thu et al., 2018). Destination Innovativeness is defined as a company's tendency to engage in and support new ideas, novelty, experiments, and creative processes which can create new products, services, or technological processes (Demet, 2019) Destination Innovativeness is generally measured by innovations that occur in tourism which covers tourism products / services, processes, managerial, marketing or innovation of tourist destinations (Kallmuenzer & Andreas, 2018). It can be concluded that Destination Innovativeness is defined as the willingness of tourist destinations to engage in and support new ideas, novelty, experiments, and creative processes which can create new products, services, or new technological processes in existing playing fields. Destination Innovativeness is measured by indicators of assimilation, differentiation, inversion, and integration (Gallouj & Savona, 2010). The results of Foroudi et al., (2017) stated that the capability of innovation is one of the triggers in achieving sustainable competitive advantage. Therefore a proposition can be arranged as follows.

H1: Destination innovativeness was developed as an antecedent of increasing tourism competitive advantage.

Knowledge Ouality

Knowledge plays an important role in innovation (Hjalager, 2002; Lawson & Samson 2011). Innovation is not possible without proactive resources for cooperation and innovation and adequate technology and technological knowledge (Nieves & Gonzalo, 2018). Transfer of knowledge is very essential for organizations because it tends to be global in nature to utilize diverse labor costs, expertise, and access to world markets (Lane & Lutbatkin, 1998). Knowledge transfer, however, is a very difficult process to achieve and knowledge transfer might fail for reasons ranging from the quality of the relationship between the donor and the recipient group to the characteristics of the knowledge transferred. The transfer of knowledge taking place between groups has relatively higher quality from the knowledge possessed by new members compared to the knowledge that is in a group although the decision to receive knowledge from new people is influenced by many factors, such as newcomer accommodation or conflict avoidance modes (Lane & Lutbatkin, 1998). In the previous literature on knowledge transfer, it was argued that the higher the quality of knowledge, the more complex it is embedded in the reservoir of knowledge of the company which includes people, tasks, tools, and networks.

The complexity of knowledge quality is a source of unique and imitable assets because high-quality knowledge is formed by the process of "learning by doing" in organizations, and the key to its creation is the accumulation of experience and knowledge (Nonaka & Takeuchi, 1996). High-quality knowledge acquisition is needed for innovation where suppliers and target companies share the same knowledge, while acquiring moderate amount of knowledge is needed for more innovation in fields unknown to supplier companies (Han et al., 2018). Innovation is considered very important in the development of the

industry to achieve sustainable competitive advantage but innovation in tourism has remained a topic that is still being researched and innovation undervalued in tourism (Zehrer, 2016, Monteagudo & Maria, 2018; Politis & Jonas 2015; Cowdean et al., 2018; Giedia & Ndou, 2019). Research gaps related to innovation in the tourism industry lead to insufficient understanding of important elements of innovation in the tourism business (Gjedia & Ndou, 2019). Innovation is also defined as the openness of someone towards a new technology system, new information or experience and in the tourism and hospitality industry, and innovation is a positive factor which affects individuals to become more open to new technologies and becomes less complex to adopt (Fatima et al., 2017). Innovation in the tourism sector is a major topic in the literature, where, from a theoretical point of view, it has been suggested that innovation plays an undeniable role in the tourism industry. New, innovative and useful knowledge for the organization / institution / system shall meet the requirements of quality knowledge (Chow & Chan, 2008). Knowledge that is used repeatedly for the formation of other new knowledge is high-quality knowledge (Waheed & Kiran, 2014). Knowledge quality is defined as an acquisition of useful and innovative knowledge (Waheed et al., 2016).

Knowledge quality is defined as the extent to which awareness and understanding of ideas, logic, relationships, and appropriate conditions can be used, relevant, valuable for context, and applicably adapted (Widodo et. al. 2015). Knowledge can be innovative for a system or organization, but if that knowledge is not useful for organizational development or new innovation in the organization, then it cannot meet the knowledge quality criteria (Chouch & Ricci, 2015). Knowledge quality can be concluded as knowledge that is used and has adaptability quality, development quality, and is easy to apply.

Linkages, wealth, and knowledge strategies and processes are used to measure knowledge quality (Chow & Chan, 2008). New, innovative and useful knowledge for the organization / institution / system meets quality knowledge requirements (Waheed and Kiran, 2014). Knowledge quality is measured by using dimensions of usability and innovation (Waheed & Kiran, 2014). Adaptability, expandability, and applicability are other important features of quality knowledge (Nonaka & Takeuchi, 1995; Yoo et al., 2011). Knowledge which cannot be applied by individuals in real life because of its practical use is not quality knowledge. Knowledge quality enables organizations to adapt, develop, and easily apply knowledge in order to enhance effective actions and overcome uncertainties by adjusting their knowledge for flexible, broad and easy situations (Widodo et al., 2015). Thus, the indicators used in this study are Adaptable, Applicable, Expandable, True, Innovative, and Justified (Waheed & Kiran, 2014). Knowledge is a competitive instrument in the tourism industry which is greatly important to understand knowledge as a resource and competitive advantage (Monteagudo & Maria, 2018). Therefore, a proposition can be set up as follows.

H2: Knowledge quality is developed as an antecedent to increase destination competitive advantages.

Knowledge plays an important role in innovation (Monteagudo & Maria, 2018). Innovation in organizations is not possible without the existence of highly qualified human resources, who are proactive in cooperation and innovation, and without technology and adequate technological knowledge and market knowledge, it seems hard to do so. Thus, a proposition can be arranged as follows.

H3: Knowledge quality is developed as a supporter to the increasing destination innovativeness.

Entrepreneur Learning

Entrepreneurship is very closely related to innovation because it involves creation of something new or in new ways: new combinations, new production methods, new

businesses, new markets and new wealth (Corte & Massimo 2016). The entrepreneurial spirit has an important role in the tourism industry (Hunter & Jonathan, 2018). The importance of entrepreneurship in the tourism industry has been largely underestimated or misunderstood (Deale, 2016) whereas entrepreneurship plays a major role in the development of tourist destinations, and entrepreneurial figures have not yet been the subject of adequate research (Gjedia & Ndou, 2019). Cowdean et al., (2018) defines entrepreneurship as a learning process derived from experience and innovation. Entrepreneurship describes a new combination process in a company to create new products, new processes, product quality, new organizational formats and so on to answer market challenges (Politis & Jonas, 2015). Innovation for entrepreneurship in tourism has become a new approach that was ignored in the research agenda in early time and ensures that there is still a lack of research on entrepreneurship in the field of hospitality and tourism management (Monteagudo & Maria, 2018). Today entrepreneurship is considered a process which focuses on innovation, growth and uniqueness (Gartner, 1990).

In the macroeconomic point of view, the literature has shown a positive correlation among innovation, entrepreneurship and economic growth (Monteagudo & Maria, 2018; Politis & Jonas, 2015; Cowdean et al., 2018; Gjedia & Ndou, 2019). Entrepreneurship is a missing link in economic growth because entrepreneurship is a form of knowledge from academics, universities and forms of commercialization of ideas (Hunter Jonathan, 2018). Entrepreneurship is very closely related to innovation because it commonly involves creation of something new or in new ways: new combinations, new production methods, new businesses, new markets and new wealth (Brush et al., 2003). Entrepreneurship is a factor that supports innovation and an important determinant in the competitiveness of the tourism sector, because it promotes the transfer of products (Hjalager, 2010).

Entrepreneur Learning has been studied since a century ago, and has several learning characteristics which are different from others (Matthew et al., 2015). Organizational learning has a very positive influence on knowledge sharing behavior (Kamya et al., 2011). Entrepreneurial Learning is one variation of the experiential and cognitive processes used to obtain, maintain, use and share entrepreneurial knowledge (Matthew et al., 2015). The learning process of exploring and exploiting existing opportunities enable an entrepreneur to respond towards market conditions and determine renewal strategies which will be carried out as a step of innovation (Sheng & Chien, 2016). Entrepreneurship learning can facilitate the development of one's dynamic capabilities in adapting to market changes and making appropriate innovations (Fernández & Alegre, 2015). A successful entrepreneur always has particular behavior of being glad to share ideas and information with others, receives constructive suggestions and criticism, and provides coaching clinics to other entrepreneurs to form a strong network of cooperation (Matthew et al., 2015).

The results of Ernest's research, Matthew et al. (2015) stated that entrepreneurial learning aims to enhance creativity, have high innovation power, entrepreneurial spirit, become someone who has the ability to solve problems effectively, communicate and have networks as well as become leaders (Chowdean et al., 2018). Many scholars have described tourism as a system rather than industry (Deale & Seung, 2018) and include attractions, services, promotions, information and transportation as the tourism supply sides (Wang et al., 2018), with retail businesses serving tourists, including tourism destination assets that is owned and operated by tourism entrepreneurs, which is an important part of the sector.

Therefore, given the role of entrepreneurs, who may be key stakeholders such as hoteliers or restaurant owners or stakeholders such as retail business owners and tourism actors, their insights about education for businessmen in the hospital and tourism sector are important (Neck et al., 2018). Entrepreneur learning in tourism is measured by indicators of creativity, risk-taking opportunities, and understanding a sense of tourism

community (Deale, 2016). Entrepreneur learning can be concluded as a learning process to improve the ability of capturing career opportunities, creativity, risk taking and responsibility, and providing the technical and business skills needed to start a business.

Entrepreneur learning includes a series of learning processes and skills such as the ability to recognize personal opportunities of each individual, the ability to utilize existing abilities by generating new ideas and using the necessary resources, the ability of individuals to create, act, take risks by carrying out new adventures and the ability to think in creative and critical ways (Deale, 2016). Entrepreneurial activities positively give impacts on the innovation of entrepreneurs in the tourism sector (Yang et al., 2018). Entrepreneur learning is a learning process and knowledge-producing skills (Gjedia & Ndou, 2019). Therefore, propositions can be arranged as follows.

H4: The increase in entrepreneur learning will lead to the increase of knowledge quality. Based on the complete and in-depth literature, a research model can be developed as in Figure 1.

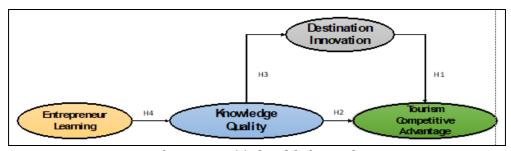


Figure 1. Empirical model of research

RESEARCH METHOD

Sample

The population of this study is the tourism industry in Central Java Province with 200 possessed by the government and private owners. The sampling method used was purposive sampling technique, meaning that it is based on the characteristics of the population, namely tourism leaders in Central Java Province by location and a minimum of 5 years of operation. The sampling size refers to Hair et al. (1996), which is 120 respondents.

Measurement of Variables

The entrepreneur learning indicator refers to the Deale study (2016) which involves recognizing opportunities, generating new ideas and taking risks. Furthermore, the quality indicator knowledge includes: adaptable, applicable and expandable (Waheed & Kiran, 2014). Then, destination innovativeness involves assimilation, differentiation, integration (Gallouj & Savona, 2010) while Tourism Competitive advantages include environmental sustainability, social wealth and attractiveness (Abreau, 2015).

The variables were measured with questionnaire by using likert-scale with answer scale of 1 to 5. The scale represented the rating from 'strongly disagree' to 'strongly agree'. Table 1 shows the results of validity and reliability test and a loading factor value above 0.7 (Sekaran, 2003) and a minimum reliability value of 0.6 (Hair et al., 2010). Therefore, it can be concluded that the instrument has the validity and reliability.

RESULT

Goodness of fit

The empirical model test used Structural Equation Modeling. The model indicates that Chi-square= 58.000 with probability value of 0.204; GFI=0.928, AGFI=0.888 and

TLI=0.986, while value of RMSEA=0.037. The result of the model is a Fit. Based on statistical analysis, the results of this study indicate conformity with the required standard values. As shown in Figure 2 was the results of the Full Analysis Model.

No	Variable	Indicator	Loading Factor	Reliability
		 a) Recognizing opportunity 	0.85	0.72
1 Entrepreneur learning		0.83		
		c) Dare to take risk	0.82	
		a) Adaptable	0.86	0.69
2	2 Knowledge quality	b) Applicable	0.77	
		c) Expandable	0.86	
	Destination	a) Assimilation	0.83	0.79
19	innovativeness	b) Differentiation	0.79	
illilovativelless	iiiiovativeiless	c) Integration	0.87	
Tourism Competitiv	Tourism Compositive	a) Environmental sustainability	0.90	0.76
		b) Social wealth	0.71	
⁻ advantage		c) Attractiveness	0.89	

Table 1. Validity and Reliability Test

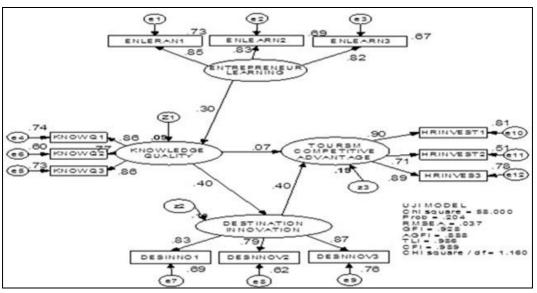


Figure 2. The Results of Full Model Destination Innovation

Table 1 shows that the 3 proposed hypotheses were supported by empirical data and one hypothesis was not supported by empirical data. The first hypothesis proposed was that increasing innovative destinations will enhance competitive tourism and it was supported by empirical data. This condition indicates that the increase in assimilation, differentiation and integration developed will realize environmental sustainability, social wealth and attractiveness. Thus, this supports the study of Foroudi et al., (2016) stating that the capability of innovation is one of the triggers in achieving sustainable competitive advantage. However, the second hypothesis of knowledge quality which was developed as an antecedent to increase destination competitive advantages was not supported by empirical data. This condition is caused by knowledge quality indicators which include adaptable, applicable and expandable have not been carried out

intensively, extensively and comprehensively. The third hypothesis of knowledge quality which is developed will increase destination innovativeness was supported by empirical data. This condition indicates that increasing adaptable, applicable and expandable indicators will trigger an increase in innovation destination variables with assimilation, differentiation and integration indicators. Thus, it supports the opinion of Monteagudo and Maria (2018) who say knowledge plays an important role in innovation. Innovation in organizations is not possible without the existence of highly qualified human resources, who are proactive towards cooperation and innovation. Meanwhile, the fourth hypothesis states that increasing entrepreneur learning development will lead to an increase in knowledge quality was supported by empirical data. This condition shows that entrepreneur learning with an indicator of ability to recognize opportunities, produce new ideas and take risks which increase will enhance adaptable, applicable and expandable. Thus, this study supports the opinion of Gjedia and Ndou (2019) that entrepreneur learning is a learning process and skills which produce knowledge.

			•	
No	Exogenous variable	Endogenous variable	Standard Estimate	T-value
1	Tourism Competitive Advantage	Destination Innovative	0.403	3.648*
2	Tourism Competitive Advantage	Knowledge Quality	0.070	0.653
3	Destination Innovative	Knowledge Quality	0.404	3.943*
4	Knowledge Quality	Entrepreneur Learning	0.296	2.854**
	p < 0.05; * p < 0.10; ** p < 0.01;			
	*** n < 0.001			

Table 1. Inner Path Model Coefficients and their Significance

Direct, indirect and total impacts

The analysis of these direct, indirect and total effects is intended to determine the effects of the hypothesized variables. Direct effect is the coefficient of all coefficient lines with one end arrow or commonly referred to as path coefficient, while indirect effect is the impact caused by moderating variable. Furthermore, the total effect is the total sum of direct and indirect effects. The testing of the direct, indirect and total effects of each variable on the Knowledge Quality Development Model towards Entrepreneurship Learning-Based Organizational Performance is presented in table 2 as follows.

No	Variable	Effect	Entrepreneur Learning	Knowledge Quality	Destination Innovation
1	Knowledge	Direct	0.296	0.000	0.000
	Quality	Indirect	0.000	0.000	0.000
		Total	0.296	0.000	0.000
2	Destination	Direct	0.000	0.404	0.000
	Innovation	Indirect	0.120	0.000	0.000
		Total	0.120	0.404	0.000
3	Tourism	Direct	0.000	0.070	0.403
	Competitive	Indirect	0.069	0.163	0.000
	Advantage	Total	0.069	0.232	0.403

Table 2. Direct, indirect and total impacts

Table 2 containing the direct, indirect and total effects of tourism competitive advantage models explains that the quality knowledge variable is directly influenced by entrepreneur learning at 0.296 while the indirect effect that affects the quality knowledge variable is not apparent in this research model because the quality knowledge variable is a variable at the first level in a structured equation model. The innovative destination

variables are directly influenced by knowledge quality with 0.404 while indirect effects which affect innovative destination variables are not seen in this research model because innovative destination variables are variables at the first level in structured equation model. Variables of tourism competitive advantage are directly influenced by quality knowledge (0.070 and destination innovation (0.403). It shows that destination innovative variables have a significant influence on tourism competitive advantage while indirect effects of quality knowledge on innovation through destination variables are 0.163. The total effect of entrepreneur learning variables on tourism competitive advantage is 0.069. Meanwhile, Knowledge quality learning for tourism competitive advantage is 0.232. Destination innovation regarding tourism has a competitive advantage of 0.403. Based on these total effects, we can conclude that the Destination variable towards tourism competitive advantage is 40.3%.

Managerial Implications

The developed and expanded quality of knowledge has consequences of being able to adapt or being easily applied to tasks. Knowledge must be transformed into action to realize its usefulness and profitability. Unique knowledge is a source of innovative activity. Thus, the possessed quality of knowledge resources must be dynamic in order to realize tourism competitive advantage.

It provides better insight into the potential factors to influence tourism competitive advantage through entrepreneurial learning and knowledge quality and destination innovativeness on non-government and government attractions. There is importance of the knowledge quality factor in achieving destination innovation, and the impact resulted from destination competitive advantages and we need to offer a deeper understanding of important contextual issues which have impacts on efforts to implement strategies of tourism marketing and in turn increase destination competitive advantages. Therefore, the evidence of this model contributes to the theory by extending support for social exchange theory and knowledge management into the context of strategies for tourism marketing and development.

Limitations and Future Research

The calculation results with Software AMOS show that the effect of knowledge quality has no significant effect on tourism competitive advantage. Based on the limitations of the study of antecedent variables, knowledge quality of competitive tourism advantage is an interesting black bock study area. This research, however, has not considered the quality factor of Human Resource of tourism enterpreneurs who are possibly considered to be able to increase their competitiveness / innovativeness on achieving tourism competitive advantage. The addition of environmental support factors or added value can be considered to vary further researches.

CONCLUSION

The model of developing tourism competitive advantages can be enhanced through destination innovative which is built with indicators of assimilation, differentiation and integration.

Aknowlegments

Tourism leaders in Central Java Province who have been willing to become respondents. Then the Tourism Office Central Java province that has supported this study.

REFERENCES

Abreu-Novais, M., Ruhanen L., Arcodia C. (2016). Destination competitiveness: what we know, what we know but shouldn't and what we don't know but should. *Current Issues in Tourism*, 19.6 492-512.

- Al Bayrak, T., Caber, M., Rosario, González-Rodríguez, M. & Aksu, A. (2018). Analysis of destination competitiveness by IPA and IPCA methods: The case of Costa Brava, Spain against Antalya, Turkey. *Tourism Management Perspectives*, 28, 53–61. doi:10.1016/j.tmp.2018.07.005.
- Añaña, Edar da Silva, Raphaella Costa Rodrigues & da Silva Flores, L.C. (2018). Competitive performance as a substitute for competiveness measurement in tourism destinations: an integrative study. *International Journal of Tourism Cities* 4.2: 207-219.
- Armenski, T., Dwyer, L. & Pavluković, V. (2018). Destination competitiveness: public and private sector tourism management in Serbia. *Journal of Travel Research*. 57.3: 384-398.
- Aydin, S. & Dube, M. (2018). Knowledge management, innovation, and competitive advantage: is the relationship in the eye of the beholder. *Knowledge Management Research & Practice*, 16.3: 402-413.
- Chin, Wei Lee, Haddock-Fraser, Janet & Hampton, Mark P. (2017). Destination Competitiveness: Evidence from Bali. *Current Issues in Tourism*, 20 (12). pp. 1265-1289. ISSN 1368-3500.
- Choi, Miju, Jin-Soo Lee & Ava J. Seo. (2018). Shopping destination competitiveness: scale development and validation. *Journal of Travel & Tourism Marketing*, 35.8: 1087-1103.
- Corte Della, V. & Aria, M (2016). Coopetition and sustainable competitive advantage. The case of tourist destinations. *Tourism Management*, 54 524-540.
- Chouch G. & Ricci JR. (1999). Tourism, Competitiveness, and Societal Prosperity. *Journal of Business Research*. 44 (3): 137-152.
- Chow, W.S. & Chan, L.S. (2008). Social network, social trust and shared goals in organizational knowledge sharing. *Information & management*, 45(7), 458-465.
- Cowdean, S., Whitby P., Bradley L., McGowan P., (2019). Entrepreneurial learning in practice: The impact of knowledge transfer. Industry & Higher Education (2019). 0950422218812630.
- Davenport, T.H. & Prusak, L. (1998). Working knowledge: How organizations manage what they know. Harvard Business Press.
- Deale, Cynthia S. (2016). Entrepreneurship education in hospitality and tourism: insights from entrepreneurs. Journal of Teaching in Travel & Tourism, 16. 1: 20-39.
- Deale, Cynthia S. & Seung Hyun L. (2018). Are They on the Same Wavelength? Industry Professionals' and Students' Perceptions of Online Graduate Degree Programs in Hospitality and Tourism. *Journal of Hospitality & Tourism Education*, 30.3: 154-166.
- Demet, Bagiran O. (2019). Towards a model of destination innovation process: an integrative review. *The Service Industries Journal*, 39.3-4, 206-228.
- Dong Kyoon Yoo., Vonderembse, M.A. & Ragu-Nathan, T.S. (2011). Knowledge quality: antecedents and consequence in project teams. *Journal of Knowledge Management*, 15(2), 329-343.
- Ernest, K., Somiah K.M., & Ansah K. S. (2015). Towards Entrepreneurial Learning Competencies: The Perspective of Built Environment Students. Higher Education Studies 5(1).
- Fatima, J.K., Ghandforoush, P., Khan, M. & Masico, R.D. (2017). Role of innovativeness and self-efficacy in tourism m-learning. *Tourism Review*, 72.3: 344-355.
- Fernández-M., Alegre, J. (2015). Entrepreneurial orientation and export intensity: Examining the interplay of organizational learning and innovation. *International Business Review*, 24(1): 148-156.
- Foroudi, P., Gupta, S., Nazarian, A. & Duda, M. (2017). Digital technology and marketing management capability: achieving growth in SMEs. Qualitative Market Research, *An International Journal*, 20(2), 230-246.
- Gartner, W. B. (1990). What are we talking about when we talk about entrepreneurship? *Journal of Business venturing*, 5(1), 15-28.
- Gallouj, F. & Savona, M. (2010). Towards a theory of innovation in services: a state of the art. The handbook of innovation and services: A multi-disciplinary perspective, 27-48.
- Gjedia, R. & Ndou, V. (2019). Educating of Entrepreneurship Competence in Pre-university Education System: An Effective Way for Tourism Development and Innovation. Smart Tourism as a Driver for Culture and Sustainability. Springer, Cham, 35-47.
- Hall, C.M. (2019). Constructing sustainable tourism development: The 2030 agenda and the managerial ecology of sustainable tourism. *Journal of Sustainable Tourism*, 1–17. doi:10.1080/09669582.2018.1560456.
- Han, John, Gil S. Jo & Jina Kang. (2018). Is high-quality knowledge always beneficial? Knowledge overlap and innovation performance in technological mergers and acquisitions. *Journal of Management & Organization*, 24.2: 258-278.
- Hair, Jr., F. Joseph, R. E., Anderson, R.L. Tatham W. C., Black. (1992). Multivariate Data Analysis with Readings, Macmillan.
- Hjalager, A.M. (2002). Repairing innovation defectiveness in tourism. *Tourism Management*, vol. 23, núm. 1, pp. 465-474.
- Hjalager, A. M. (2010). A review of innovation research in tourism, Tourism Management, vol. 31, núm. 1, pp. 1-12.
- Hunter, Lise & Jonathan Lean. (2018). Entrepreneurial learning—a social context perspective: evidence from Kenya and Tanzania. *Journal of Small Business and Enterprise Development* 25.4: 609-627.
- Kamya, M.T., Ntayi J.M., & Ahiauzu, A. (2011). Organisational learning and competitive advantage: testing for the interacting influence of knowledge management and innovation. *International Journal of Innovation and Learning*, 10.4: 376-401.

- Kane, A. A., Argote, L. & Levine, J. M. (2005). Knowledge transfer between groups via personnel rotation: Effects of social identity and knowledge quality. Organizational Behavior and Human Decision Processes, 96(1), 56–71. doi:10.1016/j.obhdp.2004.09.002 url to share this paper: scihub.tw/10.1016/j.obhdp.2004.09.002.
- Kallmuenzer, A. & Mike P. (2018). Innovativeness and control mechanisms in tourism and hospitality family firms: A comparative study. *International Journal of Hospitality Management*, 70: 66-74.
- Lawson, B & Samson. D. (2011). Developing innovation capability in organizations: a dynamic capabilities approach, International Journal of Innovation Management, vol. 5, núm. 3, pp. 377-400.
- Lane, P.J. & Lutbatkin, M. (1998). Relative absorptive capacity and interorganizational learning, Strategic Management Journal, Vol. 19 No. 5, pp. 461-477.
- Lee, Kwang-Ho & Sunghyup Sean Hyun. (2016). The effects of perceived destination ability and destination brand love on tourists' loyalty to post-disaster tourism destinations: The case of Korean tourists to Japan. *Journal of Travel & Tourism Marketing* 33.5: 613-627.
- Majchrzak, Ann, Lynne P. Cooper & Olivia E. Neece. (2004). Knowledge reuse for innovation. Management science: 50.2174-188.
- Matthew, Ernest, Kissi, Somiah K. & Ansah K. Samuel. (2015). Towards Entrepreneurial Learning Competencies: The Perspective of Built Environment Students. Higher Education Studies 5.1: 20-30.
- Martínez-Román, Juan A., et al. (2015). Innovativeness and business performances in tourism SMEs. *Annals of Tourism Research*, 54: 118-135.
- Monteagudo, Inmaculada Carrasco & María Soledad Castaño Martínez. (2015). Drivers of entrepreneurship innovation in tourism sector: entrepreneurship, knowledge and internationalization. Icade: Revista de las Facultades de Derecho y Ciencias Económicas y Empresariales 94: 11-29.
- Musetescu, A. (2013). How to achieve a competitive advantage. Knowledge Horizons. Economics, 5, 13.
- Neck, Heidi M. & Andrew C. Corbett. (2018). The scholarship of teaching and learning entrepreneurship. Entrepreneurship Education and Pedagogy 1.1: 8-41.
- Nieves, Julia & Gonzalo Diaz-Meneses. (2018). Knowledge sources and innovation in the hotel industry: Empirical analysis on Gran Canaria Island, a mature mass-tourism destination. *International Journal of Contemporary Hospitality Management*, 30.6: 2537-2561.
- Nonaka, I. & Takeuchi, H. (1996). A theory of organizational knowledge creation. *International Journal of Technology Management*, 11(7–8), 833–845.
- Politis, Diamanto, & Jonas Gabrielsson. (2015). Modes of learning and entrepreneurial knowledge. *International Journal of Innovation and Learning*, 18.1: 101-122.
- Sekaran, Uma. (1992). Research Methods for Business: A Skill Building Approach, Second Ed., John Willey & Sons, Inc.
- Sheng, Margaret L. & Iting Chien. (2016). Rethinking organizational learning orientation on radical and incremental innovation in high-tech firms. *Journal of Business Research*, 69.6: 2302-2308.
- Stinglhamber, F., Marique, G., Caesens, G., Desmette, D., Hansez, I., Hanin, D. & Bertrand, F. (2015). Employees' organizational identification and affective organizational commitment: An integrative approach. PloS one, 10(4), e0123955.
- Sundbo, J., Orfila-Sintes, F. & Sørensen, F. (2007). The innovative behaviour of tourism firms comparative studies of Denmark and Spain. Research Policy, 36(1), 88–106.
- Valaei, Naser & Sajad Rezaei. (2016). Job satisfaction and organizational commitment: An empirical investigation among ICT-SMEs. Management Research Review 39.12: 1663-1694.
- Waheed, Mehwish & Kiran Kaur. (2016). Knowledge quality: A review and a revised conceptual model. Information Development 32.3: 271-284.
- Waheed, Mehwish, Kiran Kaur & Atika Qazi. (2016). Students' perspective on knowledge quality in eLearning context: a qualitative assessment. Internet Research 26.1 120-145.
- Wang, Wei, Shu T. Cole & Joseph S. Chen. (2018). Tourist innovation in Air travel. *Journal of Travel Research*, 57.2: 164-177.
- Wang, Catherine L. & Harveen Chugh. Entrepreneurial learning: past research and future challenges. Entrepreneurial learning. Routledge, 2015. 11-44.
- Widodo, Sitty Yuwaliatin & Endang Dwi Astuti (2015). The Development Design of Knowledge quality Based on Knowledge networking and Cross Functional Integration Toward SMES' Innovative Performance. *Journal of Applied Economic Sciences* (JAES), Volume X, Issue 8 (38).
- Wong, P.P.W. (2015). Role of components of destination competitiveness in the relationship between customer-based brand equity and destination loyalty. *Current Issues in Tourism*, 21(5), 504–528, doi: 10.1080/13683500.2015.1092949.
- Zach, F. J. & Hill, T. L. (2017). Network, knowledge and relationship impacts on innovation in tourism destinations. *Tourism Management*, 62, 196-207.
- Zehrer, A., Muskat, B., & Muskat, M. (2015). Enablers of corporate innovation in tourism. In: Pechlaner, H., & Innerhofer, E. (eds.), Competence-Based Innovation in Hospitality and Tourism (pp. in print). Gower Publishing.

Submitted: Revised: Accepted and published online 16.06.2019 03.01.2020 06.01.2020

EVALUATING THE ABILITY OF LOCAL MUNICIPALITIES TO PROMOTE STRONG BRAND IMAGE IN ALGERIAN CITIES

Karim CHENIKI*

USTHB (Houari Boumediene Sciences and Technology University), Department of Geography and Territorial Planning, BP 32, El Alia, Bab Ezzouar, 16111, Algiers, Algeria, LREAU Laboratory, e-mail: kcheniki@usthb.dz or cheniki.karim@gmail.com

Amel BAZIZ

USTHB (Houari Boumediene Sciences and Technology University), Department of Geography and Territorial Planning, BP 32, El Alia, Bab Ezzouar, 16111, Algiers, Algeria, LREAU Laboratory, e-mail: Bazizusthb@yahoo.fr

Citation: Cheniki, K. & Baziz, A. (2020). EVALUATING THE ABILITY OF LOCAL MUNICIPALITIES TO PROMOTE STRONG BRAND IMAGE IN ALGERIAN CITIES. GeoJournal of Tourism and Geosites, 28(1), 21–34. https://doi.org/10.30892/gtg.28102-449

Abstract: This work explains the role and importance of brand image in promoting tourism in Algiers. Its first objective is to create a model that evaluates and classifies the ability of local municipalities to develop a brand image of Algiers and to discover difficulties that could hinder its implementation. This paper is divided into three parts. The first section explained the role of brand image in tourism development. The second part is devoted to explain the method adopted. The authors chose MVAT method, based on multi-attribute analysis to assess brand image using the database of the bay of Algiers. The last section is devoted to explain the results of this work. Hence, this work revealed two kinds of results, on one hand, a model to assess the destination's ability to create a positive brand image. On the other hand, the classification of the destinations under study. So, this study leads us to consider that the Casbah is the only municipality that capable to promote the brand image of the bay of Algiers. It is important to mention that this model will serve as a decision-making tool for decision-makers when they decide to develop the brand image of a tourist destination in developing countries. It has the advantage of being flexible, so it accepts modifications in order to be improved. However, it is limited by information because it needs more information for a better diagnosis. Finally, it is well recommended to develop an image that is consistent with the local context of the city, as well as the necessary involvement of citizens in the construction of this image.

Key words: brand image, tourism, bay of Algiers, destination, MAVT, Model

* * * * * *

_

^{*} Corresponding author

INTRODUCTION

The development of tourism has undergone several periods of development; indeed, it was during the 1980s that it enjoyed its real success, with the progress of the means of communication that facilitated mobility between countries where people became freer to choose their tourist destination, according to their own wishes, without any exogenous constraints. Tourism has great potential for the development of the city's economy and even the entire country. The World Tourism Organization has recorded a growth in tourism revenues as a result of the increase in the number of tourists and the development of the tourism industry. In 2018, the number of tourists worldwide reached 1.4 billion, an increase of 27 million compared to 2014 and 78 million compared to 2013. Also, there was a growth rate of 6% per year (UNWTO, 2018). In addition, "with the exception of the increased number of natural disasters, tourism will become the largest industry in the world" (Benghadbane & Khreis, 2019, p. 147).

It is important to mention that tourism is considered the cleanest industry with the lowest environmental impact compared to other industries. In addition, it is considered an important tool for the economic regeneration of the city.

The role of brand image in the development of tourism

In support of the increase in competitiveness between the world's cities, particularly in terms of tourism, the image of the city as a brand has become a strategy through which the city is created as an urban product. Its development has become conditioned by supply and demand in the global market. Thus, strengthening the brand image of tourism is an important way to achieve a more successful tourist destination in the long term (Ritchie & Ritchie, 1998; Caldwell & Freire, 2004; Kazemi et al., 2018). The use of brands in service industries such as tourism is more efficient than manufacturing (Buhalis, 2000; Kazemi et al., 2018). It is important to mention that the tourist's decision is strongly linked to the destination brand. The latter provides information on the destination to be visited, it plays an important role in differentiating the chosen destination from other destinations by shaping tourists' expectations of that destination (Gursoy & McCleary, 2004; Murphy et al., 2007; Kazemi et al., 2018).

Generally, tourists have a global vision of the tourist destination they want to visit, this is what is called the image of the city. This image is the result of the aggregation of several elements, namely tradition, the city's culture, its natural environment, works of art, music and even the celebrities who have their origin in this city (Schwaighofer, 2014).

This image can take many forms. Schwaighofer (2014) explains that there are four types of images, namely "an induced image, organic, transferred and perceived".

- The induced image is generally produced by advertising campaigns as part of urban marketing. It will be transmitted through brochures and tourist booklets....
- The organic image is the information obtained through conversations between citizens who live in the vicinity of tourist destinations, it is composed of several major elements such as local culture and traditions, the history of the place as well as beliefs.
- The transferred image is constructed by public authorities, with the objective of attracting tourists, and shaped by different institutions and travel agencies to convey the image of a destination to customers. It is generally transferred through the media.
- The perceived image has a direct relationship with the needs and expectations of tourists as a motivating factor to choose a specific destination. This perception differs from one person to another (Andreu et al., 2000; Schwaighofer, 2014).

Indeed, this destination will be kept or rejected if it meets or not the expectations of tourists. Then this destination will indeed be assessed in relation to the expectations of tourists who have or will visit this tourist destination (Echtner & Ritchie, 2003; Schwaighofer, 2014). Thus, the image of a tourist destination is the corollary of the

combination of several elements that cannot be studied separately. In this respect, the challenge to be overcome is to encourage tourists to visit a destination and ensure that they remain loyal to a tourism direction in the long term, this is the role of brand image.

Thus, the development of a city's brand image is defined according to Peel and Lloyd (2008) as including the creation of a particular image of the city through urban and environmental promotion, it constitutes an essential element in the promotion and development of urban spaces, especially those on waterfront, at a time when "cities are considered to be manageable as brands and vocabularies of "urban marketing" or "place marketing" have become common" (Merunka & Ouattara, 2006). Moreover, Haarhoff and De Klerk (2019) note that brand image is seen as the interaction between destination positioning and destination brand. The objective of this composition is therefore to make the image of the destination different with its competitive identity. Hence, the use of brand image development at a tourist destination has become essential to make a city known and differentiate it and give it a specific character in order to be distinguished from other cities in the world and to guarantee it as a long-term tourist destination.

Indeed, this phenomenon became more important during the 1990s, considering it as an important means of developing the various forms of industry, citing tourism in particular. Several factors can affect the choice of a tourist destination such as the cost of travel, comfort, quality of services offered, however, the most important factor that can have the greatest influence on the choice of a destination is above all "the brand of the city" (Iordache et al., 2014). The work of (Schwaighofer, 2014) perfectly explains the pillars on which a brand image of a tourist destination will be placed on.

It stipulates that this image must be based on four main elements, namely "Distinctiveness, Singularity, Acceptance, Translatability. To this end, he explains that a brand image of a tourist destination must be distinct. Then, it must appear stronger, unique and clearly defined. He adds that the second element to consider is singularity, explaining in this regard that a brand image must target a certain group of customers, because targeting all groups will create confusion among tourists and thus complicate the process of developing the brand image. So, in order to create a positive image of a tourist destination, it will be recommended to target a certain category of tourists in order to convince them to visit it. Acceptance is indeed a challenge to be surpassed, by giving a certain tourist destination brand image. Indeed, this image must be accepted by tourists but also by the citizens (Harrison-Walker, 2011). Finally, translatability is an important element through which a destination image must reflect the values of the city in a way that is clear to understand. Thus, these values must be respected by the various actors (Harrison-Walker, 2011). According to Merunka and Ouattara (2006), several factors are at the root of brand promotion, namely:

An important communication strategy, especially at the international level. Indeed, a communication strategy is essentially based on a mix of actors, namely the state, associations specialized in the field as well as other institutions. This is mainly done through a mass advertising campaign aimed at tourists.

It should be noted that personal communications and social network communications are an important factor in advertising cities as a destination.

Certainly, literature and cinema play an essential role in promoting the image of a tourist destination (Vladi, 2014).

Finally, it is well recommended to develop an image that is consistent with the local context of the city, this is achieved through the management of the organic image of the tourist destination.

Many cities have not clearly defined their images, due to several barriers. Is this the case for Algiers?

Aim and research objectives

Algiers wants to become a "world city", so Algiers has given more attention to the site of the bay of Algiers as a potential for the city's development. The question to be asked is therefore the following: can the municipalities of the bay of Algiers constitute a brand image project for the promotion of the tourist industry? Also, which municipality deserves more attention as a first priority in order to achieve our objective?

The main objective of this study is to evaluate and prioritize the capacity of a local site to catalyze the development or construction of a new brand image for the entire city (in this work we took the case of the municipalities of Algiers' bay). This objective will be achieved by creating a new model for evaluating and ranking the capacity of the municipalities of the bay of Algiers to promote the brand image and to discover the factors that could hinder the achievement of a positive brand image of Algiers.

The importance of this research paper is to demonstrate the importance of brand image in promoting tourist destinations. This research paper examines the capacity of strategic local sites to promote tourism production in all cities. In addition, this work has potential by providing a model that qualitatively and quantitatively assesses the ability of any destination to build a positive image. In addition, it has the possibility of classifying different destinations according to their brand image. This type of analysis helps decision-makers to prioritize the destinations to be developed in order to obtain a positive image of a chosen destination. It is important to mention that there are various studies that study the brand image of a destination using a theoretical model, citing mainly (Ghodeswar, 2008; Hanzaee & Saeedi, 2011; Qu et al., 2011; Martins, 2015; Shahzeidi et al., 2019).

It is remarkable that all these works have stopped at proposing a model except Shahzeidi et al. (2019) which suggest a qualitative and quantitative model for evaluation and prioritization of tourist sites in Iran. In the case of our work, we treated it differently. On the one hand, the case of Algiers has never been treated before, on the other hand, the authors tried to develop a model (qualitative and quantitative approach) adapted to the specificity of the case of Algiers, in order to prevent problems that could hinder the development of a positive image for Algiers, and to prioritize municipalities that deserve a first intervention to obtain better results in shorter time.

STUDY AREA

Algiers is the political, economic and administrative capital of Algeria. It is a coastal city with the highest population in Algeria with 3,154,791 inhabitants (DPAT, 2015). The bay of Algiers (Figure 1) is composed of nine municipalities (54.43 km²) which are different in surfaces and number of citizens. It is covering 6.73% of Algiers area with approximately 574880 inhabitants, and representing 18.22% of the population of Algiers capital.

MATERIALS AND METHODS

This work stands on the application of a multi-attribute value theory (MAVT), it is based on mathematical representation to evaluate and rank the performance of service or activity to help decision-makers choose between alternative decisions.

It is based on the use of several attributes that are different in their type (qualitative or quantitative) and scale of measurement. It is important to mention that this method has the advantage of replacing quantitative data when they are not available with expert judgments. It's intention is to build a way to associate a real number with each alternative, in order to produce an order of preference on alternatives in line with the value judgments of decision-makers (Ferretti et al., 2014).

Through MAVT, all alternative values could be aggregated into a single value, the alternatives with the best value are the most valued.

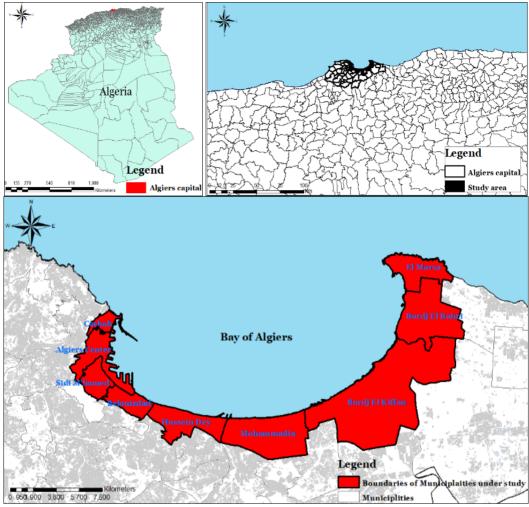


Figure 1. Presentation of the bay of Algiers

This method is carried out by adopting two steps:

- First, setting the appropriate objectives to evaluate. These objectives can be described according to a set of attributes. These attributes are extracted from analyzing the characteristics of the objectives under study, also previous researches in the same field may be a help. According to Jiang and Ji (2002) those attributes may be cooperative or conflicting. Thus, defining the appropriate attributes allows authors to better diagnose the underlined objective and, consequently react properly.
- Second, moving from the abstract concept to the measured attributes is the main objective of this part of the work. "Those attributes may be natural (extracted directly from definition of objective), constructed (they specify a finite number of degrees to which objectives are met), proxy (they are indirectly related to the definition of objective)" (Ferretti et al., 2014, p. 4). Thus, these attributes can be expressed quantitatively or qualitatively. In this work we've used only quantitative attributes. Hence, a detailed explanation of this method is indicated in the work of (Ferretti et al., 2014; Da Cruz & Marques, 2017; Cheniki et al., 2019).

RESULTS

This work present two kinds of findings namely:

A decision-making model

This model was developed based on an analysis of the literature on brand image and applied experiences in different tourist destinations, as well as recommendations from different researchers and authors' proposals to promote the brand image of a destination. Also, it takes in consideration the specificity of destinations located in developing countries, particularly in Algeria. This model was developed on the basis of ten main attributes (natural spaces, natural & architectural heritage, equipment, cultural heritage, events, aesthetic value, environmental value, social media, service quality, ICT services). This model was developed using a top-down approach, it was developed based on the definition of the concept of the image of the city and the brand image of the destination and the objective of this work which is to develop and promote a brand image of a tourist destination and the analysis of the development of the brand image concept of a destination and the possibility of promoting a destination to make it more attractive.

Therefore, the attributes of the model tree (Figure 2) have been elucidated below:

Tangible attributes

- **(A)** Natural spaces: This attribute measures the presence of natural areas in tourist destinations, which can be green spaces, forests, but also blue spaces such as beaches.
- **(B)** Natural & architectural heritage: This attribute is measured on the basis of information provided by UNESCO on the classified heritage and the reports about national heritage provided by (Parquexpo, 2016) and (D.F.C.V, 2019).
- **(C)** Equipment: This attribute takes into consideration all equipment related to the tourism industry such as hotels, mobility, leisure, cultural equipment, telecommunications equipment. This information was obtained using GIS of Algiers, Google Map and the report of (DPTIC, 31-12-2017).

Intangible attributes

- **(A) Cultural Heritage:** This attribute measures cultural activities such as artistic and literary productions and history. The information were extracted from the report of (DCH, 2003).
- **(B)** Events: This attribute measures the different events that occur in each municipality of the bay of Algiers, whether local, national or international.
- **(C) Aesthetic value:** It takes into consideration the visual aspects of the city being evaluated, here in this work, the authors took into account the state of buildings, visual pollution such as the presence of satellite dishes. So, collecting information was based on (ONS, 2011), (DPAT, 2011).
- **(D) Environmental value:** This attribute measures the environmental aspect of each municipality in the bay of Algiers, we have chosen to measure the following variables (polluting facility, water quality, authorized and unauthorized beaches). The needed information were extracted from the report of (DPAT, 2011).
- **(E) Social media:** This attribute measures the popularity of each municipality through social media pages such as Facebook, Twitter and Instagram.
- **(F) Service quality:** This attribute was calculated using customer satisfaction and recommendation ratings based on different sources such as the Google Map indications.
- **(G) ICT services:** It measures the ability of different visitors to connect to the internet. It takes into account the visitor's ability to be integrated into an intelligent atmosphere (it facilitates mobility, discovery of different places to visit and contact with other people). In order to measure mobile internet strength (2G, 3G, and 4G) the authors used "Speed Test" android application for mobile.

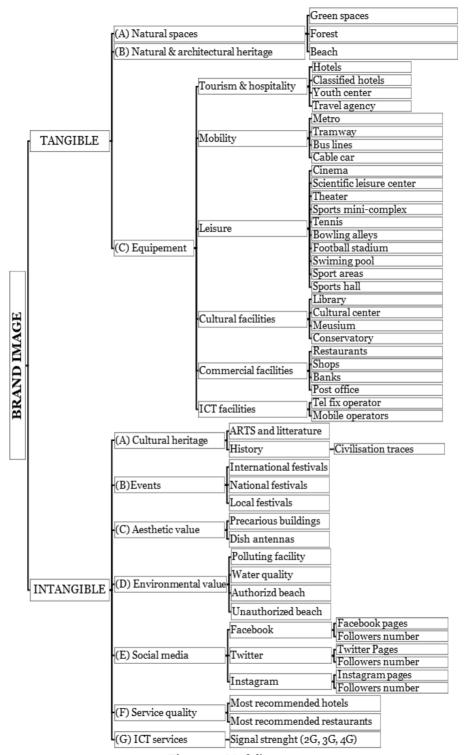


Figure 2. Model' tree structure

Evaluation and prioritization of different municipalities

This part of work was realized using three main steps:

First, standardizing raw values using z-score formula (Equation 1) as it is explained by (Abdi. 2007).

Z-score formula:
$$Z = \frac{Y - MY}{SV}$$
 Equation 1

Second, calculating the weight values of each attribute following AHP method (Saaty, 2002, 2008). So, (Table 1), presented values obtained from calculating weight values of intangible attributes based on expert's evaluation.

Table 1. Standardized matrix (in the case of intangible attributes)

Data Source: Authors, based on experts' evaluation

attributes	A	В	С	D	E	F	G	Weight
A	0,37	0,34	0,46	0,29	0,42	0,42	0,23	0,36
В	0,06	0,06	0,05	0,08	0,05	0,04	0,13	0,07
С	0,18	0,28	0,23	0,25	0,28	0,25	0,20	0,24
D	0,07	0,03	0,04	0,04	0,03	0,03	0,10	0,05
E	0,12	0,17	0,12	0,21	0,14	0,17	0,18	0,16
F	0,07	0,11	0,08	0,12	0,07	0,08	0,15	0,10
G	0,12	0,01	0,03	0,01	0,02	0,01	0,03	0,03

Lambda Max = 7,084

CI = 0,014 < 0.1 (significant) CR = 0,01 < 0.1 (significant)

Table 2. Brand image scores and ranking Source: Authors using the conceived model

Casbah	+1,046736
Algiers Center	-0,01711
Mohammadia	-0,02498
Hussein Dey	-0,03712
Bordj El Kiffan	-0,03945
Bordj El Bahri	-0,05701
Sidi M'hamed	-0,19333
Belouizdad	-0,19458
El Marsa	-0,35445

Third, measuring brand image of each municipality using the designed model and the database of the municipalities of the bay of Algiers.

The key results of this study were presented in two main points:

Rating the ability of municipalities of the bay of Algiers to promote brand image of Algiers

In order to measure and prioritize the capacity of the different municipalities of the bay of Algiers to promote the Algiers brand image, it was necessary to build and use the model (Figure 2). Therefore, the measurement attributes defining this model yielded the following results (Table 2). Casbah was ranked as the best municipality that is already able to develop a brand image in order to place Algiers as an attractive destination followed respectively by Algiers Center, Mohammadia, Hussein Dey, Bordj El Kiffan, Bordj El Bahri, Sidi M'hamed, Belouizdad, El Marsa.

• The Casbah was ranked as the best with higher scores (+1,046736) followed by Algiers Center, Mohammadia, Hussein Dey, Bordj El Kiffan, Bordj El Bahri with average scores (-0,01711, -0,02498, -0,03712, -0,03945, -0,05701). Besides, three other municipalities were ranked as the worst.

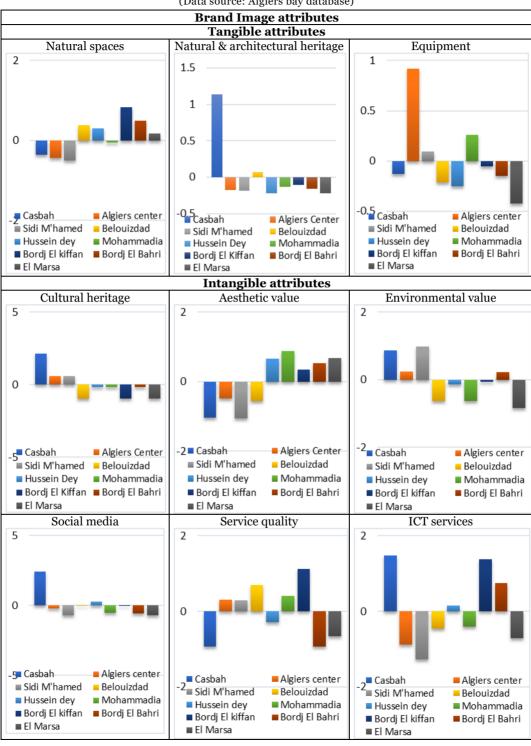


Table 3. Evaluation of brand image using the municipalities of Algiers bay (Data source: Algiers bay database)

• It is important to mention that the Casbah is the only municipality that has obtained a positive overall score by measuring all the attributes of this model.

Difficulties in achieving a brand image in the bay of Algiers

After measuring all attributes associated to the brand image in the nine municipalities of the bay of Algiers, (Table 3) demonstrates different scores obtained from measuring each attribute of that model. The analysis of results obtained and represented in (Table 3) demonstrate that there are two kinds of barriers to the promotion of Algiers bay municipalities to be a brand image. First, barriers related to tangible attributes. Second, those related to intangible attributes.

Tangible attributes

- 4/9 municipalities under study have not succeeded in preserving natural spaces in their urban spaces (Casbah, Algiers Center, Sidi M'hamed, Mohammadia).
- 7/9 municipalities are poor in term of natural and architectural heritage (Algiers Center, Sidi M'hamed, Hussein Dey, Mohammdia, Bordj El Kiffan, Bordj El Bahri and El Marsa).
- 6/9 of municipalities did not have sufficient tourist infrastructure (Casbah, Belouizadad, Hussein Dey, Bordj El Kiffan, Bordj El Bahri and El Marsa).

Intangible attributes

- 6/9 municipalities have failed to preserve cultural heritage in their urban areas (Belouizdad, Hussein Dey, Mohammadia, Bordj El Kiffan, Bordj El Bahri, El Marsa).
- 4/9 of municipalities have failed to promote the aesthetic value of their urban spaces (Casbah, Algiers Center, Sidi M'hamed, Belouizdad).
- 5/9 of municipalities failed to protect their environment from pollution (Belouizdad, Hussein Dey, Mohammadia, Bordj El Kiffan, El Marsa).
- 7/9 municipalities are barely inactive in social media spaces (Algiers Center, Sidi M'hamed, Belouizdad, Mohammadia, Bordj El Kiffan, Bordj El Bahri, El Marsa).
- 4/9 municipalities did not provide a good service to tourists (Casbah, Hussein Dey, Bordj El Bahri, El Marsa).
- 5/9 municipalities failed to provide a good internet services to customers (Algiers Center, Sidi M'hamed, Belouizdad, Mohamadia, El Marsa).

DISCUSSIONS

This paper aimed to assess the capacity of the municipalities of the bay of Algiers to build and promote a brand image and to discover which municipality should be a priority. To achieve this objective, the authors therefore used the Algiers bay database, which played an important role in achieving this objective.

Few works attempt to evaluate a brand image in the case of Algerian cities, in particular, this work aims to prioritize the capacity of local municipalities to promote a brand image for the entire city. It was therefore relevant to build and develop a model to evaluate the branding strategy to be adopted in the case of Algiers. In addition, this model takes the particularity of extracting barriers that could hinder promoting a brand image to attract leisure tourists and businessmen in particular.

In this aim the authors have attempted to develop a model based on the context of an African developing country in order to evaluate the capacity of their cities to adopt brand image strategy by helping decision-makers to make appropriate decisions to solve issues associated with brand image strategy.

The assessment of the capacity of the bay of Algiers to promote a brand image in order to attract tourists gives us the following results:

• Casbah is ranked as the municipality most capable of adopting a brand image strategy for the development of the Algiers brand image (the scores obtained during the measurement were positive). However, the global score was not very far from the average. Besides, the other municipalities had negative results. This means that they were not yet in a position to adopt a branding strategy. The authors tried to assess the capacity of the municipalities of the bay of Algiers to promote a brand image strategy using a designed model. Fortunately, Algiers' bay municipalities' data base played an important role in achieving the underlined objective. However, some attributes weren't used due to a lack of information (i.e. security level in each municipality), or non-existence of this service. This work is following the line of several research works in the field of brand image. However, it is different because it explores and ranks the possibility of promoting a branding strategy and assesses local municipalities to see which municipalities should be given priority in order to promote a positive brand image for the entire city, examining two types of obstacles: tangible and intangible.

The application of that model in the case of the municipalities of the bay of Algiers led the authors discover the following realities:

The results obtained from using the brand image model in the case of the municipalities of the bay of Algiers revealed different values from municipality to another. Only one municipality was considered the best (Casbah), but it has faced many obstacles (i.e. the scarcity of natural spaces, it is noted by (DPAT, 2011) that the Casbah municipality has only 23 green spaces, and one beach that is not allowed, and lack of forests, also, our research revealed that this municipality suffers from the low presence of tourist facilities especially hotels particularly classified ones, service quality is very poor, after consulting the hotels and restaurants most recommended by customers, we discovered that the number of customers who recommend this service in the municipality of the Casbah is very low (basing on Google Map information).

The aesthetic value also has a disadvantage for the development of a brand image in this municipality due mainly to precarious buildings; a study carried out by (CNERU, 2007) revealed that from general analysis of 2189 plots which is composed of 83% of constructed plots and 17% which were empty. Of these parcels built there are 30% that were in advanced degradation, 50% in extreme degradation, 10% were in ruins and the remaining 10% were closed). Therefore, decision-makers must focus on solving these barriers extracted from model in order to promote the brand image in these municipalities; they only have to solve the problems that need to be solved the first. Therefore, the role of decision-makers in the Casbah is to find a way to solve those problems to obtain an attractive brand image for Algiers. Besides, the other municipalities have not been able to promote a brand image for an attractive tourist destination. The authors discovered that the municipalities of the bay of Algiers suffer from tangible and intangible barriers. Hence, in order to build a positive brand image of Algiers it is imperative to solve problems related to brand image strategy in the aim to attract tourists. However, the brand image model has also some limitations.

It is based on numerical values delivered from different disciplines to achieve the underlined objective. Hence, the lack of information is considered as an obstacle to assess the objective under study, particularly cities in African developing countries where it is difficult to obtain information if it already existed. In addition, the same value in all samples led to drop some variables (variables that had the same value in all municipalities were automatically ignored when standardizing, in this study, events were rejected because all municipalities shared the same events).

In addition, the compensatory nature of the model generally delivers global scores, it does not consider the detailed information of each attribute (i.e. low scores were offset by high scores).

This paper will play a significant role in the understanding of brand image strategy in cities in African developing countries; it will be an aid-tool to help decision-makers to make best decisions. This model was constructed on the basis of different attributes that define the concept of brand image in cities in developing countries. So, this model will serve as reference for assessing the brand image of the tourist destination; it could be applied in many other cities, particularly in developing countries that have the same objectives as Algiers.

In order to create a clear brand image in Algiers, we have built this model that vise of attracting mainly leisure tourists and businessmen, this choice is in the same line of the Master plan for development and urban planning of Algiers (Parquexpo, 2016). This model presents the advantage to be applied in the case of other cities around the world because it can be customized by adding or deleting certain attributes and variables that could be associated to the objective under study.

CONCLUSION

This paper examines the capacity of local municipalities to promote a brand image for the city as a whole. To this end, the authors attempted to design a model that assesses and ranks different municipalities based on their ability to develop a brand image.

This work has therefore given decision-makers a decision-making tool that helps them to choose the best option to develop a brand image in Algiers.

This decison-making tool has the advantage to be applied in different cities around world, in a condition, that it must have the same objectives as this model (this model targets leisure tourists and businessmen). Otherwise, it can be modified according to the characteristics of these cities. Also, it is flexible, so, researchers could add or remove attributes depending on the characteristics of the city under study.

In addition, this model could easily be transformed into design model in order to build software or android application in a way that is easy for decision-makers to use, this operation is well explained in the work of (Prasad et al., 2011).

However, this model needs pieces of information to allow for a better diagnosis, and is therefore limited by the information.

It is important to mention that, the two main elements to be taken into account in the development of a brand image of a tourist destination are as follows:

First, it is necessary to target a category of visitors to attract, because the concentration on several categories of users makes this image blurred and difficult to achieve.

Secondly, involve citizens in these kinds of strategies, because the citizen must feel concerned about these kinds of large-scale and important projects.

Indeed, tourism can guarantee citizens quality jobs and ensure a link between local economic activity and tourism.

It should be noted that citizens play an important role in strengthening the brand image of the city of Algiers, especially through social networks such as Facebook and Twitter and Instagram. Indeed, a simple visit to social network sites shows us the great effort made by citizens to transmit a positive image of Algiers to the world.

Many people who contributed through their cameras to show the world how beautiful Algiers is and deserves a chance to be visited.

REFERENCES

- Abdi, H. (2007). Z-scores. Encyclopedia of measurement and statistics, vol.3, p.1055-1058, SAGE Publications, Canada.
- Andreu, L., Bigné, J. E., & Cooper, C. (2000). Projected and Perceived Image of Spain as a Tourist Destination for British Travellers. *Journal of Travel & Tourism Marketing*, vol.9, n°.4, p.47-67, Routledge, United Kingdom.
- Benghadbane, F., & Khreis, S. (2019). The role of tourism marketing in enhancing tourism development: a comparative study between Constantine and Amman cities. *GeoJournal of Tourism and Geosites*, vol.24, n°.1, p.146–160, Oradea University Press, Oradea.
- Buhalis, D. (2000). Marketing the competitive destination of the future. *Tourism management*, vol.21, n°.1, p.97-116, Elsevier BV, United kingdom.
- Caldwell, N., & Freire, J. R. (2004). The differences between branding a country, a region and a city: Applying the Brand Box Model. *Journal of brand management*, vol.12, n°.1, p.50-61, Palgrave Macmillan UK, United Kingdom.
- Cheniki, K., Baziz, A., & Boudiaf, B. (2019). Evaluating Relationship between Mixed-land Use and Land-use Compatibility in Algiers Bay. *International Journal of Environmental and Science Education IJESE*, vol.14, n°.7, p.389-404, Look Academic Publisher, Russia.
- Da Cruz, N. F., & Marques, R. C. (2017). Structuring composite local governance indicators. *Policy Studies*, vol.38, n°.2, p.109-129, Routledge, United Kingdom.
- Echtner, C. M., & Ritchie, J. (2003). The meaning and measurement of destination image:[Reprint of original article published in v. 2, no. 2, 1991: 2-12.]. *Journal of tourism studies*, vol.14, no.1, p.37, Townsville, Qld.: National Centre for Studies in Travel and Tourism, James Cook University of North Queensland, 1990-2005, Australia.
- Ferretti, V., Bottero, M., & Mondini, G. (2014). Decision making and cultural heritage: An application of the Multi-Attribute Value Theory for the reuse of historical buildings. *Journal of Cultural Heritage*, vol.15, n°.6, p.644-655, Elsevier Masson SAS, France.
- Ghodeswar, B. M. (2008). Building brand identity in competitive markets: a conceptual model. *Journal of product brand management*, vol.17, n°.1, p.4-12, Emerald Group Publishing Limited, United Kingdom.
- Gursoy, D., & McCleary, K. W. (2004). An Integrative Model of Tourists' Information Search Behavior. *Annals of tourism research*, vol.31, n°.2, p.353-373, Elsevier Masson, France.
- Haarhoff, R., & De Klerk, B. (2019). Destination South Africa: analysis of destination awareness and image by international visitors. *GeoJournal of Tourism and Geosites*, vol.24, n°.1, p.201–211, Oradea University Press, Oradea.
- Hanzaee, K. H., & Saeedi, H. (2011). A model of destination branding for Isfahan city: Integrating the concepts of the branding and destination image. *Interdisciplinary Journal of Research in Business*, vol.1, n°.4, p.12-28, Center for Research Promotion, United kingdom.
- Harrison-Walker, L. J. (2011). Strategic positioning of nations as brands. *Journal of International Business Research*, vol.10, n°.2, p.135, The DreamCatchers Group, LLC, USA.
- Iordache, C. M., Ciochină, I., & Marin, C. (2014). Brand positioning –Tourism strategy support. *Annals Economic Science Series*, vol.20, p.194-187, Universității "Tibiscus" din Timișoara, Romania.
- Jiang, R., & Ji, P. (2002). Age replacement policy: a multi-attribute value model. *Reliability Engineering & System Safety*, vol.76, n°.3, p.311-318, Elsevier BV, Netherlands
- Kazemi, M., Hesam, M., Rad, M. S., & Cheraghi, M. (2018). The evaluation of tourism destination brand equity from the female tourist's perspectives (study of 16 cities in Iran). *GeoJournal of Tourism & Geosites*, vol.21, n°.1, Oradea University Press, Oradea.
- Martins, M. (2015). The tourist imagery, the destination image and the brand image. *Journal of Tourism Hospitality Management*, vol.3, n°.2, p.1-14, Elsevier BV, United Kingdom.
- Merunka, D., & Ouattara, A. (2006). La ville en tant que marque: métaphore ou réalité. *Cahier de recherche*, p.769, Cahier de recherche, CEROG, Aix en provence.
- Murphy, L., Moscardo, G., & Benckendorff, P. (2007). Using brand personality to differentiate regional tourism destinations. *Journal of Travel Research*, vol.46, n°.1, p.5-14, SAGE Publications, United States
- Peel, D., & Lloyd, G. (2008). New communicative challenges: Dundee, place branding and the reconstruction of a city image. *Town Planning Review*, vol.79, n°.5, p.507-532, Liverpool University Press, United Kingdom
- Prasad, L., Rathore, N. P. S., Patidar, S., & Bhaduria, S. (2011). Transformation of analysis model to design model. 2010 International Conference on E-business, Management and Economics IPEDR, vol.3, p.213-217, IACSIT Press, Hong kong.

- Qu, H., Kim, L. H., & Im, H. H. (2011). A model of destination branding: Integrating the concepts of the branding and destination image. *Tourism management*, vol.32, n°.3, p.465-476, Butterworth-Heinemann, United Kingdom.
- Ritchie, J., & Ritchie, J. (1998). The branding of tourism destinations. *Annual Congress of International Association of Scientific Experts in Tourism*, vol.11, p.1-31, Citeseer, Morroco.
- Saaty, T. L. (2002). Decision making with the analytic hierarchy process. *Scientia Iranica*, vol.9, n°.3, p.215-229, Sharif University of Technology, Iran.
- Saaty, T. L. (2008). Decision making with the analytic hierarchy process. *International journal of services sciences*, vol.1, n°.1, p.83-98, Inderscience publishers, USA.
- Schwaighofer, V. (2014). Image and destination brands. *Tourist Destination Images and Local Culture: Using the Example of the United Arab Emirates*, p.7-15, Springer Fachmedien Wiesbaden, Wiesbaden (Austria).
- Shahzeidi, S., Pourkhosravani, M., & Mahmoudi Mohammad Abadi, T. (2019). Evaluation and prioritization of tourism sites in Koohbanan city in order to develop tourism in Iran. *GeoJournal of Tourism and Geosites*, vol.25, n°.2, p.334–348, Oradea University Press, Oradea.
- Vladi, E. (2014). Tourism development Strategies, SWOT analysis and improvement of Albania's image. *European Journal of Sustainable Development*, vol.3, n°.1, p.167, Acad Organisation Environmental Engineering & Sustainable Development, Romania
- *** CNERU. (2007). Permanent plan for the safeguarding and enhancement of the safeguarding sector of the Casbah of Algiers Algiers: National center for studies and applied research in urban planning, p.1-88.
- *** D.F.C.V. (2019). Natural Heritage. Algiers: Wilaya of Algiers, p.1-6.
- *** DCH. (2003). Algérie : liste des sites et monuments classés (Algeria: list of classified sites and monuments).

 Algiers: Algerian Ministry of Communication and Culture, p.1-13.
- *** DPAT. (2011). Statistical yearbook of the wilaya of Algiers (Annuaire Statistique de la Wilaya d'Alger).

 Algiers: wilaya of Algiers, p.1-59.
- *** DPAT. (2015). La wilaya d'Alger par les chiffres (The wilaya of Algiers by the numbers). Algiers: Wilaya of Algiers, p.1-16.
- *** DPTIC. (31-12-2017). *Telecommunication*. Algiers: The ministry of post, telecommunications, technologies and digital technology, p.1-2.
- *** ONS. (2011). The urban frame RGPH 2008: The main results of the exhaustive exploitation. Algiers: National office of statistics, p.213.
- *** Parquexpo. (2016). Plan directeur d'aménagement et d'urbanisme de la wilaya d'Alger (Master plan of Algiers). Algiers: Department of urban planning and construction p.1-170.
- *** UNWTO. (2018). UNWTO World Tourism Barometer and Statistical Annex, January 2019. Spain, p.1-14.

Submitted: Revised: Accepted and published online 01.08.2019 03.01.2020 06.01.2020

LOCAL RESIDENTS' PARTICIPATION IN TOURISM AT A WORLD HERITAGE SITE AND LIMITATIONS: A CASE OF AKSU-JABAGLY NATURAL WORLD HERITAGE SITE, KAZAKHSTAN

Imanaly AKBAR

State Key Laboratory of Desert and Oasis Ecology, Xinjiang Institute of Ecology and Geography, Chinese Academy of Sciences, Urumqi 830011, China University of Chinese Academy of Sciences, Beijing 100049, China, e-mail: yimanaili akebaier@yahoo.com

Zhaoping YANG*

State Key Laboratory of Desert and Oasis Ecology, Xinjiang Institute of Ecology and Geography, Chinese Academy of Sciences, Urumqi 830011, China, e-mail: yangzp@ms.xjb.ac.cn

Ordenbek MAZBAYEV

L.N. Gumilyov Eurasian National University, St. Satbayeva 2, Almaty district, Nur-Sultan 010000, Kazakhstan, e-mail: ordenbek@mail.ru

Aday SEKEN

L.N. Gumilyov Eurasian National University, St. Satbayeva 2, Almaty district, Nur-Sultan 010000, Kazakhstan, e-mail: adai seken@mail.ru

Madeleine UDAHOGORA

State Key Laboratory of Desert and Oasis Ecology, Xinjiang Institute of Ecology and Geography, Chinese Academy of Sciences, Urumqi 830011, China University of Chinese Academy of Sciences, Beijing 100049, China, e-mail: udahogoram@gmail.com

Citation: Akbar, I., Yang, Z., Mazbayev, O., Seken, A. & Udahogora, M. (2020). LOCAL RESIDENTS' PARTICIPATION IN TOURISM AT A WORLD HERITAGE SITE AND LIMITATIONS: AKSU-JABAGLY STATE NATURE RESERVE, WESTERN TIAN-SHAN, KAZAKHSTAN. GeoJournal of Tourism and Geosites, 28(1), 35–51. https://doi.org/10.30892/gtg.28103-450

Abstract: One of the core elements of tourism development is considered to encourage local communities' participation in World Heritage (WH) tourism because of its vital role in the sustainability. Albeit more and more scholars have attached much importance on researching developing tourism fields of the country, unfortunately, very few researches have been undertaken to identify and analyze major issues in natural world heritage tourism in Kazakhstan, including the management structure, financial resources, tourism impacts, policy making and local community participation. In this context, there is a need to explore what level such communities can participate in the tourism at World Heritage sites (WHS) where tensions between preservation and tourism are notable. The main purpose of this article is to indicate the local residents' participation in heritage tourism and analyze

_

^{*} Corresponding author

Imanaly AKBAR, Zhaoping YANG, Ordenbek MAZBAYEV, Aday SEKEN, Madeleine UDAHOGORA

the impacting factors on their participation. In our research, we conducted a questionnaire survey of 222 representative households from two neighboring settlements of Aksu-Jabagly natural world heritage site. The results of the research show that the inhabitants do not actively participate in the development of tourism. The results also reveal that few travelers' coming to this tourist destination and lack of preferential policies were the primary restrictions for local residents' participation in tourism.

Key words: Residents' participation, tourism development, world heritage, Aksu-Jabagly nature reserve, Kazakhstan, limitation, sustainable tourism

* * * * * *

INTRODUCTION

Tourism is considered to be one of the most active and important industry in many countries and plays a vital role by contributing to economy of many developing countries. In addition, the tourism industry has provided many opportunities for governments to live in the global economic space, thus it has been stimulating the development of urban and rural economy (UNWTO, 2013). Tourism has become a major strategy for communities to achieve economic, social and ecological benefits, which can promote community development and poverty reduction (Binns & Nel, 2002). With the fast development of tourism, the role of the community in tourism development has increased, and in order to balance the status of communities and other related stakeholders in the development of tourism, it is important to increase the participation of community residents in tourism development (Inskeep, 1991). Most experts agree with the idea that local residents' involvement in tourism planning in the heritage area adjacent to their neighborhood has many benefits, such as get achieving sustainability and increasing local economy. The participation of local people in the conservation of World Heritage Site (WHS) and the tourism planning there will help improve the quality of life of local residents and make the heritage protection plan more sustainable (Friedman et al., 2009, Sirisrisak, 2009). In addition, community participation in tourism of local WHS increases residents' feeling of belonging, promotes the development of social networks, and attaches great importance to the value of local district (McCool & Martin, 1994; Gursoy et al., 2002; Tosun, 2002). According to Mann (2000), community involvement can make distributing benefits and costs more efficient and more equitable, and more importantly, help people's self-development and knowledge sharing. Local communities play a significant role in reviving and sustaining WHSs, and thus, participation of local community in tourism activities at the WHS is essential for the sustainable tourism development (Rasoolimanesh & Jaafar, 2016). Community participation in WHS management can address conflicts and assist in clarifying the concept of heritage among community members (Sirisrisak, 2009; Su & Wall, 2014).

Several studies have attested the role of public participation in sustaining heritage conservation programs (Nicholas et al., 2009; Yung & Chan, 2013). Local residents' participation in tourism activities at the heritage sites contributes to their economic development, and improves their overall quality of life (Sirisrisak, 2009). Community participation in tourism development at the WHSs is significant and necessary for improving people's welfare and conserving heritage area effectively. Therefore, involvement of local community in heritage tourism has been valued as a key development opportunity for local residents there. Although their abundant local knowledge and experience of the heritage conservation are admitted generally, local

residents, who are affected by heritage tourism mostly, are always neglected (Tosun, 2000) and as the 'owner' and custodian of heritage, local communities rarely have full control over the site and planning of tourism development (Scheyvens, 2003). At the WHSs, preservation and development work is implemented by local people and international authorities. Thus, involvement of local communities in heritage tourism is essential (Timothy & Tosun, 2003) to reduce negative impacts and ensure fair distribution of tourism benefits. At the same time, there are a number of obstacles of local residents' participation in tourism in least developed and some developing countries. Scheyvens (2003) claimed that albeit its importance, community involvement is constrained by a number of factors, such as residents' lack of knowledge, confidence, time, and interest.

Sometimes, some stakeholder groups may even become hostile, sabotaging, or politically manipulative. The importance of community participation in natural resource management and the tourism development have long been debated in western academic and planning circles (Agrawal, 2000; Archabald & Naughton-Treves, 2001; Brohman, 1996; Inskeep, 1991; Prentice, 1993; Ryan & Montgomery, 1994; Simmons, 1994; Stræde & Helles, 2000). However, due to economic, socio-cultural and political conditions there are a number of differences between western societies and countries in Asia. Some limits described by Tosun (2000) in terms of barriers to community participation in developing countries can be found in Kazakhstan, especially in the centralization of public administration. On the one hand, 'Residents and other stakeholders' participation in decision-making has not been recognized as important in planning documents, nor has it been addressed in practice' (Timothy, 1999). On the other hand, most of the residents are reluctant to participate in regional tourism decision-making and management.

Simply say, for various reasons discussed by Gu and Ryan (2009), the application of principles of stakeholder participation to tourism planning in developing countries are difficult, although an objective of such planning is commonly the development of benefits for local communities. Additionally, except for issues of administrative structures, other issues also exist in the tourism development in the developing countries like Kazakhstan. The urgent one is the relatively early stages of tourism development. This means there is a lack of experience on the part of operating in the tourism industry. For residents, this lack of knowledge can be further handicapped if there are varying degrees of education level that indicates not all residents have the possibility to access the necessary requirements of full involvement in planning process. Today Kazakhstan tourism planning is heavily oriented towards the development of cultural tourism, and nature based tourism just around developed big cities, such as Nur-Sultan and Almaty. Developing community based tourism in marginalized rural areas are not perceived as important, at where having advantages of developing many types of tourism in one time, for example, ecotourism, equestrian tourism, ethnic tourism, agritourism and rural tourism. And the local residents are the most valuable human resources for tourism development. This study attempts to analyze this phenomenon given the local importance of residents in that region.

Study area overview: Aksu-Jabagly State Nature Reserve and Jabagly village

Western Tien-Shan is a transnational site, one of the largest mountain ranges in the world. It spans over three countries: Kazakhstan, Kyrgyzstan and Uzbekistan. On 17 July 2016, during the World Heritage Committee's 40th session in Istanbul, Turkey, it was inscribed on UNESCO's World Heritage List to protect its biodiversity. Western Tien-Shan covers 467,550 hectare (4675.5 km²) at an altitude ranging from 700 to 4,503 m. It spans over three Important Bird and Biodiversity Areas (IBBAs): The Aksu-Jabagly State Nature Reserve, the Kenshektau Mountains and the Bashkyzylsay Unit of the Chatkal

Mountains Biosphere Reserve. This is Kazakhstan's second natural site to be declared a World Heritage Site, while it is Kyrgyzstan's and Uzbekistan's first. The Western Tien-Shan trans-boundary serial nomination, lying within the Republics of Kazakhstan, Kyrgyzstan and Uzbekistan, consists of 13 component parts covering a combined area of 528,178 ha plus 102,916 ha of buffer zones (whc.unesco.org 2016).



Figure 1. Sketch of main parts of Western Tien-Shan natural world heritage site

The Aksu-Jabagly State Nature Rreserve, established in 1926. It is located in the western extremity of Talasski Alatau ridge and ranges at elevations from 1100m to 4238m (Sayram Peak). There are two main rivers in this nature reserve called Aksu and Jabagly respectively. Aksu river length is 120 km and the Jabagly River is twice shorter. The rivers take their sources from heavy ice and snow at mountain peak. There are 114 ice hills in the reserve. There are many lakes in the territory of the reserve, all of which are situated at a very high altitude. The reserve is also abundant with mineral waters. As one of the main protected zones of Western Tian-Shan natural world heritage site, Aksu-Jabagly nature reserve features diverse landscapes, which are home to exceptionally rich biodiversity. It is of global importance, as an origin place, for a number of cultivated fruit crops and is home to a great diversity of forest types and unique plant community associations. Aksu-Jabagly nature reserve is home for more than 1,279 recorded species of flora, 57 of them registered in the Red Book of republic Kazakhstan including the Greig's Tulip (the symbol of the reserve). There are 267 species of birds in the territory, 52 mammals, 11 reptiles, and 3 species of amphibians. There are also some endangered birds and animals in the nature reserve, such as Egyptian vulture, eagles, black stork, brown bear, Arkhar, paradise flycatcher, snow leopard, Central Asian lynx etc. There are 2124 species of insects, more than 63 species of mussels, 64 species of algae, 235 mushrooms and 1312 species of plants. The bush contains 62 types (Kazakhstan National Committee, 2014).

Aksu-Jabagly State Nature Reserve consists of 3 zones, lies in Tulkibas district of Turkistan region, Jualy district of Jambyl region of the Republic of Kazakhstan. Main part of nature reserve (N42 16 34, E70 40 27) has 131,704 ha property zone and 25,800 ha buffer zone. Other two zones are Karabastau paleontological area (N42 56 24, E69 54 54) and Aulie paleontological area (N42 54 18, E70 00 00) with only property zones, 100 ha and 130 ha respectively (whc.unesco.org 2016).

Jabagly village - administrative unit of Tulkibas district. It includes the Jabagly, Abaiyl and Russian Railway 115 settlement. The total population of the Jabagly village is 3048 people, including 2401 people of Jabagly settlement, 545 people of Abaiyl settlement and 102 people of settlement Russian Railway 115. The center of the village is Jabagly settlement. And Jabagly settlement is 17 km southeast to the Turar Ryskulov town (former Vannovka), administrative center of Tulkibas district. Jabagly settlement has a public transport connection with Turar Ryskulov town and Shymkent city (passport of Jabagly village, 2019). Lying adjacent to the West Tien Shan Mountains, Jabagly settlement is the gateway to Aksu-Jabagly State Natural Reserve. The main economic activities are agriculture, plant growing and cattle breeding. 59km area of Tulkibas is located along Western Europe-Western China (WE-WC) Highway, and it leads convenience to travel to Jabagly village by car for visitors.

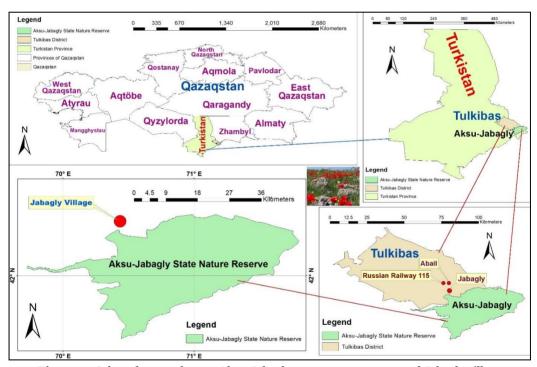


Figure 2. Selected research area, Aksu-Jabagly state nature reserve and Jabagly village

Aksu-Jabagly natural world heritage tourism

The implementation of the world heritage structure, especially in rural areas, has achieved global impact because they become a venue characterized by a global vision and traditional rural elements. However, construction always increases local and regional development possibilities since conservation measures tend to stimulate tourism (Butler

et al., 1998). WH designation specifies challenges involving stakeholders at all levels of society, but the combination of natural and landscape conservation and the simultaneous increased potentials in tourism development may be particularly prone to occur conflicting views and interests (Syels, 2015). In a globalized, multidimensional world, WH stakeholders are numerous and heterogeneous. However, the most significant daily relationship in WHSs is still between local residents and tourists. The common apparent impact of WH tourism, together with its effects as perceived by locals, is both vital for a balanced and sustainable development. Tourism relies mostly on the benefits of the local residents and therefore their support and participation are significant for its sustainability. However, reshaping local heritage into a fully viable tourism environment, local communities may also begin to influence and ultimately jeopardize the WH values (Nicholas et al., 2009). Therefore, developing tourism at a world heritage site, it is necessary to consider its characteristics, for example developing tourism in ecologically sensitive protected areas the best strategy is to organize tourism activities at the buffer zone of the protected areas. In this respect, our research area, Aksu-Jabagly biodiversity conservation site can be one of the best examples. Because there in accordance with the "Specially Protected Natural Territories" law of the Republic of Kazakhstan, areas, which are not included valuable ecological systems, are allowed to organize ecological excursions under the control of authorities, as well as, some trails and regular tourist routes are created by the licensed tourism sectors (Kazakhstan National Committee 2014).



Figure 3. Two selected settlements of Jabagly village and Aksu-Jabagly world heritage site (Source: aksu-jabagly.kz and Imanaly AKBAR)

On the territory of Aksu-Jabagly state nature reserve, there are currently three ecological paths and seven excursion routes, which are equipped with information boards, signposts, shelters aimed to study and observe the flora, fauna and landscape. Ecological paths created in natural areas conservation for development of ecotourism and environmental education for population and tourists are intended for general acquaintance with the nature of protected areas and for educational purposes.

Before starting a route, each group or individual tourist is instructed, the rules of conduct on the route are issued and required to sign in a safety diary. Guides lead a tour of the trail and watch out the group. If necessary, unplanned stops are made. Designed trails and routes are classified: 1) by appointment: scientific, educational and tourist-excursion; 2) by type of movement: pedestrian, horse and car. Tourists are divided into groups, hiking group must be no more than 10 people and equestrian group must be no more than 6 people, every group should be accompanied by tour guide. And there is strict quota for the numbers of tourists to visit the nature reserve every day.

The head of environmental education and tourism department of Aksu-Jabagly state nature reserve, Zhumanova Elmira Perdebaevna said that the nature reserve receive four groups every day (Mynzhasarhyzy, 2018). It means very few number of tourists are allowed to enter daily the core zones of the nature reserve. When we observed our research area, we found that although national and local authorities have paid very close attention to protect the core zones, they failed to develop tourism in the buffer zone of the protected area, instead permitting other industries, such as animal husbandry and farming, which lead threats to the ecological protection.

MATERIALS AND METHODS

A mixed methods research design was employed, integrating quantitative and qualitative methods in data collection and analysis. Questionnaire surveys and key informant interviews were used as the major primary data collection methods. Government documents and tourism statistics facilitated the effective execution of the surveys and interviews and complemented results for primary data analysis.

Representatives both from Jabagly settlement and Abaiyl settlement residents were interviewed, at the same time, in order to understand local residents' participation level comprehensively. Director of the scientific research department of Aksu-Jabagly state nature reserve office, the mayor of the Jabagly village and the director of the travel company "Zhana-Talap" in Shymkent city were also interviewed with some specific questions concerning the influential factors of local residents' passive participation in tourism activities. Face-to-face interviews with aforementioned experts and all questionnaire surveys were conducted in three weeks. Interview and survey questions include local residents' supports for and participation in tourism development at the Aksu-Jabagly natural world heritage site, and the main reasons why local residents do not participate in tourism development.

The questionnaire to all relevant respondents was designed with three major sections. Section 1 was designed by ticking " $\sqrt{}$ " on the corresponding option to acquire basic information about their gender, age, ethnic and education level. Section 2 was designed with some multiple choice questions indicating annual household income, current engaging industry, number of people who engage in tourism in their family, tourism income rate in their annual household income and the most suitable industry for buffer zone of Aksu-Jabagly Nature Reserve to understand local residents' economic situation and participation level in tourism generally, and obtain respondents' opinions on industries which have more advantages to develop at the buffer zone of the heritage site in the future. Section 3 evaluates respondents' perceptions of statements regarding local residents' supports for and participation in tourism development at the Aksu-Jabagly natural world heritage site and the main reasons why local residents do not participate in tourism development. Question items in the section 3 encouraged respondents to answer on a 5-point Likert scale questions with 1 (fully agree), 2 (agree), 3 (neutral), 4 (disagree) and 5 (fully disagree). Data collection occurred over a 20-day

period from 2nd of March to 22th of March, 2019, with respondents selected from Jabagly settlement (166 people out of 1571 economically active population) and Abaiyl settlement (56 people out of 275 economically active population).

We went to the aforementioned two settlements and issued our questionnaire to respondents personally. Using five point Likert-scale options, the respondents were asked for their opinion on total 14 questions, including 7 statements regarding the local residents' supports for and participation in tourism development at the Aksu-Jabagly natural world heritage site and left 7 statements are about the main reasons why local residents do not participate in tourism development by indicating 1 (fully agree), 2 (agree), 3 (neutral), 4 (disagree) and 5 (fully disagree).

RESULTS DISCUSSIONS

Table 1 shows that of the 222 respondents, 166 were from Jabagly and 56 were Abaiyl settlements, According to Kazakh national traditions, specially, in small rural areas men usually take care of earning for living and women take care of housework and children, so we interviewed approximately two times more men than women with 66.3% and 67.9% from Jabagly and Abaiyl settlements, respectively. The respondents were categorized into three age groups: young age group (ages between 18-34) with 60 respondents from Jabagly and 22 respondents from Abaily, middle age group (35-54) with 88 respondents from Jabagly and 27 respondents from Abaily, and elder group (≥55) with 18 respondents from Jabagly and 7 respondents from Abaily. Most of the respondents were Kazakh ethnicity with 152 and 52 people from Jabagly and Abaiyl settlements, respectively. At the same time, questionnaires were answered by 8 Russian ethnic people and 6 other ethnic groups in Jabagly settlement and 2 Russian and 2 other ethnic groups in Abaiyl settlement. Most of the respondents had secondary to middle (school or college) education level with 142 respondents from Jabagly and 50 from Abaiyl while only a few respondents had a high (university or above) education level with 24 respondents from Jabagly and 6 respondents from Abaiyl.

Jabagly Village Local Residents' Participation in WH Tourism Development

Kazakhstan, with its rich cultural and natural heritage resources, joined the World Heritage Convention after 2000. The Minister of Foreign Affairs of Kazakhstan, Mr. Kaiarat Abdrakhmanov, affirmed the importance of UNESCO for peace, security and sustainable development during a meeting with Director-General Irina Bokova on 29 March 2017 (UNESCO 2017). The positive impact of tourism on community can encourage local residents to support the development of tourism, and its negative impacts have ceased their favor for tourism development (Sharpley, 2014). In addition, the positive impacts of tourism development on community contributes to local residents' participation in sustainable tourism activities (Nicholas et al., 2009).

And the diversity of residents' perception by tourism development influences the level of residents' support for and participation in tourism development (Easterling, 2005). Tosun (2000) analyzed the pattern of community participation in tourism and its characteristics with reference to tourism development and argued that higher-levels community participation were more conducive to the evolution of sustainable tourism development. He contended that passive participation meant an elementary-level involvement in tourism development and its object was as much to prevent a too hurried residents' intervention into tourism development by providing residents with longer term sustainable participation opportunities. Thus, with Jabagly village and the adjacent Aksu-Jabagly state nature reserve as a study area, this research examines local residents'

support and participation in tourism development at the Aksu-Jabagly natural world heritage site and the main reasons why they do not participate in tourism activities in their hometown through assessing the perceptions of local residents from two settlements of Jabagly village lying next to the natural world heritage site.

Table 1. Profile of respondents

Characteristics	Jabagly (n=166)		Abaiyl (n=56)	
Characteristics	Frequency	Percentage	Frequency	Percentage
SECTION 1				
Gender:				
Male	110	66.3	38	67.9
Female	56	33.7	18	32.1
Age (years):				
Young (18–34)	60	36.2	22	39.3
Middle age (35–54)	88	53	27	48.2
Elder (≥55)	18	10.8	7	12.5
Ethnicity:				
Kazakh	152	91.6	52	92.8
Russian	8	4.8	2	3.6
Other	6	3.6	2	3.6
Education:		_		_
Middle (school or college)	142	85.5	50	89.3
High (university or above)	24	14.5	6	10.7
SECTION 2				
Annual household income:				
(KZ Tenge, 1\$ = 375 tenge)				
Below 500,000	11	6.6	6	10.7
500,000 –1 million	82	49.4	30	53.6
1 million −1.5 million	60	36.2	17	30.4
1.5 million – and above	13	7.8	3	5 ⋅3
Current engaging industry:				_
Tourism	17	10.2	2	3.6
Animal husbandry	81	48.8	11	19.6
Farming	39	23.6	7	12.5
Business	18	10.8	6	10.7
Other industry	11	6.6	30	53.6
Number of people who engage				
in tourism in your family:		00.0	_,	06.4
o people	149	89.8	54	96.4
1-2 people	13	7.8	2	3.6
3 and above	4	2.4	0	0
Tourism income rate in your				
nnual household income:	4.0	00.0	- .	06.
0 %	149	89.8	54	96.4
1-20%	12	7.2	2	3.6
21-60%	4	2.4	0	0
61-100%	1	0.6	0	0
Suitable industry for the buffer zone				
of Aksu-Jabagly Nature Reserve:	87	52.4	a Q	67.9
Tourism	,	· .	38 8	, ,
Animal husbandry	45 27	27.1	8 6	14.3
Farming	27 7	16.3		10.7
Forestry	7	4.2	4	7.1

Section 2 of table 1 showed Jabagly settlement had a slightly better economic background than Abaiyl settlement according to their annual household income comparison. Because population of annual household income of "below 500,000" and "500,000 -1 million" in Jabagly settlement with 6.6% and 49.4% were less than Abaiyl settlement's 10.7% and 53.6%. And population of annual household income of "1 million -1.5 million" and "1.5 million - and above" in Jabagly settlement with 36.2% and 7.8% were more than Abaiyl settlement's 30.4.7% and 5.3%. As far as their current engaging industries are concerned, there are more residents in Jabagly settlement (10.2%) engaged in tourism than in Abaiyl settlements (2%). And most of the population of Jabagly settlement engaged in animal husbandry and farming, with 48.8% and 23.6% respectively while more than half of the total population in Abaiyl settlement engaged in other industry with 53.6%. In this study Section 2 of table 1 also showed that 89.8% of Jabagly people and 96.4% of Abaiyl residents' jobs had nothing to do with tourism industry. 1-2 people's participation in tourism was 7.8% in Jabagly settlement and 3.6% in Abaiyl settlement while 3 and above people' participation in tourism was 2.4% in Jabagly and o% in Abaiyl. Comparing the tourism income rate in household income, families from Jabagly, with tourism income rate of 1-20%, 21-60% and 61-100%, were 7.2%, 2.4% and 0.6% respectively, however, there is only families with tourism income rate of 1-20% in Abaiyl, accounting for 3.6%. From above statistical analysis we can easily conclude that both settlements had a weak involvement in tourism at the heritage site, however, residents from Jabagly settlement had slightly a greater number of people participating and tourism income rate than Abaivl settlement. Here we preliminary say that the participation level of local residents in Jabagly settlement is higher than Abaiyl settlement. And the reasons which caused hese differences will be analyzed in the next section. In terms of multiple choice question of the most suitable industry for the buffer zone of Aksu-Jabagly Nature Reserve, both settlements' residents thought tourism industry was more appropriate than others, with 52.4% and 67.9% support respectively. Although they have a very low participation rate in the tourism business at the area of nature reserve, most residents support for developing tourism industry rather than animal husbandry, farming and forestry in the buffer zone of world heritage site.

The two settlements neighboring WHSs have apparently similar historical background. however, there are differences in the participation of communities in tourism activities on the heritage site, and the industries they have engaged are also various. How do local people evaluate the status of local residents' participation in tourism development at the WHS? The respondents' answers are expressions of their perceptions and therefore subject to interpretation. Given the result from the empirical data, the dissimilarity of opinions between statements regarding local residents' supports for and participation in tourism development at the Aksu-Jabagly natural world heritage site and the main reasons why local residents do not participate in tourism development is distinguishable, but not so clearly. Table 2 showed a five-point Likert-scale choice of selected questionnaire statement groups (SA and SB).

First, as far as statements of group A are concerned, majority of respondents from both Jabagly and Abaiyl settlements (SA1: mean=1.67 and mean=1.96 respectively and SA2: mean=1.69 and mean=1.91 respectively) supported the idea of conservation of nature reserve ecology through developing tourism at the heritage site and improving residents' wellbeing through developing tourism in the buffer zone of the nature reserve. One of the most essential elements of realizing sustainable tourism development at susceptible and vulnerable natures like Aksu-Jabagly natural world heritage site is the highly participation of local residents in the ecological protection of the heritage site.

Local Residents' Participation in Tourism at a World Heritage Site and Limitations: A case of Aksu-Jabagly Natural World Heritage Site, Kazakhstan

Table 2. Statements from Jabagly and Abaiyl settlements' participation in tourism and limitations survey

Statements Jabagly settlement (n = 166) Abaiyl settlement (n = 56)												
A. Local residents' supports	Fully						Fully	Ι ΄			<u> </u>	
and participation in tourism	agree	Agree	Neutral	Disagree	Fully disagree	Moon		Agree	Neutral	Disagree	Fully disagree	
development at the Aksu-	(%)	(%)	(%)	(%)	(%)	Mean	(%)	(%)	(%)	(%)	(%)	Mean
Jabagly world heritage site	(70)				(70)		(70)				(70)	
1. I support the strategy of												
conservation of nature reserve	57 Q	24.2	12.0	4.8	1.2	1 67	53.6	25.0	3.6	7.1	10.7	1.96
ecology through developing	3/.0	24.2	12.0	4.0	1,2	1.0/	55.0	25.0	3.0	/•1	10./	1.90
tourism at the heritage site												
2. I support the strategy												
of improving residents'												
wellbeing through developing	54.2	27.7	13.9	3.0	1.2	1.69	55.3	21.4	5.4	12.5	5.4	1.91
tourism in the buffer zone				_		_				_		_
of the nature reserve												
3. I participate in												
ecological protection	18.1	28.3	8.4	28.3	16.9	2.98	1.8	5.4	8.9	26.5	55.4	4.30
works of the nature reserve	1011	_=0.0	0.4	_0.5	20.9	,_	1.0	J-T	0.9	_0.5	55-4	4.0
4. I participate in receiving	†											
tourists in this tourism	14.6	23.1	20.2	24.3	15.8	3.04	1.8	12.5	14.3	17.8	51.8	4.02
destination	14.0	23.1	20.2	24 .3	13.0	3.04	1.0	12.0	14.0	17.0	51.0	4.02
5. I participate in tourism												
research works in this	7.2	15.1	7.8	28.3	41.6	3.82	3.6	10.7	7.1	20.2	41.1	4.07
tourism destination	/.2	19.1	7.0	20.3	41.0	3.62	3.0	10./	/•1	39.3	41.1	4.07
6. I participate in planning	6.6	16.0	-0	04=	440	0 00	0.6		- 4	01.4	60 =	4.00
of tourism activities in	6.6	16.9	7.8	24.7	44.0	3.83	3.0	7.1	5.4	21.4	62.5	4.32
this tourism destination												
7. I participate in organizing												
and managing tourism	12.0	18.1	6.0	23.5	40.4	3.62	3.6	10.7	7.1	39.3	41.1	4.07
activities in this tourism				0.0				,	,	0,0	•	. ,
destination												
B. The main reasons why local	Fully	A	Mountmal	Diagomag	Fully	Moon	Fully	A	Mautual	Disagree	Fully	Mean
residents do not participate in tourism industry:	agree	Agree	Neutrai	Disagree	disagree	Mean	agree	Agree	Neutrai	Disagree	disagree	wiean
Shortage of necessary funds	30.2	42.2	12.0	8.4	7.2	2.20	39.3	35.6	3.6	16.1	5.4	2.13
2. Insufficient labor force		39.2	6.0	22.3	8.4		28.6		8.9	14.3	17.8	2.63
3. The residential area is	_ T-2	<i>57.</i>			~•¬			5-4		- 170	=,.0	
located far from the	3.0	4.8	4.0	9.6	78.4	4.55	Qn 1	E 4	1.8	71	3.6	1 45
tourist destination	ა.0	4.0	4.2	9.0	/0.4	4.99	02.1	5.4	1.0	7.1	ა.0	1.45
4. There are very few visitors												
to the tourist this destination.	54.2	30.2	9.6	4.2	1.8	1.69	60.7	19.6	5.4	8.9	5.4	1.79
5. Lack of knowledge												
about tourism planning	041	36.1	01.1	10.7	6.0	2.40	8.0	00.1	50.6	26	1.8	9 55
and management	24.1	30.1	21.1	12.7	0.0	2.40	0.9	32.1	53.6	3.6	1.0	2.5 7
	1											
6. Tourism business in this tourism destination are												
	0.6	18.1	40.0	10.0	10.9	0.04	10.5	01.4	10.5	28.6	26.8	0.00
monopolized by a small number of individuals or	9.6	10.1	42.2	19.3	10.8	3.04	10.7	21.4	12.5	20.0	20.6	3.39
organizations.	 											
7. Lack of preferential policies	1											
of supporting for local	36.2	48.2	3.0	8.4	4.2	1.96	55.3	21.4	5.4	12.5	5.4	1.91
regidents to participate in	10		J -		•		55.5	l '	<u> </u>		0.1	
residents to participate in tourism development												

And the statements regarding ecological protection works of the nature reserve was answered somewhat positively by Jabagly residents (SA3: mean=2.98) while it was responded more negatively by residents from Abaiyl (SA3: mean=4.30). And these result showed that all two settlements had a stronger support for the strategies of conservation and local development through tourism development at the heritage site, and residents from Jabagly settlement involved in heritage site conservation to some degree whereas very few people from Abaiyl took part in conservation work. Interviews support these findings. In terms of participation in receiving tourists, tourism research works, planning of tourism activities and organizing and managing tourism activities in this tourism destination, (SA4, SA5, SA6 and SA7), nearly all respondents answered negatively with mean above 3. And there was less participation level in Abaiyl settlement with mean above 4 comparing with Jabagly settlement (mean was between 3 and 4).

Among 4 statements assessing participation in tourism level, receiving tourists was answered by comparatively higher number of respondents with (SA4: mean=3.04 and mean=4.02 respectively) and planning of tourism activities was responded by lower number of residents from both settlements with (SA6: mean=3.83 and mean=4.32 respectively). This result shows that although this tourism destination had been inscribed in the list of world heritage site and tourism has been developed there, the local residents who are the most affected stakeholders of the heritage site have not participated in tourism activities well, and the overall participation level of Jabagly settlement was a little higher than that in Abaiyl settlement. And the influential factors of participation in tourism development at this tourism destination and participation dissimilarity between two settlements will be discussed in the following paragraph.

Second, answering questionnaires concerning the obstacles of residents' participation in tourism (SB), except for statement of far residential location from the tourist destination (SB3), nearly all impediments for local residents' participation in heritage tourism were replied with the approximately same answers. And shortage of necessary funds (SB1), labor force (SB2) and knowledge about tourism planning and management (SB5) were thought to be little handicap for both settlement residents' participations in tourism, with (SB1: mean=2.20, SB2 mean=2.52 and SB5: mean=2.40 for Jabagly and SB1: mean=2.13, SB2 mean=2.63 and SB5: mean=2.57 for Abaiyl).

Far residential location (SB3) was the biggest impediment for Abaiyl settlement's local residents (mean=4.55) while it was considered as not an obstacle for residents from Jabagly (mean=1.45). And the most crucial two barriers for two settlements' participation in tourism were visitation of very few travelers to the tourist this destination, with (SB4: mean=1.69 and mean=1.79 for two settlements individually), and lack of preferential policies of supporting for local residents to participate in tourism, with (SB7: mean=1.96 and mean=1.91 for two settlements individually). There was a slightly negative perception by both settlements' residents on monopolization of tourism business in this area by a small number of individuals or organizations, with (SB6: mean=3.04 and mean=3.39 for two settlements individually). It means they have an equal opportunity for engaging in tourism industry to some extent. In conclusion, majority of respondents from two selected research area supported for tourism development strategies at Aksu-Jabagly heritage site. And the participation level of tourism activities at the heritage site was a little higher in Jabagly than in Abail settlement, nevertheless, overall participation status was very low. Considering all indicators regarding obstacles of local residents' participation in tourism development, respondents' perceptions were diverse between some statements. And the results of survey showed that a small number of tourists and lack of preferential policies of supporting for local residents' participation in tourism were

the common reasons for all residents in two settlements, and farther residential location from the tourism destination was the primary reason for Abaiyl settlement's people.

When we interviewed three relative experts, the mayor of the Jabagly village, the scientific research department director of Aksu-Jabagly state nature reserve office and the director of the Zhana-Talao travel company, who knows local residents' participation situation in tourism at the Aksu-Jabagly state nature reserve, we found that although the world heritage tourism destination has a high popularity with nature based tourism through CIS (Commonwealth of Independent States) countries, few local residents engaged in tourism business. The Akim (mayor of village) claimed that the main two reasons were lack of business skills and laziness of the local residents. He also said most of the villagers have earned their living by relying on animal husbandry and farming, and "I will be very glad if they engage in tourism activities" (Mynzhasarhyzy, 2018).

The scientific research department director told us that the tourism activities in the core zone of the heritage site have been strictly controlled and monetarized by the heritage management office in Jabagly settlement, however, tourism planning and organizing events in the buffer zone have been controlled by very few skilled people, some of whom are not local residents. After highlighting the importance of protecting Aksu-Jabagly state nature reserve, he also asserted that although this village has great potential of developing other types of tourism on the basis of ecotourism at Aksu-Jabagly heritage site, such as rural tourism, agritourism and ethnic tourism, unfortunately, the government have not paid attention to this fact and the villagers have not been aware of the significance of developing community based tourism. interviewing the director of the Zhana-Talap travel company, we found that although many tourists have a big desire for visiting this tourism destination, there are existing some drawbacks that have banned coming of large number tourists to this tourism destination, for example low quality service facilities (including old car, tired horse and unprofessional local tour guides) and the higher accommodation price (Mynzhasarhyzy, 2018).

Li and Hunter (Li & Hunter 2015) listed several reasons why full community involvement is difficult to achieve in heritage tourism practices: (1) The host community is never a naturally unified single entity, but comprises multiple stakeholder groups, which may hold diverse views and conflicting interests toward how it operates. (2) Not all stakeholder groups will participate as soon as such opportunity has been made available. (3) Based on different resources held, each stakeholder group may have varying degrees of influence over decision making in tourism companies – for example, the government agency that authorizes tourism operation licenses has a higher level of power than grassroots environmental protection NGOs (nongovernmental organizations).

Community involvement in decision-making is of particular importance and viewed as a prerequisite for fair distribution of benefits from tourism, especially in Western countries, however, in developing countries, it is rarely possible because of many restrictions (Li, 2006). A top-down, passive and indirect community participation approach is generally taken in tourism development in developing countries, as a result, others make decisions for the communities, and they only participate when implementing and sharing the benefits rather than making decisions about tourism planning (Tosun, 1999; Tosun, 2006). In a study of Jiuzhaigou Biosphere Reserve, China, Li (2006) discovered that Local communities benefit from tourism to much extent without involving in the planning process. Even though their significance and benefit, community participation studies have been evaluated in terms of theory and has been lacking in conceptual framework in terms of rural tourism (Tosun, 2006; Flaherty et al., 2006). Most of the scholars have proposed that community participation process is a part of

democratic system also comprises community's decision making. Timothy (1999) in his study has illustrated that tourism planning which has public involvement fundamentals occurs from approaches to safeguard locals from the effect of tourism planning and get the benefits of tourism development. Public participation is not solitary about the link between the local government and the local community but it is an authorization process given to the local people for decision making (Kayat, 2002). The community participation is thought as a discussion or consultancy between the local residents and the local government based on the Skeffington Report (Britain, 1969). The economic contribution of community based tourism contains the improvement of local employment and natural resources; local knowledge, skills and ability for protection of local heritages and natural environment promotion and sustain the local attraction (Gautam, 2017). Community tourism has been prioritized in the national tourism agenda of many developed countries.

And some developing nations' community tourism policy includes terms, such as rural pro-poor tourism. Community participation in the tourism sector has been growing rapidly in the developed and some developing states, but community participation in tourism development have not been practically recognized as important yet in Kazakhstan. In this study the survey showed that albeit they realized developing tourism around the heritage site will lead to more benefits than other industries, both two settlements' residents had a weak awareness of how to be constructively involved in tourism. In many insular and less-developed regions, tourism has been developed and controlled by large, multinational tour companies who have little regards for local sociocultural and economic conditions (Timothy & Ioannides, 2002). The pattern of power and wealth allocation among different groups in most developing countries is itself a reflection of their economic, social and political history and may vary from country to country (Todaro, 1994). Despite this, developing countries are dominated by a small group of well-organized and powerful elites, to a greater extent than developed nations are. Tosun (2000) claims the implementation of participatory tourism development methods requires radical changes in the socio-political, legal, administrative and economic structures of many developing countries and it is difficult for making decisions in the societies based on cumbersome social, economic and environmental trade.

CONCLUSION

Community participation requires considerable time, money and skills to organize and sustain participation (Paul, 1987). We admit that like most developing countries above scholars mentioned influential factors for citizens' participation in heritage and rural tourism also occur in our research area to some extent. Nevertheless, it may be said that it is impossible to discuss every relevant issue regarding local residents' participatory in tourism development at this heritage site in this article. Therefore, according to the findings of our investigation, we will discuss the most crucial three types of barriers that cause passive participation in the tourism activities at the Aksu-Jabagly natural world heritage tourism destination. In a word, active and higher community involvement in tourism will be realized when the following issues are fully taken into consideration:

(a) Fewer tourists' visitation to the tourist this destination: It can be clearly seen from the survey results in table 2 that all respondents from two settlements next to heritage tourism destination admitted the first most crucial limitation was tourists' visitation to the tourist this destination. In many developed and some developing countries, fewer tourists are not considered the primary reason of local community nonparticipation in tourism, since their inbound tourism is well developed. And Kazakhstan has a small population, larger territory and the inbound tourism just begins to develop, for this

reason, the small number of tourists traveling to Aksu-Jabagly tourism destination is the first major barrier for local residents' participation in tourism.

- Lack of preferential policies for local residents' participation in tourism: In the Kazakhstan context, after independence transiting its economy from planned form to market form, the district (municipal)-level government is playing a leading role in the rural tourism development processes although (Li, 2004) argued that rural tourism development usually relies on the joint involvement of governments, tourism enterprises, tourists, and local residents. In Kazakhstan, government plays an active role as planners, investors, investment stimulators, promoters, educators and regulators even though privatization policy in economic development has been implemented after independence. However, diversification of industry has just become one of the vital tasks of Kazakhstan government recently. And the development of tourism industry in the remote rural areas has not been paid completely attention by the state. Therefore, the preferential policies for local communities' engagement in tourism industry are not implemented practically in the rural residential areas (Akbar et al., 2020). As can be seen from the study results in Table 2, the weakness of the government's support for local residents' participation in the tourism industry by effective policies is seen as the second major cause of non-participation in tourism.
- Lack of necessary funds, labor force and knowledge of tourism planning: The introduction of tourism within communities usually requires funds to be allocated to develop a tourist infrastructure of facilities (Reed, 1997). These facilities often are based on Western standards even in the poorest host countries (Cohen, 1972). Lack of qualified human resources in the tourism sector in many local destinations in the developing world has stimulated an influx of employees from other parts of country to work in tourism (Tosun, 2000). And (Murphy, 1985) noted, effective management of tourism industry requires day-to-day and season-to-season operational decisions. If the local residents do not catch up with the modernized knowledge of tourism management. the low status, unskilled jobs associated with low wages and hard working conditions will always leave for them. These shortcomings have appeared as a major limitation to the local residents' participation in tourism development in many developing countries. Our findings from table 2 showed that aforementioned drawbacks were one of the primary obstacles for the Jabagly and Abaiyl settlement's people to engage in tourism industry. And the result of interviews with the experts showed that the local administration had not formulated any special training program for community residents and had failed to orientate them towards positive participation although they admitted one of the main influential factors for residents' participation in tourism had been lack of skills of planning, organizing and managing tourism activities. Therefore, because of aforementioned impediments, local community involvement in tourism development has still been resting on a passive participation stage.

Among above discussed three types of barriers which hinder community participation, fewer tourists' visitation and lack of preferential policies for local residents' participation in tourism were the crucial barriers highlighted by both selected community residents. In this regard, it is suggested that active measures must be taken to attract large number of tourists to this tourism destination, at the same time, government institutions should provide many favorable policies for local residents' participation in tourism. This study was not without its limitations that can affect the applicability of the results. This study applied perception of local residents in two different geographical locations to assess participation status of them in heritage tourism development. By having focused solely on local residents as well as interviewing three relevant experts, this

Imanaly AKBAR, Zhaoping YANG, Ordenbek MAZBAYEV, Aday SEKEN, Madeleine UDAHOGORA

study did not investigate the perceptions of other stakeholder groups, such as tourists, government/local authorities or tourism industry/the private sector. And this can be a limitation of the present research, however, it will give a chance for future study. Furthermore, in this study the sample size of respondents was not large and respondents were selected from only two communities adjacent to world heritage site, which are considered as the most affected. This might be thought as another limitation of the current study and this one should be handled in future studies.

Aknowlegments

This research was sponsored by the projects of the National Key Research and Development Project of China with grant no. (2016YFC0503307), the National Natural Science Foundation of China under Grant no. (41971192) and the Chinese Government Scholarship under Grant number (80001). Jumanov Smatulla Zhorauly, the deputy director of scientific research department of Aksu-Jabagly State Nature Reserve office in Jabagly village, provided great help during the field and social surveys.

Special thanks Beknur Izenbaev (PhD from M. Auezov South Kazakhstan State University in Shymkent) and Gauhar Ospan (L.N. Gumilyov Eurasian National University in Nur-Sultan), who helped to design questionnaires for local residents.

REFERENCES

- Agrawal, A. (2000). Adaptive management in transboundary protected areas: The Bialowieza National Park and Biosphere Reserve as a case study. *Environmental Conservation*, 27, 326-333.
- Akbar, I., Yang, Z., Han, F. & Kanat, G. 2020. The Influence of Negative Political Environment on Sustainable Tourism: A Study of Aksu-Jabagly World Heritage Site, Kazakhstan. Sustainability, 12, 143.
- Archabald, K. & Naughton-Treves, L. (2001) Tourism revenue-sharing around national parks in Western Uganda: early efforts to identify and reward local communities. *Environmental conservation*, 28, 135-149.
- Binns, T. & Nel, E. (2002). Tourism as a local development strategy in South Africa. *Geographical Journal*, 168, 235-247.
- Britain, G. (1969). Ministry of Housing and Local Government Committee on Public Participati on in Planning, People and Planning; Skeffington Report. HMSO.
- Brohman, J. (1996). New directions in tourism for third world development. *Annals of tourism research*, 23, 48-70.
- Butler, R., C. M. Hall & Jenkins J. M. (1998). Tourism and recreation in rural areas.
- Cohen, E. (1972). Toward a sociology of international tourism. Social research, 164-182.
- Easterling, D. S. (2005). The residents' perspective in tourism research: A review and synthesis. *Journal of Travel & Tourism Marketing*, 17, 45-62.
- Flaherty, J. C., W. Gorman, J. T. Garibotto, J. R. Bussiere, M. D. Abelson & Chastain D. P. (2006). Components and methods for patient infusion device. Google Patents.
- Friedman, H.S., Prados, M.D., Wen, P. Y., Mikkelsen, T., Schiff, D., Abrey, L.E., Yung, W., Paleologos, N., Nicholas M.K. & Jensen R. (2009). Bevacizumab alone and in combination with irinotecan in recurrent glioblastoma. J clin oncol, 27, 4733-4740.
- Gautam, K. K. (2017). Tourism and Its Sustainability in a Local Community Participation Model: A Theoretical Discussion. 大阪産業大学経営論集= Osaka Sangyo University Journal of Business Administration, 19, 33-53.
- Gu, H. & Ryan, C. (2009). Hongcun and Xidi: Rural townships' experiences of tourism. In Tourism in China: Destinations, cultures and communities, 259-267. Routledge New York.
- Gursoy, D., urowskiC. J & Uysal, M. (2002). Resident attitudes: A structural modeling approach. *Annals of tourism research*, 29, 79-105.
- Inskeep, E. (1991). Tourism planning: an integrated and sustainable development approach. Van Nostrand Reinhold.
- Kayat, K. (2002). Power, social exchanges and tourism in Langkawi: Rethinking resident perceptions. *International journal of tourism research*, 4, 171-191.
- Li, W. (2006). Community decisionmaking participation in development. Annals of tourism research, 33, 132-143.

Local Residents' Participation in Tourism at a World Heritage Site and Limitations: A case of Aksu-Jabagly Natural World Heritage Site, Kazakhstan

- Li, Y. (2004). Exploring community tourism in China: The case of Nanshan cultural tourism zone. *Journal of sustainable tourism*, 12, 175-193.
- Li, Y. & C. Hunter (2015). Community involvement for sustainable heritage tourism: a conceptual model. Journal of Cultural Heritage Management and Sustainable Development, 5, 248-262.
- Mann, M. (2000). The community tourism guide: Exciting holidays for responsible travelers. London (Earthscan).
- McCool, S.F. & Martin, S.R. (1994). Community attachment and attitudes toward tourism development. *Journal of Travel research*, 32, 29-34.
- Murphy, P. E. (1985). Tourism: A community approach. New York: Methuen. National Parks Today (1991): *Green Guide for Tourism*, 224-238.
- Mynzhasarhyzy, D. (2018). Tourism is developing in Tulkibas district. Turkistan International.
- Nicholas, L. N., B. Thapa & Y. J. Ko (2009). Residents' perspectives of a world heritage site: The Pitons Management Area, St. Lucia. *Annals of tourism research*, 36, 390-412.
- Paul, S. (1987). Community participation in development projects. World Bank Washington, DC.
- Prentice, R. (1993). Community-driven tourism planning and residents' preferences. *Tourism Management*, 14, 218-227.
- Rasoolimanesh, S. M. & Jaafar, M. (2016). Community participation toward tourism development and conservation program in rural world heritage sites. *Tourism-From Empirical Research Towards Practical Application*. InTech.
- Reed, M. G. (1997). Power relations and community-based tourism planning. *Annals of tourism research*, 24, 566-591. Ryan, C. & Montgomery D. (1994). The attitudes of Bakewell residents to tourism and issues in community responsive tourism. *Tourism management*, 15, 358-369.
- Scheyvens, R. (2003). Local Involvement in Managing 12 Tourism. Tourism in destination communities, 229.
- Sharpley, R. (2014). Host perceptions of tourism: A review of the research. Tourism Management, 42, 37-49.
- Simmons, D. G. (1994). Community participation in tourism planning. *Tourism management*, 15, 98-108.
- Sirisrisak, T. (2009). Conservation of Bangkok old town. Habitat International, 33, 405-411.
- Stræde, S. & Helles, F. (2000). Park-people conflict resolution in Royal Chitwan National Park, Nepal: buying time at high cost? *Environmental Conservation*, 27, 368-381.
- Su, M. M. & Wall G. (2014). Community participation in tourism at a world heritage site: Mutianyu Great Wall, Beijing, China. *International Journal of Tourism Research*, 16, 146-156.
- Svels, K. (2015). World heritage, tourism and community involvement: A comparative study of the High Coast (Sweden) and Kvarken Archipelago (Finland). Scandinavian Journal of Hospitality and Tourism, 15, 183-201.
- Timothy, D. & Ioannides D. (2002). Tour-operator hegemony: dependency, oligopoly, and sustainability in insular destinations. Island tourism and sustainable development: Caribbean, *Pacific and Mediterranean experiences*, 181-198.
- Timothy, D. J. (1999). Participatory planning A view of tourism in Indonesia. Annals of tourism research, 26, 371-391.
- Timothy, D. J. & C. Tosun (2003). Appropriate planning for tourism in destination communities: Participation, incremental growth and collaboration. *Tourism in destination communities*, 181-204.
- Todaro, M. P. (1994). Economics for a development world. New York: Longman.
- Tosun, C. (1999). Towards a typology of community participation in the tourism development process. Anatolia, 10, 113-134.
- Yung, E.H. & Chan E.H. (2013). Evaluation for the conservation of historic buildings: Differences between the laymen, professionals and policy makers. Facilities, 31, 542-564.
- *** KazakhstanNationalCommittee. 2014. Kazakhstan National Committee for the UNESCO Programme "Man and Biosphere": Aksu-Zhabagly Biosphere Reserve.
- *** Limits to community participation in the tourism development process in developing countries. (2000). Tourism management, 21, 613-633.
- *** Host perceptions of impacts: A comparative tourism study. (2002). Annals of tourism research, 29, 231-253.
- *** Expected nature of community participation in tourism development. (2006). *Tourism management*, 27, 493-504.
- *** UNESCO. (2017). Kazakhstan Places Priority on Partnership with UNESCO for Peace and Security. In Annals of tourism research. MEDIA SERVICES.
- *** UNWTO. (2013). UNWTO annual report 2012. UNWTO Madrid.
- *** whc.unesco.org. 2016. Proposal for inscription on the UNESCO world cultural and natural heritage list: Nomination Dossier of Western Tien-Shan.

 Submitted:
 Revised:
 Accepted and published online

 14.10.2019
 12.01.2020
 16.01.2020

TOURISM IN BORDER CITIES: CASE STUDY FROM IRAN

Ebrahim SHARIFZADEH AGHDAM

Ferdowsi University of Mashhad, Faculty of Letters & Humanities, Department of Geography, Park Square, 9177948974, Mashhad, Iran e-mail: Email: eb.sharifzadehaghdam@mail.um.ac.ir

Barat Ali KHAKPOOR*

Ferdowsi University of Mashhad, Faculty of Letters & Humanities, Department of Geography, Park Square, 9177948974, Mashhad, Iran e-mail: Email: khakpoor@ferdowsi.um.ac.ir

Mohsen AHADNEJAD REVASHTY

Zanjan University, Department of Geography, Zanjan, Iran Km6 Road Tehran-Tabriz Zanjan, Iran e-mail: Email: ahadnejad@znu.ac.ir

Citation: Sharifzadeh Aghdam, E., Khakpoor, B.A., & Ahadnejad Revashty, M. (2020) TOURISM IN BORDER CITIES: CASE STUDY FROM IRAN. GeoJournal of Tourism and Geosites, 28(1), 52–66. https://doi.org/10.30892/gtg.28104-451

Abstract: It is necessary to have the knowledge of places and a logical, strategic, and practical view toward their future. Since spatial developments on a macro-scale in political, environmental, physical, social, and cultural dimensions can have different influences in a long-term perspective, the present study was carried out in accordance with the world's effective approaches and the current situation of Iran and the region. The aim of the present study was to examine the primary factors affecting the promotion of tourism level in the border town of Piranshahr. In this regard, the present study was a descriptive-analytical investigation including a questionnaire which was conducted within Delphi model framework and software analyses. Afterwards, following dialog and consultation with the elites and academicians in the form of a research panel on urban issues, 40 individuals were chosen as the statistical population, and 39 variables were identified as the study's primary variables in the form of 8 general categories. For the working process of the primary variables, crossover influences were described within a matrix framework in futures study MICMAC Software. Afterwards, the statistical population was required to use the level of influence – direct, indirect, or potential dependence – in order to evaluate the variables in the range from o (no influence) to 3 (very strong influence). The results of 2 repeats of data rotation indicated that the fit index of the obtained model was 96.52%, which shows the high level of influence of the variables on one another. Moreover, based on the results of the present study, the index of strategic situation of the town and being located on the border (R) with a score of 114 had the strongest level of direct influence. Finally, by taking into account the recognized key driving forces, desirable, middle, and disastrous scenarios were proposed.

Key words: tourism, border, border towns, Iran

* * * * * *

^{*} Corresponding author

INTRODUCTION

Nowadays, tourism as one of the largest and most profitable sectors of the global economy has a special place in human societies and plays an effective role in promoting the economic, social, and political structures of countries particularly in developing countries. Meanwhile, developing border tourism as one of the internationally essential dimensions is highly significant especially in countries like Iran which has numerous tourist attractions (Ghaderi, 2007, p. 13). Achieving this important factor and its benefits requires planning which should be based on a realistic view in order to manage the interaction among the main factors of tourism development (tourists, the region, and destination features) in border areas (Alvani & Pirouzbakht, 2006, p. 112). In this regard, geographers and urban planners pay more attention to degree of permeability, boundary influences on patterns of spatial interaction (flow of goods, people's thoughts and movement, relation of place to place and people to place), and the attitude of the border residents (Higham & Lück, 2002, p. 35). According to the estimations of World Tourism Organization, the total number of tourists in 2020 will reach 1,600,000,000 people (WTO, 2004). The importance of this statistics will be clear when we come to know that regarding growth indices, Iran experienced a growth of 10% in 2014 compared to 2013 and placed fourth in the world (World Health Organization, 2015).

According to what has been announced, although Iran tourism growth is double of that of the average global rate, Iran's share of world tourism does not even reach 0.5% (Tourism of the Islamic Republic of Iran, 2015). In the Sixth Development Plan of the Islamic Republic of Iran however, the government considered an annual growth rate of 15% for years 2015-2019, so that a total number of 13 million tourists and 10 billion dollars can be obtained (Kheirollahi et al., 2016). As a factor beyond an industry, tourism is a dynamic global and social phenomenon (Elliott, 2002). A phenomenon whose integrated mechanism takes different shapes in different places and times can have different influences (Zahradníčková & Vacík, 2014). Such a concept involves various sections and acts in a framework of totality and a system of different components (Gunn & Var, 2002, p. 34). Therefore, understanding the exact factors and analyzing this phenomenon along with futurism and proper strategic vision can be highly useful, and due to this important issue, benefits can be obtained from tourism economy by identifying important factors and their influence on "tourism planning", determining short- and longterm goals, and adopting tourism development strategies. With regard to strategic planning, since futures study has features such as logical decision-making process (Jimenez, 2013) and determining how to proceed toward appropriate future (Gates, 2010, p. 3), it highlights the necessity of paying attention to this thought more (Kaberger, 2002). Therefore, the main aim of the scenario is to promote the efficiency and quality of planning in uncertain conditions of the future (Rahnama & Mahrufi, 2015, p. 56; Wack, 1985, p. 140).

Piranshahr has a special geographical position and various attractions and capacities; therefore, it can be proposed as one of the tourism hubs, particularly commercial and natural tourism, in the northwest of Iran. According to what mentioned above, the present study was aimed at identifying effective factors in tourism of Piranshahr based on analytical scenario-planning model in order to examine the factors affecting the development of tourism in Piranshahr, methods and strategies to develop based on the capacities of the region, and prioritize the obtained strategies using MICMAC Software. Therefore, the present study is important and necessary because tourism futures study is a process of regular attempt in good urban governance, aimed at obtaining sufficient understanding of strategic research fields (Heydari et al., 2016). It was also aimed at practicing a wise spatial management in order to include the public interest of the citizens, impose minimum damage to the urban environment, and propose

proper border tourism scenarios by taking into account a model of democratic and ecosystem management. In this regard, the present study proposed a type of creativity and innovation in the field of proper management and strategic planning by taking into account sustainable urban development with an emphasis on futuristic and environmental aspects in tourism of border cities. The present study was a part of geographical and urban planning research. In order to explore the issue, the objectives of the present study were as follows:

- Identifying primary effective and key factors in developing the tourism of the border town of Piranshahr
 - Evaluation of the potentials of border tourism in Piranshahr
 - Converting weaknesses to opportunities usable in the field of urban tourism
 - Proposing approaches that are based on futures study of border tourism.

Theoretical framework

Urban tourism

Tourism includes 29% of services all over the world, and it is sometimes considered as the first important source of foreign income in developing countries (Pour Ahmad et al., 2016). Nowadays, the concept of tourism is not like the past and its economic aspects are paid more attention to. Since tourism is a money-making activity and creates jobs, it can bring money to a country (Lita et al., 2014). Tourism is in fact a mixture of different activities that are carried out in a chain form to provide tourists with services (McIntosh, 1998, p. 9). Urban environments all over the world were among the most important tourism attractions for many years. Urban tourism is a type of tourism in which the citizens who are interested in different attractions spend a part of their free time in such places while they are walking in the city (Higham & Lück, 2002). The main motive in launching and boosting tourism in every urban region especially in developing countries is promoting the criteria of life quality and achieving a sustainable income for local communities (Khoshkam et al., 2016). Tourism of border towns can provide the grounds for this important issues in sensitive areas by increasing the people's income in tourism destinations (Lee et al., 20013).

Tourism planning

Tourism is one of the main activities to support the economic sectors and accounts for 9% of gross world production (WTO, 2010). It has remarkably developed over the recent years. Due to the benefits of tourism, different countries are trying to establish the grounds to take advantage of the positive aspects of this industry by providing and valuating tourism attractions in capable areas (Rosentraub & Joo, 2009, p. 759). In this regard, specific plans are required in order to create natural, social, economic, historical, and ecological potentials to motivate people to travel (Stefănică & Butnaru, 2013). Therefore, by utilizing appropriate views and identifying advantages and limitations, planners try to establish grounds for success of tourism centers in response to the tourists' desires on the one hand and modification of host regions on the other hand (Royo Vela, 2009). It should be based on a type of planning that leads to selection of strategies which bring about success if conducted correctly and timely (Hasangholipour & Aghazadeh, 2005, p. 65). The significance of tourism in the present era is more dependent on its economic cycle, and it is highly important in dynamic local and international economy (Lee & Chang, 2008, p. 180). With regard to tourism of border towns with its high potential, urban management should respect the local people's measures and methods in the form of a professional approach to urban development, because a sustainable strategy cannot be actualized without local participation (Nana Ato & Victor Mensah, 2006, p. 299). Therefore, using a comprehensive democratic approach and by considering environmental and spatial conditions, it seems necessary more than ever to create a proper and logical futuristic plan.

Border towns and tourism

Borders as special geographical areas lead to compatibility and consistency of economy in convergence among countries. They are essentially considered as moderate areas for domestic and foreign markets and regarded as the main convergence center for the region in a geographical aspect (Niebuhr & Stiller, 2002: p. VI). Strengthening tourism in border regions not only accelerates non-oil exports but is also useful in economic growth and development of the region. Also, it greatly helps job creation in the region; in addition to direct employment, a large number of people will have an opportunity for indirect employment (Pourbodaghi, 2000). In general, urban tourism takes place with some main motives and aims which are very different and include: business and culture (Low, 1996, p. 670). In sensitive border regions, these aims can lead to expansion of peace and stability, increased security, and improvement of infrastructures and services needed in urban areas (Roknadin Eftekhari et al., 2009, p. 83). Luis Worth (1938) believed that division of specialized work increases with market growth, and not only can cities have different economic functions, but some special cities can also specialize in producing products that bring about huge benefits. Therefore, their markets convert from their local form into a national and finally an international one (Darkosh, 2009). Tourism economy in border towns can lead to economic progress and development of the areas around them, improvement in standards of people's lives, decrease in poverty, appropriate distribution, creation of more friendship, and acceleration of more cooperation among border regions (Chandoevwit & Srawooth, 2004: p.145). Since joint border markets are among the major factors that revolutionize border towns, they can boost the economy of the border regions, and tourism develops and finally more economic growth is achieved as a result of activities in border markets, which lead to economic growth and urban development (development of cities) (Edwards et al., 2008).

Table 1. Existing views on the role of the markets in the economy of the country

Views	Reasons
Overall denial view	The activity of border markets does not follow the regulations governing the country's exports and imports. There is a lack of controlling and monitoring the method of activities, and these factors cause the trend of exports and imports to exit their normal channels
Corrective	They lead to relative mobility of the economies of the regions and border areas. Relative flourishing of the economy of the border villages A factor to create employment and prevent the evacuation of the border areas and maintain the population
Supportive and reinforcing	The positive role of the markets in decreasing deprivation from border regions and their economy. They want to boost the markets regarding the number, the level of exchange, and provision of more discount and facilities to such markets. Completing the utilities and services of the markets, the possibility of obtaining interest exemptions and custom duties to establish regional balance.

The scope of study

As the political center of Piranshahr County, Piranshahr is located in southwest of West Azerbaijan Province, 12 km from the borders of the Islamic Republic of Iran with Iraq (The Kurdistan Regional Government of Iraq). This town shares its borders with Oshnavieh and Naqadeh from the north, Sardasht from the south, and Mahabad from the east. Based on the Population and Housing Census of 2006, its population was 59,721 (Iran Statistical Center, 2006). It increased to 91515 in 2016 (Ibid, 2016).

As seen in Figure 1 above, Piranshahr is limited to Haji Omaran Mounts as the border from west and southwest. On the other side of these mountains is located The Kurdistan Regional Government of Iraq, and Tamarchin Border Market is located at the

zero point of the border. Moreover, Sardasht and Naqadeh are respectively located in the north and south of Piranshahr (Rahnama & Sharifzadeh Aghdam, 2018). Having a special strategic and geopolitical situation in the northwest of Iran and being adjacent with north of Iraq, Piranshahr has proper and easy access to Turkey via Oshnavieh.

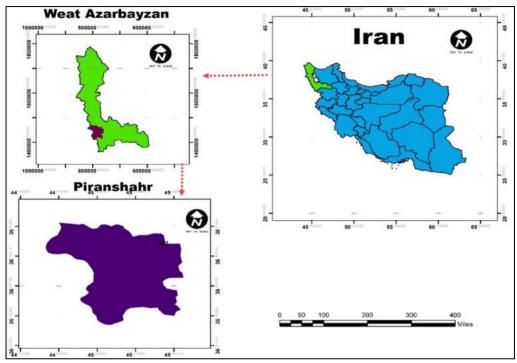


Figure 1. Geographic location city of Piranshahr

Moreover, locating on the Zagros mountain range, being foothills, having good and clean climate with excellent environmental conditions, jungle and natural resorts, and pristine and unique nature, and a variety of plant and animal species have enabled Piranshahr to include various tourist sites and elements such as business tourism. ecotourism (such as permanent water-rich rivers, water-rich springs, dense and lush oak forests), historical places, cultural elements, presence of traditions, unique traditional clothes of the citizens, and local music. Quantitative and qualitative diversity and variety of foreign goods in 20 malls and possibility and ease of exchange of goods and currency with foreign countries such as China, UAE, Iraq, Turkey, and Syria lead to absorption of tourists from the surrounding regions and central Iran. Furthermore, entrance a large number of resident of The Kurdistan Regional Government of Iraq to Piranshahr with their private vehicles, existence of the official customs of the Islamic Republic of Iran at the border, and transport on the road to economic progress in Iraqi Kurdistan over the recent decade have intensified the desire of its citizens to travel to this part of Iran. The newest developments in the region include construction of some large dams with high reservoir which can boost the potentials of the region if exact planning is made.

METHODOLOGY

Planning and management have lost their traditional meaning in today's complex and fast societies. A new science called futures study has emerged over the last two or

three decades. Instead of linear and definite planning, it tries to achieve a united future in order to open a broader horizon to many kinds of possible proper futures for human by searching in the extensive unknown facilities of human and technology. Therefore, the concept of planning gave its place as following the past or predicting the future to the concept of planning to make the future or future making (Mahdizadeh, 2010, p. 12).

Once a border region or line is created, it can not only consider the natural landscape as a part of it, but also affect the architecture and policies of the neighboring countries (Prescott, 2014) the significance of simultaneous use of futures and scenario study approaches in tourism studies of border towns seems necessary. In fact, development of futures study can create more hope for more cooperation in order to overcome the barrier to sustainable development and creation of a better future for border residents (Mahdizadeh, 2010: 54). With regard to its objectives, the present study was an applied one, and regarding its method and nature, it was descriptive-analytical. It was an attempt to utilize futures study within the framework of indices and effective factors in the tourism of the border town of Piranshahr in order to analyze political and social developments in both micro and macro scopes. In so doing, documentary studies and questionnaire were utilized within the Delphi model framework and scenario software. Since an applied plan is considered in strategic studies in order to achieve long-term goals of the government with regard to the method of receiving tourists given the environmental potentials, obtaining sustainable tourism in urban environments requires experts and elites with appropriate level of knowledge about the environment. Therefore, data collection was based on documentary and survey methods, and the statistical population was consisted of both authorities and elites, respectively 23 and 27 people. The sampling method was purposeful and non-randomized. Participants Delphi model is as follows.

Degree of education	Number	Specialist field	Number
Diploma	6	Urban planning	14
Masters	10	Tourism Geography	8
M.A	12	Sociology	6
Ph.D.	17	Urban Management	10
Ph.D. post	5	Political science	7
		Spatial planning	5

Table 2. The field of expertise and level of education of Delphi Participants

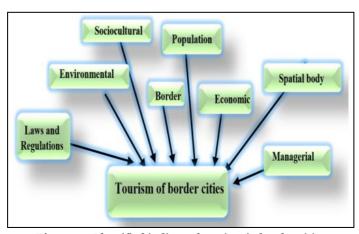


Figure 2. Identified indices of tourism in border cities

Identifying the primary indices and forming the crossover matrix

Classifying the factors affecting urban tourism in the border town of Piranshahr was carried out within an n*n matrix. In so doing, 8 main classifications of variables (as shown in Table 3) along with 39 of their subsidiary variables were discovered as the study's primary variables after different dialog during meetings with the academicians and the executive and the elites as civil institutes, which finally led to a matrix with dimensions of 39×39. After all subsidiary variables were identified by forming the crossover influences matrix in the next step, the elites were required to evaluate the variables in question based on the level of their influence. In the end, the variables were scored from o to 3 based on the intensity of their influence and P according to their potential influences. According to the results presented in Table 3, it can be stated that the fit index obtained for the variable shows the Table of 96.52% by 2 times data rotation in the software, which shows the high coefficient of the selected variables and factors' influences on each other. This shows the fit and efficiency of the study instrument and affirms the necessary accuracy in reliability of the results of the software and the appropriateness of the questionnaire and the collected data. According to the results presented in (Table 3), which are calculated based on the value of 1468, in the primary matrix of crossover influences evaluated by elites and experts, 923 cases with the highest statistical volume had strong effectiveness. Moreover, 355 cases were evaluated to have moderate effectiveness, 94 cases weak influence, 53 cases no influence, and 97 potential effectiveness.

2 8 FF F,				
Matrix size	39×39			
Repetition	2			
Number of zero's	53			
Number of ones	94			
Number of twos	355			
Number of threes	922			
Number of Ps	97			
Total	1468			
Filling index	96.51%			

Table 3. The properties of the primary matrix

Direct influence-dependence matrix and distribution of indices

According to the status of the indices and the sum of the obtained values presented in the table above, the variable of "the strategic border situation of the town" (P5) with a score of 114 had the strongest influence coefficient on the other variables. Moreover, "neighborhood with The Kurdistan Regional Government of Iraq" (P3) with a score of 109, "Tamarchin border exchanges" (P1) with a score of 104, and "Water and agricultural and environmental activities" (V4) with a score of 104 had great influences. The weakest level of effectiveness was related to the variable of "The feeling of belonging based on the fact that the citizens are immigrants" and "Favorable elements based on urban environment". Therefore, it should be stated that the weakest level of being affected was related to the variable of "Construction of the equipped stone factory in order to make optimal use of stone mines especially black granite stones to export to foreign markets". The following figure shows the influence-dependence graph as Figure 4. In this figure, the direction of the influence in each group from one group on the other group is indicated with arrows, and the level of effectiveness is shown using numbers on the arrows.

Finally, the key factors can be extracted and ranked based on the topology of the variables (Figure 3). In analyzing the influence-dependence matrix, attention should be paid to the spatial arrangement and dispersion of tourism indices in the border town of Piranshahr using the futures study model within the framework of Figure 5.

Table 4. Primary classification of direct influence-dependence matrix of tourism in the border town of Piranshahr

	ation	I		Effec	afi	70
#	Classification title	Index	Variables	Effectiveness	Being affected	Signs
	. 10		Presence of expert and experienced managers and use of expert planners and counselors	92	98	W1
	rial nt		Educating and clear informing (urbanization culture) through the municipality	83	83	W2
1	Managerial components		Coordination among governmental and non-governmental offices and organizations and the municipality	83	84	W3
	Mar comj		The citizens' awareness about the responsibilities and performance of the municipality and city councils	84	85	W4
			Development of foreign and environmental economic diplomacy	93	86	W5
			Investment on and improvement of the infrastructure of the town	90	92	V1
			Presence of industrial workshops (factories, industrial town, etc.)	91	94	V2
	c		Customs facilities and services	98	89	V3
2	Economic omponent	v	Facilities to control and transfer water for agricultural activities and completion and construction of irrigation and drainage networks	104	96	V4
	Economic components	•	Conversion industries to convert agricultural products of the town into products with high added value	95	91	V ₅
	၁		Development of technology in order to reduce environmental costs	91	98	V6
			Construction of the equipped stone factory in order to make optimal use of stone mines especially black granite stones to export to foreign markets	87	76	V7
	Environmental components		Paying attention to climatic comfort	94	93	E1
			Presence of natural landscapes such as tall mountains, valleys, caves, mineral water springs, etc.	96	91	E2
3	iron mpo	E	Fertile agricultural lands for gardening and planting agricultural products especially sugar beet	95	97	Ез
	Suv Co		Passage of rivers on two sides of the town	81	86	E4
	_		Changes of frosty and hot days	91	92	E5
	nenta ions ws		Development of laws related to protection of the environment of the urban region	100	99	F1
4	Environmental regulations and laws	F	Assessment of the expenses of destruction of the environment in the town to construct dams	92	95	F2
			Cooperation with international institutes within the framework of the climate conditions	103	83	F3
	on		The citizens' and immigrants' behavioral pattern in the urban environments	99	89	N1
	ati		The feeling of belonging based on the fact that the citizens are immigrants	90	90	N2
5	la od	N	Imbalanced distribution of population in suburban and urban environments	83	92	N3
	Population Components		Pressure on environmental resources especially in suburban areas (lands ending in villages of Shinabad and Zidan) and lands of constructing Soghanlou Dam	83	96	N4
	. 4		Organic and unplanned urban development	83	101	M ₁
	Physical- spatial		Physical-spatial design based on the urban environment Nonstandard density of residential units and population	88 88	86 81	M2 M3
6	hysical spatial moone	M	Physical-spatial justice in accessibility			M3 M4
	र्मर इ		Favorable elements based on urban environment	95 76	97 92	M5
	_ 3		Commercialization of land and residential units and pressure on resources	85	87	M6
\vdash	7 %		Using sociocultural capacities in urban environments	95	99	O1
	Sociocultural components		Organizing sociocultural laws within the framework of educating the citizens and authorities in order to revive and protect urban places	94	100	02
7	oci	O	NGOs and development of urban environments	78	94	О3
	Soci		Social morality and responsibility with regard to protecting the urban environment	60	80	04
			International exchanges of Tamarchin Border market	104	93	P1
	e		Incoming and outgoing passengers	92	100	P2
8	Border	P	Neighborhood with The Kurdistan Regional Government of Iraq	109	98	Р3
	Bo		The level of exports and imports and transits	108	98	P4
			The strategic border situation of the town	114	92	P5

The pattern of this dispersion has a direct relationship with stability and instability of the tourism system of Piranshahr by a futuristic approach, such that in stable tourism systems along with possessing indices with strong effectiveness, variables have a normal distribution on other levels of the graph (having determinant, double, risk, goal, regulatory, independent, and second lever variables). On this basis, in instable urban tourism systems, distribution of the variables is not normal, and most indices have either up or down skewedness. Therefore, according to Figure 4 and the conducted analyses, it can be concluded that the capacities of urban tourism have a good status by regarding the influence-dependence graph, but they have an instable status in the current situation, which can be due to the policies that have indirect influences on this situation, such that all of the variables in question were different regarding the effectiveness and being affected, and their number is among the determinant factors of the changing graph, which can be an indication for progressive changes and developments (Figure 4). According to the results presented in the influence-dependence graph, they can be indicated as Figure 5 In this figure, the effectiveness of each group of the variables on the other ones is indicated with arrows, and the level of effectiveness is shown using numbers on the arrows. Finally, the key factors can be extracted and ranked based on the topology of the variables (Figure 3).

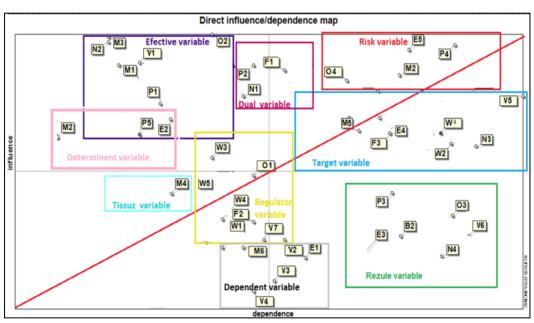


Figure 3. The graph of direct influence-dependence analysis of the tourism variables in the border town of Piranshahr

Indirect influence-dependence matrix and distribution of indices

The level of the influences is through exponentiations 2, 4, 6, and so on of the data obtained from the direct influence of the variables. Within an argumentative and comparative framework, it can be stated that based on the data obtained from analyzing the level of indirect influence of the variables on each other, the status of the tourism system in Piranshahr is appropriate. As a result, positioning and distribution of the variables show different influences of the variables. In the first status, most variables have a double condition and nature. Such variables are very effective and highly being affected at the same time, they are also very likely to change in the near future, such that

distribution of the variables is around the diagonal line in the northeast above and southeast below this section, and the variables have a double nature. Such variables are very effective and highly being affected at the same time, and due to their instable nature, they intensify the primary influence, because any action and change in the role or influence on tourism leads to a constructive or destructive change in other variables in Piranshahr. Therefore, the influences of heterogeneous management and inappropriate distribution of population and construction of dams on effectiveness by other variables can be seen, and the changes in the border and its subsidiaries can easily be understood, which have a transient influence. Moreover, among the variables presented in Figure 4, it should be stated that the index (the strategic border situation of the town) with a total calculated row value of 952023 has the highest level of indirect influence on urban environment within the framework of futuristic approach. Moreover, the variables of the strategic border situation of the town 913192, neighborhood with The Kurdistan Regional Government of Iraq, the level of imports and exports of goods and transits, international exchange of Tamarchin border, and facilities to control and transfer water for agricultural activities and completion and construction of irrigation and drainage networks had the highest coefficient of indirect influence on other variables (Table 5).

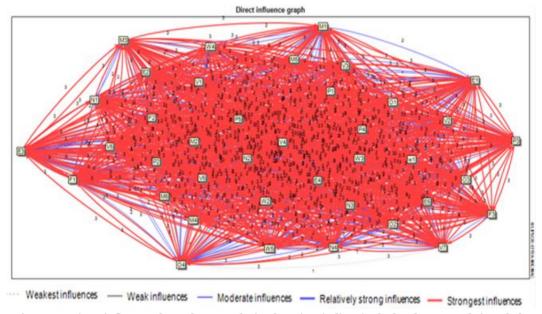


Figure 4. Direct influence-dependence analysis of tourism indices in the border town of Piranshahr

According to the results presented in this "Table" and "Figure" 1 to 6, the key driving forces can be presented as in Table 4 with regard to effectiveness and being affected. In this regard, based on the total 39 analyzed variables, 10 key driving forces can be presented from most to least important, respectively (Table 6).

Production of tourism scenarios in Piranshahr by a futuristic approach

Based on the total approach governing the study, it can be stated that after the 39 final variables were identified, they were evaluated and ranked by the elites and executive managers within the framework of the key assumptions of border tourism with futuristic approach. Finally, 8 variables were presented as the (direct and indirect) key effective factors on a spectrum from highly important to relatively important and important, as

indicated in Table 5, which were utilized as a basis for developing the study's scenarios. Here, since some indices of the study were close to each other, they were used as a complementary variable in the process of planning the scenarios. Moreover, in order to complete they requirements of presenting the scenarios, some indices were added to the previous list and utilized in the process of presenting desirable, middle, and disastrous scenarios.

Table 5. The variables of indirect influence-dependence matrix of tourism in Piranshahr

3.70	37 * 11	Total number	Total number	
No	Variable	of rows	of columns	
1	Expertise Management	783001	821138	
2	Education and information	701000	700707	
3	organizational cooperation	705595	709047	
4	Citizens information	708551	716004	
5	Diplomacy Project	784707	731449	
6	Infrastructure improvements	762139	778113	
7	Industrial workshop	763284	790794	
8	Customs service	823960	749333	
9	Installations conveying water	873420	807243	
10	Alternant industries	804333	768542	
11	technology development	759783	821515	
12	Associated with the construction	745386	648855	
13	Climatic comfort	797715	782841	
14	landscapes	810378	771031	
15	Agricultural and cultivation fields	806825	816021	
	Crossing of the river	689268	729559	
17	Change the days of glacial and heat	771188	773320	
18	Environmental legislation Codification	836199	829044	
19	The costs of environmental degradation	809481	776510	
20	International organization cooperation	861560	697803	
21	Pattern of behavior citizens and migrants	827117	748774	
22	The lack of a sense of place	756844	755455	
23	Uneven distribution of population	703273	781503	
24	Pressures on environmental resources	687841	806327	
25	Unplanned Urban Development	699009	850658	
26	Physical and Space design	750839	729762	
27	Non-standard residential units density	737092	681949	
28	Justice of physical - space	794475	814470	
29	Desirable elements based on the urban environment	647807	776014	
30	Commercialization land and residential units	718019	737855	
31	Utilizes the social and cultural capacity	798190	831954	
32	Organizing rules of socio-cultural	787557	837227	
33	NGO and development of urban ecology	647440	791430	
34	Social morality and responsibility feeling	511162	676738	
	International border exchanges	870542	782625	
36	incoming and outgoing passengers	772146	838514	
37	Neighborhood with the Kurdistan Regional Government of Iraq	913192	819114	
38	Amount of export and imports of goods and transit	902522	822925	
39	The strategic location of the city border	952023	772700	
	Totals	3570	3570	

Since the periods of strategic planning include short-term processes of 5 to 10 years, middle-term processes of 10 to 20 years, and long-term processes of 30 years, the

present study used a period of 15 years to develop the future studies pattern of border tourism in Piranshahr because the present study had an applied nature. Afterwards, based on (Table 6, 8) factors and 32 states were supposed for the four presented scenarios which were proposed on a spectrum from the most desirable to the most disastrous within the framework of desirable, middle, and disastrous scenarios. Therefore, obtaining any of them requires development of specific strategies which will lead to conduction of the most unfavorable scenarios if they are not actualized. As a result, given the comprehensiveness of Wizard Software, only the scenarios are presented in Table 7.

Table 6. The key driving forces affecting the tourism status with a futuristic approach

Key factors with an indirect influence	Abbreviation	Key factors with a direct influence	Abbreviation
Strategic situation	RY	Strategic situation	RY
Neighborhood with the Kurdistan Regional Government	UL	Neighborhood with the Kurdistan Regional Government	ME
Trading the border goods	ME	Trading the border goods	UL
Dams and water transfer	EE	Population and immigration elements	PM
Urban management	ent CP Environmental factors, climand beautiful scenery		OT
The rate of exports and imports	UD	Modern technologies	NT
Population and immigration elements	MP	Urban management	EP
Environmental factors, climate, and beautiful scenery	OT	Dams and water transfer	EE
Modern technologies	PM	NGOs and development of urban environment	СР

Table 7. The status of the key driving forces in the border tourism of Piranshahr in the next 15 years

Desirable scenario	Disastrous scenario	Middle scenario	Key factor
Strengthening the ties between Iran and the Kurdistan Regional Government, independence of the Kurdistan Regional Government from Iraq, and development of international ties through Tamarchin Border and increase in transit	Disruption of the relations between Iran and Iraq, closure of borders, pressure of border residents, and militarizing the region	Conversion of the Kurdistan Regional Government into a state, Iran's pressure on the borders, and restriction of relations between Iran and the Kurdistan Regional Government	International diplomacy management
Essential attention to the climatic and environmental element, climate changes affecting the quality of urban environment	Increase in construction of dams and destruction of agricultural lands and change in the region's climate	Construction of a dam appropriate with Piranshahr and consideration of environmental conditions	Environmenta l technology
Using expert and experienced managers and counselors and expert local planners familiar with the region	Strengthening the centralization view and using unqualified people appropriate to the positions and marginalizing the local people	Strengthening the decentralization view and increasing people's participation at all levels and creating equal opportunity to take part in planning	Democratic and meritocratic and specialist management
Facilities to control and transfer water for agricultural activities and completion and construction of irrigation and	Constructing dams merely to transfer water to other cities/towns and failure to complete	Finishing the dam constructing and a balanced and sequential trend	Facilities of water control and transfer

drainage networks, and using the region's natural potentials	irritation projects for the region's people		
Unequal distribution of population in suburban areas and inside the town and increase in pressure on agricultural lands around the town	Continuation of the unfavorable current status	Boosting small towns and villages around Piranshahr and creating jobs in them to prevent immigration growth	Imbalanced population distribution
Organic and unplanned urban development and mismatch of the uses	Continuation of the unfavorable current status	Following the sustainable development principles	Physical development of the town
An increase in social mortality and feeling of responsibility regarding protection of urban environment, formation of NGOs	Preventing the development of NGOs and oppressing the people's sense of cooperation to manage the town and protect the environment	Continuation of the current enlightenment and slowly boosting the people's mentality regarding the nature and an increase in the level of awareness about decrease in destructions	Comprehensiv e protection of environment
Using the natural and historical capacities in developing and boosting tourism of the region	Continuation of the unfavorable current status	Change in urban management and more active emphasis on the future opportunities	Capacities of tourism development

CONCLUSION

Borders as gigantic coordinators can motivate the managers to think deeply, predict, and foresee the far horizons through mutual integration. Therefore, in order to develop such a horizon, close attention needs to be paid to the mutual relation between development and tourism including the role of people, economy, and so on, in order to provide the border residents with better conditions of living using a comprehensive trend to increase human-social capacities to respond to the needs of human communities in a spatial scope. Economy and attraction of commercial tourism in border regions, main indices in establishing the relationship among neighboring countries, families, and people residing the border regions are not only economic development engines but also centers for cultural innovation, social developments, and political changes. Here, scenario planning and creating a regular and systematic method can be used to determine the key driving forces within all changes, complexities, and sensitive uncertainties, and urban governors can obtain an understanding of real current situation and an attitude toward the developments through time and explore the conditions in the future by referring to unexpected events in the future and understanding their probable consequences.

In fact, development and correct execution of scenarios can guide the managers to carry out the plans. Based on what was said, the importance of strategic planning to develop tourism is felt more than ever. In general, if we have a principled attitude toward the variables and the subsets of the above indices and the outputs from MICMAC and scenario writing, we can refer to the importance and highly efficient role of the international border of Tamarchin and the strategic situation of the region and development of foreign exchanges and appropriate environment in developing the region's tourism. Although the variable of integrated urban management in the border region can be a strength in intensifying tourism industry in the region, it has been a threat to its development over the last few years due to lack of inefficient management. Finally, it can be concluded that the present study could be carried out with the highest level of validity and reliability with regarding its analyses, which has high infirmity with the stated realities regarding border tourism in Piranshahr, and exact outputs within the

framework of strategic and futuristic studies confirm this reality. Moreover, analysis of the collected data remarkably confirms the point that tourism in the border town of Piranshahr has a semi-stable status, such that continuation of the present status will lead to formation the scenario of disaster, and in the best condition, if the present status continues, the tourism of the town will remain the same without any change or exchange of goods. Therefore, in addition to taking into account other conducted tourism studies, the present study revealed new and strategic dimensions in the framework of utilizing the approach of border town tourism. By taking these factors into account, a more sustainable tourism can be created, which is an issue that would be not accounted in other geographical and spatial studies. In the present study, sustainable border town tourism approach, indices like "variables of urban, social and cultural management, various urban and economic-natural ecosystem in urban areas, and population and immigration and border factors", and the model of future studies of MICMAC and analysis of crossover and strategic influences were utilized in order to develop a desirable model to show the developments in the tourism of the border town of Piranshahr.

Therefore, the indices affecting tourism in Piranshahr were determined within the framework of a 39×39 matrix, 8 general categories, and 39 subsidiary variables. Afterwards, the results of the matrix of analyzing the crossover influences were calculated by giving them weights (from 0 to P). Based on the calculated value of 1468 in the primary matrix of crossover influences by the elites, 922 cases with the highest statistical size had the highest influence, which shows the willingness of the elites toward high valuation among other variables of the study. Furthermore, this point covers high potentials at a high scale to boost the environmental indices in Piranshahr, such that a relatively desirable status of distribution of tourism variables can be shown only by applying risk and double indices on the distribution graph of the indices. Within the framework of the above results and based on the table of development of the scenarios, the subsets of border index, integrated and efficient management, management of water control and transfer, and dam construction are the most important understandable items in terms of obtaining desirable and middle scenarios by a futures study approach. In this regard, the results of the present study is capable of being executed, writing scenarios, and guiding in order to improve the correct tourism management within the framework of structural planning although the empirical results of the present study show the compliance between theoretical results and analyses carried out by the elites and tourism status of Piranshahr.

REFERENCES

Alvani, S. M., & Pirouzbakht, M. (2006). *The Process of Tourism Management*. 1st Ed. Office of Cultural Research: Tehran, https://www.adinehbook.com/gp/product/9643790800.

Chandoevwit, W., & Srawooth, P. (2004). *Thaill and Cross Border Economy*, A Case Study of SA Kaeoond Chiangrai. Thailand development resource institute (TDRI).

Darkosh, S. A. (2009). An Introduction to Urban Economics Publisher: Academic Publishing Center. https://www.adinehbook.com/gp/product/9640113622.

Edwards, D., Griffin, T., & Hayllar, B. (2008). Urban tourism research: developing an agenda. *Annals of Tourism Research*, 35(4), 1032-1052. https://doi.org/10.1016/j.annals.2008.09.002.

Elliott, J., (2002). Tourism: Politics and public sector management. Routledge. https://doi.org/10.4324/9780203416136. Gates, Linda P. (2010). Strategic planning with critical success factors and future scenarios: An integrated strategic planning framework. No. CMU/SEI-2010-TR-037. Carnegie-Mellon Univ Pittsburgh Pa Software Engineering Inst. https://www.sei.cmu.edu/.

Ghaderi, E., (2007). Introduction to the Tourism of Iran Geography, Publishing Mekhameh.

Gunn, C. A., & Var, T. (2002). Tourism planning: Basics, concepts, cases. Psychology Press.

Hasangholipour, T., & Aghazadeh, H. (2005). Strategic planning for small and average institutes. Business Journal, 35. pp. 65-100. Tehran. https://jomc.ut.ac.ir//article_14205_en.html.

- Heydari, A., Rahnama, M., Shokouhi, M., & Kharazmi, O. (2016). Analysis the Spatial Changes of Urban Environment in the Mashhad Metropolis Using the Natural Step Future Study Approach, *Journal: Geography and Sustainability of Environment*, Iran, and Kermanshah.
- Higham, J., & Lück, M. (2002). Urban ecotourism: a contradiction in terms? Journal of Ecotourism, 1(1), 36-51. https://doi.org/10.1080/14724040208668111.
- Jimenez, B. S. (2013). Strategic planning and the fiscal performance of city governments during the Great Recession. The American Review of Public Administration, 43(5), 581-601. https://doi.org/10.1177/0275074012451051.
- Kaberger, T. (2002). Making transport systems sustainable, Journal of Cleaner Production, 10 (4), pp. 45-56. Kheirollahi, A., Hisa. P., & Mana, K. (2016). An Analysis and Analysis of the Role of the Water Crisis on Iran's Tourism in the Next Ten Days: Master's Thesis, University of Zanjan.

 Khoshkam, M., Marzuki, A., & Al-Mulali, U. (2016). Socio-demographic effects on Anzali wetland tourism
- development. *Tourism Management*, 54, 96-106. doi.org/10.1016/j.tourman.2015.10.012. Lee, C. C., & Chang, C. P. (2008). Tourism development and economic growth: A closer look at panels. Tourism
- management, 29(1), 180-192. https://doi.org/10.1016/j.tourman.2007.02.013.

 Lee, T.H., Jan, F.H. & Yang, C.C. (2013). Conceptualizing and measuring environmentally responsible behaviors from the perspective of community-based tourists. *Tourism Management*, 36, pp.454-468. https://doi.org/10.1016/j.tourman.2012.09.012.
- Low, S. M. (1996). Spatializing culture: the social production and social construction of public space in Costa Rica. American ethnologist, 23(4). https://doi.org/10.1525/ae.1996.23.4.02a00100.
- Lita, R.P., Surya, S., Ma'ruf, M. & Syahrul, L. (2014). *Green attitude and behavior of local tourists towards hotels and restaurants in West Sumatra*. Indonesia. Procedia Environmental Sciences, 20, pp.261-270.
- https://doi.org/10.1016/j.proenv.2014.03.033.

 Mahdizadeh, J. (2010). Scenario Planning, A New Step in Strategic Planning, Quarterly Urban Planning Quarterly, Ninth. No. 32.
- McIntosh, A. (1998). Mixing methods: Putting the tourist at the forefront of tourism research. Tourism Analysis, 3(2), 121-127. https://www.ingentaconnect.com/contentone/cog/ta.
- Nana Ato Arthur, S., & Victor Mensah, J. (2006). Urban management and heritage tourism for sustainable development: The case of Elmina Cultural Heritage and Management Programme in Ghana. *Management of Environmental Quality: An International Journal*, 17(3), 299-312. https://doi.org/10.1108/14777830610658719.
- Niebuhr, A., & Stiller, S. (2002). Integration effects in border regions-A survey of economic theory and empirical studies (No. 879-2016-64210). https://ageconsearch.umn.edu/record/26340.
- Pour Ahmad, A., Gharakhloo2, M., Darban Astaneh, A, & Pourghorban, Sh. (2016). Analysis of the Tourism Potential of Hormuz Island with an Emphasis on Academic Land use. *Biannual journal of urban ecology research*. 5 (19), 37-56. http://grup.journals.pnu.ac.ir/article_2943_en.html.
- Pourbodaghi, Y. (2000). An investigation into the performance of Serve border market and it role in economic growth of the region. Unpublished Master's Thesis, Islamic Azad University, Science and Research Branch, Tehran.
- Prescott, J. R. V. (2014). Political frontiers and boundaries. Routledge. https://doi.org/10.4324/9781315747651. Rahnama, M. R. & Mahrufi, A. (2015). Scenario writing in urban and regional studies (Concepts, methods, and experiences). Research Center of Mashhad Islamic Council, 1st Ed.
- Rahnama, M. R., & Sharifzadeh Aghdam, E. (2018). Analyzing the role of social capital in sustainable environmental governance: A case study on Piranshahr. Business Strategy & Development, 1(3), 189-195. https://doi.org/10.1002/bsd2.26.
- Roknadin Eftekhari, A. R. Papoli-e-Yazdi., M. H & Abdi, E. (2008). "Assessment of the economic effects of border markets in the development of border areas, case study: Sheikh Saleh border markets in Salas Babajani county-Kermanshah." The Journal of Geopolitics 12 (2008): 82-109. https://doi.org/10.1016/j.annals.2008.09.002.
- Rosentraub, M. S., & Joo, M. (2009). Tourism and economic development: Which investments produce gains for regions. Tourism management, 30(5), 759-770. https://doi.org/10.1016/j.tourman.2008.11.014
- Royo-Vela, M. (2009). Rural-cultural excursion conceptualization: A local tourism marketing management model based on tourist destination image measurement. Tourism Management, 30(3), 419-428. https://doi.org/10.1016/j.tourman.2008.07.013.
- Stefănică, M., & Butnaru, G. I. (2013). Approaches of durable development of tourism. Revista de Turism-studii si cercetari in turism, (15), 41-47.http://www.revistadeturism.ro/rdt/article/view/135/100. Wack, P. (1985). Scenarios, Uncharted Waters Ahead, in<< Harvard Business Review>>, sept./oct.
- G., Fahl, U., Pyka, A., Staber, U., Voegele, S., & Weimer-Jehle, W. (2008). Generating innovation scenarios using the cross-impact methodology. Discussion Papers Series, (007-2008). https://crossimpact.de/ Ressourcen/generating_innovation_scenarios.pdf.
- Zahradníčková, L., & Vacík, E. (2014). Scenarios as a strong support for strategic planning. Procedia Engineering, 69, 665-669. https://doi.org/10.1016/j.proeng.2014.03.040
 *** Iran Statistical Center. (2016). General Census of Population and Housing1996, 2006 and 2011. (In Persian).
- *** Tourism profile of the Islamic Republic of Iran. (2015). Islamic Consultative Research Center. Tehran.
- *** World Health Organization. (2015). "Country cooperation strategy for WHO and Islamic Republic of Iran: 2010–2014. *** WTO. (2004). *Cultural Tourism and Poverty Alleviation:* The Asia-Pacific Perspective, Spain, 1st Editio.
- *** WTO. (2010). Cultural Tourism and Poverty Alleviation: The Asia-Pacific Perspective, Spain, 1st Editio (Jing, X. (2005). Cultural tourism and poverty alleviation: the Asia-Pacific perspective. https://www.bcin.ca/bcin/detail.app?id=243144).

Submitted: Revised: Accepted and published online 16.01.2020 21.01.2020 15.04.2019

TOURIST AND RECREATIONAL POTENTIAL OF LANDSCAPES OF THE SPECIALLY PROTECTED NATURAL AREA OF SHARYN OF THE REPUBLIC OF KAZAKHSTAN

Bayan S. KERIMBAY*

L.N. Gumilyov Eurasian National University (ENU), Faculty of Natural Sciences, Department of Physical and Economical Geography (DPhaEG), st.Kazhymukan, 13, 010000, Nur-Sultan, Republic of Kazakhstan, e-mail: bayan.kerimbay.65@mail.ru

Kulchikhan M. JANALEYEVA

L.N. Gumilyov Eurasian National University (ENU), Faculty of Natural Sciences, Department of Physical and Economical Geography (DPhaEG), st.Kazhymukan, 13, 010000, Nur-Sultan, Republic of Kazakhstan, e-mail: dzhanaleeva44@mail.ru

Nurzhan N. KERIMBAY

L.N. Gumilyov Eurasian National University (ENU), Faculty of Physics and Technical Sciences, Department of Space Engineering And Technology (DSEaT), st.Satpaev, 2, 10000, Nur-Sultan, Republic of Kazakhstan, e-mail: n.kerimbay@mail.ru

Citation: Kerimbay, B.S., Janaleyeva, K.M. & Kerimbay, N.N. (2020). TOURIST AND RECREATIONAL POTENTIAL OF LANDSCAPES OF THE SPECIALLY PROTECTED NATURAL AREA OF SHARYN OF THE REPUBLIC OF KAZAKHSTAN. GeoJournal of Tourism and Geosites, 28(1), 67–79. https://doi.org/10.30892/gtg.28105-452

Abstract: In this work, we studied the tourist and recreational resources - relict, unique landscapes of the specially protected natural area of the Sharyn. The work is the result of many years of field research on landscapes and summer field practice in 2019 in the Sharyn River basin, the study and systematization of published scientific materials. 4 key sections were laid along 2 routes. On this basis, foci of landscape diversity were identified: relic tracts of Sarytugai with Sogdian ash (Fraxinus sogdiana Bunge), tracts Kurtogay, Moyyntugay and Temirlik with relict morphological sculptures. A digital thematic map was created on ArtGIS 10.1. The "passport" of the existing tourist routes and the "passport" of the recreational load of the protected areas Sharyn have been completed. To remove the anthropogenic load on the Sharyn Canyon, it was proposed to develop two more routes: "Small Canyon" and "Temirlik tract." The scientific base of the tourist and recreational potential has been created and the feasibility of further development of international tourism has been substantiated.

Key words: Sharyn Canyons, Castle valley, landscape, natural boundary, refugium, morphosculptures, Sogdian ash, tourist routes

* * * * * *

^{*}Corresponding author

INTRODUCTION

Tourism is considered to be one of the most active and important industry in many countries and plays a vital role by contributing to economy of many developing countries (Akbar et al., 2020, p. 35). Tourism plays a significant role in the global tourism and hospitality industry, and according to forecasts of experts, including the World Tourism Organization, its growth rates will continue to be high, and the income generated will make a significant contribution to the development of economies of various countries of the world (Aliyeva et al., 2019, p. 3). The aim of this work is: to study at the present stage of the tourist and recreational potential of landscape refugium of SPNA (specially protected natural areas) of Sharyn. Landscape refugium are a relief or other natural objects in which, due to the unique combination of landscape-forming factors and low economic development, characteristic and rare relict geosystems for the region have been preserved. The idea of refugiums has long been established in Western and Russian biological science and literally means "shelters" - areas of the earth's surface where one species, or more often a whole group of living forms, survived an unfavorable period of geological time during which these forms disappeared in other spaces. Studied Landscape refugium (Chibilev, 1999).

To achieve this goal, the objectives are: landscape field research in key areas; creation of a geographic information database. The relevance of the study is the need for integrated landscape research. Landscape is a concept and structure that can be used as an approach to enhance the implementation of tourism policy. The study of recreational conditions and resources of the living environment of the population is a special area of comprehensive landscape and geographical study of the territory (Mazhitova et al., 2018, p. 19). The object of research in administrative relations is located within the Uyghur and Kegen districts of the Almaty region, Republic of Kazakhstan. A feature of the studied object is that it is located along the mountain river Sharyn. Below the confluence of the large left tributary of Karkara, the river enters a narrow valley - Aktogay tract. Further the river, having passed the relic tracts Kurtogay, Moyyntokay and Sarytogay, goes to the Ili Valley. One of the main tributaries is the right bank of the Temirlik River.

RESEARCH METHODS AND MATERIALS

The methodological basis and theoretical concepts of the systems approach in landscape science were developed in the works of many scientists (Krauklis, 1979; Solntsev, 1981; Retyum, 2017; Snytko & Semenov, 2008; Tandaric, 2015).

The landscape approach as newly adopted in the development context is rooted in integrative landscape research with a long tradition in geography and planning. landscape research puts the analyses of pattern and processes within the landscape at center stage, on the other side, landscape research focusses on holistic approaches, in which landscape is understood as "an area, as perceived by people, whose character is the result of the action and interaction of natural and/or human factors" (Burgi et al., 2017, p. 1372).

In the doctrine of the geosystem-basin approach (Janaleyeva, 1993; Janaleyeva, 2010) defined the concepts of structural organization, a number of works on this topic were carried out, where a geosystem-basin approach was substantiated when studying the natural environment of the Republic, including the Sharyn subgeosystem under Balkhash- Ili mega-geosystem. The methodological basis for physical geography is presented in the writings of scientists (Gorbunov & Gorbunova, 2013; Kerimbay, 1998; Kerimbay, 2015; Veselova & Shmarova, 2016; Zhandaev, 1972), the provisions of the concept of protected areas (specially protected natural areas) are described in the works of (Chibilev, 2011); Characteristics of individual species of relic plants - living witnesses of the flora of previous eras, preserved to our time, including Sogdian ash, growing in the

Sharyn river basin, studied (Wintergoller, 1984). Sogdian Ash (Fraxinus sogdiana Bunge), was first discovered by P.P. Semenov-Tyan-Shansky in 1857 on the banks of the Ili River (in the Sharyn River Delta). We believe that the most effective way to preserve the natural and biological diversity of landscape refugium is to comprehensively study them. The methods and approaches of landscape-recreational research have been studied in publications (Dunets, 2011; Kabiyev et al., 2018; Mazhitova et al., 2018; Nazarova et al., 2019; Wendt, 2018). The method of "key" sites is used to study the most typical and important geosystems, the study of which will solve the main problems necessary for landscape mapping (Makunina, 1987; Beruchashvili & Zhuchkova, 1977).

When conducting field research, the employees of the Department of Science of the Sharyn SNNP (State National Natural Park) took active part. A lot of information was obtained from the archive of this department (Chronicle of Nature, 2018a, 2018b).

Protected areas play a major role in landscape diversity, high conservation value, namely those that are unique or relict landscapes, characteristic natural or anthropogenic - natural types of geosystems; ensure the maintenance of a population of background, characteristic, rare and economically significant species. Rare plant species, rare relief types, etc. can be model groups for creation. In the structure of protected areas, the core "nodal territories" of world and national significance, landscape refugium "foci of landscape diversity" stand out. On the territory of protected areas Sharvn 2004 according to the Decree of the Government of the Republic of Kazakhstan No. 213, the Sharyn SNNP (State National Natural Park) was organized on an area of 127,050 hectares in order to preserve and restore the unique natural complexes of the Almaty region. The territory has a special environmental, historical, scientific, aesthetic and recreational value. The main task of the Sharyn SNNP is to protect and expand the habitat of rare and endemic species of animals and plants, as well as their communities, listed in the Red Book of the Republic of Kazakhstan; protection of unique geological objects with morphosculptures. The Sharyn Canyon is included in the list of geological and geomorphological objects and in the list of subsoil areas of particular value. Here, the steep rocky slopes of the canyon, paleontological finds, including fossil animals found in the area, as well as rare species of fauna and flora are protected (Betemesov & Toktasynov, 2013; Ogar et al., 1997; Kolisnichenko et al., 2013). In 2018, by the decision of the 30th session of the International Coordinating Council of the UNESCO Program "Man and the Biosphere", the Sharyn Biosphere Reserve was included in the UNESCO international network of biosphere reserves. The Sharyn Biosphere Reserve with an area of 239.7 hectares is located in the Sharyn River Basin. It is a unique biogeosystem in the central part of the Ili intermountain basin. The reserve combines the canyon-like valleys into a single whole.

General characteristic of the landscape topography and climate. The mountainous surroundings of the territory are represented by the midlands with absolute heights of 1800-2000 m. The steeply sloping manes and ridges are separated from each other by valleys of temporary watercourses with a depth of 300-500 m. Low mountains are developed at absolute heights of 1400-1800 m, represented by a combination of ridges, separated by gorge-like valleys of watercourses, logs with a depth of 150-200 m. On the slopes, gravel screes are developed. The alluvial-proluvial plain, stretching along the mountains to the Sharyn River, has an almost flat surface, intersected by river valleys with different depths of incision. In the Sharyn river valley, floodplain and floodplain terraces with a decrease in the absolute elevations along the channel from 755 to 605 m above sea level, with a fall from the southwest to the northeast, are clearly pronounced over wide sections. In places of sharp turns of the channel and narrowing of the valley, clamps and cone of deluvial deposits prevail. A section of a valley composed of

sedimentary metamorphic rocks forms a deeply eroded canyon with steep slopes in the form of colored weathered rocks resembling castle walls and fairy-tale characters.

The variety of tourist values of the places increases the possibilities of practicing various types of tourism (Kabiyev et al., 2018, p.645). The climate on the territory of protected areas Sharyn is desert continental. The average annual temperature is about + 5° C, the coldest month (January) -6° C, the warmest (July) - about + 27° C. The frost-free period in the air lasts 180 days, and atmospheric drought lasts about 40 days. The snow cover is shallow (10-20 cm), lasts about 60 days: it is established on average on December 20, and is destroyed on February 20. The total precipitation is about 150 mm per year (Kerimbay, 2015, p.39). The water temperature in the Sarytogay tract in April is 8.2° C, in July - 17.5° C, and the transition through 0.2° C is observed on December 5. In late December, the river banks are covered with ice, which disappears in late February - early March. Field studies were conducted on predefined routes and key areas. In total, during the field research period in the summer of 2019, 2 routes Kurtugay - Mointugay - Temirlik were laid; Moyintugai - Sarytogay. As a result of these studies, key sections (Table 1) of the Kurtugay, Mointugay, Temirlik tracts with relict morphosculptures and the Sarytogay tract with relict vegetation species were identified and studied in detail (Figure 1).

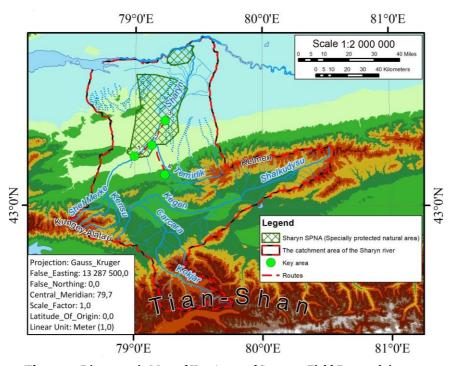


Figure 1. Diagrammic Map of Key Areas of Summer Field Research in 2019

Name and location key areas:

- 1. Kurtogay tract, near the Sharyn River, 500 m from the bridge on the A-6 highway;
- 2. End of Sharyn Canyon, Moyynthay Valley with Canyons;
- 3. Ash tree Sogdian grove, 50 km. from dirt road, Sarytogay tract;
- 4. Temirlik Canyons, 3.5 km. from highway A-7, the western outskirts of the village of Temirlik.

The tracts are located in the basin of the middle and lower reaches of the Sharyn River. The beginning of the tract is 4 km above the mouth of the Temirlik river and ends at 5 km. in front of the bridge on the Almaty-Zharkent highway, not only landscapes as a whole are unique here, their individual components are unique, especially the relief is the basis for the formation and differentiation of landscapes.

In all key areas, work began with navigation: receiving satellite signals, determining coordinates, determining absolute altitude. The relief description was carried out according to external morphological data, the meteorological data to of the air were determined, fluctuating between +270 and +290, the direction and speed of the S-b wind, 4-5m / s. To study the vegetation, geobotanical sites 1x1 m in size were laid.

Key area № 1

N.İ. 43° 17.185 / east.l. 78° 97.392 / height above sea level 1252 m.

Date: 06/18/2019

At the Sharyn River, 500 meters from the bridge on the A-6 highway, natural boundary Kurtugay (Figure 2). The site is confined to the middle reaches of the Sharyn river, composed of boulder-pebble-sand deposits with solyanka-ephemeral-wormwood vegetation on gray-brown soils. Kurtogay hilly-inclined plain with deep sai (Figure 3).

The natural boundary Kurtogay is located in the immediate vicinity of the bridge over the Sharyn River, 200 kilometers east of Almaty. Here are observed the terrigenous-carbonate stratum of the Miocene, overlapping the light gray very strong weathering crust along coal-bearing volcanics. The entire Neogene sequence is colored in reddish and yellowish tones. Carbonic volcanic rocks themselves are represented in the form of beautiful outcrops of tuffs with large rounded fragments of volcanic rocks, then they are replaced by the thickness of a tuff lava, the rock outcrops of which, reminiscent of stone idols, form the walls of the narrowest section of the canyon. This rock consists of particles of molten lava, raised into the air as a result catastrophic explosions. Quite large fragments of lava stand out among tuff lavas to 50 cm. Then the canyon expands, and a volcanic sedimentary thin layer with a lenticular horizon of gray tuffs about 2 m thick is exposed on its right side. Impressive outcrops of intrusive and volcanogenic rocks are observed in the gorge, at the base of which (near the mouth of the canyon) are granites.



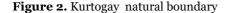




Figure 3. Kurtogay hilly-inclined plain with deep ravine

From the east, to the right side of the tract Kurtogay adjoins a site with an extremely dissected relief. Numerous gullies and ravines, wriggling, intersecting and newly

disconnecting, form a dense, disordered network, the so-called poorland. The term literally translated from English means "barren land" - include many landforms - small hills, plains, sand massifs, canyon slopes to the canyon with many terraces, caves, grottoes, bizarre single rocks, etc. On the laid geobotanical site (1x1) a description of the vegetation is made. The characteristic vegetation is herb-shrub-poplar (*Populus diversifolia*, *P. nigra*, *Salix kirillovii*, *Rosa iliense*, *Trachomitum lancifolium*, *Clematis orientalis*) along the channel, and shrub thickets (*Rosa plathyacantha*, *R. silverhjelmii*, *Berberis cleis iliensiens iliensiens iliensiens*) terraces in combination with single shrubs (*Atraphaxis virgata*, *Caragana kirghisorum*, *Ephedra intermedia*, *Salsola arbuscula*) rocky steep slopes.

Project coverage - 65% - is quite plentiful.

Vitality: medium not full bloom;

does not grow in widespread clusters.

Key area № 2

N.Í. 43º 24.231 / east.l. 79º 10.218 /

height above sea level 1121m.

Date: 06/19/2019

Moyyntokay valley with canyons, the end of the Sharyn canyon.

It is represented by a valley with canyons, with narrow gorges, cut in porphyrites and bedrock rocks with sparse xerophytic-cereal-shrub vegetation on alluvial meadow soils. The natural boundary Moyyntokay extends from the exit of Sharyn from the gorge cut into the spur of Toraigyr to the mouth of Temirlik. This is a narrow canyon 200-300 m wide (Figure 4). The river Sharyn in the Kegen valley after the confluence of Karkara and Kegen, as a result of erosion-accumulative processes, formed a valley - a canyon with morphosculptures, this is a grandiose ravine (sai) "Castle Valley".

In the Sharyn Canyon, the height of the rocks reaches three hundred meters, and the total length of the canyon is more than 15 km. along the sides of the canyon ravine, weathering processes, temporary water currents, strong winds carved bizarre cliffs resembling the ruins of ancient castles. According to the work of geologists (Aubekerov et al., 2003) here, a mineralogical change in the granites of the Ordovician period is observed from the initial pink-brown to bluish-green color with the introduction of magma in the Carboniferous period. In the Holocene of the Quaternary, as a result of erosion-accumulative processes, solar energy, from plastic sedimentary rocks, mainly from sandstone, which gives the walls of the gorge reddish hues, the gorge acquired its current appearance, hanging over the river of morphosculptures in the form of palaces, towers and minarets (Figure 5). The tract cuts through the Toraigyr ridge. Here, magmatic contact of Ordovician granite (orange with blue inclusions) and carbon rhyolitic lava (blue-turquoise color) is observed (Gorbunov & Gorbunova, 2013).

An array of carbonic volcanic rocks of the Toraigyr mountains is currently advancing on the Neogene plains, the process of thrusting carbonic volcanic rocks on the Pliocene breccias is ongoing at the northern foot of the Toraigyr ridge, at the southern foot of the Yellow Canyon in Pliocene clays and boulder-pebbles. Neogene pattums (pattum-mixed, unsorted) sand-aleuritic-clay rocks of the Castles Valley contain a lot of rubble - the product of rock destruction of the northern macro slope of Toraigyr. The whitish lenses of lake sediments, mainly marls (clay-calcareous rocks), are also noteworthy. In the Valley of Castles, Neogene deposits overlap a rocky shallow hive composed of effusive rocks (volcanic rocks) of the Upper Paleozoic (Carboniferous). These dark rocks are clearly visible on the starboard side of the saya, especially at the place of its exit to Sharyn, where the canyon reaches a depth of 200 m. Here, a mineralogical change in the granites of the Ordovician period is observed from the initial pink-brown to bluish-green color with the introduction of magma in the Carboniferous

period. In the Holocene of the Quaternary, as a result of erosion-accumulative processes, solar energy, from plastic sedimentary rocks, mainly from sandstone, which gives the walls of the gorge reddish hues, the gorge acquired its current appearance, hanging over the river of morphosculptures in the form of palaces, towers and minarets.

On the laid geobotanical site (1m x 1m) a description of the vegetation is made.

Astragalus Sharynsky, Iliysky cutter, Kashgar rabbit, Sisoluy turanga, Kolpakovsky tulip (*Astragalus Sharynsky, Kashgar leporelabrum, Populus Salicaceae, Tulipa Kolpakovsky*) and other communities (Chronicle of nature, §2, 2018).

Project coverage - 55% - quite plentiful

Vitality: medium not full bloom; does not grow in widespread clusters.





Figure 4. Moyyntokay Valley with canyons

Figure 5. Morphosculptures in the canyon

Key area N^{0} 3 N.L. 43° 30.972 / E.l. 079° 15.046 / height above sea level 787m.

Date: 06/24/2009

Grove ash Sogdian (Figura 6), 50 meters from the highway, on the northern outskirts of the village of Bahar, Uyghur district, natural boundary Sarytogay (Figure 7).

The northern edge of tugai ash with grassy meadows on alluvial tugai soils. It is represented by the Sarytogay Valley with numerous sai and small mounds composed of pebble-sandy loamy deposits. The soil profile includes a gray-humus horizon of gray color, lumpy, with a poorly diagnosed layer; deluvium rolled stones; the thickness of the horizon is 20-30 cm. The Sarytogay (Ash Grove) tracts (about 25 km long) are the widest (in places up to 2 km) in the Sharyn valley with a depth of not more than 100 m.

Due to the rare combination of a number of geological factors, the interesting locations of the most ancient representatives of the flora have been preserved in the Ash Grove. Sogdian ash (Figura 8) - a relic grove of the Paleogene period, survived the era of glaciation. Sogdian ash tree (Chronicle of Nature, §2, 2018) up to 20-25 meters high, with a trunk diameter of up to 1.5 meters at chest height. The bark is light gray, fissured. Branches are reddish or gray, young pubescent. The crown is openwork, rounded, in old specimens it is very spreading and reaches enormous size. In the Ashen Grove, 400-year-old ash with 4.5 girths, 300-year-old ash in 3.5 girths and 300-year-old ash in 3 girths are common. The bark of the trees is light gray, the branches are reddish-brown, and the leaves are very long - up to 20 cm. The wood-loving ash tree has very valuable wood. The area of the ash forest in Sarytugaev in 1926 was about 1100 hectares, in 1943 - only 410 hectares. This time, the area of the ash forest increased to 812 hectares. In addition

to ash, various shrubs and trees grow in Sarytogay. On the saline high floodplain terraces, two types of turanga (variegated and sisolate), very original in floristic composition, are common - also the same age as Sogdian ash, and is a relic and endemic (Figura 9). In the undergrowth are common willows, rose hips - Ili and Alberta, as well as rare red-book species - Barberry Ili and Honeysuckle Ili. In rarefied ash forests, a layer of coarse grass is well developed (kendyr lanceolate, Ural licorice, medicinal asparagus, multifooted scythe, etc.). In the clearings and clearings, dense thickets of shrubs (barberry, dogrose, chingil, comb) are common. In Kazakhstan, this type of ash is also called Turkestan, Syrdarya, riverine, and reloving because of its confined plantation in mountain river valleys, it is the only one not only in Kazakhstan, but also in Central Asia.

On the laid geobotanical site (1x1) a description of vegetation is given.

Characteristic number of communities (Chronicle of Nature, §2, 2018): ash (Fraxinus sogdiana) with a rare lower tier from Asparagus officinallis and Ribes saxatile \rightarrow sea buckthorn-willow-sucker (Elaeagnus ochusarra, Salix angustifolia, Hippophae rhamnoides, \rightarrow poplar-ragenogen P. alba) from (Rosa iliensis, Lonicera iliensis, Berberis iliensis) \rightarrow sucker-shrub (Elaeagnus ochusagra, Salix alba, S. kirillovii, Hippophae rhamnoides, Clematis orientalis) on alluvial low-lying boggy soils and.

Project coverage - 95% - a lot

Viability: full viability, (plants have normal growth) full bloom; grows in common clusters.



Figure 6. Study of Grove ash Sogdian



Figure 7. Natural boundary Sarytogay



Figura 8. Sogdian ash (Fraxinus Sogdiana)



Figura 9. Turanga poplar, age 400 years

Key area № 4

N.l. 43° 05.918 / east.l. 79° 25.762 /

height above sea level 1099m.

Date: 06/20/2019

3.5 km. from highway A-7 Shonzhi-Kegen, the western outskirts of the valley of Temirlik, Kegen district, Temirlik canyons. It is represented by the Middle Temirlik lowlands with erosive steep-walled canyons, composed of porphyrites with ephemeral-wormwood-forbs-vegetation on gray-brown gravelly soils. Here there is a very spectacular exposure of the ophiolites, which are the remains of the Cambrian paleocean, and are represented by serpentinized pyroxenites, gabbros, and diorites. Ophiolites compose a large and extended linear block of sub-latitudinal orientation, crossed by a deep gorge of the river. Temirlik canyons, in the walls of which the relationships between various rocks of the ophiolite association are clearly visible. To the south of the exposure of the ophiolites lies a stratum of layered phyllite schists and phyllitized schist sandstones, gravelites and conglomerates of the Shushanai Formation of the Upper Silurian (Walter, 1986). Conglomerates of this stratum contain pebbles of serpentinized ultrabasic rocks (which are known to have a high chromium content) with a large amount of a characteristic secondary mineral - bright green fuchsite - chromic mica.

On the laid geobotanical site (1x1) a description of the vegetation is made.

Semirechye wormwood (*Artemisiaheptapotamica-wormwood Semirechenskaya*) communities enriched with species of petrophytic forbs, ephedra thickets (*Ephedraequisetina-horsetail*, *E.intermedia-ephedra*, *among the rocks and scree*).

In Temirlik, there are 4 populations of Populus Salicaceae, 400 years old.

Project coverage - 50% - quite plentiful

Vitality: medium not full bloom; does not grow in widespread clusters.

RESULTS AND DISCUSSION

Thus, in the Sharyn River Basin, the landscape structure represented by a full range of genetic types of localities - from watershed (eluvial) to floodplain (alluvial) are the key landscape areas that we identified - relic tracts Kurtogay, Moyyntokay, Temirlik and Sarytogay. These tracts are almost completely preserved from anthropogenic impact.

Currently, in accordance with functional zoning and according to the Management Program of the RGM "Sharyn State National Natural Park" for 2015-2019, 3 tourist routes have been developed (Management program, 2015):

- 1. The route "Nature Monument Sharyn Ash";
- 2. The route "Sharvn Canvon":
- 3. The route «Burial grounds and mounds».

All routes are seasonal from April to October. It offers visitors: On the route Sharyn Canyon: a yurt, a gazebo. The route is equipped with a viewing platform -2; descent; marked trail; buffer zone is indicated; parking - 1; panel signs -35. Roads: On the Sharyn Canyon, due to heavy rains, the dirt road is constantly eroded, constant leveling by a grader is required. The route "Sharyns ash forest" is equipped with a guest house for 6 people (with amenities); cottage for 6 people; gazebo with 50 seats. There is a dirt road to the guest house, for buses there is a special check-in. We studied tourism monitoring information (Management program, 2015). Based on this information, the authors compiled a passport of the recreational load on the protected natural territories of Sharyn (Table 1, 2) and dynamics tourists visiting these tourist sites along the routes (Table 3). From these data one can learn that very few foreign tourists visit such unique tourist sites. It also turned out that the most visited object in the protected areas are relict morphosculptures - Sharyn canyons.

Table 1. "Passport" of the tourist route through the protected areas of Sharyn

	Table 1. Passport of the tourist route through the protected areas of Sharyh			
Nº	Route name	Route description	Tourist facilities	
1	2	3	4	
1	Charyn Canyon "Valley of Castles"	Inspection of the Sharyn canyon "Valley of Castles" from the observation deck located on top, then descent into the canyon. Passing through the path network, the attention of tourists is drawn to the beauty and grandeur of the pyramids, castles, towers, sculptures created by the hand of nature. Is one of the well-visited objects with a length of 2 km., Designed for 1 day, valid from April to October. This is a geological - geomorphological tour, which is of particular value for tourism and recreation. An opportunity to see the Kungei feather grass, bristle-leaved onion, Kolpakovsky tulip.	Muyntugai Canyon	
2	Monument of nature "Sharyn Ash-tree Grove"	With a length of 25 km., Is designed for 1 day, valid from April to October. This is a geobotanical tour in the Paleogene era. From the observation deck you can see the beautiful panorama of the unique plantings of ash. Then a descent into the floodplain of the Sharyn River. Inspection of the clean plantings of Sogdian ash, special attention is paid to its excellent natural renewal, familiarity with the artificial plantations of ash on the second terrace, then the route runs to the ash-tree, a long-lived ash, the diameter of which can cover 7 people. Acquaintance with plant communities, with a variety of natural landscapes, red book: barberry Iliysky, sea buckthorn, etc.	Natural boundary Sarytogay	
3	Burial Grounds and mounds	The route starts from the Shonzhi-Almaty highway, located in the direction of the river Sharyn-Sarytogay. With a length of 22 km., Is designed for 1 day, valid from May to October. This is a historical and archaeological tour. The route starts from the Shonzhi-Almaty highway, located in the direction of the river Sharyn-Sarytogay. The first display facility of the Burial Grounds. The burial ground consists of 108 barrows and ring stone fences. Mounds of mounds from earth and stone, diameter 3-16 m, height 0.1-1.2 m., 17 mounds and one fence excavated. In burial mounds according to the rite of corpse, the position of the head to the northwest. Funeral equipment, clay vessels, a wooden bowl, iron knives, a bronze pendant, animal bones. BC. in Kazakhstan there were relatively large associations with the beginnings of state power. In the south-east, in Semirechye - this is Uysuni. The most important source on the history of the Saka tribes, their material, spiritual culture are archaeological sites - burial grounds, mounds, cave paintings, treasures of Saka things, dwellings of the Bronze Age. These were dugouts and half dugouts with walls 1-2 m deep in the ground, made of stones in clay mortar. Here was located the largest settlement in Semirechye with the presence of traces of the irrigation system of the Early Iron Age. Scattered fragments of cauldrons, jugs, bowls, as well as stone tools are visible on the surface. Here, interesting locations of the oldest, now extinct representatives of the fauna are preserved. Rich clumps of fossilized bones of mastodons, elephants, rhinoceros, horses of Stenon, hyenas and many others were found in the cliffs. Finds in the Miocene clays of the remains of a hipparionic fauna - hipparion (a three-toed horse the size of a donkey), a rhino that lived in shrubbery, a giraffe that lived in light forests, an antelope and an ostrich. Then the route continues along the left bank of the river Sharyn to the guest house, to get acquainted with the exhibits of archaeological finds. After	they found archaeological and paleontological finds, burial grounds, mounds	

Route			The		Recreational load	
No.	Route name	type of route	length, km.	Seasonality	Number	Number of
NO.			length, kill.	-	of days	persons
1	2	3	4	5	6	7
1	"Sharyn Canyon"	Toute	2km	April- October	1	30
2	"Sharyn Ash- tree Grove»	Car and pedestrian route	25km	April- October	1	30-50
3	«Burial grounds and mounds»	Car and pedestrian route	22km	May- October	1	140

Table 2. Passport of recreational load of protected areas Sharvn

Table 3. Dynamics of tourists visiting the routes of protected areas Sharyn

Nº	years	total number of visitors	including foreign tourists
1	2010	3700	300
2	2012	3900	350
3	2014	4200	370
4	2016	4300	420
5	2018	4400	800

The chaotic unorganized descent into the canyon along the slopes is accompanied by a failure along the paths of the soil and vegetation cover, which results in water erosion of the slopes, which stimulates ravine formation, mudflows, and landslides. A progressive increase in tourists and sightseeing will further degrade the slopes of the canyon. In order to avoid the development of negative anthropogenic-stimulated processes, it is necessary to modernize the infrastructure of the territory.

For example, the construction of a cableway to descend into the canyon. This will not only prevent the erosion of the slopes, but also restore the vegetation cover, including the populations of some rare and endemic species. Thus, the infrastructure created in the connected areas will provide a reliable system of favorable conditions for research, development of both domestic and international tourism. Undoubtedly, in strict accordance with functional zoning, taking into account recreational loads. Based on the current situation, in order to relieve the anthropogenic load on the Sharyn Canyon, taking into account the previous scientific work of specialists, we propose to develop two more routes: "Small Canyon Kurtugay" and "Temirlik tract". When forming tourist routes, it is necessary to pay attention to the attractions located in the adjacent territories. Small Canyon is an ideal place for geological excursions.

The Small Canyon Kurtogay. The route will start from the border of the Sharyn Reserve, where an observation deck of 1.5 km will be installed. From the descent, on the starboard side of the canyon. Descent to a small canyon in the place "Bestamak". The path is 3300 meters along the bottom of the canyon. The path is defined as a buffer zone, 2 places for rest along the route. At the end of the path, on the banks of the Sharyn River under the Turang Forest, summer tables can be placed. In an open place, there can be placed a yurt with 10 seats, toilets, a kitchen, a barbecue for making barbecue.

Route Temirlik. Interesting geological attractions are located near the mountain estuary of the river Temirlik. The Temirlik route begins 3-4 km from the border of the Sharyn protected areas along the right bank of the Temirlik river. In the floodplain of the Temirlik River, Sharyn SNNP (State National Natural Park) administration plans to build a cordon, next to it is a guest house with 12 seats, a kitchen, a bathhouse, and a stable. Further, the route will be runs from the cordon to the mouth, i.e. where Temirlik flows into the Sharyn River. At the end of the path you can put a yurt, a gazebo, places for

cooking, installation of barbecues, etc. In parallel with the footpath, you can plan an equestrian route. Currently, in the Sharyn Canyon - all geological, geomorphological, biological, paleontological natural monuments are protected.

CONCLUSION

Landscape refugium of protected areas Sharyn is one of the Kazakhstani and Central Asian pearls. Relict landscapes including piedmont plains, canyons and ash forests along the Sharyn River have great scientific, tourist and recreational potential. In combination with a variety of landscapes (canyons, small hills, deserts, wetlands, floodplain forests, etc.), a relic relief structure, the presence of historical and archeological monuments, this territory deserves special attention as an object with the potential for the development of international tourism. At the present stage, the natural conditions for the functioning of landscapes determine a high degree of their vulnerability; therefore, environmental requirements should become decisive in the design and organization of tourist and recreational activities here.

We have created a scientific database of tourist and recreational potential in the identified key landscape areas of protected areas Sharyn. This territory has the prospect of developing international tourism. Relict morphostructures and morphosculptures of the tract Kurtogay, Moyyntokay and Temirlik, refugia Sarytogay - Ashen grove, are sources of information on the interaction of endogenous and exogenous processes of landscape formation in this territory. And they have not only scientific and aesthetic significance, they are also natural monuments, invaluable tourist and recreational resources. Sharyn with its unique landscapes is a good choice for those interested in geology, nature and history. Almaty region borders on the People's Republic of China. The development of international tourism would be one of the sources of income for the local population of the Uigur and Kegen regions.

Thus, the authors suggest that the location and natural features of Sharyn can bring the best level of tourism experience in this part of Kazakhstan.

REFERENCES

- Akbar, I., Yang, Zh., Mazbayev O., Seken A. & Udahogora M. (2020). Local residents' participation in tourism at a world heritage site and limitations: a case of Aksu-Jabagly natural world heritage site, Kazakhstan. *GeoJournal of Tourism and Geosites*, 28 (1), 35–51.
- Aliyeva S., Chen Xi., Yang D., Kanat Samarkhanov K., Mazbayev O., Sekenuly A., Issanova G. & Kozhokulov S. (2019). The Socioeconomic Impact of Tourism in East Kazakhstan Region: Assessment Approach. Sustainability, 11 (17), 1-14.
- Aubekerov, B., Sala R., Nigmatova S.A. & Zhakupova Sh.A. (2003). Changes in atmospheric circulation, paleoclimate and paleogeography in the Tien Shan-Balkhash system. Pages news, 11, 24-26.
- Beruchashvili, N.L. & Zhuchkova, N.L. (1977). Methods of complex physical and geographical research. Moscow: Publishing house of Moscow University.
- Betemesov T.A. & Toktasynov Zh.N. (2013). The current state and protection of Sogdian ash. *Proceedings of the Charyn State National Natural Park*, 1, 15-25.
- Burgi, M., Ali, P., Chowdhury, A., Heinimann, A., Hett, C., Kienast, F., Mondal, M.K., Upreti, B.R. & Verburg, P.H. (2017). Integrated landscape approach: Closing the gap between theory and application. *Sustainability (Switzerland)*, 9 (8), pp. 1371.
- Chibilev, A.A. (2011). Key landscape areas as the fundamental basis of the natural heritage of Russia. Geographical basis for the formation of ecological networks in Russia and Eastern Europe. *Materials of electronic conf. Partnership of scientific publications of KMK*, 1, 303-308.
- Dunets, A.N. (2011). Tourist and recreational space of a mountainous cross-border region: organization theory and development. ABSTRACT dissertation for the degree of Doctor of Geographical Sciences. St. Petersburg: Publishing House Saint Petersburg State University.

Tourist and Recreational Potential of Landscapes of the Specially Protected Natural Area of Sharyn of the Republic of Kazakhstan

- Gorbunov, A.P., & Gorbunova, I.A. (2013). Charyn Canyons. *Journal Academic Publishing Center "Science"* RAS. Nature, 9, 77-82.
- Janaleyeva, K.M. (1993). The landscape structure of the Balkhash-Ili mega-geosystem. Alma-Ata: KazNU.
- Janaleyeva, K.M. (2010). Physical geography of the Republic of Kazakhstan. Astana: ENU named after L.N. Gumilyov, "Arkas".
- Kabiyev Y.S,, Berdenov Z.G., Kulchihan M.D., Atasoy E., & Wendt J.A. (2018). Landscape ecological analysis of the modern delta of the Ural (Zhayik) river. *GeoJournal of Tourism and Geosites*, 11 (3), pp. 644-655.
- Kerimbay, N.N. (2015). Rational use of landscapes of geosystems of the Sharyn River basin. Saarbrucken, Germany: LAP Lambert Academic Publishing Heinrich-Böcking-Str.
- Kerimbay, N.N. (1998). Intramountain valley landscapes of the Sharyn river basin. Search, 1, 58-61.
- Kolisnichenko, Yu.S., Sartbaev, Zh.T., & Nurgaliev A.E. (2013). To the study of the forest pathological state of the Sharyn forest Asheneva dacha. Materials of the International scientific-practical conference "Development of the" green economy "and the conservation of biological diversity" Schuchinsk: 189-194.
- Krauklis, A.A. (1979). Problems of experimental landscape science. Novosibirsk: Siberian Branch.
- Makunina, G.S. (1987). Methodology of field physical and geographical research. The structure and dynamics of the landscape. Moscow: Publishing House of Moscow University.
- Mazhitova, G.Z., Pashkov, S.V., & Wendt J.A. (2018). Assessment of landscape ecological recreational capacity of north Kazakhstan region. *GeoJournal of Tourism and Geosites*, 11 (3), 731–737.
- Nazarova, T.V., Fomin, I.A., Dmitriev, P.S., Wendt, J.A., & Janaleyeva, K.M. (2019). Landscape and limnological research of lake system of the plain areas of the northeastern borderlands of the Republic of Kazakhstan and assessment of their recreational capacity. GeoJournal of Tourism and Geosites, 25 (2), 485–495
- Ogar, N.P., Geldyev, B.V., & Mirkhashimov I.Kh. (1997). On the organization of the Charyn National Nature Park to preserve the biodiversity of ecosystems in the Iliysky intermountain basin. Biological and landscape diversity of the Republic of Kazakhstan. Almaty, 98-102.
- Solntsev, V.N. (1981). Systemic organization of landscapes: problems of methodology and theory. Moscow: Thought. Snytko, V.A., & Semenov. Yu.M. (2008). The study of geosystem structure, development and functioning in Siberia. Methodology of landscape research. Commission of Cultural Landscape of Polish Geographical Society, Sosnowiec, 9, 141-150.
- Tandaric, N. (2015). Towards a general theory of landscape systems: the integration of the geoecological and bioecological approaches. Miscellanea geographica regional studies on development, 19(1), 29-34
- Veselova, L.K., & Shmarova, I.N. (2016). Geomorphological systems of the Sharyn State National Natural Park.

 Bulletin of the Kazakh National University. Physical, economic and social geography, 42(1), 17-21.
- Walter, S. (1986). The world of stone. V.1. Rocks and minerals., Moscow: Mir.
- Wendt, J.A., & Bógdał-Brzezińska, Ag. (2018). Problematyka, metody i problemy badań w geografii turystycznej Turystyka: nowe trendy. *Publisher: Polska Izba Turystyki Oddział w Gdańsku*, 7, 7-42
- Wintergoller, B. A. (1984. Relics around us. Alma-Ata: Science.
- Zhandaev, M.Zh. (1972). Geomorphology of Zailiysky Alatau. Alma-Ata: Science.
- *** Chronicle of nature, § 1, (2018). Changes in the surface topography on the territory of the Sharyn SNNP for 2006-2018. The state and dynamics of changes in the elements of the abiotic environment. Scientific Department of SHSNNP. Shoongy.
- *** Chronicle of nature, § 2, (2018). State and dynamics of change of elements biological complex on the territory of the Sharyn SNNP for 2006-2018. Rare and endangered plant species, endemic and relics. Scientific Department of SHSNNP. s. Shoongy.
- *** Management program, (2015). RGM "Sharyn SNNP" for 2015-2019. Department of SHSNNP. Shoongy.
- *** The management plan of the RGU "Sharyn State National Natural Park" for 2015-2019. (2015). Scientific Department of SHSNNP. Shoongy.

Submitted: Revised: Accepted and published online 07.10.2019 23.01.2020 27.01.2020

THE ANALYSIS OF ENTREPRENEURIAL INTENTION IN RURAL AREA: A CASE STUDY OF BUKIT PERAMUN GEOSITE IN INDONESIA

Risa BHINEKAWATI*

Sekolah Tinggi Manajemen IPMI, Business and Management Program, Jl. Rawajati Timur I/1, Jakarta 12750, Indonesia, email: risa.bhinekawati@ipmi.ac.id

Liza Agustina Maureen NELLOH

Sekolah Tinggi Manajemen IPMI, Business and Management Program, Jl. Rawajati Timur I/1, Jakarta 12750, Indonesia, email: liza.nelloh@ipmi.ac.id

Oman ABDURAHMAN

Bandung Geological Museum, Geological Agency, Ministry of Energy and Mineral Resources, Jl. Diponegoro No. 57, Bandung, Jawa Barat, Indonesia, email: omanarah@gmail.com

Citation: Bhinekawati, R., Nelloh, L.A.M., & Abdurahman, O. (2020). THE ANALYSIS OF ENTREPRENEURIAL INTENTION IN RURAL AREA: A CASE STUDY OF BUKIT PERAMUN GEOSITE IN INDONESIA. GeoJournal of Tourism and Geosites, 28(1), 80–94. https://doi.org/10.30892/gtg.28106-453

Abstract: A geosite inherits geological heritage which brings rural entrepreneurship potentials. This study aims to investigate the relationships between social norms. subjective norms, perceived behavioural control (PBC) and entrepreneurial intention of villagers of Bukit Peramun geosite in Belitong Geopark, Indonesia. Structural Equation Model with Partial Least Square is employed to analyze the questionnaires from 100 local residents surrounding the geosite. The study finds that social norms have positive and significant effect on subjective norms, but no direct effect on PBC. Both PBC and subjective norms have positive and significant effect on entrepreneurial intention. It means that the community's views directly influence the families' and close friends' views about the importance of entrepreneurship spirits and actions. Subsequently, the families' and friends' view would affect individuals' perceptions on their entrepreneurial capabilities, which then influence their entrepreneurial intentions to do businesses and be entrepreneurs. These findings illuminate factors that influence entrepreneurial intention of villagers surrounding a geosite. This research has tested and enhanced the application of the Theory of Planned Behavior on rural entrepreneurship in the context of geopark. Lessons from this research can be replicated to other rural areas with similar characteristics.

Key words: Entrepreneurial Intention, Belitong Geopark, Bukit Peramun Geosite, Indonesia, Theory of Planned Behavior

* * * * * *

^{*} Corresponding author

INTRODUCTION

Rural entrepeneurship has been seen as a way to improve rural economic development (Newbery et al., 2017). Rural entrepreneurs usually develop their business in close proximity to their residences, at least at the early stage of their entrepreneurial process (Bosma et al., 2009). With regards to rural economic development, geoparks have been developed as innovative efforts to preserve national and geological heritage and serves as local economic and cultural protection (Ardiansvah et al., 2015: Doniz-Paez et al., 2011; Farsani et al., 2012). UNESCO has set very high criteria for a geopark to be listed as a global geopark, including the wealth of ecological, archaeological, historical or cultural value of geosites within geopark (2018). Geoparks should be managed with integrated concept of environmental protection, education, and sustainable development involving local communities (UNESCO, 2018), so it can contribute to poverty eradication, employmnet creation, and environmental preservation in rural areas of the world (Bentivenga et al., 2019; Farsani et al., 2012). Accordingly, geoparks have been considered as one of the best forms of sustainable rural tourism that will provide jobs and productions of goods and services related to uniqueness of the geoparks (Bentivenga et al., 2019; Farsani et al., 2012).

Indeed, geoparks have been able to generate novel ideas for business development for local people, such as geotours, geoproducts, geomuseums, geosports, georestaurant, geobakeries, hotels and health centers (Farsani et al., 2011).

Indonesia has 15 national geoparks where four of them are recognized as global geopark among 140 global geoparks in 138 countries (UNESCO, 2018). Currently, Belitong National Geopark in Indonesia is being reviewed by UNESCO to receive global geopark status. The status of this geopark is now a UNESCO Global Geopark (UGG) candidate whose dossier have been accepted by UNESCO since November 2018 (Abdurahman et al., 2019). Belitong Geopark is located approximately 400 km to the North of Jakarta, the capital city of Indonesia (only 1 hour by plane), and covered Belitung district and East Belitung district, Bangka-Belitung Island Province.

The geographical boundaries of Belitung island span between 107013'00" – 108051'00" East longitude and 02029'30"- 03025'00" South latitude. Belitung island has a total area of approximately 4,800 km2 of land and 13,000 km2 of sea area. The geopark is situated in the Belitung island which is surrounded by 241 small islands. The name "Belitung Geopark" was chosen based on traditional and historical consideration and has been well accepted by the communities of the Belitung island (Abdurahman et al., 2019).

As shown in Figure 1, Belitong Geopark's main geology is dominated by flysh sedimentary rock, sandstone & clayrock, Permocarbonaged or Kelapa Kampit Formation (red-green colour in the map) and Tajam Formation (red-green-blue colour); & granite-granitic rocks (pink to red colour). The granite-granitic rocks are generally divided into two types. The S-type (Tanjung Pandan granite) which is rich in tin mineral (cassiterite), and I-type (granitic rocks namely adamelite, granodiorites, etc) that does not contain tin mineral. Although it is close to Bangka island and both have granite type rocks, are both tin producers, but the geological conditions of granite on Belitung are different from those in Bangka. Other characteristics of Belitong's geology which is not found on Bangka Island is Belitung tektite or Billitonite rocks or Batu Satam according to local residents. In sum, Belitong is the first geopark in Indonesia in the form of islands with major geological geoheritages and their values, including 1) Tor landscape of granite Belitong; 2) the unique Satam stone/Billitonite rock/Belitung tektite; 3) The variations of granite, granitic, to quartzdiorite rocks in the south end of Malaya Tin-Belt; 4). The uniqueness of the the remains and history of old tin mining in

Indonesia; 5) Outcrops of Permoc-carbon sedimentary rocks andt heuniqueness of tin genesis; 6) Sediment out crops where typical Kerangas ecosystems grow; 7) Landscapes and of small islands around Belitung island; 8) Biogeography and relation of geological, biological and cultural diversity (Abdurahman et al., 2019).



Figure 1. Geological Map of Belitong Island (Source: Adapted from Belitong Geopark Management Agency: https://belitonggeopark.net/beranda-1)

Meanwhile, a geosite is a ground formation of geological stucture which carries the characteristics of geological heritage located inside a geopark (Çiftçi & Güngör, 2016). According to Wimbledon (1996) and ProGEO Group (1998), a geosite is a natural structure in the forms of group of rocks, minerals or fossils, stratum, ground formation or geological structure resulting from an event during the creation or evolution of the earth's crust, that put a process or formation into existence, that has a need for scientific documentation and in some cases visual attraction qualities.

As the context of this research, one of geosites of Belitong Geopark called Bukit Peramun, located in Aik Selumar village has been chosen as a case study. Aik Selumar village, the area where Bukit Peramun (Peramun Hill) is located, was chosen as a case study for several reasons. Firstly, there is a research gap on the application of the theory of planned behavior to explain entrepreneurship development in the context of rural areas in a developing country (Gries & Naudé, 2011; Kibler, 2013; Wilson & Martin, 2015).

Secondly, empirical evidence is needed to explain how geoparks as a government policy affect the well-being people through economic participation in geotourism (Farsani et al., 2011). Thirdly, Belitong Geopark Agency suggested Aik Selumar as an exemplary case study for the capability to be self-organized in preserving the Bukit Peramun geosite,

and in generating visits from domestic and foreign tourists despite limited support from the government. Fourthly, Arsel community was open to be researched. Figure 2 shows the study location, which is one among 17 geosites in Belitong Geopark.



Figure 2. Location of Bukit Peramun geosite in Belitung Island (Source: Adapted from Belitung Geopark Agency: https://belitonggeopark.net/map-2)

Aik Selumar has a population of 2,736 inhabitants and is endowed with beautiful landscape, richness in herbal resources, a historical cultural site, a rare species of the nocturnal animal called "Tarsius" (spectral tarsier). The landscape of Bukit Peramun has unique characteristics with formations of ancient rocks of around 245 million years old, which consist of Tanjung Pandan Granite that emerged as a continuation of the "Jurassic Granite Belt" that stretches from Burma, Thailand, Malaysia, Riau Islands, Riau Islands, Bangka Island and Belitung Island to Karimata Island. Granite belts are rows of granite rock formations which are rich in mineral cassiterite (cassiterite) tin carriers which came to be known as "tin belts" (Abdurahman et al., 2019).

The area of Bukit Peramun hosts endemic biodiversity, namely Pelilean (Cephalopachus bancanus saltator), and some fishes which characterise biogeography of the Belitung island at the last maximum glacial (LMG) age. The unique kerangas forests and other ecosystem that represent typical relationship between the environment, biodiversity and culture such as treatment with herbs (Abdurahman et al., 2019; Abdurahman & Cahyadi, 2019). The plants of Bukit Peramun have been well-known for herbal medicine made by villagers who inherit the capabilities of formulating medicines for the plants. The government has given Aik Selumar (Arsel) community the right to manage 115 Hectares of Bukit Peramun as community forest from 2013. Since 2016 Arsel community started to offer eco-tourism with a motto "sustainability of forest generates prosperity for community". In 2018, Bukit Peramun attracted 14.408

domestic and international tourists (ARSEL-Community, 2018), and was chosen as one of Indonesia's 20 best eco-tourism spots by the Indonesia Sustainable Tourism Award. As an illustration of Bukit Peramun landscape, Figure 3a and 3b show geological formations located in Bukit Peramun. Subsequently, Figures 3c and 3d display the process of geomorphology of ancient rocks in the area.



Figure 3. The balancing rock as common Tor landscape in Bukit Peramun (a); Outcrops of granite on top of Bukit Peramun (b); Erosion produces a rounded form with recesses (c); Tectonic plus erosion which results in passageways (d) (Photocredits: Abdurahman)

Current research on rural entrepreneurship are mostly being conducted in developed countries like USA (Newbery & Bosworth, 2014), Malaysia (Dahalan et al., 2015) and Finland (Kibler, 2013). There are also numbers of research on sustainabile community-based tourism like in Ghana (Atanga, 2019), in South Africa (Strydom et al., 2018), Romania (Vijulie et al., 2018), Indonesia (Aswita et al, 2018), and Poland (Idziak et al., 2015), as well as the roles of geoparks in rural development (Adriansyah et al., 2015; Dowling & Newsome, 2018; Farsani et al., 2012; Yuliawati et al., 2016).

However, there is still a research gap on entrepreneurship development in rural areas surounding geosites of geoparks. To fill in the research need, this study aims to extend previous research in rural entrepreneurship development by adopting the theory of planned behaviour to investigate the relationships between social norms, subjective norms, perceived behavioural control (PBC) and entrepreneurial intention of villagers of a geosite in a Belitong geopark of Indonesia.

LITERATURE REVIEW AND HYPOTHESIS DEVELOPMENT

In the context of rural development, community-based tourism has been proven to be a successful sustainable development initiative to enhance the well being of people in rural areas (Atanga, 2019; Jaafar et al., 2014; Farsani et al., 2011; Idziak et al., 2015; Strydom et al., 2018; Aswita et al., 2018; Vijulie et al., 2018). Extensive research has also been done on the roles of geotourism in improving the livelihood of people (Adriansyah et al., 2015; Dowling & Newsome, 2018; Farsani et al., 2012; Yuliawati et al., 2016).

As discussed in the Introduction, this study aims at filling in the gap on the analysis of factors that influence entrepreneurship intention of rural people surrounding a geosite in a geopark. It focuses on variables related to entrepreneurial intentions, including social norms variable adopted from the entrepreneurial framework conditions (Reynolds et al., 2005); subjective norms and perceived behavioural control from the theory of planned behaviour (Ajzen, 1991; Ajzen & Fishbein, 2004), and entrepreneurship intention variable from rural entrepreneurship research by Kibler (2013). The following sections discuss hypothesis development on the relationships among variables.

Social Norms, Subjective Norms, and Perceived Behavioural Control

Entrepreneurship is the result of interactions between the person and his/her social environment, including social norms (Robeyns, 2005). Social norms refer to collective representation of informal understandings that influence the behaviour of the members of society (Lapinski & Rimal, 2005). According to Entrepreneurial Framework Conditions developed by Global Entrepreneurship Monitoring (GEM), social norms provide the context of social circumstances, opportunities, and perceptions for people in perceiving their abilities in becoming entrepreneurs that would lead to entrepreneurial actions (Reynolds et al., 2005). Social norms will influence subjective norms, which refers to perceptions of closer social environment such as family, friends, and collegues certain on somebody's perceptions about his/her actions or behaviour (Ajzen, 1991).

Hence, entrepreneurship may not automatically be functionings because it may depend on the subjective norms, whether being an entrepreneur is valued by individual's family and friends (Gries & Naudé, 2011). Social norms may also influence somebody's perception on his/her perceived behavioral control, which refers to individual's belief whether he/she possesses the required capabilities and resources to perform certain behaviour (Kibler, 2013, p. 295). Perceived behavioural control captures a person's perception on the likelihood of easiness and successfulness if they choose to start a business (Kibler, 2013, p. 304). In the capability approach view, entreprenurial capabilities of a person relates to a person's freedom to pursue entrepreneural opportunity and it is based on the level which is afforded by individuals within their own environment (Wilson & Martin, 2015, p. 161).

Social norms matters in individual decision in becoming an entrepreneur because individual decisions are usually influenced by his/her interactions with surrounding environment and their relations with others (Boschma et al., 2010; Sternberg, 2009). As for the relationship between subjective norms and perceived behavioural control, researchers have also find the influence of closest people such as family, friends and community in building somebody's perception of his/her capability in performing certain behavior (Liñán et al., 2011). Such relationships have also been tested by Kibler (2013) in his study on rural entrepreneurship in Finland.

Based on the above discussions, we develop the following hypotheses:

H1: Social Norms positively influence subjective norm

H2: Social Norms positively influence perceived behavioural control

H3: Subjective norms positively influence perceived behavioural control

Subjective Norms, Perceived Behavioural Control, and Entrepreneurial Intention

Researchers have conducted studies on the relationship between subjective norms, perceived behavioural control and entrepreneurial intention, the theory of planned behaviour (Ajzen, 1991; Ajzen & Fishbein, 2004) in studies on entrepreneurship (Kibler, 2013; Liñán et al., 2011). They find the perceptions of family, friends and community will influence people's perception about their capabilities in conducting business or being entrepreneurial (Kibler, 2013; Liñán et al., 2011). Furthermore, previous research has also confirmed positive relationship between perceived behavioural control and entrepreneurial intention (Kibler, 2013).

Perceived behavioural control refers to individual's belief whether he/she possesses the required capabilities and resources to perform certain behaviour (Kibler, 2013, p. 295). Entrepreneurship intention is a person's drive or strong intention to start a new business, or seriously plan to open a new venture in a foreseeable future (Thompson, 2009). When sombebody believes that he or she has entrepreneurship capabilities, it is very likely that he or she also has entrepreneurial intention (Kibler, 2013). Accordingly, we can develop the following hypotheses.

H4: Subjective norms positively affect entrepreneurial intention

H₅: Perceived behavioural control positively affects entrepreneurial intention

Conceptual Framework

Based on the above discussion, we develop the following conceptual framework to be tested with empirical evidence from this research (Figure 4).

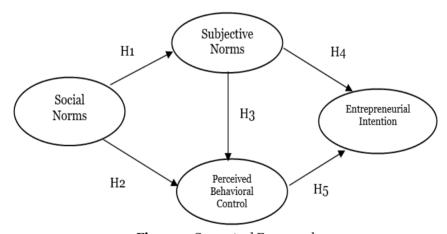


Figure 4. Conceptual Framework

METHODS

The aim of this research is to understand factors that influence entrepreneurship intention by testing the relationships between the variables of social norms, subjective norms, perceived behavioural control, and entrepreneurial intention.

Before determining the research model, we conducted a preliminary study to see the validity of variables. To test the hypotheses, the study uses Structural Equation Modeling - Partial Least Square with SmartPLS version 3.2.7 as the tool of analysis.

As for the selection of geosite, this research expands previous studies conducted by the Ministry of Tourism of Indonesia (2018) and Abdurahman, et al. (2019) which reveal that Bukit Peramun ranks 1 of 17 geosites in Belitong geopark. Both studies apply the criteria of Global Sustainable Tourism (GST) and Indonesian Sustainable Tourism Association (ISTA) on the indicators of 1) management of sustainable tourism destinations; 2) economic use for local communities; 3) cultural preservation by the public and visitors; and 4) environmental preservation.

Furthermore, Abdurahman et al. (2019) has also applied the methods developed by Newsome and Dowling (2005) and Brahmantyo (2014) to determine the uniqueness aspects of geosites, including location, geological characteristics, biodiversity, cultural diversity, knowledge value, economic value, environmental protection and preservation, geotourism potential, and the total scores fulfilled by each geosites. Based on those studies, Bukit Peramun has been seen as the most ready geosite for geotourism in Belitung, and can be served as a model of other geosites in Belitung geopark.

Sampling and Study Site

The target population of this study is the society of Aik Selumar Village in Belitung, Indonesia who intend to start a new business. As we are using SEM-PLS as the tool to analyze the data, we follow the guidelines of (Marcoulides & Chin, 2013; Marcoulides & Saunders, 2006) that the acceptable numbers of samples are ten times numbers of arrows pointing at latent variables As we have five arrows, the sampling size of 70 would be sufficient. However, we also follow Hoyle's (1995) suggestions that a sample size of 100 to 200 would fulfill the criteria for path modeling.

For this research we distribute a total of 120 questionnaires, divided evenly in four sub-villages of Aik Selumar. Three surveyors assisted with data collection, and we have 100 filled questionnaires which fulfilled the statistical requirement. The profile of respondents can be summarised in Table 1.

Demographics Total Percenta				
Sex	Male	45	45%	
Sex	Female	55	55%	
	17-25	15	15%	
Age	26-30	19	19%	
Age	30-40	25	25%	
	> 40	41	41%	
	Not finish Elementary School	6	6%	
Education	Elementary	27	27%	
Level	Junior High School	37	37%	
	Senior High School	30	30%	
	Housewife	29	29%	
Current Job	Business owner	30	30%	
Current 300	Farmer	27	27%	
	Employees/Labourers	14	14%	
	<idr (usd="" 143)<="" 2="" millions="" td=""><td>26</td><td>26%</td></idr>	26	26%	
Monthly	IDR 2-3.5 Millions (USD 143-250)	32	32%	
Income	IDR 3.5-5 Millions (USD 250 -357)	4	4%	
	No Answer	38	38%	

Table 1. Respondents' Profile

Measurement

Previous studies have confirmed the measurement of indicators in this study. Social norms are formulated based on (Reynolds et al., 2005), while subjective norms and perceived behavioural control are derived from previous studies in theory of planned behaviour and entrepreneurial intention (Ajzen & Fishbein, 2004; Kibler,

2013; Liñán et al., 2011). The indicator of entrepreneurial intention is based on Kibler (2013). The indicators of variables are presented on Table 2. This study uses 5-Points Likert Scale such as 5 (Strongly agree), 4 (Agree), 3 (Neutral), 2 (Disagree) and 1 (Strongly Disagree) (Sekaran & Bougie, 2010).

Table 2. Variables and indicators				
Code	Variables	Indicators		
son1	Social Norms	At my village, most people consider starting a new business as a desirable career choice.		
son2	(Reynolds, et al., 2005)	At my village, those who succeed in starting a new business have a high social status and being respected		
sn1	Subjective Norms	My family suggests me to start a new business		
sn2	(Ajzen & Fishbein,2004;	My friends advise me to be an entrepreneur		
sn3	Kibler, 2013; Liñán et al., 2011)	The people whom I respect suggest me to start a new business in the near future		
pbc1	Perceived Behavioural Control	If I wanted to, I could easily pursue a career as an entrepreneur		
pbc2	(Ajzen & Fishbein, 2004; Kibler, 2013;	For me, starting my own firm and becoming an entrepreneur would be very easy		
pbc3	Liñán, et al., 2011)	If I started my own business and became an entrepreneur, I have chances of success		
ei1	Entropyon ourial Intention	I want to be an entrepreneur		
ei2	Entrepreneurial Intention (Kibler, 2013)	I wish to start a new business in the future		
ei3	(Kibici, 2013)	In the near future, I plan to open a new business		

Table 2. Variables and Indicators

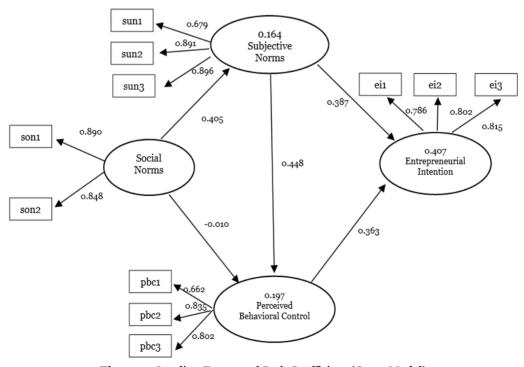


Figure 5. Loading Factor and Path Coefficient (Outer Model)

RESULTS AND DISCUSSION Results of Validity and Reliability Testing

To test validity we conducted several tests including covergent validity, discriminant validity, construct validity (Hair Jr et al., 2017). Convergent validity confirms reflective indicators on variables. To be valid, the loading factors of each item of indicators that must exceed 0.5 (Ghozali, 2006). Discriminant validity can be tested by conducting cross loading analysis to compare the outer loadings among variables. Construct validity is used to confirm that the tested variables will reflect the overal model (Ghozali, 2006). Figure 5 shows the result of the convergent and discriminant validy. It reveals the loading factors of all indictors for respective variables all are above 0.5. Moreover, as shown in Table 3, if we compare the cross loadings of between indicators' own reflect and other indicators' reflect it shows that their own reflect are higher than other indicators' reflect.

Variables	Indicators	Social Norms	Subjective Norm	PBC	Entrepreneur ial Intention
Social Norms	son1	0,890	0,377	0,160	0,303
Social Norths	son2	0,848	0,325	0,137	0,158
Cubicativa	sn1	0,131	0,679	0,234	0,406
Subjective Norms	sn2	0,310	0,891	0,365	0,422
NOTHIS	sn3	0,482	0,896	0,458	0,524
Perceived	pbc1	0,304	0,414	0,662	0,269
Behavioural	pbc2	0,084	0,367	0,835	0,414
Control (PBC)	pbc3	0,039	0,263	0,802	0,531
Entropropourial	ei1	0,061	0,338	0,435	0,786
Entrepreneurial Intention	ei2	0,374	0,434	0,419	0,802
Intention	ei3	0,204	0,527	0,434	0,815

Table 3. Loading Factor Analysis

Furthermore, as presented in Table 4, the construct validity assessment shows that AVE for all latent variables are above 0.5, hence we confirm that construct model is valid. That means, the independent and mediating variables are valid to explain the change of dependent variable (Hair Jr et al., 2017).

Variables	Average Variance Extracted (AVE)			
Social Norms	0,756			
Entrepreneurial Intention	0,641			
Perceived Behavioural Control (PBC)	0,593			
Subjective Norms	0,686			

Table 4. Construct Validity of SEM Model

Following the validity testing, we conducted reliability testing. For the indicators to be reliable, the composite reliability should exceed > 0.7 and Cronbach's Alpha above > 0.6 (Chin, 1998; Ghozali & Latan, 2015). Table 5 reveals that all Cronbach's Alpha are above 0.6; Composite Reliability are above 0.8. Therefore, variables used in this research are reliable, showing that respondents reveal consistent answers to the questionnaires.

Results of Coefficent Determination

Coefficient of Determination (R^2) represents goodness of fit to prove that the model is globally accepted (Chin, 1998; Henseler et al., 2014). The results of SmartPLS 3 on Coefficient of Determination (R^2) are presented on Table 6. The results indicate a moderate

relationship between social norms as the exogenous variable on subjective norms and perceived behavioural control. Hence, as shown in Figure 1, 40.7% of variance of entrepreneurial intention is explained by subjective norm and perceived behavioural control.

Table 5 . Construct Validity and Reliability	
---	--

Variables	Cronbach's Alpha	Composite Reliability
Social Norms	0,678	0,861
Entrepreneurial Intention	0,722	0,843
Perceived Behavioural Control (PBC)	0,652	0,812
Subjective Norms	0,771	0,866

Table 6. The Value of R-Square

Variables	R-Square	Adjusted R-Square
Subjective Norms	0.164	0.156
Perceived Behavioural Control	0.197	0.181
Entrepreneurial Intention	0.407	0.395

Results of Hypothesis Testing

In this research, hypothesis testing is examined through the visual diagrams and numerical assessments. The visual diagrams are depicted in Figure 5 above and in the following Figure 6. Figure 3 and Figure 4 reveal direct and indirect path relationships that show magnitude and significance of the relationships between latent variables. The above relationships are summarised in the following numerical assessment in Table 7.

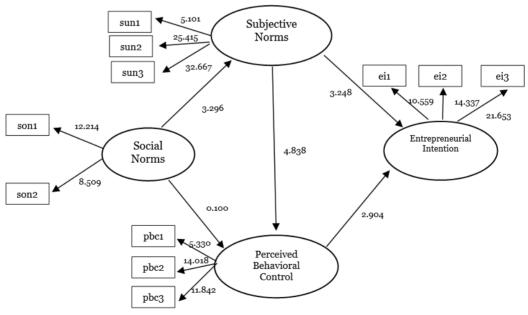


Figure 6. Structural Model (Inner Model)

Discussion

The quantitative results of this study reveals that the intention of being entrepreneurs and doing entrepreneurial work is supported by social norms, subjective

norms, and perceived behavioral control. The results supports the assertions of Reynolds et al., (2005) about the impact of social norms on entrepreneurial actions; Kibler (2013) on the influence of subjective norms and perceived behavioural control of the theory of planned behaviour (Ajzen & Fishbein, 2004) on entrepreneurial intention; and Robeyns (2005, 98) about the influence of social context, especially social norms, in somebody's decision making and choice on their behaviour.

Hypothesis	Original Sample (O)	T Statistics (O/STDEV)	P Values*	Explanation
Social Norms > Subjective Norm	0,405	3,286	0,001	Supported
Social Norms > Perceived Behavioural Control	-0,010	0,100	0,920	Not Supported
Subjective Norms > Perceived Behavioural Control	0,448	4,750	0,000	Supported
Perceived Behavioural Control > Entrepreneurial Intention	0,363	2,904	0,004	Supported
Subjective Norms > Entrepreneurial Intention	0,387	3,214	0,001	Supported

Table 7. Summary of Research Hypothesis Test

Firstly, the results reveal that social norms have a positive effect on subjective norms. It means that the community of Aik Selumar influence family's and close friends' view that entrepreneurship is a valuable spirit and occupation. Secondly, the social norms have no direct effect on perceived behavioural control, meaning that the community of Aik selumar does not direcly influence somebody's perception about his/her entrepreneurship capability. Thirdly, the subjective norms have positive influence on perceived behavioural control, that means the family and friends have influence on somebody's perception on his/her entrepreneurial capability. Fourthly, Perceived Behavioural Control has significant influence on entrepreneurial intention, meaning that somebody's perception on his/her own entrepreneurial capability will affect his/her intention to do business and be an entrepreneur. Lastly, subjective norms have positive effect on entrepreneurial intention, meaning that family and close friends affect somebody's intention to do business and be an entrepreneur.

Overall, it can be concluded that in the case of Aik Selumar village, people have a better perception about their capabilities of being entrepreneurs when they work with people close to them. Hence, although the social norms are conducive for entrepreneurial environment, it only affects the norms personal circles of individuals like family and friends but does not directly affect individual's perceived entrepreneurial capabilities. The study illuminates that the personal circle (subjective norms) significantly influence individual's perception on his entrepreneurial capabilities (PBC), thus, both subjective norms and PBC affect villager's entrepreneurial intentions. The study illuminates that collaborations among villagers becomes necessity if they want to transform their entrepreneurial intention into entrepreneurial actions.

A further interview with the chief of community group revealed that the villagers have basic capabilities and local resources to pursue their entrepreneurial intention, however, they still lack skills, access to market and access to finance to transform their entrepreneurial intention into entrepreneurial actions. Good collaborations among villagers in the form of community group have attracted government, private sectors and universities to help develop Bukit Peramun. As the results, Bukit Peramun community

^{*} Significance at Aplha of below 0.05

has been able to develop Bukit Peramun as attractive tourist destination which has been able to atract national and international tourists. The tourism development in Bukit Peramun has provided jobs for the villagers, as tour guide with fixed income while pursuing their entrepreneurial aspirations. Eventually, Bukit Peramun was selected as role model of eco-tourism by central government and it was awarded as top 20 sustainable tourist destination in 2018 by the Indonesia Sustainable Tourism Association.

CONCLUSION

This study fills in the research needs in explaining the relationship between social context (social norms), personal context (subjective norms), perceived entrepreneurial capabilities (perceived behavioral control) and entrepreneurial intention functionings in the real setting (Gries & Naudé, 2011; Wilson & Martin, 2015). It extends the the findings of previous research by using the theory of planned behavior to investigate factors that influence entrepreneurial intention in the context of a geosite of a geopark.

The findings from this research can be applied to the practices of entrepreneurship development in other rural areas and geoparks. However, this research has limitations. Firstly, it covers one geosite as a case study. To enhance generalisability, further studies need to be conducted in more geosites. Secondly, the study does not test the "attitude" variable of the theory of planned behavior (Ajzen, 1991), which may limit the analysis on the relationship between overall theory of planned behavior and entrepreneurial intentions. Therefore, further research needs to be conducted to include more geosites for broader generalisability, and more variables of TPB for deeper analysis. Finally, it would also be interesting if further research is conducted to evaluate the pressure of economic development of the geosites on the forestry, which methods have been developed by Andronache et al., (2019).

Acknowledgments

This work was supported by research fund of Sekolah Tinggi Manajemen IPMI, Jakarta, Indonesia. The authors wish to thank Belitong Geopark Management Agency for advises during the research, and to Mr Adir Darmawan and the community of Aik Selumar (ARSEL) for the opportunity to conduct research at the community. We also would like to thank two anonymous reviewers for their helpful comments and feedback.

REFERENCES

- Abdurahman, O., Erowati, D. & Putra, H. F. (2019). Geotourism in Belitong Geopark: Enhancement of interpretation materials and proposed development of tourism destinations towards sustainable tourism. Paper presented at the 6th APGN Symposium, Rinjani-Lombok UGG, Indonesia, 20 August—6 September, 2019.
- Abdurahman & Cahyadi (2019). Studi awal biogeografi pulau Belitung: Kasus pelilean dan ikan, sebuah upaya pengkayaan materi geowisata geopark Belitong. Paper presented at Seminar Nasional Ilmu Kebumian-Geodiversity 2019, Kebumen, Indonesia, 2 Oktober 2019.
- Adriansyah, D., Busu, I., Eva, H. & Muqtada, M. (2015). Geoheritage as the basis for geotourism development: A case study in Jeli District, Kelantan, Malaysia. *GeoJournal of Tourism and Geosites*, 1(15), 25-43.
- Ajzen, I. (1991). The theory of planned behavior. Organizational Behavior and Human Decision Processes, 50, 179-211. https://doi.org/10.1016/0749-5978(91)90020-T.
- Ajzen, I., & Fishbein, M. (2004). Questions raised by a reasoned action approach: Comment on Ogden (2003). Health Psychology, 23, 431-434.. https://doi.org/10.1037/0278-6133.23.4.431.
- Andronache, I., Marin, M., Fischer, R., Ahammer, H., Radulovic, M., Ciobotaru, A., Jelinek, H.F., Di Ieva, A., Pintilii, R., Drăghici, C., Herman, G.V., Nicula, A., Simion, A., Loghin, I., Diaconu, D. & Peptenatu, D. (2019). Dynamics of Forest Fragmentation and Connectivity Using Particle and Fractal Analysis. Scientific Reports, 9:12228. https://doi.org/10.1038/s41598-019-48277-z 1.

The Analysis of Entrepreneurial Intention in Rural Area: A Case Study of Bukit Peramun Geosite in Indonesia

- Aswita, D., Suryadarma, I.G.P. & Suyanto, S. (2018). Local wisdom of Sabang island society (Aceh, Indonesia) in building ecological intelligence to support sustainable tourism. *GeoJournal of Tourism and Geosites*, 22(2), 393–402. https://doi.org/10.30892/gtg.22210-297.
- Atanga, R. A. (2019). Stakeholder views on sustainable community based ecotourism: A case of the Paga crocodile ponds in Ghana. *Geojournal of Tourism and Geosites*, 25(2), 321-333. https://doi.org/10.30892/gtg.25204-362.
- Bentivenga, M., Cavalcante, F., Mastronuzzi, G., Palladino, G. & Prosser, G. (2019). Geoheritage: The foundation for sustainable geotourism. *Geoheritage*, 11 (4), 1367–1369. https://doi.org/10.1007/s12371-019-00422-w.
- Boschma, R. & Martin, R. (2010). *The Handbook of Evolutionary Economic Geography*. Cheltenham: Edward Elgar Publishing Ltd.
- Bosma, N., Schutjens, V., & Stam, E. (2009). Entrepreneurship in European Regions. In J. Leitao & R. Baptista (Eds.), *Public Policies for Fostering Entrepreneurship: A European perspective* (pp. 59–89). New York: Springer. https://doi.org/10.1007/978-1-4419-0249-8_4.
- Brahmantyo, M. (2014). Geowisata Bali Nusa Tenggara. Bandung, Indonesia: Badan Geologi.
- Chin, W. W. (1998). The partial least squares approach for structural equation modeling. In G. A Marcoulides (Ed.), *Methodology for business and management. Modern methods for business research* (pp. 295–336). Mahwah, NJ: Lawrence Erlbaum Associates Publishers.
- Çiftçi, Y. & Güngör, Y (2016). Proposals for the standard presentation of elements of natural and cultural heritage within the scope of geopark projects. *Bulletin of Mineral Research and Exploration*, 153, 223-238. https://doi.org/10.19076/mta.18476.
- Dahalan, N., Jaafar, M., & Rosdi, S. A. M. (2015). Attitude and Entrepreneurial Intention Among Rural Community: the Mediating Role of Entrepreneurial Opportunity Recognition. SHS Web of Conferences. https://doi.org/10.1051/shsconf/20151801005.
- Doniz-Paez, J., Becerra-Ramirez, R., Gonzales-Cardenas, E., Guillen-Martin, C., Escobar-Lahoz, E. (2011). Geomorphosites and geotourism in volcanic landscape: The example of La Corona de Lajjal Cinder Cone (El Hierro, Canary Island, Spain). *GeoJournal of Tourism and Geosites*, 2(8), 185-197.
- Dowling, R. K., & Newsome, D. (2018). Geotourism Destinations Visitor Impacts and Site Management Considerations. *Czech Journal of Tourism*, 6(2): 111-129 https://doi.org/10.1515/cjot-2017-0006.
- Farsani, N. T., Coelho, C., & Costa, C. (2011). Geotourism and geoparks as novel strategies for socio-economic development in rural areas. *International Journal of Tourism Research*, 13(1), 68–81. https://doi.org/10.1002/jtr.800.
- Farsani, N. T., Coelho, C., & Costa, C. (2012). Geotourism and Geoparks as Gateways to Socio-cultural Sustainability in Qeshm Rural Areas, Iran. *Asia Pacific Journal of Tourism Research*, 17 (1), 30-48. https://doi.org/10.1080/10941665.2011.610145.
- https://doi.org/10.1080/10941665.2011.610145.
 Ghozali, I., & Latan, H. (2015). Partial Least Squares: Konsep, Teknik dan Aplikasi Menggunakan Program SmartPLS 3.0, -2/E. Semarang: Badan Penerbit Universitas Diponegoro.
- Ghozali, I. (2006). Structural Equation Modeling Metode Alternatif dengan Partial Least Square (PLS). Semarang: Badan Penerbit Universitas Diponegoro.
- Gries, T., & Naudé, W. (2011). Entrepreneurship and human development: A capability approach. *Journal of Public Economics*, 95, 216–224. https://doi.org/10.1016/j.jpubeco.2010.11.008.
- Hair Jr, J. F., Hult, G., Ringle, C. M., & Sarstedt, M. (2017). A Primer on Partial Least Squares Structural Equation Modeling. Los Angeles: Sage.
- Henseler, J., Ringle, C. M., & Sarstedt, M. (2014). A new criterion for assessing discriminant validity in variance-based structural equation modeling. *Journal of the Academy of Marketing Science*, 43(1), 115–135. https://doi.org/10.1007/s11747-014-0403-8.
- Hoyle, R. H. (1995). Structural Equation Modeling: Concepts, Issues, and Applications. Thousand Oaks, CA: Sage Publications, Inc.
- Idziak, W., Majewski, J. & Zmyślony, P. (2015). Community participation in sustainable rural tourism experience creation: A long-term appraisal and lessons from a thematic villages project in Poland. Journal of Sustainable Tourism, 23, (8-9), 1-22. http://dx.doi.org/10.1080/09669582.2015.1019513.
- Jaafar, M., Dahalan, N., & Asma, M. R. S. (2014). Local community entrepreneurship: A case study of the Lenggong Valley. *Asian Social Science*, 10(10), 226–235. https://doi.org/10.5539/ass.v10n10p226.
- Kibler, E. (2013). Formation of entrepreneurial intentions in a regional context. *Entrepreneurship and Regional Development*, 25(3–4), 293–323, https://doi.org/10.1080/08985626.2012.721008.
- Lapinski, M. K., & Rimal, R. N. (2005). An explication of social norms. *Communication Theory*, 15(2), 127-147. https://doi.org/10.1093/ct/15.2.127.
- Liñán, F., Urbano, D., & Guerrero, M. (2011). Regional variations in entrepreneurial cognitions: Start-up intentions of university students in Spain. *Entrepreneurship and Regional Development*, 23(3-4), 187-215. https://doi.org/10.1080/08985620903233929.

- Marcoulides, George A., & Chin, W. W. (2013). You Write, but Others Read: Common Methodological Misunderstandings in PLS and Related Methods. Springer Proceedings in Mathematics and Statistics. https://doi.org/10.1007/978-1-4614-8283-3_2.
- Marcoulides, George A., & Saunders, C. (2006). Editor's Comments PSL: A Silver bullet? *MIS Quarterly*, 30(2), iii–ix. Newbery, R., & Bosworth, G. (2014). The character of rural business relations. In *Rural Cooperation in Europe: In Search of the "Relational Rurals."* Singapore: Palgrave Macmillan. https://doi.org/10.1057/9781137348890.
- Newbery, R., Siwale, J., & Henley, A. (2017). Rural entrepreneurship theory in the developing and developed world. *International Journal of Entrepreneurship and Innovation*, 18(1), 3-4. https://doi.org/10.1177/1465750316686232.
- Newsome, D. & Dowling, R. (2005). The scope and nature of geotourism . In D. Newsome (Ed.), *Geotourism* (pp. 3-25). London: Routledge. https://doi.org/10.4324/9780080455334.
- Reynolds, P., Bosma, N., Autio, E., Hunt, S., De Bono, N., Servais, I., & Chin, N. (2005). Global entrepreneurship monitor: Data collection design and implementation 1998-2003. *Small Business Economics*, 24(3): 205-231. https://doi.org/10.1007/s11187-005-1980-1.
- Robeyns, I. (2005). The Capability Approach: a theoretical survey. *Journal of Human Development*, 6(1), 93–117. https://doi.org/10.1080/146498805200034266.
- Strydom, A.J., Mangope, D., & Henama, U.S. (2018). Making community-based tourism sustainable: Evidence from the Free State Province, South Africa. *GeoJournal of Tourism and Geosites*, 24(1), 7–18. https://doi.org/10.30892/gtg.24101-338.
- Sternberg, R. (2009). Regional Dimensions of Entrepreneurship. *Foundations and Trends in Entrepreneurship*, 5(4): 211-340. https://doi.org/10.1561/0300000024.
- Thompson, E. R. (2009). Individual entrepreneurial intent: Construct clarification and development of an internationally reliable metric. *Entrepreneurship: Theory and Practice*, 33, 669–694. https://doi.org/10.1111/j.1540-6520.2009.00321.x.
- Vijulie, I., Matei, E., Preda, M., Manea, G., Cuculici, R., & Mareci, A. (2018). Tourism A viable alternative for the development of rural mountainous communities. Case study: Eftimie Murgu, Caras-Severin County, Romania. GeoJournal of Tourism and Geosites. 22(2), 419–431. https://doi.org/10.30892/gtg.22212-299.
- Wilson, N., & Martin, L. (2015). Entrepreneurial opportunities for all?: Entrepreneurial capability and the capabilities approach. *International Journal of Entrepreneurship and Innovation*, 16(3), 159–169. https://doi.org/10.5367/ijei.2015.0189.
- Wimbeldon, W.A.P. (1996). National site selection, a stop on the road to a European Geosite list. *Geologica Balcanica*, 26, 15-27.
- Yuliawati, A. K., Sapari, M., Hadian, D., & Hurriyati, R. (2016). Developing Geotourism as Part of Sustainable Development at Ciletuh Sukabumi, West Java, Indonesia. *Journal of Environmental Management and Tourism*, VII(1), 57–62. https://doi.org/10.14505/jemt.v7.1(13).05.
- *** ARSEL-Community. (2018). Rencana Kerja Tahunan Usaha Pemanfaatan Jasa Lingkungan Hutan Kemasyarakatan Arsel Community Tahun 2018 dan Laporan Pengeloaan Hutan Kemasyarakatan HKm Arsel Community. Retrieved from http://arthawisesa.com/simping/assets/upload/renka/RENCANA KERJA ARSEL COMMUNITY TAHUN 2018.pdf.
- *** Ministry of Tourism of Indonesia (2018). *Penyusunan Masterplan Pengembangan Geopark Pulau Belitung*. Retrieved 25 December 2019 from http://eperformance.kemenpar.go.id/dokumen/264-Presentasi %20Masterplan%20Geopark%20Belitung%20(4%20desember%202018)%20-%20FINAL.pdf.
- *** ProGEO Group (1998). A first attempt at a geosites framework for Europe -an IUGS initiative to support recognition of World heritage and European geodiversity. *Geologica Balcanica*, 28(3), 5-32.
- *** UNESCO. (2018). UNESCO Global Geopark. Retrieved from http://www.unesco.org/new/en/natural-sciences/environment/earth-sciences/unesco-global-geoparks/frequently-asked-questions/what-is-a-unesco-global-geopark/.

Submitted: Revised: Accepted and published online 11.10.2019 24.01.2020 28.01.2020

MARKETING AWARENESS OF CROSSBORDER DESTINATION - THE CASE STUDY OF BIHOR- HAJDU/BIHAR EUROREGION

Corina-Florina TĂTAR*

University of Oradea, Department of Geography, Tourism and Territorial Planning, Universității Street, 1, 410087, Oradea, Romania, e-mail: corina criste 78@yahoo.com

Tomasz STUDZIENIECKI

Gdynia Maritime University, Department of Management and Economics, Morska 81/87, 81-225 Gdynia, Poland, e-mail: tomaszstudzieniecki@wp.pl

Klara CZIMRE

University of Debrecen, Department of Social Geography and Regional Development Planning, Egyetem tér 1, 4032, Debrecen, Hungary, e-mail: czimre.klara@science.unideb.hu

Janos PENZES

University of Debrecen, Department of Social Geography and Regional Development Planning, Egyetem tér 1, 4032, Debrecen, Hungary, e-mail: jpenzes@unideb.hu

Citation: Tătar, C.F., Studzieniecki, T., Czimre, K. & Penzes, J. (2020). MARKETING AWARENESS OF CROSSBORDER DESTINATION - THE CASE STUDY OF BIHOR-HAJDU/BIHAR EUROREGION. GeoJournal of Tourism and Geosites, 28(1), 95–103. https://doi.org/10.30892/gtg.28107-454

Abstract: The study aims to highlight the high education students' awareness about the tourism opportunities of the Bihor-Hajdu-Bihar euroregion of north-western Romania and eastern Hungary respectively, through a survey applied to the students of the University of Oradea and Debrecen cities, as county seats of the of Bihor and Hajdu-Bihar. The respondents' answers were stored into an SPSS database and its results processed and analyzed through generated charts. The results showed that most respondents claim for a better marketing of the euroregion and its activities, through internet and websites, indicating an eagerness to find out more about its potentialities. Most respondents were aware of the tourist attractions that the county from their side of the border offers, but only five respondents could provide tourist attractions that belong to the other side of the border, thus indicating that the euroregion is not yet perceived as a single tourist destination on the market. Therefore 79,7% of the respondents could name correctly one tourist attraction that belongs to the euroregion, more than half (67,2%) could provide two attractions and less than a half (40,6%) could provide three tourist attractions as incentives for visitation and marketing.

Key words: borderland, tourism, Bihor-Hajdu Bihar euroregion, marketing, awareness

* * * * * *

_

^{*} Corresponding author

RESEARCH PURPOSE

The current study is meant to highlight the high education students' awareness about the tourism opportunities of the Bihor and Hajdu-Bihar areas as adjoining borderland counties that belong to north-western Romania and eastern Hungary respectively and to highlight the degree of knowledge of the Bihor-Hajdu Bihar euroregion generally among the young population that inhabit this area.

Therefore a set of closed and open question surveys were applied in the core centres of the Bihor-Hajdu Bihar euroregion, namely Oradea city (Romania) and Debrecen city (Hungary) to the students of the University of Oradea and of the University of Debrecen. The research results are meant to help potential investors in tourism in the two counties as well as researchers interested of developing joint projects between the two high education institutions.

KNOWLEDGE OF THE TOPIC IN INTERNATIONAL LITERATURE

Tourism in crossborder areas is approached by more authors (Studzieniecki & Spiriajevas, 2019; Wecka, 2013; Thimothy & Saarinen, 2013; Thimothy & Teye, 2008; Wachowiak, 2006). The most common elements in tourism considered in cross-border cooperation include trade in goods and services, promotion and marketing, flow of people, environmental conservation, transportation and infrastructure (Thimothy & Teye, 2008). Crossborder tourism marketing is a relatively new trend, which comes to the forefront in the globalizing era as tourism is seen as a means to join people because tourist flows do not stop at the borders but with a good promotion and management allow mutual exploration, cultural exchanges and knowledge enhancement.

Crossborder cooperation in Central and Eastern European former communist countries comes to the forefront in the economic, social and political sphere as a modern trend of changing the borders' role from divergent separation into convergent connecting lines (Studzieniecki & Soares 2017; Ilieş, 2003), one of its stated objectives being to prevent the isolation of border areas (Czimre, 2010; Lorant et al., 2011, 2008), as in the case of the Bihor- Hajdu-Bihar Euroregion herewith submitted for analysis. The current study focuses on raising awareness of Bihor-Hajdu Bihar borderland tourism. Tourism joint projects have become very active lately thus resulting in a free flow of people and goods, academic exchanges, networking at institutional levels, joint project accomplishments, environmental protection measures, etc. The current study fills the gap of crossborder researches related crossborder marketing awareness.

Euroregions are small areas or regions reaching beyond political frontiers to work with adjacent areas or communities on the other side to address common social, economical and technical issues in borderlands (Thimothy & Saarinen, 2013). Inter-local cooperation or euroregions have gained momentum in Europe in the 1990s -2000 amounting to 74 such structures currently (Thimothy & Saarinen, 2013). There are many examples around the globe where many countries with neighbouring protective areas have joined hands to reverse the adverse impacts, being not only beneficial for the environment as it also encouraging friendly and co-operative relations between countries (Wachowiak, 2006). The study herewith encapsulates a research among students of the crossborder area Bihor-Hajdu Bihar from Oradea and Debrecen as core centres of the euroregion, meant to highlight the knowledge and awareness of the euroregion existence and its tourist attractions so as to create a cooperative alliance of the people in the region (Uzama, 2011). The euroregion submitted for study herewith is an area where cultural and natural areas lie adjacent to the Romanian and Hungarian border of north-western Romania and eastern Hungary epitomized in many natural reserves, cultural and entertainment sites, some of which were highlighted by the survey respondents.

Borderland tourism opportunities and tourist flows can enhance by making its people aware that they belong to a rich natural and cultural environment.

Because of their peripherality, borderlands are often more physically underdeveloped and ignored by mainstream marketing, despite their considerable potential, this study being meant to bring added value so as to help promote the attractions of these two neighbouring countries as a single integrated tourist destination. Tourism as the tertiary sector of the economy is a source of revenue and most tourist destinations will attempt to capture tourist flows, which are not oriented randomly toward certain destinations but as a consequence of the effort of certain states policies and planning strategies (Hall, 2008; Maghsoodi Tilaki et al., 2017). A sustainable marketing uses resources sustainably, reduces overconsumption and waste, maintains diversity, integrates tourism into planning, supports local economies, involves local authorities, consults stakeholders and the public, markets tourism responsibly (Holloway, 2004), preserving naturally endowed areas sustainably without damaging its ecological balance (Dasgupta, 2011). Marketing sustainably means to anticipate demand, recognize it, stimulate it and finally satisfy it (Fyall & Garrod, 2005).

METHODOLOGY

In order to meet the research goal a set of surveys were applied to the students of the high education institutions of the Universities of Oradea and Debrecen, as main cities and county seats of the two neighbouring counties of the Bihor-Hajdu Bihar euroregion.

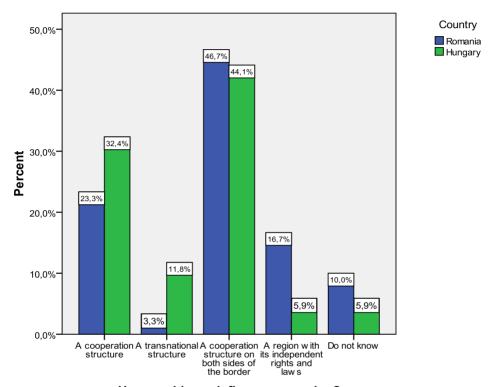
The survey comprises seven questions referring to the age; definition of a euroregion; selection of the right euroregion to which their city belongs; naming at least three main attractions that belong to the euroregion; naming activities carried out within the euroregion; the students opinion referring to marketing the euroregion and the best distribution channel for it. The survey was applied in November and December of the year 2018 at the University of Debrecen (Hungary) and in the month of January 2019 at the University of Oradea (Romania). The respondents' answers were stored into an SPSS database and its results processed and analyzed through generated charts.

RESULTS

The survey respondents were aged between 21-30 years and are students of the Universities of Oradea (Romania) and Debrecen (Hungary) at various specialisations. The first question of the survey was meant to find out the respondents knowledge of a euroregion and how they define it (Figure 1); most Romanian (46,7%) and Hungarian (44,1%) respondents stating that it is a cooperation structure on both sides of the border and only 10% of the Romanian and 5,9% of the Hungarian respondents stated that they do not know. Related to the question about the appurtenance of their city to a given range of euroregions (i.e. Carpathian, Danubian, Bihor-Hajdu Bihar, Cris-Tisa-Mures) most respondents correctly indicated the belonginess of Oradea and Debrecen cities to Bihor-Hajdu Bihar euroregion, namely 76,5% Hungarians and 73,3% Romanians (Figure 2). As it can be shown from the chart below most respondents correctly matched their city to the right euroregion (i.e. Bihor-Haju-Bihar) which indicates a good knowledge of their local horizon and the appurtenance to the right cross-border structure, apart from a few cases who stated that their city belongs to the Carpathian, Danubian or Cris-Tisa-Mures euroregions.

The Bihor-Hajdu-Bihar Euroregion is located in the western part of the Romanain western hills, plain and partly the Carpathians and on the eastern side of the Pannonian Plain and encapsulates a Bihor-named Romanian county and a Hajdu-Bihar-named Hungarian county. Its population counts approximately 1,094,573

inhabitants spread over 13,755 sq. km. The main county seats of the euroregion are Oradea and Debrecen which are located at 80 km apart from each other. The euroregion has a judicial status, founded by the Local Council of the Municipality of Oradea and the Bihor County Council and its stated objective is to promote social and economic development as written on the official website of the Bihor County Council.



How would you define a euroregion?

Figure 1. Respondents' definition of the euroregion (Source: Authors' survey applied in December 2018 and January, 2019)

Related to its tourism, the total accommodation capacity of the euroregion is of 12,000 beds with 80% on the Romanian side and its visitation frequency of 50,000 persons, equally spread in the two counties. The length of stay is 4.25 days in Hajdu-Bihar and 3,5 days in Bihor County (Badulescu & Badulescu, 2008). The spas of Felix and 1 Mai from Romania and Hajduszoboszlo from Hungary capture most tourist flows of the euroregion (Tatar et al., 2013). Further on the respondents were asked to name from their own knowledge at least three tourist attractions of the euroregion (Figure 3) they belong to and the responses varied from the most accurate to those that are completely outside the limits of the euroregion, nonetheless most of the respondents naming attractions that belong to their side of the border, mostly placed locally in their city of residence. Debrecen or Oradea, As far as correct answers are concerned, only one Hungarian respondent indicated the tourist attraction of Felix spa as belonging to the Romanian side of the euroregion and four Romanians indicated attractions that belong to the Hungarian side of the euroregion such as Aquaticum Debrecen; Hortobagy National Park and the Hajduszoboszlo spa which appeared as most popular, a rate which indicates rather a low knowledge of attractions that belong to the foreign neighbouring county.

A common mistake was to include Balaton Lake and the Danube as natural attractions of the euroregion which was indicated both by the Hungarian and Romanian respondents alike. From the man-made attractions, Gyula castle and Fisherman bastion of Budapest were indicated by some respondents which are outside the range of the euroregion as well as Mocanita (tourist train) and Viseul de Sus which are located outside the limits of the Bihor-Hajdu-Bihar euroregion.

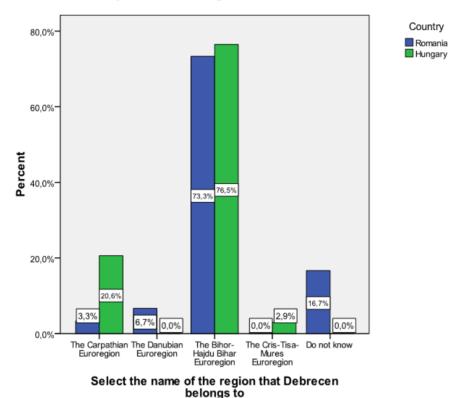


Figure 2. Respondents' answers in relation to the cities of Debrecen and Oradea appartenance to a euroregion (Source: Authors' survey applied in December 2018 and January, 2019)

Apart from these occurrences most respondents correctly indicated attractions that belong to the euroregion such as: Felix spa; Hajduszoboszlo spa; Aquaticum Debrecen; Nymphaea Lotus Aquapark Oradea; the Nature park of Cefa; Hortobagy National park; the Secession architecture of Oradea. Only by looking at the indicated attractions, it can be noted the similarity of attractions on both sides with thermal spas, aquaparks and nature parks as the most popular. Furthermore The Great Reformed Church of Debrecen appeared repeatedly as a popular sight of the euroregion referring to the man-made attractions. So as it can be noted the respondents are familiar with the most popular attractions belonging to the euroregion which highlighted once again a high concentration of man-made (cathedrals, churches, palaces and other monuments) resources as well as natural ones with nature reserves (Ilies et al., 2015), all having a touristic importance in the euroregion (Badulescu & Badulescu, 2008). The indicated attractions are spread over the respondent's side of the border, which is a shortcome that could be overcome by promoting the euroregion as an integrated tourist destination in the future and which would create a better awareness of the attractions in its whole.

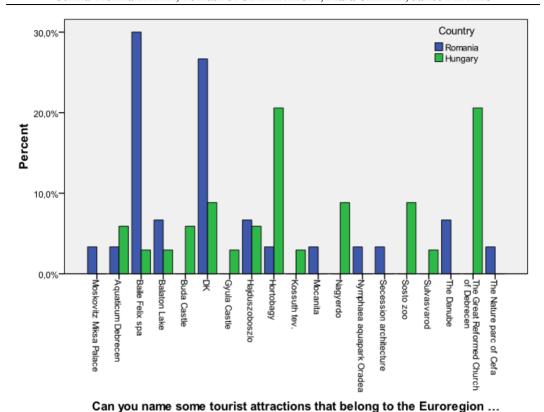


Figure 3. Respondents' answers in relation to the tourist attractions belonging to the Bihor-Hajdu Bihar euroregion (Source: Authors' survey applied in December 2018 and January and February, 2019)

Almost half of the questioned respondents (40,6%) could provide three attractions that belong to the euroregion of Bihor-Hajdu Bihar; more than half (67,2%) could provide two attractions and the largest share of 79,7% could name one tourist attraction that belongs to the euroregion. Apart from the secluded occurrences when some general attractions were wrongly integrated (i.e. The Danube, Gyula, Balaton Lake, Buda Castle, Mocanita) to the euroregion of Bihor-Hajdu Bihar, most respondents could provide correct attractions belonging to the euroregion they reside in, mostly on their side of the border. In relation to the respondents' awareness of the activities carried out within the euroregion (Figure 4), the largest share responded that they do not know which activities are carried out and only 13,3% of the Romanian respondents provided answers such as the Festival of Flowers held between 18-22 August and Secession tours of Oradea city and 2,9% of the Hungarian respondents could provide a positive answer, a fact which indicates a low knowledge of the practical activities unfolded in the Euroregion, thus their visibility and popularisation needing improvement.

The last two questions of the survey referred to marketing the euroregion and selecting the most appropriate channel of distribution (Figure 5 and Figure 6), the largest share of Hungarian (80%) and Romanian (94,1%) respondents answering that more marketing is necessary and the best channel for this marketing should be the internet and websites, indicated by a ratio of 97,1% of the Hungarian and 93,3% of the Romanian respondents. No respondent selected the radio as a best means of promotion and to a very little extent the TV (2,9%) and leaflets and brochures (6,7%) were selected.

As the current research indicates, it shows that the euroregion is not marketed enough, 87,5% of respondents (Romanian and Hungarian put together) stating that more marketing of the euroregion should be done. Some studies (Badulescu & Badulescu, 2008) claim as a solution to this shortcoming a common brand of the euroregion that will promote a unity in diversity, capitalising on the identity features of the region, a destination brand that will be *advertised by national and local offices and involved operators* (Badulescu & Badulescu, 2008). According to the aforementioned authors the euroregion as a destination (Studzieniecki, 2005) will be easier to stand out and sell on the touristic market. The marketing should be done, as indicated by the majority of respondents with the latest means and technology, internet and websites being the best tool for this endeavour.

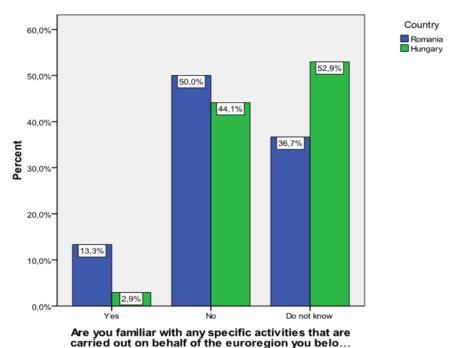


Figure 4. Respondents' answers in relation to activities carried out within the Bihor-Hajdu Bihar Euroregion (Source: Authors' survey applied in December 2018 and January and February, 2019)

CONCLUSIONS

The study reveals that students residing in the county seats of the analyzed euroregion are aware of their city belonginess to the euroregion of Bihor-Hajdu Bihar in their majority (73,5% Romanians; 76,5% Hungarians) as well as being aware what a euroregion means, most respondents definig it as a cooperation structure on both sides of the border. The young population is also knowledgeable of the most popular tourist attractions belonging to their county (of their side of the border) with responses such Aquaticum Debrecen, Hortobagy National park, Nature park Cefa, Hajduszoboszlo and Felix spas, Great Reformed Church of Debrecen, Nymphaea Lotus Aquapark; only five resopondents being able to name attractions from the other side of the border within the boundries of the euroregion (i.e. Felix Spa and Aquaticum Debrecen and Hajduszoboszlo respectively), a scarcity which indicates that a better tourist promotion is needed. Most surveyees (79,7%) could name correctly one tourist attraction that

belongs to the euroregion, more than half (67,2%) could provide two attractions and less than a half (40,6%) could provide three tourist attractions.

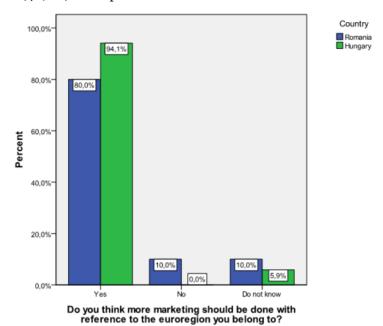


Figure 5. Respondents' answers in relation to the marketing it of the euroregion of Bihor-Hajdu Bihar

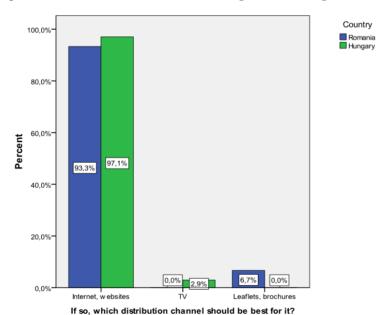


Figure 6. Respondents' answers in relation to the best distribution channel for the marketing of the euroregion (Source: Authors' survey applied in December 2018, January and February, 2019)

As far as the activities carried out within the euroregion are concerned, most respondents were unaware of them, claiming that a stronger popularisation as well as marketing of the euroregion is needed, mainly through internet and websites, as indicated by 87,5% of respondents (Romanian and Hungarian put together), so that the euroregion can be perceived as an integrated tourist destination (Wardani & Widodo, 2020) in its whole. The surveyees' claim for a better marketing shows an eagerness to find out more about its tourist potentialities and opportunities, a shortcome which according to some related economic-focused studies could be overcome by selling the Euroregion as a tourist destination on the market.

REFERENCES

- Badulescu, A. & Badulescu, D. (2008). Some aspects regarding a tourism development strategy in Bihor-Hajdu-Bihar Euroregion, in Proceedings of the 18th Biennal Congress Tourism & Hospitality Industry 2006, New trends in Tourism and Hospitality Management.
- Czimre, K., Szilagyine (2010). Policy Instruments Promoting and Implementing Cross-Border Cooperations
 Along the Internal Borders of the European Union, a practical guide Focus: the Fifth Enlargement,
 in Horga I. and Suli-Zakar I. (Eds) Cross-Border Partnership with Special Regard to the HungarianRomanian-Ukrainian Tripartite Border, IERS, University of Debrecen Press University of Oradea Press.
 Dasgupta D. (2011). Tourism marketing, Pearson publications.
- Fyall A. & Garrod B. (2005) Tourism marketing a collaborative approach, Aspects of Tourism, Channel View Publications. Hall, C.M., (2008). *Tourism Planning: Policies, Processes and Relationships*, Pearson Prentice Hal.
- Halloway J.C. (2004). Marketing for Tourism-Fourth edition, Prentice Hall, Pearson Education Limited.
- Ilieș A. (2003). Romania între milenii. Frontiere, areale frontaliere și cooperare transfrontalieră Studiu geografic (I), Editura Universității din Oradea.
- Ilies D.C., Buhas R., Ilies A., Morar C., & Herman G. (2015). Nymphaea Lotus var. Thermalis (Pârâul Pețea Nature Reserve), Brand Near Extinction of the Băile Felix-Băile 1 Mai (Romania) Spa Tourism System, *Geojournal of Tourism and Geosites*, year VIII, no1, vol 15.
- Lóránt D., Tóth G., Bujdosó Z., & Remenyik B. (2011). The role of tourism in the development of border regions in Hungary, *Romanian Journal of Economics*, 32: 2 pp. 109-124., 16 p.
- Lóránt D., Tóth G., Bujdosó Z., & Remenyik B. (2011). The role of tourism in the development of border regions in Hungary, *Romanian Journal of Economics*, 32: 2 pp. 109-124., 16 p.
- Lóránt D., Bujdosó Z., & Tóth G. (2008). Tourism planning in the Hajdú-Bihar Bihor Euroregion In: Süli-Zakar, I (szerk.) Neighbours and partners: on the two sides of the border Debrecen, Magyarország, Kossuth Egyetemi Kiadó, (2008) pp. 323-332., 10 p.
- Maghsoodi Tilaki M.J., Hedayati-Marzbali M., Abdullah A., & Mohsenzadeh M., (2017). Towards Tourism Development: Bridging the Gap between Tourists' Expectations and Satisfaction, *Geojournal of Tourism and Geosites*, year x, 2017 / 1, volume 19
- Studzieniecki T. & Spiriajevas E. (2019). Cross-Border Tourist Destinations In Europe Genesis, Essence and Promotion, Proceedings of 46th International Scientific Conference on Economic and Social Development "Sustainable Tourist Destinations"
- Studzieniecki T. (2005). Euroregions—new potential destinations, Tourism Review, vol. 60/4, pp. 26-32.
- Studzieniecki T. & Soares J.R.R. (2017). *Interregional tourism cooperation: A Europe case study*, Holos, vol 33, issue 4. Thimothy D.J & Teye V.B. (2008). *Political Boundaries and Crossborder cooperation in Tourism*, in Lew A.,
- Thimothy D.J & Teye V.B. (2008). Political Boundaries and Crossborder cooperation in Tourism, in Lew A. Hall CM., Williams A.M. (Eds), A Companion to Tourism, Wiley and Sons.
- Thimothy D. J. & Saarinen Jarkko (2013). Cross-border Cooperation and Tourism in Europe in Panyik E., Buhalis D. (Eds) Trends in European Tourism Planning and Organisation, Aspects of Tourism, Channel View Publications.
- Tatar C.F., Czimre K., & Dehoorne O. (2013). Tourism Life Cycle of Spas from the Romanian-Hungarian Crossborder Area. A Comparative Analysis of the Hajduszoboszlo- Baile Felix/1 Mai Spas, *Journal of Travel and Tourism Research*, spring –fall 2013.
- Uzama A. (2011). Cross-Border Cooperation: Strategies for Marketing Sustainable Development Development Tourism in Northeast Asia, New Delhi, Tatiana Intl. Research.
- Wachowiak H. (2006). Tourism and Borders: Contemporary Issues, Policies and International Research, Ashgate. Wardani Windi NR & Widodo (2020). Antecedent and Consequence Destination Innovation, Geojournal of Tourism and Geosites, year XIII, vol 28, no. 1.
- Wecka B. (2013). Creation of tourist products in transborder region on example of Euroregion Pradziad, in Wyrzykowski J. and Marak J. (Eds) Tourism Role in the Regional Economy, *Regional Tourism Product Theory and Practice*, University of Business in Wroclaw.

Submitted: Revised: Accepted and published online 05.10.2019 30.01.2020 03.02.2020

GEOECOLOGICAL ENVIRONMENTAL EVALUATION OF PAVLODAR REGION OF THE REPUBLIC OF KAZAKHSTAN AS A FACTOR OF PERSPECTIVES FOR TOURISTIC ACTIVITY

Galymbek AZHAYEV

S. Toraigyrov Pavlodar State University, Department of Geography and Tourism, Lomov Str., 64, 140000 Pavlodar, Republic of Kazakhstan, e-mail: agalymbek@mail.ru

Dinara ESIMOVA

S. Toraigyrov Pavlodar State University, Department of Geography and Tourism, Lomov Str., 64, 140000 Pavlodar, Republic of Kazakhstan, e-mail: dika-73@mail.ru

Seedou Mukthar SONKO

Assane SECK University of Ziguinchor, TRU of Economic & Social Sciences, Department of Tourism, Senegal, e-mail: sm.sonko@univ-zig.sn

Ruslan SAFAROV*

L.N. Gumilyov Eurasian National University, Faculty of Natural Sciences, Satpayev Str., 2, 010008 Nur-Sultan, Republic of Kazakhstan, e-mail: ruslanbox@yandex.ru

Zhanat SHOMANOVA

Pavlodar State Pedagogical University, Department of Geography and Chemistry, Mira Str., 60, 140000 Pavlodar, Republic of Kazakhstan, e-mail: zshoman@yandex.ru

Alphonse SAMBOU

Assane SECK University of Ziguinchor, TRU of Economic & Social Sciences, Department of Tourism, Senegal, e-mail: asambou@univ-zig.sn

Citation: Azhayev G., Esimova D., Sonko S.M., Safarov R., Shomanova Zh. & Sambou A. (2020). GEOECOLOGICAL ENVIRONMENTAL EVALUATION OF PAVLODAR REGION OF THE REPUBLIC OF KAZAKHSTAN AS A FACTOR OF PERSPECTIVES FOR TOURISTIC ACTIVITY. GeoJournal of Tourism and Geosites, 28(1), 104–113. https://doi.org/10.30892/gtg.28108-455

Abstract: It is well known that condition of environment is one of the most significant factors affecting the perspectives for tourism in the region. So, when we are considering ways of tourism development in such industrial cities as Pavlodar, usually we have to describe environmental conditions in the region. Thus, the main aim of the research is to reveal ecological characteristics of industrial city Pavlodar as a touristic region. The main methods used in the research are environmental risks analysis, elemental analysis of soils and snow, GIS. On the territory of Pavlodar region the industry is concentrated in the center of 3 industrial units - in such cities as Pavlodar, Ekibastuz, and Aksu. Enterprises of these centers are the main air pollutants; it is 99.3% of all industrial emissions of the territories. The possibility of using geochemical data on the content of microelements in soils and snow cover for

^{*} Corresponding author

zoning the territory of Pavlodar is shown in this article. According to the classification of Yu.V. Sayet snow cover of central area in Pavlodar refers to the average moderately dangerous levels of pollution; the northern and eastern industrial zones refer to a dangerously high pollution. Researches of soil cover showed soil in residential zones and zones of northern suburbs belong to an acceptable level of pollution, soil in eastern and northern industrial zones belong to a high level of pollution. Evaluation of anthropogenic impact on natural complexes of the region, including the Irtysh River, is given. Regulation of runoff of the Irtysh River cascade of reservoirs in the upper reaches by short and untimely release of water has led to a change in bioproductivity, abundance and species composition of phytocenoses. External water filling floodplains, not associated with the dissolved soil humus, on the contrary, they contribute to the accelerated migration of acids and intense growth and development of meadow grasses. With the cessation of seasonal bays mode soil skewed towards reducing the activity of the process. It was concluded that ecological condition of the considered region can negatively affect on the tourism intensity of the region.

Key words: Pavlodar, industrial load, tourism intensity, tourism perspectives, ecotourism, touristic attractiveness, floodplain, Irtysh river

INTRODUCTION

Pavlodar region is one of the most economically developed regions of the Republic of Kazakhstan which has a strategic importance for the country. The Paylodar region has a lot of touristic places and can attract tourists from other cities and countries. The Irtysh river is on of the biggest rivers of Eurasia. The Bayan-aul rocks are unique in Kazakhstan and have some endemic species of flora. The nature of Bayan-aul is very attractive for tourists from the whole world. Unfortunately, being the significant industrial center of Kazakhstan the Paylodar region has different problems inherent to industrial cities. It is well known, that industrial cities have different negative consequences for touristic activity because of environment condition (Badiali et al., 2018). Significant number of researchers sign, that the expansion of tourism translates into an environmental deterioration of the destination and, furthermore, it substantiates that there are specific variables connected to environmental sustainability that contribute to greater tourism growth, so that the relationship between tourism and environmental sustainability is bidirectional (Pulido-Fernández et al., 2019). Other study confirmed the feedback relationship between tourism income and energy demand, as well as between CO2 emissions and international tourism departures, while study supported the growth-led tourism income across countries (Shaheen et al., 2019). Key environmental issues of Paylodar region are air pollution, soil and environmental problems of the Irtysh River and its floodplain. Fifth part of all emissions of polluting substances into the atmosphere in Kazakhstan takes Pavlodar region, the environmental situation is characterized as tense. A researched region has high anthropogenic pollution, the field of basic industries here are mining, oil refining and chemical industry, ferrous and non-ferrous metallurgy, energetics. In the region until 1991 there was Semipalatinsk nuclear polygon (39 % of its territory is located on the lands of Mayskiy district of Paylodar region). The region has a significant fleet of mobile sources of air pollution (Nugumanova et al., 2017).

In Pavlodar region more than 200 large enterprises that use natural carrying emissions from 3880 sources are registered. According to the territory of the bulk of emissions belong to industrial enterprises that are located in the cities of Pavlodar

region: Ekibastuz, Aksu and Pavlodar. The bulk of industrial emissions of Pavlodar region come from thermal energetics and metallurgical industries (Nugumanova et al., 2017). It is well known that industries depending on their capacity and production characteristics can influence on the change of geochemical features of the territories on the local level and on the regional and global scales as well.

Chemical elements are distributed in the environment and are included in the natural course of global, regional biogeochemical cycles (Négrel et al., 2019). The main source of drinking water for the residents of Pavlodar region is a transboundary river Irtysh, which is characterized as moderately polluted. Contaminants come mainly from the enterprises of the East Kazakhstan region. Misbalance between the anthropogenic load on water objects and their capacity to renovation led to the fact that ecological trouble was characterized by almost the entire region.

MATERIALS AND METHODS

In geochemical researches of the environment, along with certain chemical elements, the distribution of chemical elements associations was analyzed (Grizzetti et al., 2019). Quantitative measure of association is the total pollution index, representing the excess amount of the additive concentration factors (scattering) over the unit (background) level (Berdenov et al., 2017). Total indicators of pollution are calculated for different landscape components - soil, snow. Analysis of distribution of geochemical parameters derived from sampling of snow cover and soil on a regular grid, gives the spatial structure of residential areas and pollution of air basin with the greatest risk to health of population (Mendybayev et al., 2015).

Total indicator of pollution (Z_c), which was conducted by zoning, was proposed by Yu. E. Sayet and represents the additive amount of the excess concentration coefficients (scattering) over the unit (background) level (Sayet et al., 1990).

$$Z_{c} = \sum_{1}^{i} \frac{C_{i} - C_{p}}{C_{p}} + 1 = \sum_{1}^{n} K_{c} - (n - 1),$$
(1)

where K_c is a concentration factor (ratio of the chemical element in the estimated object to its content background, n is the number of chemical elements in the studied association, C_i is an anomalous content, C_n is a content background.

Total indicators of pollution are calculated for the various components of the landscape — soil, snow. This indicator can be defined as for keeping in a separate sample, and for the part of territory (district, functional area, focus halo). In the latter case, the research is conducted in geochemical samples (Khomyakov, 2011).

Evaluation of risk of soil pollution by complex of elements in terms of Z_c is held on an assessment scale, gradations of which are based on the study of health outcomes of people living in areas with different levels of soil contamination (Table 1).

Table 1. Approximate rating scale of pollution risks of snow and soil according to total pollution index (Sayet et al., 1990)

Level of pollution	Quantity Z_c	Quantity Z_c
Allowable	Less than 64	Less than 16
Average moderately dangerous	64-128	16-32
Highly dangerous	128-256	32-128
Very high and extremely dangerous	More than 256	More than 128

Each sample may be presented as a set of relative features of abnormality of chemical elements. This set allows giving a qualitative and quantitative evaluation of the geochemical association of the researched object. The development of complex regional directions of lowland natural systems research for sustainable development of the region requires the search for new methodological techniques. One such method is a systematic approach as a way to realization of the law of dialectics about the relationship and interaction of objects and phenomena. The main issue here is the complex of methodological principles of analysis and construction of an object as a system - a holistic set of interrelated elements considered at a certain point of view.

A system analysis is the analysis of complex, whole, undivided in the context of the intended target. In connection with this, a systematic analysis is specific way of knowledge of the phenomena and processes occurring in the studied objects. Variety of natural and economic objects forms real, objectively existing systems. However, in solving various practical problems, it is difficult and sometimes impractical to cover all relationships equally. Hence, on the one natural object many systems can be constructed. Nowadays a systematic approach is probably the only way that allows at the methodological level to look for approaches to linking private geo-environmental issues. One of the leading approaches of systematic analysis of the functioning of the valley complexes can be noted are a landscape and a basin (Theng et al., 2014).

Formation of valley paragenetic hydromorphic landscape complexes largely predetermined by geological and geomorphological and hydrological factors and inherently reflect the characteristics of the ancient and modern functioning of paragenesis of basin geosystems. Using the basin landscape approach in the study of these features and allows to have a comprehensive approach to the study of geo-ecological assessment of the object and to solve environmental problems, in particular the development of water protection objectives, modeling of hydromorphic geosystems (Nworie et al., 2019).

RESULTS DISCUSSIONS

On the territory of Pavlodar region, the industry is concentrated in the center of 3 industrial units - in such cities as Pavlodar, Ekibastuz, and Aksu.

Enterprises of these centers are the main air pollutants; it is 99.3% of all industrial emissions of the territories. The contribution of each of the cities (Pavlodar, Ekibastuz and Aksu) according to the amount of pollutants emissions into the atmosphere is not the same (28.6, 38.3 and 33.1%, respectively) (Table 2).

Table 2. Emissions of pollutants into the atmosphere in the cities of Pavlodar region in 201	1-2012
(according to the Newsletter in the environmental state in the Republic of Kazakhstan for 20	1/2012)

Cities of the region	Amount of emission in 2011, thousand tons	Amount of emission in 2012, thousand tons	Increase of emission relatively to 2011, thousand tons
Pavlodar	160.5	168.4	+7.9
Ekibastuz	200.6	225.1	+24.6
Aksu	187.0	194.9	+7.9
Pavlodar region	548.1	588.4	+40.4

Research of the solid constituents of exhaust gases showed a significant difference in their chemical composition, including the content of chemical elements. For example, the emissions related to Company Profile of Pavlodar Heat Electro power Station 1,2 and State District Power Station in Aksu aluminum content varies 2.5 times (0.59 and 0.23).

mg/g), copper - 7 times (0.03 and 0.004 mg/g), titanium - 60 times (0.3 to 0.005 mg/g), lead - 3 times (0.009 and 0.003 mg/g), iron - 4 times (0.13 and 0.03 mg/g), respectively (PavlodarEnergo, Annual report, 2013). Depending on the particle size, they are deposited at different distances from the source, and then, according to a rational and chemical composition can leach, migrate to a considerable distance and being deposited. concentrate on different parts of territorial industrial complex area.

Daily dust load in Paylodar and suburbs (Fig. 1) up to 15 times higher than the background rate (9.75 kg/km²/24h) loss of aerosol particles for continental plains areas of temperate latitudes. In industrial zones high dust pollution within 8-13 times higher than the background. A characteristic feature of pollutants in Pavlodar is multicomponent. During our research characteristics of geochemical specialization of different areas of the region have been obtained (Tables 5-7).

According to the classification of Yu.V. Sayet (Sayet et al., 1990) snow cover of central area in Paylodar refers to the average moderately dangerous levels of pollution, the northern and eastern industrial zones refer to a dangerously high pollution. On average, the aqueous snow phase in Paylodar is characterized by mercury-copper, copper-cadmium and copper-lead geochemical specialization (Table 3).

areas of the water fraction of show pollution in Laviouan (20)			
Area of	Level of Z_c		Formula of geochemical
pollution	Fluctuation limit	On average areal	specialization
Northern	10.5-711.2	249.3	$Hg_{109.4}Cu_{42.4}Pb_{31.5}Ni_{13.0}Cd_{11.1}Be_{10.5}V_{9.9}$
Industrial Zone	10.5-/11.2	249.3	$Sr_{8.3}Mo_{6.8}Cr_{6.4}Mn_{4.7}Co_{3.9}Zn_{3.6}$
Eastern	3.19-720.3	225.2	$Cu_{81.3}Cd_{55.7}Pb_{52.8}Ni_{9.9}Mo_{8.8}Mn_{8.0}Cr_{6.7}$
Industrial Zone	3.19-/20.3	235.2	$Sr_{4.9}Hg_{4.7}Zn=Co_{4.3}V_{3.3}Be_{2.6}$
Central	29.3-74.6	53.6	$Cu_{12.8}Pb_{9.6}Ni_{7.9}Cr_{5.6}Mn_{5.3}V_{4.7}Cd_{3.6}Mo_{3.4}$
(residential) Zone	29.3-/4.0		$Zn_{3.1}Sr=Hg_{2.8}Co_{2.5}Be_{1.7}$
Total in	2 10-720 2 170 4	$Hg_{60.1}Cu_{48.9}Pb_{34.1}Cd_{23.1}Ni_{11.2}V_{7.0}Mo_{6.8}$	
the city		Be _{6.6} Sr _{6.4} Cr _{6.3} Mn _{5.8} Co _{3.8} Zn _{3.7}	

Table 3. Comparative characteristics of individual areas of the water fraction of snow pollution in Paylodar (Z_c)

In the northern industrial zone Z-forming metals of water fraction of snow cover are mercury, copper, lead; in the eastern industrial zone - copper, cadmium, lead; central - copper, lead, nickel, chromium and manganese.

Table 4. Comparative characteristics of individual

ar	eas of the solid fra	ction of snow po	ollution in Pavlodar (Zc)
Area of pollution			Formula of geochemica

	Level of Z_c		
Area of pollution	Fluctuation limit	On average areal	Formula of geochemical specialization
Northern Industrial Zone	18.5-184.1	83.6	$\begin{array}{c} Cd_{14.9}Be_{13.9}Sr_{11.4}Mo = Cu_{7.9}Mn_{7.3}V_{6.6}Co_{6.2} \\ Zn_{6.0}Pb_{4.8}Ni_{4.4}Cr_{3.4} \end{array}$
Eastern Industrial Zone	3.8-163.7	66.2	$ \begin{array}{c} Cd_{14.1}Mn_{8.8}Mo_{8.6}Be_{8.0}Sr_{7.2}Cu_{6.6}Zn_{5.4}Pb_{4.6} \\ V_{4.4}Co_{4.0}\ Ni_{2.8}Cr_{2.7} \end{array} $
Central (residential) Zone	41.3-71.0	58.5	$ \begin{array}{c} Zn_{25.3}Be_{7.1}Co=V_{4.7}Cd_{4.6}Sr_{4.3}Mo_{3.8}Mn_{3.3} \\ Cu_{3.2}\ Ni_{3.1}\ Pb_{3.0}Cr_{2.5} \end{array} $
Total in the city	3.8-184.1	69.4	$\begin{array}{c} Cd_{13.2}Be_{11.1}Sr_{9.1}Mo_{7.6}Mn_{7.1}Cu_{6.8}V_{5.7}Zn_{5.6} \\ Co_{5.3}Pb_{4.5}\ Ni_{3.7}Cr_{3.1} \end{array}$

As enterprises form territorial industrial sites in the city, spots of pollutions have more than one center, which has the maximum content in the snow of a particular element, and several centers, different composition of elements accumulated in the intensity of their accumulation (Shomanova et al., 2017).

Average level of Z_c in the aqueous fraction of snow is 33.1. The solid fraction of the snow cover in Pavlodar is typical to cadmium-beryllium, cadmium manganese and zinc beryllium geochemical of specialization (Table 4).

In the northern industrial zone Z-forming metals are cadmium, beryllium, strontium; the eastern industrial zone - cadmium, manganese, molybdenum; central - cadmium, beryllium, strontium (Shomanova et al., 2014).

The average level of Z_c for the specified zone is 34.

Researches of soil cover showed that according to the classification of Sayet soil in residential zones and zones of northern suburbs belong to an acceptable level of pollution, soil in eastern and northern industrial zones belong to a high level of pollution. On average, soil in Pavlodar is typical to cadmium - mercury -cadmium and strontium geochemical specialization (Table 5).

A f 11+;	Level	of Z_c	Formula of geochemical		
Area of pollution	Fluctuation limit On average area		specialization		
Northern	4.9-256.5	69.3	$Hg_{42.3}Cd_{13.8}Sr_{7.8}Pb_{3.4}Zn=Mo_{1.8}Ni_{1.3}$		
Industrial Zone	4.9-250.5	09.3	$Cu=V_{1.2}Co_{1.0}Cr_{0.9}Mn_{0.8}Be_{0.7}$		
Eastern	10.7-108.1	44.7	$Cd_{26.2}Sr_{5.5}Pb_{5.2}Mo_{3.6}Hg_{2.7}Zn_{2.1}Cr =$		
Industrial Zone	10./-106.1	44.7	$Co_{1.8}Cu_{1.6}V_{1.2}Mn=Ni_{1.1}Be_{1.0}$		
Central	8.3-26.8	10.4	$Cd_{9.3}Sr_{6.2}Pb_{2.9}Mo_{2.3}Hg_{1.9}Zn_{1.1}Cu=Cr_{1.0}$		
(residential) Zone	6.3-20.6	19.4	$Co = Ni_{0.9}V = Mn_{0.8}Be_{0.4}$		
Total in the city	41101	0.0	$Sr_{6.0}Cd_{4.9}Hg_{2.6}Pb_{1.8}Mo_{1.5}Ni_{0.8}Zn =$		
Total in the city	4.1-19.1	9.8	$Mn=V_{0.7}Cr=Co_{0.6}Cu_{0.5}Be_{0.2}$		
Northern	4.1.056.5	49.0	$Cd_{13.5}Hg_{12.4}Sr_{6.4}Pb_{3.3}Mo_{2.3}Zn_{1.4}Cu =$		
Industrial Zone	4.1-256.5	48.2	Co=Cr _{1.1} Ni=V _{1.0} Mn _{0.8} Be _{0.6}		

Table 5. Comparative characteristics of individual areas of soil pollution in Pavlodar

In the northern industrial zone Z-forming metals are mercury, cadmium, strontium, lead; eastern - cadmium, strontium, lead, molybdenum, mercury, zinc; central - cadmium, strontium, lead, molybdenum; northern suburbs - strontium, cadmium and mercury. These data show that in the soil exposed to pressure of industrial enterprises, accumulates mostly the same heavy metals (cadmium, strontium, mercury).

The distribution of heavy metals in soils of the city a clear zonation is mentioned, reflected in a reduction of the spectrum toxicants and decrease of their concentrations with increasing distance from major sources of pollution (Dzhanaleyeva et al., 2017).

The highest concentrations of chemical elements in the soil cover of the eastern and northern areas of the city due to the fact that they are concentrated and large industrial Heat Electorpower Station. These zones are characterized by high levels of dust (more than 146.3 kg/km² in 24 hours) and natural inflow of chemical elements with atmospheric dust. Thus, only aluminum and oil-processing factories and three Heat Electorpower Stations of the city more than 126.2 tons of pollutants are emitted (from 130.5 tonnes in the whole city from stationary sources) (PavlodarEnergo, Annual report, 2013).

Maps-schemes of the total contamination coefficient (Z_c) in water, solid fractions of snow cover and soil in the city of Pavlodar are presented in Figures 1 and 2.

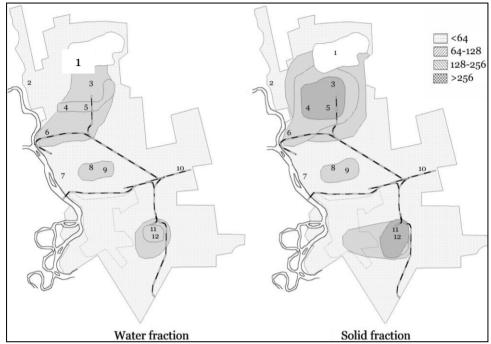


Figure 1. Map-scheme of the total contamination coefficient (Z_c) in water, solid fractions of snow cover in Pavlodar (mg/kg). 1 – sump of Balkyldak lake; 2 – Pavlodarskoe village; 3 – Pavlodar chemical plant; 4 – Pavlodar petrochemical plant; 5 – CHP-3; 6 – Zhana-aul village; 7 – Lesozavod village; 8 – Pavlodar tractor plant; 9 – CHP-2; 10 – Zhetekshi village; 11 – Pavlodar aluminum plant; 12 – CHP-1

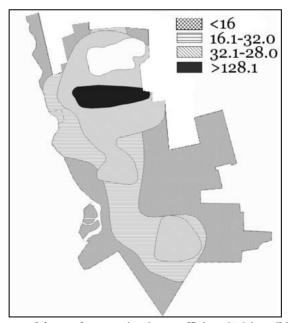


Figure 2. Map-scheme of the total contamination coefficient (Zc) in soil in Pavlodar (mg/kg)

Hydrochemical regime in the upper flows of the Irtysh (Black Irtysh, Buran village) formed by leaching and dissolution of rocks, surface runoff from the catchment area and pollutants entering the drain of the river from the region of the China.

In the area of Ust-Kamenogorsk and downstream, under the influence of sewage discharge from the East Kazakhstan industrial complex into the Irtysh River and its tributaries, the level of pollution in the river on certain indicators increases. Surface water is the most contaminated by the following pollutants: Cu (2.1-6.0 MPC), Zn (1.0-8.0 MPC), phenol (0.4-4.0 MPC), petroleum (1.48-7.6 MPC). In the period from 1961 to 2000 average water salinity ranged 142.0-230.2 mg/l, in some years - up to 316.6 mg/l, i.e. there was an increase in salinity 1.1-1.7 times compared with the natural range (100-160 mg/l). Fluctuations in sulphate and chloride practically correspond to fluctuations of salinity, the maximum concentration of SO4 and Cl was observed in dry years (1962-1984). And it was 30.5-42.5 and 20.4-14.4 mg/ml, respectively.

The relative content of HCO3 varied within 17-38 % eq. There was a dramatic increase in the total iron in 1.7-4.5 times (0.52-1.36 mg/l). The nitrate content increased 7 times in comparison to the natural range (Bobylev et al., 2016; Vaganova & Kovalchuk, 2012; Perelman & Kasimov, 1999; Kabiyev et al., 2018). Subgeosystem of the Irtysh River basin is a combination of interfaces and autonomous subordinates landscapes located in the same basin runoff on different hypsometric levels and flows related to substances moving from higher to lower levels. Floodplain of the Irtysh River is natural self-regulating mechanism, it is unique in its size, and in phytocenoses in subgeosystem. Floodplains in arid conditions of Pavlodar region are especially valuable because they allow to stabilize prey animal husbandry and beneficial to the local climate. Rich phytocenose of floodplain meadows of the Irtysh River is a geochemical barrier that prevents delivery of airspace sebaceous and smoke emissions of the industrial enterprises of the East Kazakhstan and Pavlodar regions, and of groundwater and surface water, pollutants and toxic substances.

In addition, the floodplain is a natural protective barrier, reducing the degree of soil erosion. Currently, the lack of funds allocated for the development of forestry, leads to the degradation of shelterbelts, reclamation activities are not conducted. Practically organic and mineral fertilizers (even for vegetable crops) were stopped. The use of irrigated lands is being reduced. Phytocenotic diversity of meadows provided greater stability of yield, especially under changing climatic conditions. Keeping quality of the floodplain landscape and all living creatures on them from time immemorial contributed cyclical seasonal flooding, which significantly disrupted today.

Regulation of runoff of the Irtysh River cascade of reservoirs in the upper reaches by short and untimely release of water has led to a change in bio-productivity, abundance and species composition phytocenoses. External water filling floodplains, not associated with the dissolved soil humus, on the contrary, they contribute to the accelerated migration of acids and intense growth and development of meadow grasses. With the cessation of seasonal bays mode soil skewed towards reducing the activity of the process.

It is known that in natural conditions the Irtysh River floodplain is flooded almost every year for 89-97 % of its area, in some years, a frequency of 1 time every 6-8 years floodplain flooded only by 60-70% and a frequency of 1 time every 12-15 years flooding amounted to 10 % of the area. In wet years floodplain river flooded the entire area and sufficient for an extended period. Total flooding floodplain had a positive impact on the functioning of the unique ecosystem, as these conditions are periodically flooded areas of the floodplain with high marks, thus hindering their drainage and degradation. In addition, under such circumstances, there is a natural flushing channels numerous

channels, oxbows and lakes, as well as waterlogged and saline areas. Yields meadow grasses in natural conditions flooding floodplain averaged 16-18 c/ha, and the most valuable wheat and ribbon grass meadows to 50-60 c/ha. During the construction period of Bukhtarma Hydroelectric Power Station (1958-1963) the Irtysh River floodplain has not flooded, causing quantitative and qualitative changes in plant communities and a sharp decrease in the yield of meadows to 5.5 t/ha. Under the conditions of flow regulation, since 1964, in order to maintain the productivity of the floodplains of the cascade of reservoirs made special natural hold releases, which, according to the Committee of Ecology of Pavlodar, conducted serious violations "human exploitation cascade of Upper Irtysh reservoirs" and did not consider the needs of in the water of the river ecosystem, fisheries, shipping, etc. This led to the fact that the Irtysh River, its resources, fauna and flora ecosystems appeared in condition requiring immediate action to restore the natural resource potential of the complex.

Value of flood waters (oxbows, backwaters, creeks) is exceptionally favorable conditions for the fish fauna (Berdenov et al., 2016). Changing of the height of floodwater standing, the intensity of rise and fall of water, the duration of standing water on the floodplain led to a sharp decrease in fish production ponds and the Irtysh floodplain.

CONCLUSION

The unfavorable factors of anthropogenic load on floodplain include human intervention associated with plowing, logging, taking sand from the riverbed, creating a basin irrigation system in the floodplain, residential areas and industrial enterprises located in close proximity to the river.

Heavy metal pollution upstream and upper tributaries of the Irtysh River lead to contamination of the entire river system and the river flow. Speed, intensity and morphology of man-made landscape of migration depend on conditions such as: specificity combination meteorological and soil-botanical characteristics of the studied area. According to many authors, the main source (supplier) of heavy metals in transaccumulative, superaqueous and aquatic landscapes is superficial (not streamflow) stock. It is formed due to soil erosion, dust flush with man-made surfaces, solid-phase deposition from the atmosphere, erosion area landfills, slime pit, etc.

Thus, unfavourable factors were revealed during both geochemical and the Irtysh River basin analysis. These man-made effects negatively affect the touristic activity in the region. As it is known, there is strong relation between environmental condition and touristic perspectives (Ilieş et al., 2017). So, the research conducted emphasize necessity of governmental intervention into the finding of solutions of the prevailing environmental situation in Pavlodar region. The challenge is very complicated also because of the importance of the studied region as an industrial hub of the Republic of Kazakhstan.

REFERENCES

- Badiali, F., Ilieş, D. C. & Castaldini, D. (2018) A tale of a city, through its urban landscape and cultural heritage in the heart of Europe: The case study of Oradea city (Romania). *Geojournal of Tourism and Geosites*, no. 1, vol. 21, p. 88-102.
- Berdenov, Z., G., Atasoy, E., Mendybayev, E., H., Ataeva, G. & Wendt, J., A. (2016). Geosystems geoecological assessment of the basin of rivers for tourist valorization. Case study of Ilek river basin. *Geojournal of Tourism and Geosites*, no. 2, vol. 18, p. 187-195.
- Berdenov, Z., Mendibaev, E., Salihov, T., Akhmedenov, K. & Ataeva, G. (2017). Geoecological analysis of industrial cities: On the example of Aktobe agglomeration. *Chemistry*, no. 6, vol. 26, p. 890-902.

- Bobylev, A., V., Bubin, M., N., & Rasskazova, N., S. (2016). The Geoecological Modelling of Small Water Reservoirs and River Catchment Areas as a Procedure in Urban Development. in *Procedia Engineering*, vol. 150, p. 2067–2072. DOI:10.1016/j.proeng.2016.07.240
- Dzhanaleyeva, K., Mazhitova, G., Zhanguzhina, A., Berdenov, Zh., Bazarbayeva, T. & Atasoy, E.. (2017). Technogenesis of geoecological systems of Northen Kazakhstan: progress, development and evolution. *Chemistry: Bulgarian Journal of Science Education*, no. 6, vol. 26, p. 903-921.
- Grizzetti, B., Liquete, C., Pistocchi, A. et al. (2019). Relationship between ecological condition and ecosystem services in European rivers, lakes and coastal waters. *Science of the Total Environment*, vol. 671, p. 452–465. DOI:10.1016/j.scitotenv.2019.03.155
- Ilieş, D., C., Baias, Ş., Buhaş, R., Ilieş, A., Herman, G., V., Gaceu, O., Dumbravă, R. & Măduţa, F., M. (2017) Environmental education in protected areas. case study from Bihor County, Romania. *Geojournal of Tourism and Geosites*, no. 1, vol. 19, p. 126-132.
- Kabiyev, Y., S., Berdenov, Z., G., Dzhanaleeva, K., M., Atasoy, E. & Wendt, J., A. (2018). Landscape ecological analysis of the modern delta of the Ural (Zhayik) river. *Geojournal of Tourism and Geosites*, no. 3, vol. 23, p. 644-655.
- Khomyakov, D., M. (2011). Soil degradation: causes, effects, ways to reduce and eliminate. Moscow, MSU, p. 272.
- Mendybayev, E., H., Atayeva, G., Berdenov, Zh. & Atasoy, E. (2015). Geochemical researches of region soil with technogenic influence in terms of Borlinskiy region, West Kazakhstan. *Oxidation Communications*, vol. 38, no. 4, p. 1933–1941.
- Négrel, P., Ladenberger, A., Reimann, C. et al. (2019). GEMAS: Geochemical background and mineral potential of emerging tech-critical elements in Europe revealed from low-sampling density geochemical mapping. *Applied Geochemistry*, vol. 111, article no. 104425. DOI:10.1016/j.apgeochem.2019.104425
- Nugumanova, L., Frey M., Yemelina, N., Yugay, S. (2017) Environmental problems and policies in Kazakhstan: Air pollution, waste and water. IOS Working Papers, Regensburg, no. 366, 40 p., http://hdl.handle.net/10419/162150
- Nworie, O., E., Qin, J. & Lin, C. (2019). Trace element uptake by herbaceous plants from the soils at a multiple trace element-contaminated site. *Toxics*, vol. 7, no. 1, article no. 3. DOI: 10.3390/toxics7010003
- Perelman, A., I. & Kasimov, N., S. (1999). Geochemistry of landscape, Moscow, MSU, p. 432.
- Pulido-Fernández, J., I., Cárdenas-García, P., J., & Espinosa-Pulido, J., A. (2019). Does environmental sustainability contribute to tourism growth? An analysis at the country level. *Journal of Cleaner Production*, vol. 213, p. 309–319. DOI:10.1016/j.jclepro.2018.12.151
- Sayet, Yu., V., Revich, B., A., Yanin, E., P., Smirnova, R., S., Basharkevich, I., L., Onishchenko, T., L., Pavlova, L., N., Trefilova, N., Ya., Achkasov, A., I., Sargsyan, S., Sh. (1990) Geochemistry of environment, Moscow, p. 334.
- Shaheen, K., Zaman, K., Batool, R. et al. (2019). Dynamic linkages between tourism, energy, environment, and economic growth: evidence from top 10 tourism-induced countries. *Environmental Science and Pollution Research*, vol. 26, no. 30, p. 31273–31283. DOI: 10.1007/s11356-019-06252-1
- Shomanova, Z., K., Safarov, R., Z., Tleulesov, A., K., Nosenko, Y., G., Zhumakanova, A., S., & Larichkin V., V. (2017). Study of composition of waste from metallurgy production aimed in use them as active phases of catalysts for hydrocarbon raw materials refining. *News of the National Academy of Sciences of the Republic of Kazakhstan, Series of Geology and Technical Sciences*, vol. 6, no. 426, p. 195–200.
- Shomanova, Z., K., Tashmukhambetova, Z., K., Zharmagambetova, A., K., Safarov, R., Z., & Nosenko, Y., G. (2014). Integrated approach for recycling of ferroalloy production wastes. *International Journal of Chemical Sciences*, vol. 12, no. 4, p. 1569–1576.
- Theng, S., Qiong, X., Ilies, D. & Dehoorne, O. (2014) Sustainable tourism and ecotourism: Experiences in the lesser Antilles. *Advances in Intelligent Systems and Computing*, vol. 254, p. 433-445.
- Vaganova, O. & Kovalchuk, O., A. (2012). Assessment of anthropogenic impacts on the landscape and hydrological systems. *Geography and natural resources*, no. 3, p. 151-156.
- *** (2013) PavlodarEnergo, Annual report, 70 p.
- *** (2011) Newsletter in the environmental state in the Republic of Kazakhstan for 2011. Astana, RSE "Kazgidromet".
- *** (2012) Newsletter in the environmental state in the Republic of Kazakhstan for 2012. Astana, RSE "Kazgidromet".

Submitted: Revised: Accepted and published online 22.11.2019 31.01.2020 04.02.2020

DELINEATING THE PLACE BRAND FACTORS INFLUENCING SOUTH AFRICA AS AN EMERGING BUSINESS TOURISM DESTINATION

Tafadzwa MATIZA*

Tourism Research in Economics, Environs and Society (TREES) Unit, North West University, Faculty of Economic and Management Sciences, School of Tourism, Building E3, Office 230B, Hofman Street, Potchefstroom, South Africa, 2531, e-mail: matizata@hotmail.com

Citation: Matiza, T. (2020). DELINEATING THE PLACE BRAND FACTORS INFLUENCING SOUTH AFRICA AS AN EMERGING BUSINESS TOURISM DESTINATION. GeoJournal of Tourism and Geosites, 28(1), 114–126. https://doi.org/10.30892/gtg.28109-456

Abstract: The proliferation of place brands within the global tourism market has resulted in the need for emerging business tourism markets such as South Africa to better understand their potential influence on tourists' decision-making. The aim of the study was to delineate the place brand factors influencing business tourism to South Africa and explore the nexus between South Africa's place brand and business tourism. Quantitative data was generated from a convenient sample of n=233 inbound tourists to South Africa. Exploratory Factor Analysis and Multiple Regression Analysis were employed, utilising the Statistical Package for Social Sciences (SPSS 25.0) to analyse the data. The study found evidence of a statistically significant relationships between South Africa's Socio-cultural and Tourism place brand aspects, and business tourism to the country. These findings suggest that South Africa's place brand is an inferential heuristic cue that may have a halo effect on the predilections of business-oriented tourists.

Key words: Business tourism, heuristic cues in tourism, place brands, South Africa, tourist behaviour

* * * * * *

INTRODUCTION

African tourism destinations are synonymous with leisure and nature-oriented tourism activities; as a result, business tourism represents an emerging and niche form of tourism for a significant proportion of African countries (Hoogendoorn & Rogerson, 2016; Signé, 2018; Tichaawa, 2017). Generally, business tourists represent a particularly affluent and non-seasonal consumer segment within the tourist market, with the average business tourist spending up to three hundred percent more than the typical leisure tourist (Kumar et al., 2018; Marais et al., 2017; Signé, 2018). Not surprisingly, the economic multiplier effect of business tourism has been linked to infrastructure development, employment creation, and integrated tourism value chains

_

^{*} Corresponding author

with other more traditional forms of tourism (Chiang et al., 2012; Kumar et al., 2018; Kumar & Hussain, 2014; Marias et al., 2017). Globally, business-related travel and tourism accounted for 22.5% (US\$1 230.6bn) of the global travel and tourism gross domestic product (GDP) in 2017 (World Travel and Tourism Council – WTTC, 2018a).

In the case of South Africa, business travel contributed an estimated US\$7.4bn to the South African economy (WTTC, 2018b). With the WTTC (2018a) projecting global business travel and tourism spend at an estimated US\$1,756.1bn by 2028, African tourism destinations such as South Africa are poised to reap the economic benefits of the emerging tourism market segment if they are 'positioned' strategically within the global tourism market. The effective positioning of places as business tourism destinations is a critical, but under-researched area of tourism (Rogerson, 2015; Tichaawa, 2017) underpinned by the need for a better understanding of business tourist behaviour as well as the potential influence of place brands on the behaviour of business tourists within emerging business tourism destinations.

Understanding tourist behaviour is imperative for the competitiveness of tourism destinations and is the cornerstone of contemporary destination marketing research (Khairi et al., 2019). To this end, the notion that tourist behaviour is influenced by destination images is well established within the tourism discourse. While there is a plethora of destination image research investigating the influence of destination images on tourist behaviour (Apostolopoulou & Papadimitriou, 2015; Kim et al., 2009; Martinez-Santana et al., 2017; Pike, 2016), academic inquiry into the effect of the generic place brand on tourist decision-making is still very limited, more-so within the African context. Moreover, research into the heuristic value of place brands in providing information symmetry for the travel decisions of business tourists is also limited compared to that of leisure tourists. This despite empirical evidence suggesting that information symmetry is significant to the decision-making process of business tourists and represents a critical success factor for business tourism (Chiang et al., 2012; Marais et al., 2017).

Relatedly, Africa suffers from a significant image deficit, particularly fuelled by negative stereotypical perceptions (Hemmonsbey & Knott, 2016; Schorr, 2011; Signé, 2018). As a result, the marketing axiom of perceived reality and its influence on consumer decision-making (Pike, 2016), is valid in suggesting that research into the effect of African place brands, on tourist behaviour such as South Africa's place brand, is imperative for the growth and development of business tourism destinations on the continent. Moreover, within the context of emerging African business tourism destinations, there is a discernible dearth of research into business tourism in general and, more pertinently the decision-making process of business tourists, when considering visiting African destinations (Donaldson, 2013; Marais et al., 2017; Rogerson, 2015; Tichaawa, 2017). Therefore, the aim of the study was to examine the place brand - business tourism nexus within the South African context, by delineating the place brand factors influencing tourist perceptions of South Africa as a business tourism destination. Thus, this paper makes three significant contributions to the business tourism discourse.

Firstly, the present paper contributes to the tourism literature by providing new insights into, and a better understanding of the potential effect of place brands on business tourist decision-making within the African context. Secondly, this paper expands the characterisation of business tourism by exploring the viability of previously excluded business-oriented tourism activities (academic, short-term employment, shopping and other corporate business activities) and providing empirical evidence to support the notion within the wider tourism literature. Thirdly, and more pertinently, the current paper provides tourism marketing practitioners in South Africa with critical

insights into tourist perceptions of South Africa as a business tourism destination by examining the South African place brand-business tourism nexus.

LITERATURE REVIEW Business tourism

Conventionally, business-oriented tourism is associated with activities such as meetings, incentives, conferences and exhibitions (MICE) (Donaldson, 2013; Marais et al., 2017), and is often defined within that context as involving, "... the traveling of people for the purpose of work and encompasses independent business trips as well as travelling for purposes of meetings, incentives, conferences, and exhibitions (MICE) tourism," (Tichaawa, 2017: p. 181). This characterisation of business tourism holds true in the case of South Africa which concurs with the conventional characterisation of business tourism (National Tourism Sector Strategy, 2012). To this end, the most recent tourism statistics report that business tourism accounted for just 12% of the 10.04 million and 8% of the 10.3 million tourists that visited South Africa in 2016 and 2017, respectively (Statistics South Africa, 2017) supporting the emerging status of business tourism within the South African context. Importantly, these figures exclude tourists who visited South Africa to shop for business purposes (cross-border traders), shortterm workers and/or academic activities. Within the African context, there are contestations regarding the characterisation of business tourism, particularly since some of the literature (Rogerson, 2015, 2018, Tichaawa, 2017) argues that business tourism extends to other socio-economic aspects, such as retailing (cross-border trading trips), short-term employment, and academic activities. The extension of the conceptualisation of business tourism activities, particularly within the African context, expands the business tourism market segment, and thus incorporates a wider crosssection of tourists, thereby necessitating further academic inquiry into the behaviour of business tourists. With this in mind, this paper presents a unique perspective by conceptualising and examining business tourism beyond the conventional MICE activities by incorporating other business-related activities to include: academic activities (Bento, 2014; Roderiguez et al., 2013); short-term employment (Chikanda & Tawodzera, 2017) and shopping (Rogerson, 2018) as well as other corporate business activities such as product delivery, sourcing or launching, and sales trips (Tichaawa, 2017).

The role of place brands in tourism and tourist behaviour The place brand is characterised by Zenker and Braun (2010:5) as,

"...a network of associations in the consumers' mind based on the visual, verbal, and behavioural expression of a place, which is embodied through the aims, communication, values, and the general culture of the place's stakeholders and the overall place design,"

From this perspective, the place brand represents two critical aspects - image (an existing perception or reputation) and/or a value promise (a unique and relevant positioning) in the minds of consumers (Belloso, 2010; Park & Lee, 2017). This suggests that place brands are cognitive in nature and as inferential heuristic cues, may have an overall influence on the evaluation of tourism destinations, thus giving credence to the notion of the importance of place brands in informing the subjective preferences of tourists in their decision-making (Brijs et al., 2011; Martin-Santana et al., 2017; Wang et al., 2012).

Of particular interest within the place brands-tourism nexus is the halo effect (Han, 1989), which hypothesises that consumers use the place brand as a heuristic cue for information symmetry - thereby influencing any subsequent evaluations of a country's particular products such as tourism offerings (Kang & Yang, 2010; Han, 1989;

Matiza & Oni, 2014; Stepchenkova et al., 2018). Based on this premise, it then follows that place brands are inextricably linked to the manner in which consumers process information associated with the place (competitive and comparative advantages), their affective behaviour, as well as their conative behaviour (Apostolopoulou & Papadimitriou, 2015; Souiden, et al., 2017). Generally, the literature (Brijs et al., 2011; Elliot & Papadopoulos, 2016; Kiryluk & Glinska, 2015; Wang et al., 2012) observes a relationship between the place brand and the behaviour of various consumer groups, including tourists. For instance, Wang et al., (2012) provide empirical evidence that in the absence of product information, Chinese consumers utilised the source country image (place brand) as a heuristic cue to infer product quality evaluation and inform their behaviour when evaluating American, German, Japanese and Korean products. While, specifically within the tourism context, prior studies (Park & Lee, 2017; Souiden et al., 2017; Qu et al., 2011; Zeugner-Roth & Zabkar, 2015) have supported the notion that place brands influence and elicit predictable tourist behaviour.

Measuring place brands

Globalisation and the resultant increase in competitive forces, have buoyed the proliferation of contemporary brand theory beyond conventional products and services into new fields of study and unconventional "products" - such as the branding of places within the tourism context (Hemmonsbey & Knott, 2016; McCreary et al., 2019).

However, the subjective and complex nature of place brands, compounded by the intangibility of tourism product offerings, as well as the diversity of tourism destinations, has presented researchers with a myriad of challenges in measuring place brands and their associated dimensions as well as the influence of place brands on tourists (Agapito et al., 2013; Knott et al., 2013; Marais et al., 2017; Martinez & Alverez, 2010; Slabbert & Martin, 2017). As a result, while some individual place brand-related studies have quantitatively measured place brands, there seems to be no consensus within the literature regarding the most suitable measurement instrument for place brands (McCreary et al., 2019; Souiden et al., 2017).

Nation branding theory does however, attempt to standardise the measurement of place brands within various fields. The theory posits that places, akin to corporate entities, are susceptible to both positive and negative perceptions that ultimately influence the behaviour of their external stakeholders - who include tourists (Anholt, 2002, 2007; Dinnie, 2008; Njeru, 2010). According to Anholt (2002, 2007) and Žugić and Konatar (2018), consumers interact with a country (place) through one or multiple dimensions, and make their product evaluations based on:

- Governance the perceptions of the government and its actions
- Cultural and heritage the history, values and achievements associated with the place
- Tourism the attractiveness of the place from a tourism perspective
- People (human capital) the pervasive views/opinions of the citizens of the place
- Investment and immigration the perceptions of the socio-economic conditions of the place and the willingness to live and work there and/or
- Exports the perceptions and/or stereotypes of the products associated with the place. To this end, various studies (Brijs et al., 2011; Souiden et al., 2017; Wang et al., 2012; Žugić & Kantar, 2018) have measured place brands as a mental representation of a country based on: socio-economic; technological; cultural; people; historical (cultural heritage); economic development; and/or political variables. The present paper, after excluding exports as a factor, adopted five of the six conventional nation brand hexagon dimensions as measures within the tourism context as follows: Cultural heritage (Kemp et al., 2012); Governance (Steyn & van Vuuren, 2016); Tourism (Reitsamer &

Brunner-Sperdin, 2017); Immigration (Cook, 2010) and People (Das & Mukherjee, 2016). Given the dynamic and competitive nature of the contemporary global tourism market, the influence of two novel factors, Marketing (Han & Hyun, 2014) and Negative Events (Avraham, 2018) was also examined.

The following hypotheses were thus formulated for the study:

- H_1 : South Africa's cultural heritage as a place brand factor influences business tourism to South Africa.
- H_2 : South Africa's governance as a place brand factor influences business tourism to South Africa.
- H_3 : South Africa's marketing as a place brand factor influences business tourism to South Africa.
- H_4 : South Africa's tourism as a place brand factor influences business tourism to South Africa.
- H_5 : South Africa's negative events as a place brand factor influences business tourism to South Africa.
- *H*₆: South Africa's immigration as a place brand factor influences business tourism to South Africa.
- H_7 : South Africa's people as a place brand factor influences business tourism to South Africa.

RESEARCH METHOD

The aim of the present study was to examine the place brand-business tourism nexus within the South African context. The positivist paradigm was most suitable for the purpose of the hypothesis testing. A quantitative cross-sectional deductive study was conducted to generate the data required from a sample of inbound tourists to South Africa. Due to the key informant nature of the target population, non-probabilistic convenient sampling was employed. An effective sample of n=233 foreign tourists was drawn from visitors visiting one of South Africa's most iconic tourist attractions, Table Mountain in Cape Town, between the 6^{th} and 9^{th} of November 2018.

Data was generated by way of a self-administered survey disseminated to tourists at the Table Mountain Aerial Cableway station by a team of four trained fieldworkers. The novel survey instrument consisted of four sections that solicited sociodemographic, general perception, influential factors of South Africa's place brand and travel motives, respectively. The South African place brand factors were measured by observed variables drawn from the literature as previously discussed.

An ordinal 5-point Likert type scale was developed to record tourist responses to 44 statements related to South Africa's place brand factors. Responses on the scale ranged from (1) Not at all influential to (5) Extremely influential. Data on the Business tourism factor was also generated from a literature-based (Gowreesunkar & Sotiriadis, 2015) ordinal 5-point Likert type scale for five statements on the business travel motives of tourists relating to South Africa. Responses on the travel motives scale ranged from (1) Strongly disagree to (5) Strongly agree. The survey responses were collated on a Microsoft Excel sheet and then exported to Statistical Package for Social Sciences (SPSS 25.0) for analyses. The Kaiser-Meyer-Olkin (KMO) measure of sampling adequacy (at ≥.50) and Bartlett's test of sphericity with a null significance value were employed to determine the factorability of the data (Field, 2011). In order to establish the factor model for the South African place brand factors influencing tourism to South Africa, Principal Components Analysis (PCA) was employed to generate the values underlying the place brand factors influencing business tourism to South Africa, with

factors indicating an Eigenvalue of EV >1 being retained (Hair et al., 2006). An exploratory factory analysis (EFA) Oblimin with Kaiser Normalisation then extracted and clustered the correlated items into discernible place brand factors (Norris & Lecavalier, 2010), at factor loading coefficient of \geq .40, in line with the recommendations of Hair et al. (2006) for samples of at least $n \geq$ 200. Construct reliability (inter-item consistency) was verified using the Cronbach's alpha (α) test at a lower limit of .60, which is regarded acceptable for exploratory studies in order to accommodate scales with fewer items (Field, 2011; Hair et al., 2006; Nunally & Berstein, 1994). Descriptive statistics were also calculated.

ANALYSES AND RESULTS Tourist profile

Table 1 summarises the profile of the tourists surveyed

Table 1. Tourist profile

Segment Percentage (%)						
Gender	Male	55.1				
Gender	Female	44.9				
	<19	3.1				
	20-30	30.5				
	31-40	26.5				
Age	41-50	10.0				
	51-60	11.3				
	>61	7				
	Did not mention	12.6				
	Non-formal	1.5				
	High school	17.0				
Education	Bachelor's degree	39.4				
	Post graduate degree	22.6				
	Professional qualification	19.3				
	Student	9.0				
	Unemployed	2.4				
Employment status	Employed (Private sector)	54.9				
	Employed (Public sector)	24.5				
	Retired	9.2				
	United Kingdom	19.4				
	Netherlands	7.1				
Country of residence	United States of America	11.6				
	Germany	15.4				
	Other	46.6				
	First visit	75.0				
Number of visits	More than 1 visit	24.5				
	Did not mention	0.5				

As shown in Table 1, a slight majority of the tourists surveyed were male (55.1%), while the majority (cumulative 57%) were aged between 20 and 40 years old. Notably, 18.3% of the survey population were aged >51 years old. Most of the respondents possessed a degree (62%), either a bachelor's (39.4%) or post-graduate (22.6%) degree, and were employed (79.4%) at the time of the survey. Interestingly, 9.2% of the respondents indicated that they were retired. The four main country of origin/residence

segments were the UK (19.4%), Germany (15.4%) the USA (11.6%), and the Netherlands (7.1%), of which the majority of all the foreign visitors surveyed (75.0%), indicated that they were visiting South Africa for the first time.

Results for the PCA, EFA and Cronbach's alpha for the South African place brand factors and Business Tourism

The PCA and EFA were employed to establish the factor models, and then extract and cluster the correlated items into discernible constructs for the place brand factors influencing tourism to South Africa, as well as the *Business Tourism* factors, respectively. The KMO (.854) and Bartlett's test of sphericity (χ^2 (946) = 4919.853, p < .001), supported the factorability of the survey data. Table 2 is a summary of the PCA, EFA, reliability test and the descriptive statistics.

Table 2. Summary of results for the PCA, EFA and Cronbach's alpha of the place brand factors influencing tourism to South Africa

Factor	*Items	Factor Loading (>0.40)		EV	Var (%)	Alpha (α)		riptive istics
		Min	Max				Mean (₹)	Std Dev(σ)
Socio-Cultural (SCU)	IMM3, IMM4, IMM5, CLH1, CLH2, CLH3, CLH4, CLH5, PEO1, PEO2, PEO3, PEO4	.478	.789	13.01	29.58	.918	3.42	.756
Governance (GOV)	GOV1, GOV2, GOV4, GOV5, GOV6	.669	.786	3.17	7.20	.860	3.12	.977
Marketing (MKT)	PEO7, MKT3, MKT4, MKT5, MKT6, MKT7	.499	.806	2.74	6.23	.885	3.62	.816
Tourism (TOR)	TOR3, TOR5, TOR6, TOR8, GOV3	.519	.693	2.35	5.35	.659	2.97	.950
Negative Events (NEV)	NEV1, NEV2, NEV3, NEV4, NEV5, NEV6	·457	.751	1.92	4.36	.864	3.18	.883
Competitive Advantages (CAV)	TOR2, TOR4, TOR7, IMM1, IMM2	.507	.659	1.47	3.34	.682	3.86	.696

Key: Culture and Heritage = CLH; Governance = GOV; Marketing = MKT; Tourism = TOR; Negative Events = NEV; People = PEO; Immigration = IMM

Table 2 summarises the six place brand factors influencing tourist decision-making within the South African context. As a result of the PCA (EV>1) and EFA (Oblimin with Kaiser Normalisation at the cut-off of >.40), the identified place brand factors were: Governance (5 items; EV = 3.17; α = .860); Marketing (6 items; EV = 2.74; α = .885); Tourism (5 items; EV = 2.35; α = .659) and; Negative Events (6 items; EV = 1.92; α = .864). Notably, some immigration, cultural heritage and people items loaded onto a new factor which was relabelled Socio-Cultural (12 items; EV = 13.01; α = .918). While a

completely new factor labelled *Competitive Advantages* (5 items; EV = 1.47; α = .682) also loaded as a place brand factor potentially influencing business tourism to South Africa. Factor loading coefficients for all the place brand factors ranged between .478 and .806, explaining a cumulative 56.06% of the variance in the data. All subscales were deemed reliable, ranging between α = .659 and α = .918. Table 3 presents the EFA, PCA and Cronbach's alpha test results of the antecedents of *Business Tourism* to South Africa.

Table 3. Results of the EFA, PCA and Cronbach's alpha tests for the antecedent factors of *Business Tourism* in South Africa

Items	Factor Loading (>.40)
Allows access to academic activities/ opportunities (teacher/student exchange, studying for a period <1-year, research)	.724
Hosts major international congresses, conventions, exhibitions and trade fairs	.818
Is a shopping paradise	.685
Is attractive/offers me opportunities for short-term migration for employment purposes (working holiday)	.809
Is a good destination for corporate business trips (product delivery/sourcing/launching, sales trips)	.797
Eigenvalue (EV)	2.127
Variance explained (%)	10.13
Cronbach's alpha (α)	.880
Mean (\bar{x})	3.05
Standard Deviation (σ)	.917

*KMO = .854; Bartlett's test of Sphericity (χ^2 (210) = 2979.398, p < 0.001)

Table 3 validates that South Africa is perceived as a *Business Tourism* destination. As a result of the PCA (EV>1) and EFA (Oblimin with Kaiser Normalisation at >.40), *Business Tourism* emerged as a valid tourism typology in South Africa and was constituted of 5 items (EV = 2.13; explaining variance of 10.13%; α = .880). The factor loading coefficients for *Business Tourism* ranged between .685 and .818. The *Business Tourism* subscale was also deemed to be reliable (α > .70).

After the PCA and EFA analyses, the hypotheses were (re)formulated as follows:

- H_1 : South Africa's socio-cultural profile as a place brand factor influences business tourism to South Africa.
- H_2 : South Africa's governance as a place brand factor influences business tourism to South Africa.
- H_3 : South Africa's marketing as a place brand factor influences business tourism to South Africa.
- H₄: South Africa's tourism as a place brand factor influences business tourism to South Africa.
- H_5 : South Africa's negative events as a place brand factor influences business tourism to South Africa.
- *H*₆: South Africa's competitive advantages as a place brand factor influences business tourism to South Africa.

Correlation analysis of South Africa's place brand factors and Business Tourism

The results listed in Table 4 show the correlations between South Africa's place brand factors and *Business tourism*.

Table 4. Correlation matrix of South Africa's
place brand factors and Business Tourism to South Africa

Variables	BTR	SCU	GOV	MKT	TOR	NEV	CAV
Business Tourism (BTR)	1.000						
Socio-Cultural (SCU)	.225**	1.000					
Governance (GOV)	.111	.420**	1.000				
Marketing (MKT)	.015	.521**	.338**	1.000			
Tourism (TOR)	.355**	.328**	.387**	.274**	1.000		
Negative Events (NEV)	.146*	·554**	.411**	.542**	.390**	1.000	
Competitive Advantages (CAV)	.014	·437**	.328**	.493**	.345**	.358**	1.000

^{**}Correlation is significant at the 0.001 level (2-tailed)

Table 5. Summary of the results of the Multiple Regression Analysis: Business Tourism

Dependent variable: Business		nearity istics					
Independent variables (R ² = .182)	β	t- value	Sig. (p)	Tol.	VIF	Нур.	Outcome
Socio-Cultural (SCU)	.254	3.011	.003**	.573	1.744	H_1	Accepted
Governance (GOV)	050	668	.505	.723	1.383	H_2	Rejected
Marketing (MKT)	133	-1.581	.115	.527	1.750	H_3	Rejected
Tourism (TOR)	.377	5.140	.000*	·755	1.324	H_4	Accepted
Negative Events NEV)	.003	.039	.969	.559	1.787	H_5	Rejected
Competitive Advantages (CAV)	146	-1.881	.061	.676	1.478	H_6	Rejected

^{*} p<0.001 **p<0.05

As is evident in Table 4, *Business Tourism* was significantly correlated with the *Tourism* (r = .355, p < .001); *Socio-cultural* (r = .225, p < .001) and; *Negative events* (r = .146, p < .05) place brand factors, respectively.

There were however, non-significant correlations of .111(p = n.s); .015 (p = n.s), and; .014 (p = n.s), between *Business Tourism* and the *Governance*, *Marketing*, and *Competitive Advantages* place brand factors respectively.

Multiple regression analysis of the South African place brand factors influencing Business Tourism to South Africa

MRA was then employed to test if South Africa's place brand was of a statistically significant influence to *Business Tourism* to South Africa. Table 5 summarises the results of the Multiple Regression Analysis.

The results of the regression analysis in Table 5 indicated that two South African place brand factors influenced *Business Tourism*, explaining 18.2% of the variance (R²=.182, F(6,201)=7.46,p<.001). The place brand factors, *Tourism* (β =.38, p=.000) and *Socio-cultural* (β =.25, p=.003) significantly influenced *Business Tourism* to South Africa. Additionally, the t-values for each statistically significant South African place brand factor reported critical t-values of between 1.96 and 3.09 at p<.05 (*Socio-cultural*) and exceeded the 3.09 at p<.001 (*Tourism*), thus hypothesis H₁ and H₄ were accepted.

The place brand factors *Governance, Marketing, Negative Events and Competitive Advantages* reported non-statistically significant (p>.05) relationships with *Business Tourism* to South Africa. Thus, hypotheses H₂, H₃, H₅, and H₆ were rejected.

DISCUSSION

The empirical evidence suggests a correlation and the existence of a statistically significant effect between of South Africa's place brand and business tourism to the

^{*} Correlation is significant at the 0.05 level (2-tailed)

country. As it emerged, the socio-cultural and tourism factors of South Africa's place brand influence tourists' perceptions and may have a discernibly predictive effect on business tourism to South Africa. Theoretically, this finding is fundamentally supported by nation branding theory, which advances the notion that consumers may interact with, and are susceptible to the influence of one or more place brand factor(s) in their decision-making process in evaluating products from specific countries (Anholt, 2002).

The influence South Africa's place brand on business tourism to the country is supported by the literature (Brijs et al., 2011; Chiang et al., 2012; Marais et al., 2017; Martin-Santana et al., 2017; Wang et al., 2012) which propagates to some extent, the significance of place brands as inferential heuristic cues that have an effect on the predilections of tourists. Relatedly, evidence of a place brand-business tourism nexus validates and extends the notion of the halo effect of place brands within an African business tourism context supporting the views of some authors, such as (Apostolopoulou & Papadimitriou, 2015; Han, 1989; Matiza & Oni, 2014; Park & Lee, 2017; Stepchenkova et al., 2018; Souiden et al., 2017) - that while place brands influence the decision-making processes of tourists, they may also be predictive in nature. This implies that despite place brands being cognitive in nature, they may also influence how tourists evaluate tourism destinations (affective behaviour) and ultimately influence the intention to (re)visit (conative behaviour) of tourists. To be more specific, prior studies have to some extent explored the nexus between some socio-cultural and tourism aspects of places and business tourism. For instance, the reasonability of a relationship between South Africa's socio-cultural aspects and business tourism to the country through the influence of friendly trade policies, as well as the entrepreneurial nature and innovativeness of South Africans, is supported by Gisore and Ogutu (2015), as well as Signé (2018).

These researchers found evidence that expansionist and friendly trade policies aimed at exploiting mineral resources in Africa attract more business-oriented travellers, thus providing growth opportunities for business tourism for African destinations (Gisore & Ogutu, 2015; Signé, 2018). Relatedly, socio-cultural aspects such as the quality of life, public resources (health and education) and the availability of efficient basic service utilities (water, electricity) in South Africa may be associated with the demand for business tourism. This notion is supported by Bento (2014) and Roderiguez et al. (2013), who found that in the case of international student mobility within the European Union, both economic (standard of living) and non-economic (quality of public resources) factors influenced academic tourism demand for certain destinations.

The findings of the present study also indicate the probable influence tourism factors on business tourism to South Africa. For instance, the proximity of South Africa to the country of origin of the business tourist, as well as the proximity of South Africa to other African tourist destination countries may have an influence on business tourism to the country. To this end, Ho and McKercher (2014) found evidence supporting this notion, observing that in 2014 the proximity of Hong Kong to 14 of its major source markets exerted a significant impact on inbound tourist arrivals with statistically significant differences being observed between long-haul and short-haul business travellers in the consideration of Hong Kong for business travel. Relatedly, tourism aspects such as the relations between South Africa and the home country of the business tourist may have an influence on the tourist's perceptions and their intention to (re)visit South Africa for business. Alvarez and Campo (2019) support the reasonability of this notion, finding that the ethnocentric tendencies and general animosity of American tourists towards a tourism destination country significantly influenced their perceptions and conative behaviour of toward the tourism destination.

This study is also novel in that it models the influence of place brands on a 'broader' business tourism construct. As it emerged, MICE, as well as short-term employment, shopping, academic, and other corporate business activities such as product launches are antecedents to business tourism to South Africa. The empirical evidence from the case of South Africa, thus gives credence to the contentions by Rogerson (2018) and Tichaawa (2017), that the conceptualisation of business tourism within the African context goes beyond what they term the formal 'Northern' definition of business tourism. This implies that business tourism arrivals, as well as the direct and indirect socioeconomic impacts of business tourism may be more significant than reported by national tourism statistics such as those provided by Statistics South Africa.

CONCLUSION

Based on the findings of the present study, the following conclusions may be made. First, South Africa's place brand may be significant to the growth and development of South Africa as an emerging business tourism destination. This implies that South African destination marketers must be cognisant of how South Africa is generally perceived as a country and seek to proactively manage these perceptions as part of a multi-stakeholder approach to marketing the country as a business tourism destination. Second, with particular reference to the assertions of Schorr (2011) and Signé, (2018) relating to the pre-existing deleterious perceptions of Africa, it is reasonable to hypothesise that positive place brand factors may be harnessed by destination marketing practitioners when marketing their countries as business tourism destinations to counteract the effects of the negative stereotypes associated with Africa.

Implying that place brands may be utilised as strategic assets to effectively manage or influence business tourist perceptions and better position African countries as business tourism destinations. Third, there is also a valid premise for the expansion of the definition of business tourism within the African context based on the validity of the additional business-related activities beyond the traditional MICE.

Therefore, this study contributes to the ongoing debate in tourism literature on the role and characterisation of short-term academic, cross-border trading and shortterm employment activities in business tourism.

The findings of this study contribute to the extent of the literature within the general tourism discourse, by extending place branding theory to an emerging African business tourism destination, while providing an African perspective to tourist behaviour within the burgeoning business tourism discourse. However, it is important to acknowledge that there is need for much broader research into the influence of place brands on business tourism, the more so given that the scope of this study is limited to just a cross-section of inbound tourists to South Africa. A broader study that encompasses respondents from major tourism source markets for South Africa would further validate the measuring instrument, as well as the findings of the present study. Such a study is all the more important as the perspectives of tourists who have visited, have considered visiting but had decided not to visit, and those who would consider visiting South Africa in the future for business would also provide more critical insights into the South Africa's place brand-business tourist behaviour nexus.

Lastly, in the absence of a consensus on a generic measurement instrument for place brands, aspects of other African country place brands may be measured by the novel evaluative instrument developed for this study as it was found to be valid and reliable within the South African context. Generally, the evaluative framework developed for the present study to measure the influence of African place brands may

also be extended to the evaluation of the influence of place brands on other tourism typologies, such as medical, nature-based and leisure tourism in Africa, representing a new vein of critical research in African tourism.

REFERENCES

- Agapito, D., Valle, P.O. & Mendes, J.C. (2013). The cognitive-affective-conative model of destination image: A confirmatory analysis. *Journal of Travel and Tourism Marketing*, 30(5): p. 471-481.
- Alvarez, M. D. & Campo, S. (2019). Consumer animosity and its influence on visiting decisions of US citizens. Current Issues in Tourism, https://www.tandfonline.com/action/showCitFormats? doi=10.1080/13683500.2019.1603205 (18.04.2019).
- Anholt, S. (2002). Nation branding, Journal of Brand Management, 9 (4/5): p. 229 239.
- Anholt, S. (2007) Competitive identity: The new brand management for nations, cities and regions, Palgrave Macmillan, Basingstoke.
- Apostolopoulou, A. & Papadimitriou, D. (2015). The role of destination personality in predicting tourist behaviour: Implications for branding mid-sized urban destinations. *Current Issues in Tourism*, 18(12): p. 1132-1151.
- Avraham, E. (2018). Nation branding and marketing strategies for combatting tourism crises and stereotypes toward destinations. *Journal of Business Research*, https://doi.org/10.1016/j.jbusres.2018.02.036 (18.04.2019).
- Belloso, J. C. (2010). Country brand. A differentiation mechanism and source of intangibles. *Paradigms*, 5: p. 44-51. Bento, J.P.C. (2014). The determinants of international academic tourism demands in Europe. *Tourism*
- Bento, J.P.C. (2014). The determinants of international academic tourism demands in Europe. *Tourism Economics*, 20(3): p. 611-628.
- Brijs, K., Bloemer, J. & Kasper, H. (2011). Country image decisions model: Unravelling meaning, structure, and function of country images. *Journal of Business Research*, 64: p. 1259-1269.
- Chiang, C.C., King, B. E. & Nguyen, T. H. (2012). Information searching and the travel behaviours of MICE travellers: A cross-cultural study. *International Journal of Tourism Research*, 14: p. 103-115.
- Chikanda, A. & Tawodzera, G., (2017). Informal entrepreneurship and cross-border trade between Zimbabwe and South Africa, Southern African Migration Programme Migration Policy Series No. 74, Cape Town.
- Cook, P. S. (2010). Constructs and experiences of authenticity in medical tourism: The performances of places, spaces, practices, objects and bodies. *Tourist Studies*, 10(2): p. 135-153.
- Das, G. & Mukherjee, S. (2016). A measure of medical tourism destination brand equity. *International Journal of Pharmaceutical and Health Marketing*, 10(1): p. 104-128.
- Dinnie, K. 2008. Nation branding: Concepts, issues, practice. Burlington, MA: Elsevier
- Donaldson, R. (2013). Conference tourism: What do we know about the business tourist in South Africa? *African Journal of Physical, Health Education, Recreation and Dance*, 2(2013): p. 24-38.
- Elliot, S. & Papadopoulos, N. (2016). Of products and tourism destinations: An integrative, cross-national study of place image. *Journal of Business Research*, 69: p. 1157-1165.
- Field, A. (2011). Discovering statistics using SPSS, 3rd edition. Sage Publications: Los Angeles.
- Gisore, R. & Ogutu, H. (2015). Sustainable tourism in Africa: Standards as essential catalysts. Sector Standardisation Needs Review, 9(3): p. 1–26.
- Gowreesunkar, V.G.B. & Sotiridis, M. (2015). Entertainment of leisure tourists in island destinations: Evidence from the island of Mauritius. *African Journal of Hospitality, Tourism and Leisure*, 4(Special edition): p. 1-19.
- Hair, J.F., Black, W.C., Babin, J.B., Anderson, R.E. & Tatham, R.L. (2006). *Multivariate data analysis*. 6th edition. Upper Saddle River: Pearson Prentice Hall.
- Han, D. M. (1989). Country image: Halo or summary construct? Journal of Marketing Research, 26(2): p. 222–229.
- Hemmonsbey, J. & Knott, B. (2016). Branding an African city through sport: The role of stakeholder engagement. *African Journal of Hospitality, Tourism and Leisure*, 5(3): p. 1-15.
- Ho, G. & McKercher, B. (2014). A comparison of long-haul and short-haul business tourists of Hong-Kong. *Asia Pacific Journal of Tourism Research*, 19(3): p. 342-355.
- Hoogendoorn, G. & Rogerson, C.M. (2016). New perspectives on Southern African tourism research. *Tourism*, 64(4): p. 355-357.
- Kemp, E., Childers C.Y. & Williams, K.H. (2012). Place branding: Creating self-brand connections and brand advocacy. *Journal of Product & Brand Management*, 21(7): p. 508-515.
- Khairi, N.D., Ismail, H.N. & Jaafar, S. M. R. S. (2019). Tourist behaviour through consumption in Melaka World Heritage Site. *Current Issues in Tourism*, 22(5): p. 582-610.
- Kim, S.S., McKercher, B. & Lee, H. (2009). Tracking tourism destination image perception. *Annals of Tourism Research*, 36(4): p. 715-718.
- Kiryluk, H. & Glinska, E. (2015). Creation and evaluation of the tourist image of a country: The example of Poland. *Procedia Social and Behavioural Sciences* 213(2015): p. 671-676.

- Knott, B., Fyall, A. & Jones, I. (2013). The nation branding legacy of the 2010 FIFA World Cup for South Africa. *Journal of Hospitality Marketing and Management*, 22: p. 569-595.
- Kumar, J. & Hussain, K. (2014). A review of assessing the economic impact of business tourism: Issues and approaches. *International Journal of Hospitality and Tourism Systems*, 7(2): p. 49-55.
- Kumar, J., Garg, A. & Fukey, L.N. (2018). In-depth review of microeconomic analysis of business tourist spending. *African Journal of Physical, Health Education, Recreation and Dance*, 7(2): p. 39-50.
- Marais, M., du Plessis, E. & Saayman, M. (2017). Critical success factors of a business tourism destination: Supply side analysis. *Acta Commercii*, 17(1), DOI: 10.4102/ac.v/7/l.423 (18.04.2019).
- Martinez, S.C. & Alvarez, M. D. (2010). Country versus destination image in a developing country. *Journal of Travel and Tourism Marketing*, 27(7): p. 748-764.
- Martin-Santana, J. D., Beerli-Palacio, A. & Nazzareno, P.A. (2017). Antecedents and consequences of destination image gap. *Annals of Tourism Research*, 62: p. 13-25.
- Matiza, T. & Oni, O. A. (2014). Managing the tourist destination image: The case of Africa. *Tourism*, 62(4): p. 397-406.
 McCreary, A., Seekamp, E., Davenport, M. & Smith, J. W. (2019). Exploring qualitative applications of social media data for place-brand assessments in destination planning. *Current Issues in Tourism*, DOI: 10.1080/13683500.2019.1571023 (18.04.2019).
- Njeru, G.W. (2010). The influence of nation branding on competitiveness of nations. Unpublished PhD in Business Administration, University of Nairobi, Nairobi.
- Norris, M. & Lecavalier, L. J. (2010). Evaluating the use of exploratory factor analysis in developmental disability psychological research. *Journal of Autism and Developmental* Disorders, 40(1): p. 8-20.
- Nunnally, J. C. & Bernstein, I. H. (1994). Psychometric theory, 3rd edition. New York: McGraw-Hill.
- Park, H. J. & Lee, T. J. (2017). Influence of the 'slow city' brand association on the behavioural intention of potential tourists. *Current Issues in Tourism*, 22(12): p. 1405-1422.
- Pike, S. (2016). Destination image: identifying baseline perceptions of Brazil, Argentina and Chile in the nascent Australian long-haul travel market. *Journal of Destination Marketing and Management*, 5: p. 164-170.
- Qu, H., Kim, L. H. & Im, H. H. (2011). A model of destination branding: Integrating the concepts of the branding and destination image. *Tourism Management*, 32: p. 54-70.
- Reitsamer, B. F. & Brunner-Sperdin, A. 2017. Tourist destination perception and well-being: What makes a destination attractive? *Journal of Vacation Marketing*, 23(1): p. 55–72.
- Rodriguez, V.A., Martinez-Roget, F. & Pawlowska, E. (2013). Academic tourism: A more sustainable tourism. *Regional and Sectorial Economic Studies*, 13(2): p. 89-98.
- Rogerson, C. M. (2015). The uneven geography of business tourism in South Africa. South African Geographical Journal, 97(2): p. 183–202.
- Rogerson, C.M. (2018). Informal sector city tourism: Cross-border shoppers in Johannesburg. *GeoJournal of Tourism and Geosites*, 22(2): p. 381-392.
- Schorr, V. (2011). Economics of Afro-pessimism: The economics of perception in African foreign direct investment, *Nokoko Institute of African Studies*, Carleton University.
- Signé, L. (2018). Africa's tourism potential. Trends, drivers, opportunities, and strategies. Brookings Institution: New York. Slabbert, E. & Martin, S. (2017). Aspects influencing the cognitive, affective and conative images of an arts festival. *African Journal of Hospitality, Tourism and Leisure*, 6(2): p. 1-16.
- Souiden, N., Ladhari, R. & Chiadmi, N. E (2017). Destination personality and destination image. *Journal of Hospitality and Tourism Management*, 32: p. 54-70.
- Stepchenkova, S., Su. L. & Shichkova, E. (2019). Marketing to tourists from unfriendly countries: Should we even try? *Journal of Travel Research*, 58(2): p. 266-282.
- Steyn, R. & van Vuuren, O.J. 2016. The relationship between quality of governance and foreign tourist numbers. African Journal of Hospitality, Tourism and Leisure, 5(4): p. 1-10.
- Tichaawa, T. (2017). Business tourism in Africa: The case of Cameroon. *Tourism Review International*, 21 (2): p. 181-192. Wang, C.L., Li, D., Barns, B. R. & Ahn, J. (2012). Country image, product image and consumer purchase intentions: Evidence from an emerging economy. *International Business Review*, 21: p. 1041-1051.
- Zenker, S, & Braun, E. (2010). Branding a city: A conceptual approach for place branding and place brand management, In *Proceedings of the 39th European Marketing Academy Conference*, Copenhagen: Denmark, 1 June to 4 June 2010.
- Zeugner-Roth, K.P and Zabkar, V. (2015). Bridging the gap between country and destination image: Assessing common facets and their predictive validity. *Journal of Business Research*, 68(2015): p. 1844-1853.
- Žugić, J. & Konatar, A. (2018). Comparative analysis of the value of nation brands. *Econviews*, 31: p. 179-191.

 *** World Travel and Tourism Council. (2018a). Economic impact 2018: World. World Travel and Tourism Council: London.
- *** World Travel and Tourism Council. (2018b). Travel and tourism economic impact 2018: South Africa. World Travel and Tourism Council: London.

Submitted: Revised: Accepted and published online 07.11.2019 03.02.2020 06.02.2020

TOURISM CLUSTERS AND INNOVATION SECURITY: DIALECTICS IN THE WESTERN BORDER REGIONS OF RUSSIA

Vasilisa Valeryevna GOROCHNAYA

South Federal University, Academy of Psychology and Educational Sciences, Nagibina av., 14, 344006, Rostov-on-Don, Russian Federation; Immanuel Kant Baltic Federal University, Institute of Environmental Management, Urban Development and Spatial Planning, Zoologicheskaya Str., 2, 236016, Kaliningrad, Russian Federation, e-mail: tunduk@hotmail.com

Andrey Sergeevich MIKHAYLOV*

Immanuel Kant Baltic Federal University, Institute of Regional Studies, Innovation Geography Laboratory, Gaidara Str., 6, 236029, Kaliningrad, Russian Federation; Saint Petersburg Electrotechnical University "LETI", 197022, Saint-Petersburg, Russian Federation, e-mail: mikhailov.andrey@yahoo.com

Anna Alekseevna MIKHAYLOVA

Immanuel Kant Baltic Federal University, Institute of Regional Studies, Centre for Baltic Studies, Gaidara Str., 6, 236029, Kaliningrad, Russian Federation, e-mail: tikhonova.1989@mail.ru

Angelina Petrovna PLOTNIKOVA

Immanuel Kant Baltic Federal University, Institute of Regional Studies, Innovation Geography Laboratory, Gaidara Str., 6, 236029, Kaliningrad, Russian Federation, e-mail: APPlotnikova1@kantiana.ru

Citation: Gorochnaya V. V., Mikhaylov A. S., Mikhaylova A. A., & Plotnikova A. P. (2020). TOURISM CLUSTERS AND INNOVATION SECURITY: DIALECTICS IN THE WESTERN BORDER REGIONS OF RUSSIA. GeoJournal of Tourism and Geosites, 28(1), 127–139. https://doi.org/10.30892/gtg.28110-457

Abstract: The article provides an assessment of tourism sector impact on regional innovation growth. The research focuses on the border regions of Western Russia experiencing the highest pressure on innovation security under the current situation of losing the established cross-border collaboration ties. The scope of the study covers Bryansk, Kaliningrad, Leningrad, Murmansk, Pskov, and Smolensk regions, Krasnodar Krai, the Republic of Karelia, the city of Saint-Petersburg as nucleus of metropolitan agglomeration. The regions are analysed for their tourism development dynamics, capturing tendencies of growth and strategic development priorities. Both interconnection and independence between tourism and innovation dynamics are identified, resulting in a typology. The best practices pointed out within the selected case studies are assessed as to be transmitted to other regions.

Key words: tourism cluster, innovation growth, western Russia, border region

* * * * * *

^{*} Corresponding author

INTRODUCTION

In many regions around the globe, tourism is one of the major economy sectors featuring high entrepreneurial activity (Klepers & Rozite, 2009). The high density of business entities, their active involvement in interfirm interactions and cooperation contribute to the process of collective learning, the establishment of a creative environment. The tourism sector is increasingly seen as an important element of economic and innovative development (Aarstad et al., 2015; García-Villaverde et al., 2017; Klepers & Rozite, 2009; Medina-Muñoz et al., 2013; Martínez-Pérez & Beauchesne, 2018). As noted by Weidenfeld et al. (2010), tourism plays a significant role in the context of innovative development by supporting knowledge transfer and innovation diffusion. This aspect has been widely discussed in a number of studies, mainly of a qualitative, descriptive nature in the field of hospitality (in Spain by Claver-Cortés et al., 2006; Qatar – Mehrez, 2019; the Balearic Islands - Jacob et al., 2003; Martínez-Ros & Orfila-Sintes, 2009; the USA - Siguaw et al., 2000; Taiwan - Yang, 2007; South Korea - Kim & Shim, 2018). Hallin and Marnburg (2008) provide an extensive review of early empirical research on these matters. Quantitative studies of the innovative development of tourism are quite rare (Hialager, 2010; López-Fernández et al., 2011; Martínez-Pérez & Beauchesne, 2018).

In the last decade, studies have focused on a set of various internal and external factors influencing the innovative activities of tourism sector organisations, including the role of entrepreneurship, the demand for technology, the presence of territorial clusters (Hjalager, 2010) and their competitiveness (Estevão & Ferreira, 2012; Jin et al., 2012; Jackson & Murphy, 2006; Jackson, 2006; Hong, 2009), the importance of social capital (Inkpen & Tsang, 2005; Staber, 2007; Nahapiet & Ghoshal, 1998).

Tourism companies are traditionally characterized by high dynamism and show ramified intersectoral connectivity, often initiating clustering processes in the region (García-Villaverde et al., 2017; Gomezelj, 2016; Hjalager, 2010). Clustering as a manifestation of "geographically bounded concentration of interdependent businesses with active channels for business transactions, dialogue, and communications, and that collectively shares common opportunities and threats" (Rosenfeld, 1997, p. 4) and "resulting in efficient collaborative synergy" (Kim & Shim, 2018, p. 2417), plays an important role in providing sustainable competitive advantage. By contributing to "...a variety of flows, within firms, between firms, between producers and consumers, and between private sector and public sector organisations..." (Hudson, 2005, p. 76), the tourism sector makes a significant contribution to the formation of a territorial community through socialization, absorption and learning of implicit knowledge through observation and involvement. A number of scholars believe that tourism agglomerations are crucial for the development and diffusion of innovation (Camisón et al., 2017; Rodríguez et al., 2014; Weidenfeld & Hall, 2014). Just as industrial enterprises are interdependent with companies in the value chain, tourism clusters are highly dependent on the quality and effectiveness of the companies in their environment outside the framework of a specific market offering. At the same time, the most effective knowledge exchange is carried out with similar companies competing in a single market segment, but located in other regions and countries (Weidenfeld et al., 2010).

According to the OECD report (2006), it is the tourism industry that is most actively involved in the exchange of knowledge and the introduction of innovative solutions, being less protected from imitation and copying (Hall & Williams, 2008). Due to the possibility of quick replication of innovations, companies generally develop inexpensive products from scratch, but introduce improved innovations (Poon, 1993) in the process of continuous learning. The most common channels for learning and knowledge absorption in tourism are observations – "learning by observing" (Nonaka &

Takeuchi, 1995), as well as "staff mobility" and "intercompany exchange" through coordinated visits to destinations, tourism associations and exhibitions, to a lesser extent trade, technology, infrastructure and regulatory systems (Weidenfeld et al., 2010).

The efficiency of tourism clusters as drivers of innovative activity is due to the fact that they help reduce transaction costs of agents, facilitate access to specialized services, investments and other resources in a systematic manner (Funck, 2012). This is especially prominent because, unlike industrial production, tourism products are a collaboration of various enterprises, predominantly small and medium-sized enterprises (SMEe), which experience the need for external capital, research and development, human resources and information more acute than large companies do (Iordache et al., 2010; Michael, 2003; Novelli et al., 2006; Thomas et al., 2011).

Innovation development of regions is one of the key directions of regional policy in Russia. To maintain global competitiveness of production and world standards of live quality, Russia stimulates innovation activities and makes them to be the issue of high priority. The most attention is focused on mechanisms of federal and regional support to the innovative industries, such as machinery, high-tech, chemistry, biotechnology and pharmaceutics, etc. However, the potential of other sectors is underestimated, as they are not directly associated with innovation growth. This research is based on the hypothesis that tourism sector has the capacity to foster innovation growth at the regional level in the modern Russia, especially via the self-organizing mechanisms of clustering. The study is purposed to identify both direct and indirect effects of innovation growth caused by (or synchronized with) the development of tourism.

We address the question of whether the investments into tourism sector of regional economy can be the means to enforce regional innovation security, by analysing the factors and best practices of advanced regions. Another issue raised is the role of tourism in innovation security (innovation resilience). We focus on the border and coastal regions of western Russia as territories under the highest influence of the geo-economic turbulence in the 'Russia-West' system since 2014. The mechanisms of overcoming certain negative trends do work already in the general international trade interaction and in some cases – within productive cooperation of enterprises, but they do not efficiently work within the sphere of investments (which are vitally important to cover the risks of innovative activities), as well as within mutual science and R&D projects. That is why innovation security, being sensitive to external shocks and changes, is one of the most urgent issues within their general economic security. As most of western border regions of Russia used to be integrated into the European economic space and perform the innovation flows from the West, they try to fulfil the loss of previous partners and contacts by intra-regional integration of business initiatives, using the centres of science and education as the platforms for such interaction (Gorochnava et al., 2019; Mikhaylova, 2018; 2019).

RESEARCH BACKGROUND

The current geo-economic situation and the need for import substitution since 2014 have been causing the waves of clustering (with the interval of approximately 2 years), spreading across the Western Russia from the leading centres – St. Petersburg, Rostov and Kaliningrad region, as they are the areas of early clustering in Russia. But the clustering in Kaliningrad region initially had the impetus from the European neighbourhood, so at the present time there is lack in 'critical mass' of enterprises and investments to form real clusters in the most of sectors. In other Western border regions the waves of clustering include more and more basic industries of regional specialization (starting with the most competitive ones), including tourism (Gorochnaya, 2019).

The average level of innovatization in the Western border regions reflected in the statistical data on the aggregate volume of innovative goods and services has remained lower than national average. Since 2014, despite the general Russian decline, the stable intensified growth dynamics in registered in this category of regions (Figure 1).

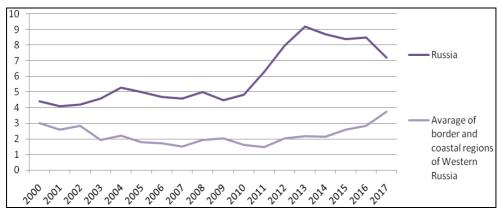


Figure 1. Dynamics of the share of innovation product in the total volume of goods and services (Source: based on Rosstat, 2018)

This trend reflects the internal self-organizing impetus to substitute innovation production from abroad and to use the appeared niches in the internal market. On the one hand, in the most part of cases such growth is beginning in the hi-tech machinery, as it is more likely to be innovative-oriented, and the clustering involves enterprises, R&D and scientific-educational institutions that already have comparatively strong relations and the experience of common projects. However, on the other hand, in some regions the process of clustering began from the initial experience of tourism sector, and then spread to other industries (Gorochnaya, 2019). In such cases, tourism becomes the core of initial clustering that gives the indirect effect of further self-organizing enforcement of innovative production, for being the local competitive advantage and specialisation, and the integrator of the regional organizational capacity.

In addition, tourism services can become the direct consumer of local innovation product or even the generator of innovations. The practice of Russian regions includes the best practice of the Republic of Tatarstan. The modernization and development of tourism in the Republic during the last two decades actively involved application of new technologies (incl. improved infrastructure, enhanced museum and sightseeing experience with digital technologies) that ultimately gave the new impetus of economic and innovation growth. Similar development strategy can be applied to the Western border regions experiencing 'structural holes' due to distortion of networks. The potential of tourism sector to lead, integrate and form the additional demand for innovation industries is to be estimated in terms of regional clustering dynamics (Osipova at al., 2017) and the specifics of coastal areas (Druzhinin et al., 2017a; 2017b; Mikhaylov, 2019).

MATERIALS AND METHODS

As the first step of the study, we identified the target regions of tourism development among the entire Western border and coastal regions of Russia, accordingly to both present developed and high potential of touristic business and regional strategies, including the priorities of developing touristic sector. Based on an inventory of previously identified set of emerged and potential clusters in the Western border regions

(Gorochnaya, 2019), we explored those cases, when clustering process in a region started (or is strategically planned to start) from the tourism sector.

Additional attention drawn to the regions, where, despite the absence of officially registered tourism clusters, tourism sector is significant and has a potential for clustering due to the competitive advantages and long-term development history. The direct and indirect interaction with other industries is included into account. The initial materials for such cluster and proto-cluster observation is taken from a wide range of official webresources of public bodies (containing the strategic documents and directives on tourism cluster development), enterprises, officially institutionalized clusters and regional Centres of cluster development, informative periodicals and press on discussing the tourism clusters' perspectives in the regions. Both formal and informal regional clustering of tourism organizations and enterprises of associated industries are viewed to be the marker of actual or potential growth of the sector via the mechanisms of self-organization. It helped to identify the number of particular regions, where the clustering in the sphere of tourism is significant or have the background to develop.

The second step of the study provided the complex statistic evaluation of tourism development of the chosen regions. The evaluation is carried out in static and dynamic extent. The static evaluation of tourism sector of the regions (the data by Rosstat on the 2018) includes two aspects: the *service volume index* and the *organizational density index*. The primary indicators are: the number of travel agencies, the number of travel packages sold, the number of outbound tourists, the number of collective accommodation facilities, the number of persons placed in collective accommodation facilities, the number of sanatoriums and resorts, the number of persons placed in health resort and wellness organizations.

All the primary indicators of tourism development are weighted on the number of population of a region (per 1000 of population). The number of travel agencies, the number of collective accommodation facilities and the number of organizations of sanatorium profile are weighted on the entire number of organizations within a region (per 1000 organizations). The general index of tourism development calculated as the average geometrical of all the weighted primary indicators (equation 1).

$$I_G = \sqrt[N]{\frac{1000 \, \boldsymbol{i}_1}{M} \cdot \dots \cdot \frac{1000 \, \boldsymbol{i}_N}{M}},\tag{1}$$

 I_G – general index: i_1 , ..., i_N – primary indicators, N – number of indicators, M – number of regional population (for the *service volume index*) of the number of population (for the *organizational density index*).

The dynamic evaluation of both service and organizational environment is carried out by calculating the average geometrical growth rates per year for a number of periods: for 13 years (2005-17), 8 years (2010-17), 4 years (2014-17), 2 years (2016-17) to identify the periods of acceleration and also to compare the development before and after 2014 as the year of radical external changes.

For every region and for every period the general growth rate is calculated as the average geometrical of all the weighted primary indicators' growth rates, multiplied on 100, final result to be measured in % (equation 2).

$$R_{\mathcal{G}} = \sqrt[N]{\frac{i_{L1} \cdot M_0 \cdot 100}{i_{01} \cdot M_{\mathcal{L}} \cdot L} \cdots \frac{i_{LN} \cdot M_0 \cdot 100}{i_{0N} \cdot M_{\mathcal{L}} \cdot L}},$$
(2)

 R_G – overall growth rate, i_O – primary indicator value in the beginning year, i_L – primary indicator value in the last year of the period, L – the duration of the period (measured in the number of years), M_O – the number of population (or the number of organizations) in the region in the first year of the period, M_L – the number of population (or the number of organizations) in the region in the last year of the period, N – number primary of indicators. The calculated general static indexes and the average growth rates provide comparative data of the regions studied, reflected visually by the means of cartography and resulted in the typology of regions by to their touristic development.

The third step of the study is the comparative assessment of innovation security of the chosen regions by the three major indicators: the share of innovative goods, works and services in the total volume of goods shipped, works performed, services; the ratio of the cost of technological innovation and R&D costs; the ratio of the volume of shipped innovative products and the cost of technological innovation. These indicators are extensively elaborated by the Baltic school of economic geographers (Problems of Economic Security, 2019). As all of them are relative measures, they do not need to be weighted on the number of population or organizations.

The official statistical data of the Russian Federal State Statistics Service is used (Rosstat, 2018). The comparison between tourism development and the rates of innovation security used for the final typology, as various types of the regions need different directions and measures of regional policy and have various background and recreational potential to induct innovation growth.

RESULTS DISCUSSIONS

After the analysis of the empirical materials, tourism clusters or their prototypes are identified in Krasnodar Krai, Saint-Petersburg (incl. the Leningrad region), Kaliningrad, Pskov, Smolensk, Bryansk, Murmansk regions and the Republic of Karelia (Table 1).

Region	Before 2014		201	2014-15		2016-17		2018-19		Potential and planned	
	O	T	\mathbf{o}	T	O	T	О	T	О	T	
Krasnodar region	-	-	1	1	1	-	-	-	3	-	
Rostov region	7	-	7	-	2	-	1	-	4	1	
Voronezh region	-	-	9	-	-	-	2	-	1	-	
Belgorod region	-	-	1	-	1	-	-	-	4	-	
Kursk region	-	-	-	-	1	-	-	-	4	-	
Bryansk region	-	-	1	1	1	1	1	-	3	-	
Smolensk region	-	-	-	-	4	1	-	-	-	-	
Pskov region	-	-	-	-	2	1	-	-	-	-	
Kaliningrad region	7	1	-	-	-	-	-	-	1	-	
Leningrad region	-	-	-	-	-	-	4	-	1	1	
Saint-Petersburg	4	-	3	-	5	-	1	1	-	-	
Republic of Karelia	-	-	-	-	-	-	2	1	2	-	
Murmansk region	-	-	1	1	-	-	2	-	-	-	
Arkhangelsk region	1	-	1	-	-	-	-	-	-	-	

Table 1. Genesis of clusters in the border regions of Western Russia, O – overall number of clusters emerged, including: T – the number of tourism clusters emerged

This analysis defined the following types of regions:

1. The regions of early clustering, where tourism clusters emerged along with other industries as the result of competitive advantages of the region and touristic sphere being one of regional specialization industries (e.g. Kaliningrad region).

- 2. The regions, where tourism sector in 2014-15 became the first economy sector to initiate clustering self-organization, and then this impetus transmitted to other industries, including innovative ones (e.g. Krasnodar, Bryansk and Murmansk regions).
- 3. The regions, where tourism clusters emerged along with other ones as the attempt to integrate local potential during 2016-19 or are planned for the nearest future (e.g. Smolensk and Pskov regions, St. Petersburg and Leningrad region, Republic of Karelia). In such cases, the impetus comes from other successful and experienced sectors of regional economy to tourist business.
- 4. The region, where tourism clusters are in the process of official institutionalization, but is more of a formal attempt to enforce the developing sector than the real clustering, despite there are some perspectives (e.g. Rostov region). The region is well developed in terms of clusters, but the tourism potential is modest and touristic infrastructure is still developing.
- 5. Regions without significant attempts for self-organization of tourism clusters (e.g. Voronezh, Belgorod, Kursk and Arkhangelsk regions). Some of them have tourist potential, but the enterprises are not interested in clustering, and the regional administration is focused on other competitive sectors.

It is notable that tourism (along with IT) is the sphere where sub-clustering is more likely than in other sectors of clustering. It happens due to the nature of tourism services that tend to divide into sub-clusters on the particular territories or focused on the particular kinds of tourism (event, medical-therapeutic, visiting historical and cultural heritage, marine-coastal, etc.). On the one hand, firms specialize at particular profile and territory within the region, so they join the sub-cluster.

On the other hand, the touristic flows come from one area to another, touristic operators make new routes that connect various objects spread in the territory of a region, and organizations of various profile work on the complex product for tourists. Such subclustering trend increases the organizational density of a region, leads to diversification and makes the business more flexible and adaptive to the market changes. That is why tourism became the first sector of clustering for some regions, where the other industries are not presented by the enough integrative organizational mass. In other regions it became the sphere which had no internal impetus for clustering, but in the changeable external situation it performed the same trend with other regional economy. In both cases, it demonstrates the enforcement of interaction with other regional industries, directly or indirectly interconnected with tourism services, and also for some regions tourism clustering became the way to develop interactions with other (neighbouring) regions (Table 2). As seen from calculating and mapping the general integrated index if tourism performance (Figure 1), the self-organizing trends after 2014 really caused the growth of the sector during the last 2-3 years, especially in Leningrad and Kaliningrad regions (more than 20% average growth per year). This brought them to the leading positions of Russian tourism regions. Murmansk region (18%), Krasnodar, Bryansk and Pskov regions (10-12%), Smolensk region (8%), St. Petersburg (6%) improved their infrastructure and attractiveness. The least developed northern regions also showed growth, especially high in 2016-2017 in Murmansk region (18%) and modest in Karelia Republic. It did not change their poor positions radically, but probably their tourism sector has the perspectives. It is also noticeable that during the 2017 the growth rates were lower in the most of regions (exceptions are Krasnodar region and Karelia Republic), and in S. Petersburg the growth rate is even negative. It probably means the enforcement of competition with other regions.

Similar patterns identified for the organizational development of the tourist sector in the regions studied (Figure 3). Data suggests that organizational density has increased, with the growth starting 2-3 years earlier than the general growth of tourism services.

Table 2. Tourism sub-clustering, interactions with other clusters and cross-regional perspectives in the Western border and coastal regions of Russia

Region	Touristic sub- clustering	Names of (sub)clusters	Interaction with other clusters and regions
Krasnodar region	3	Cluster "Abrau-Utrish", the cluster of marine tourism of the Big Sochi and the cluster of mountain tourism of the Big Sochi	Potential interaction with forming agro-business and industrial cluster
Bryansk region	-	Cluster "Crystal city"	-
Smolensk region	-	"Tourist cluster Smolensk"	-
Pskov region	-	"Tourist cluster Pskovian"	Potentially cross-border with Novgorod and Leningrad regions
Kaliningrad region	7	"Raushen", "Kranz", "Palmniken", "Neukuhren", "Pillau", "European Baikal" (using the recreational resources of the lake Vishtynetskoye in Nesterovsky district of the region) and "Königsberg"	Potentially cross-border with EU; interconnected with the Amber cluster of Kaliningrad region, interconnected with previously existed furniture cluster
Saint- Petersburg and Leningrad region	present version	of official institutionalizing, the ons of the names are: "Tourist cluster urg" and "Old Ladoga" ("Bolshaya	Potentially cross-border with Novgorod and Pskov regions; interconnected with the group of clusters of city infrastructure and technologies (cluster of innovation development in energy and industry, cluster of water supply and sanitation, cluster of clean technologies for the urban environment of information technologies) of St. Petersburg
Republic of Karelia	2	"Legends of Karelia" and "The Karelian White Sea"	Interconnected with the forming cluster of creative activities
Murmansk region	11	"Hibiny" (Apatity and Kirovsk), "Belomore" (Kandalaksha and Tersky districts), "Sub-cluster of Lovozersky district", "Sub-cluster of the Pechenga district", "Murmansk", Proto-cluster "Teriberka" (in the formation stage); "Polyarnye Zori city"; "Monchegorsk city"; "Olenegorsk city"; "The Kovdor district" and "Kola district"	Interconnected with the forming cluster of creative activities
		zoro 0017 Vomanmlalzoro Drovido Duron	alz IIDI . https://www.hwonglz.lzp.w

Data sources: Minenkova, 2017; Komsomlskaya Pravda Bryansk, URL: https://www.bryansk.kp.ru/daily/26544.7/3560447; Smolensk region Centre for cluster development, URL: https://gkk.pskov.ru/sites/default/files/analiticheskaya-zapiska-turizm.pdf; Invest in Kaliningrad region, URL: https://gkk.pskov.ru/sites/default/files/analiticheskaya-zapiska-turizm.pdf; Invest in Kaliningrad region, URL: https://jekk.pskov.ru/sites/default/files/analiticheskaya-zapiska-turizm.pdf; Invest in Kaliningrad region, URL: https://kareliainvest.ru/republic-for-investors/projects/turizm; Kaliningrad region development corporation, URL: https://www.kgd-rdc.ru; Murmansk region Centre for cluster development, URL: https://www.kgd-rdc.ru; Murmansk region Centre for cluster development, URL: https://www.kgd-rdc.ru; Murmansk region Centre for cluster development, URL: https://www.kgd-rdc.ru; Murmansk region Centre for cluster development, URL: https://www.kgd-rdc.ru; Murmansk region Centre for cluster development, URL: https://www.kgd-rdc.ru; Murmansk region Centre for cluster development, URL: https://www.kgd-rdc.ru; Murmansk region Centre for cluster development, URL: https://www.kgd-rdc.ru; Murmansk region centre for cluster development, URL: https://www.kgd-rdc.ru; Murmansk region centre for cluster development, URL: <a href="https://www.kgd-rdc.r

It means that it is the organizational multiplication and clustering effect to bring the further development of the sector and to increase the productive performance. It is especially seen by the examples of the Republic of Karelia and Smolensk region, but not the Leningrad region, where clustering trend is only beginning to develop at the present time. However, the comparison with the rates and dynamics of innovation security shows the further differentiations of the regions on the interconnection or disconnection between tourism, clustering and innovations (Figure 4).

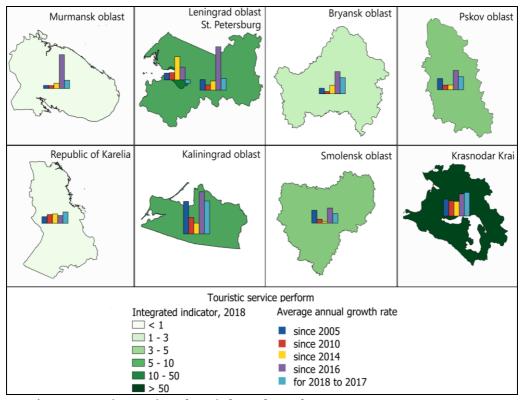


Figure 2. Tourism service volume index and growth rates (Source: based on Rosstat, 2018)

The regions are further divided into five groups:

- 1. The leader region in both tourism performance and innovation security Krasnodar region. Being initially the most attractive southern region, it has grown over the past 5 years with the help of federal state investments into the project of Summer Olympic Games 2018. The improved infrastructure uses the new technologies, and the multiplication effect takes place. From the tourism industry the clustering trend comes to other economy sectors, which had no impetus previously (in comparison with the neighbouring Rostov region with the similar agro-industrial profile, where effective clustering began about 2 decades ago). Therefore, it caused the superior innovation growth of the entire southwestern territories.
- 2. Regions with comparatively high touristic performance at the background of medium or even poor innovation security: Kaliningrad region, St. Petersburg, Pskov region. This is caused by the real challenges to their innovation security after the geoeconomic shift of 2014, combined with the relative independence of tourist sector from innovation growth (the local recreational resources have the 'critical mass' for internal growth). It is interesting to compare such fact with the active clustering of innovative production industries in this group of regions (including IT clusters in Kaliningrad region, the wide range of hi-tech clusters in St. Petersburg and one forming in Pskov region).

- 3. Region with high level of innovation security at the background of poor tourism development Bryansk region, where the innovation growth is forming in the industries of machinery; and the tourism is to become the new additional sector of development, according to the current regional policy that stimulates tourism clustering.
- 4. Regions with medium but equivalent rates in both innovations and tourism: Leningrad and Smolensk regions.
- 5. Northern regions with modest performance in both innovations and tourism: the Republic of Karelia and Murmansk region.

Despite the differentiation, all the categories of regions perform growth in both directions that has significantly increased in rates since 2014 and especially since 2016.

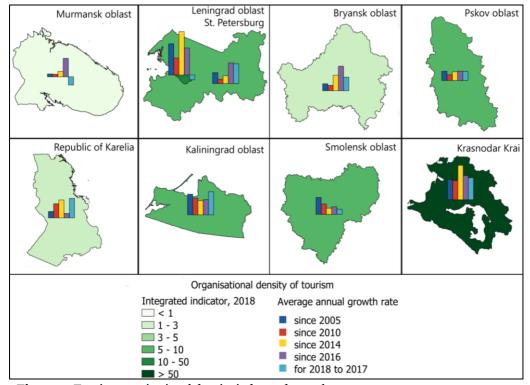


Figure 3. Tourist organizational density index and growth rates (Source: based on Rosstat, 2018)

CONCLUSION

The research results have proven that the initial shift of external conditions in 2014 has influenced the development of both innovation and tourism spheres in the Western border and coastal regions of Russia, causing the waves of clustering self-organization. However, the real interconnection between innovation security and tourism clustering is identified only in the Krasnodar region, which leads in innovation security and becomes increasingly attractive and prestigious for tourists. Nevertheless, this successful example of both private and state investments in innovations can be embodied in other regions.

The complex innovation strategy in tourism is needed in the modern Russia. The identified growth proves that cluster integrative mechanisms multiply the investments. The regions with superior tourism development need both financial and coordination support in widespread dissemination of innovations. The industrially and innovatively developed areas need the organizational initiatives and coordination between the innovators and local

touristic centres, including a stronger integration with academic and higher education institutions. The transfer of best practice on to regions with medium and poor developed tourism should be based on the place-adaptive policy principle, thus, taking into account the specifics of local cross-industry interdependencies. The study has shown that the general growth of tourism during the past decade has changed significantly.

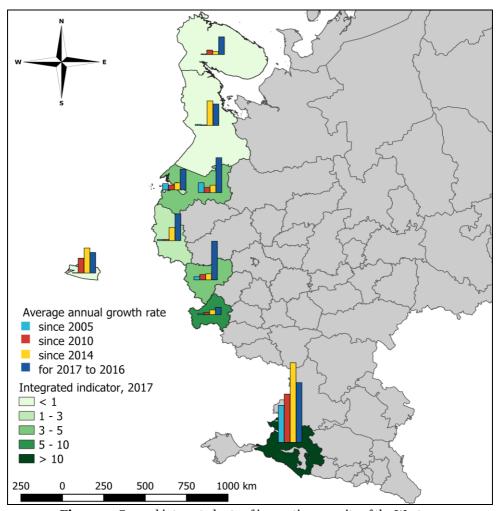


Figure 4. General integrated rate of innovation security of the Western border and coastal regions (Source: based on Rosstat, 2018)

The geopolitical shift of 2014 caused the need to find and activate all the possible resources for the further development and compensation of the lost possibilities and the negative economic trends. The tourism specialization is re-enforced not only in Krasnodar and Kaliningrad regions traditionally featuring tourism as part of major specialization, but also in northern regions with the strategy to generate new growth nodes. The growth of organizational density in 2014-15 and the following growth of performance caused change in the vectors of touristic flows shifting from the traditional centres to the developing periphery. Therefore, the growing cross-regional competition is the new challenge for the tourism industry, boosting cluster initiatives even in St.

Petersburg and the adjacent Leningrad region. We believe that the growing competition at the cross-regional market will push both clustering trend and the growth in using and developing innovations across industries. However, the multiplication and the final positive result will be much more in the case of the special attention and support from both regional administration and the federal centre. As the self-organization takes place, the indirect regulation is needed to create the conditions for the market rentable projects at the intersection of traditional tourism attractions and innovations.

Acknowledgments

The study was funded by RFBR according to the research project No. 19-010-01083 "Problems of Innovation Security and Mechanisms of Cluster Economic Development of the Border Regions of the European Part of Russia".

REFERENCES

- Aarstad, J., Ness, H., & Haugland, S.A. (2015). Innovation, uncertainty, and inter-firm shortcut ties in a tourism destination context. *Tourism Management*, vol.48, no.1, p. 354-361.
- Camisón, C., Forés, B., & Boronat-Navarro, M. (2017). Cluster and firm-specific antecedents of organizational innovation. *Current Issues in Tourism*, vol.20, p. 617-646.
- Claver-Cortés, E., Molina-Azorín, J.F., & Pereira-Moliner, J. (2006). Strategic groups in the hospitality industry: Intergroup and intragroup performance differences in Alicante, Spain. *Tourism Management*, vol.27, no.6, p. 1101-1116.
- Decelle, X. (2006). A dynamic conceptual approach to innovation in tourism. *In OECD (Ed.), Innovation and tourism policy*, p. 85–105, OECD Publishing.
- Druzhinin, A. G., Fedorov, G. M., Mikhaylov, A. S., Gontar, N. V., Gorochnya, V. V., Lachininskii, S. S., & Volkhin, D. A. (2017a). Typology of Coastal Zones in the European Part of Russia: Modern Particularities within the Trend of Cross-border Clustering. *Journal of Applied Economic Sciences*, vol.12, no.5(51), p. 1451-1460.
- Druzhinin, A. G., Gorochnya, V. V., Gontar, N. V., Mikhaylov, A. S., Fedorov, G. M., Lachininskii, S. S., & Dets, I. A. (2017). Economic Clusters in Coastal Areas of the European Part of Russia: Typological Invariance and Specifics of Localization. *Espacios*, vol.38, no.59, p. 5.
- Estevão, C., & Ferreira, J.J. (2012). Tourism cluster positioning and performance evaluation: the case of Portugal. *Tourism Economics*, vol.18, no.4, p. 711-730.
- Fedorov G.M. ed. (2019). Problems of Economic Security of the Western Border Regions of Russia. Monograph. 267 p., I. Kant Baltic Federal University Press, Kaliningrad.
- Funck, C. (2012). The innovative potential of inbound tourism: in Japan for destination development a case study of Hida Takayama. *Contemporary Japan*, vol.24 no.2, p.121–147.
- García-Villaverde, P.M., Elche, D., Martínez-Pérez, Á., & Ruiz-Hortega, M.J. (2017). Determinants of radical innovation in clustered firms of the hospitality and tourism industry. *International Journal of Hospitality Management*, vol.61, p. 45-58.
- Gomezelj, D. O. (2016). A systematic review of research on innovation in hospitality and tourism. *International Journal of Contemporary Hospitality Management*, vol.28 no.3, p. 516-558.
- Gorochnaya, V. V. (2019). Clustering and Innovation Security in the Regions of Western Russia: Inventory and Main Development Trends. *Regional economy and management: electronic scientific journal*, no.3 (59). Art. #5911. Date issued: 2019-07-25. Available at: https://eee-region.ru/article/5911/
- Gorochnaya, V. V., Mikhaylov, A., S., & Kirik, V. A. (2019). Education Clusters in Fostering Innovation Security: Experience of Rostov and Kaliningrad Regions in Western Russia. 2nd International Conference on Education Science and Social Development (ESSD 2019). Advances in Social Science, Education and Humanities Research, vol.298, p. 523-527.
- Hall, C. M., & Williams, A. M. (2008). Tourism and innovation. London: Routledge.
- Hallin, C.A., & Marnburg, E. (2008). Knowledge management in the hospitality industry: A review of empirical research. *Tourism Management*, vol.29, no.2, p. 366-381.
- Hjalager, A.-M.(2010). A review of innovation research in tourism. Tourism Management, vol.31, no.1, p. 1-12.
- Hong, W.C. (2009). Global competitiveness measurement for the tourism sector. *Current Issues in Tourism*, vol.12, no.2, p. 105-132.
- Hudson, R. (2005). Economic geographies, circuits, flows and spaces. London: Sage.
- Inkpen, A., & Tsang, E. (2005). Social capital, networks, and knowledge transfer. *Academy of Management Review*, vol.30, p.146-165.
- Iordache, C., Ciochinã, I., & Asandei, M. (2010). Clusters-tourism activity increase competitiveness support. *Theoretical and Applied Economics*, vol.17, no.5, p. 99-112.

- Jackson, J. (2006). Developing regional tourism in China: the potential for activating business clusters in a socialist market economy. *Tourism Management*, vol.27, no.4, p. 695-706.
- Jackson, J., & Murphy, P. (2006). Clusters in regional tourism an Australian case. *Annals of Tourism Research*, vol.33, no.4, p. 1018-1035.
- Jacob, M., Tintoré, J., Aguiló, E., Bravo, A., & Mulet, J. (2003). Innovation in the tourism sector: Results from a pilot study in the Balearic Islands. *Tourism Economics*, vol.9, no.3, p. 279-295.
- Jin, X., Weber, K., & Bauer, T. (2012). Impact of clusters on exhibition destination attractiveness: evidence from mainland China. *Tourism Management*, vol. 33, no.6, p. 1429-1439.
- Kim, N., & Shim, C. (2018). Social capital, knowledge sharing and innovation of small- and medium-sized enterprises in a tourism cluster. *International Journal of Contemporary Hospitality Management*, vol.30, no.6, p. 2417-2437.
- Klepers, A., & Rozite, M. (2009). Tourism as a tool of sustainable regional development and the importance of clusters in Latvia: The example of Sigulda and Ventspils. WIT Transactions on Ecology and the Environment, vol.120, p. 823-832.
- López-Fernández, M.C., Serrano-Bedia, A.M., & Gómez-López, R. (2011). Factors encouraging innovation in Spanish hospitality firms. *Cornell Hospitality Quarterly*, vol.52, no.2, p. 144-152.
- Martínez-Pérez, Á., & Beauchesne, M.-M. (2018). Overcoming the Dark Side of Closed Networks in Cultural Tourism Clusters: The Importance of Diverse Networks. *Cornell Hospitality Quarterly*, vol.59, no.3, p. 239-256.
- Martínez-Ros, E., & Orfila-Sintes, F. (2009). Innovation activity in the hotel industry. *Technovation*, vol.29, no.9, p. 632-641. Medina-Muñoz, D.R., Medina-Muñoz, R.D., & Zúñiga-Collazos, A. (2013). Tourism and innovation in China and Spain: A review of innovation research on tourism. *Tourism Economic*, vol.19, no.2, p. 319-337.
- Mehrez, Å. (2019). Investigating the effectiveness of practicing knowledge management in the hospitality industry: The case of Qatar. *International Journal of Knowledge Management Studies*, vol.10, no.2, p. 101-117.
- Michael, E. (2003). Tourismmicro-clusters. Tourism Economics, vol.9, no.2, p. 133-145.
- Mikhaylov, A.S. (2019). Coastal agglomerations and the transformation of national innovation spaces. *Baltic Region*, vol. 11, no.1, p. 29-42.
- Mikhaylova, A.A. (2018). The dimension of innovation in the economic security of Russian Regions. *European Journal of Geography*, vol. 9, no.4, p. 88-104.
- Mikhaylova, A.A. (2019). In pursuit of an innovation development trajectory of the Kaliningrad region. *Baltic Region*, vol. 11, no.3, p. 92-106.
- Minenkova, V. V. (2017). Tourism clusters in the Krasnodar region. *Tourism and regional development*, p. 169-174. Smolensk.
- Nahapiet, J., & Ghoshal, S. (1998). Social capital, intellectual capital, and the organizational advantage. *Academy of Management Review*, vol.23, p. 242-266.
- Nonaka, I., & Takeuchi, H. (1995). The knowledge creating company: How the Japanese companies create the dynamics of innovation. New York: Oxford University Press.
- Novelli, M., Schmitz, B. & Spencer, T. (2006). Networks, clusters and innovation in tourism: a UK experience. *Tourism Management*, vol.27, no.6, p. 1141-1152.
- Osipova, N. I., Ivanova, N. V., & Aksyonova, L. A. (2017). Innovation Directions of Development of Regional Touristic Clusters. *Vestnik RMAT*, no.4, p. 110-114.
- Poon, A. (1993). Tourism, technology and competitive strategies. Wallingford, UK: CAB International.
- Rodríguez, I., Williams, A. M., & Hall, C. M. (2014). Tourism innovation policy: Implementation and outcomes. Annals of Tourism Research, vol.49, p.76-93.
- Rosenfeld, S., A. (1997). Bringing business clusters into the mainstream of economic development. *European Planning Studies*, vol.5, no.1, p. 3-23.
- Rosstat (2018). http://www.gks.ru, accessed 04.10.2019-13.12.2019.
- Siguaw, J.A., Enz, C.A., & Namasivayam, K. (2000). Adoption of information technology in U.S. hotels: Strategically driven objectives. *Journal of Travel Research*, vol.39, no.2, p. 192-201.
- Staber, U. (2007). Contextualizing research on social capital in regional clusters. *International Journal of Urban and Regional Research*, vol.31, p. 505-521.
- Thomas, R., Shaw, G. & Page, S.J. (2011). Understanding small firms in tourism: a perspective on research trends and challenges. *Tourism Management*, vol.32, no.5, p. 963-976.
- Weidenfeld, A., & Hall, C. M. (2014). Tourism in the development of regional and sectoral innovation systems. In A. Lew, C. M. Hall, & A. Williams (Eds.), The Wiley Blackwell companion to tourism, p. 578-588, Oxford, UK; Wiley- Blackwell.
- Weidenfeld, A., Williams, A.M., & Butler, R.W. (2010). Knowledge transfer and innovation among attractions. *Annals of Tourism Research*, vol.37, no.3, p. 604-626.
- Yang, J.-T. (2007). Knowledge sharing: Investigating appropriate leadership roles and collaborative culture. *Tourism Management*, vol.28, no.2, p. 530-543.

Submitted: Revised: Accepted and published online 26.11.2019 06.02.2020 12.02.2020

EDUCATIONAL ACTIVITY OF AGRITOURISM FARMS IN POLAND (ON EXAMPLES FROM THE POMERANIAN REGION)

Anna WIŚNIEWSKA

Pomeranian University in Słupsk, Institute of Social and Economic Geography and Tourism, Partyzantów 27, 76-200 Słupsk, Poland, e-mail: anna.wisniewska@apsl.edu.pl

Wioletta SZYMAŃSKA*

Pomeranian University in Słupsk, Institute of Social and Economic Geography and Tourism, Partyzantów 27, 76-200 Słupsk, Poland, e-mail: wioletta.szymanska@apsl.edu.pl

Citation: Wiśniewska A. & Szymańska W. (2020). EDUCATIONAL ACTIVITY OF AGRITOURISM FARMS IN POLAND (ON EXAMPLES FROM THE POMERANIAN REGION). Geo-Journal of Tourism and Geosites, 28(1), 140–150. https://doi.org/10.30892/gtg.28111-458

Abstract: The main aim of the article is to present the educational function of agritourism developing in a region of Poland which is unique in terms of its natural environment and cultural heritage. The educational function of agritourism is more and more often emphasized in scientific research. The best developed network of agritourism farms in Poland is in the Province of Pomerania with over 600 of them. Despite strong competition on the market, Pomeranian farmers have noticed opportunities for development of their farms through educational activities and the countryside has become a place of education in the scope of agriculture, folk culture and ecology. The research involved nearly 10% of active agritourism farms. The results of the surveys and direct questionnaire interviews confirmed great involvement of the agritourism farms in the development of various forms of education. The abundance and variety of those forms are present in the organization of educational activities, participation in farm work, getting familiar with the offer of folk artists, learning about regional and local culinary traditions as well as ecological education.

Key words: Poland, region, Pomerania, agritourism, agritourism farm, education, educational activity

INTRODUCTION

The term of agritourism refers to farm-based recreation in an area of rural character with accommodation and recreational facilities connected with an operating farm (of production), the surrounding nature and production and service facilities (Drzewiecki, 1995; Wiatrak, 1996; Majewski, 2000; Marks et al., 2006; Ożdziński, 2009; Petroman et al., 2016; Staciwa, 2018). It is based on the attractiveness of the natural environment and landscape and creates and protects the natural, agricultural

_

^{*} Corresponding author

and cultural heritage of rural areas (Połucha et al., 2003). In the light of the European Union strategy for multifunctional development of rural areas, it brings significant economic, social and educational effects (Petroman et al., 2016; Sikora, 2016).

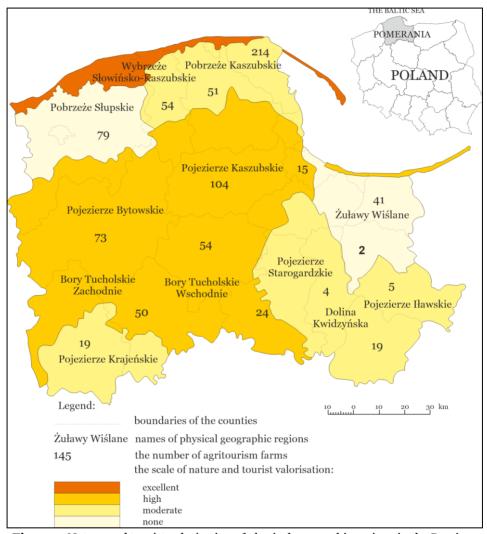


Figure 1. Nature and tourist valorisation of physical geographic regions in the Province of Pomerania (together with the number of agritourism farms in the counties) in 2011 (based on Przewoźniak, 2002; Wiśniewska, 2017, p. 50)

A great deal of attention has been paid to agritourism in scientific research and in practical actions of decision-making bodies (local authorities, agritourism associations, agricultural advisory centres). That is mainly because agritourism is perceived as a multifunctional tool for the development of rural areas which provides additional jobs and income (Gralak & Kacprzak, 2018). More and more often, a need to implement a new approach to the development of agritourism farms is emphasized as current strategies of accommodation providers seem to be ineffective and the competitiveness of agritourism offer basing on low prices is weak when compared to other forms of

tourism (Balińska, 2017; Chiodo et al., 2019; Sidali at al., 2019). In recent years, special attention has been paid to the educational function of agritourism development.

Although the phenomenon is not well known yet, it is emphasised that agritourism has significant impact on expanding the knowledge about rural culture (Benea & Petroman, 2006; Mot & Petroman, 2014; Petroman et al., 2014). It also makes people aware of their local identity (Momir et al., 2014), facilitates the dissemination of information about the use of local natural resources and rural community heritage to create new products and art (Constantin, 2014; Herman et al., 2019; Gozner et al., 2017; Ilieş et al., 2016, 2017, 2018; Lincu et al., 2018). Moreover, it helps to shape the awareness of children and youth about educational opportunities in the spheres connected with rural areas (Holmes & Tschanz, 2004; Petroman et al., 2015).

The main aim of the study is to present the educational function of agritourism farms in the Province of Pomerania in Poland where agritourism is developing rapidly due to the unique natural environment, coastal location as well as unique cultural heritage of ethnographic regions such as Kashubia, Kociewie, Krajny and the Tuchola Forest. In terms of agritourism development, the Province of Pomerania is in the Poland's forefront. According to the estimates of the Ministry of Agriculture and Rural Development, there were 672 agritourism farms with 7595 beds in Pomerania in 2014.

Since the beginning of the 1990s, a dynamic development of agritourism has taken place mainly in the areas with valuable nature, which are exceptionally attractive or very attractive in terms of nature and tourism, namely on the Słowiński and Kashubian Coast, the Bytowski and Kashubian Lake Districts and the Tuchola Forest (Figure 1). Despite strong competition on the market, Pomeranian farmers have noticed opportunities for development of their farms through educational activities and the countryside has become a place for education in the scope of agriculture, folk culture and ecology.

MATERIALS AND METHODS

The analysis of agritourism farms educational offer was based on one of survey methods, i.e. direct questionnaire interview. Interviews involved a group of 55 agritourism farms associated in the Gdańsk Agritourism Association (25) and agritourism associations called *Sworacy* (11) and *Agro-Kaszuby* (19). The address database and initial information about the farms were accessed from the official websites of the agritourism associations (http://www.kaszuby.agrowakacje.pl and http://www.infoturystyka.pl). This group included 3 ecological farms and 3 farms associated in the National Educational Farming Network. Primary research was carried out from March to November 2017. The detailed offer of individual agritourism farms as well as the information contained on the home pages of these entities were used in the analysis. While completing the assumed goals, other research methods were also applied, i.e. (open) observation, and analyses of subject literature, statistical data, photographic and cartographic documentation.

RESULTS

Educational values of agritourism farms

Agritourism activity run on farms has a wide educational impact as it satisfies diverse cognitive needs of tourists, especially children and adolescents.

Education is accomplished through action, gaining experience, being, working and experiencing emotions in a group, playing, learning and discovering as well as developing senses and expressive skills (Chojnacka-Ożga et al., 2007) and proves detailed educational values of an agritourism farm (Table 1). In the case of children and youth, the best way to teach is through play which allows to draw the students' attention away from the educational process. Thus, they learn somehow unwittingly in the process and those involved in the play decide themselves how much they learn.

Table 1. Educational values of an agritourism farm (based on Choinacka-Ożga et al., 2007, p. 190)

	(based on Chojnacka-Ozga et al., 2007, p. 190)
Educational values	Comments
Learning by acting	Direct experience through action: observation, touch, testing, self-discovery of nature, agricultural products and farmer's work.
Learning methods	Acquiring skills that improve the overall efficiency of learning processes (ability to observe, analyze, compare, communicate).
Experiencing emotions	Situations accompanied by emotions (close contact with animals, activities in the environment of nature) are remembered better and shape the personality of man.
Learning to stay and work in a team	Development of psycho-social skills and socialization: teaching children to stay and work in a team - joint decision making, mutual cooperation, coordination of activities.
Playing	Didactic animation is based on play, which stimulates the motivation to learn and is an effective way to shape children's love of the countryside.
Studying and discovering	Independent search for answers to various questions (joy when you manage to find them); careful observation, asking questions, comparing hypotheses and explanations about the life of plants and animals with what you can see in the countryside.
Developing senses	Influence of sounds, smells and flavours on children's senses, developing the ability to perceive signals from the environment and the ability to recognize food products.
Developing the ability of expression	Freedom of activity favours the expression of personality, development of creativity and expression primarily thanks to manual work.
Getting to know rural culture	Getting to know the life and work of past generations in the countryside, rural traditions and customs, proverbs taking their origin in the wisdom of the residents.
Gaining experience	Acquiring knowledge through experience in an environment other than the classroom.

Pomeranian agritourism farms promote the above values which can be exemplified by the implemented projects i.e. *the farmer's eye* (an educational visit in the countryside), *village toys* (hay and straw matting workshops), rural Olympics and manual workshops (*come and paint my world* or *cross-country paperchase*). The above values are fully applied in the *green school* types of projects. In the nineties, it became popular to receive school trips, during which children and youth were educated in the field of ecology, a produce path of life *from the field to the table* or cultural wealth of given regions. Currently, the offer for *green schools* is being expanded and modified.

Although the educational offer of farms is aimed primarily at children and adolescents, it does not exclude the participation of other types of tourists. Due to the wide range of such activities, they can be targeted at people of various education, age, needs, interests and socio-economic status. Apparently, older people studying at the universities of the third-age (from Gdynia, Gdańsk, Sopot and Słupsk) have become a significant group of recipients of educational services on the surveyed farms recently.

Educational activities carried out on Pomeranian agritourism farms

Educational activity carried out on Pomeranian agritourism farms takes place in many spheres and is related to the following areas: farmer's life and work, the process of food production and acquisition, preparation of regional dishes, cultural heritage of the Polish countryside and shaping the right attitudes towards nature and landscape protection (Figure 2). Basic educational activity of agritourism farms **involves showing life in the countryside and getting to know the farmer's work.** 67% of the farms under study declared the opportunities of observing production processes and field work. The remaining farms did not conduct this type of activity - they were

mostly farms located in the coastal area and supporting themselves mainly from income from tourism. On 80% of the farms, other farm work could be observed such as taking care of rabbits, birds, horses, goats or domestic animals. Specifically geared educational activities in this area were offered by 18% of the surveyed farms. The initiatives showing life in the countryside included classes called *A farmer's day* - the secrets of everyday farm activities and *Farmer's life* or *Countryside is fun*.

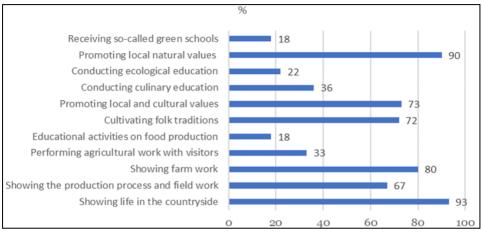


Figure 2. Educational activities carried out on Pomeranian farms in Poland in 2017

Amateurs of farm-based recreation - users of agritourism services - expand their knowledge and skills during their stay on the farm by being able **to actively participate in the process of food production and acquisition.** According to the surveyed hosts, through help and direct participation in the production activity, the tourists get to know the part of the farm that has a useful function including fruit orchards, vegetable gardens, apiaries or herb gardens, as well as cowsheds and farms. 33% of the farms offered the opportunities of active participation in the production processes and field work together with the hosts. The offer mainly included picking fruit, milking cows and goats and feeding animals (Figure 3). For reasons of safety of the guests, the hosts reluctantly allowed for active participation in field work.

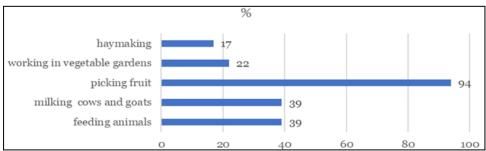


Figure 3. The possibility of active participation in production processes and field work on agritourism farms in the Province of Pomerania in Poland in 2017

Contact with breeding animals on the farm is a great tourist attraction as well as a form of education. Interested tourists can see how much work is needed in order to acquire various food products of animal origin (Marks et al., 2007). Examples of

educational activities showing the process of food production and acquisition in the researched farms include lessons about milk, lessons about cereals, horse breeding and use, dairy farming and milking, from grain to bread shows, lavender stories, talks on why we breed animals, why we grow plants, the world of horses, the world of the mother hen, the world of bunnies, the role of bees in nature, the life of ostriches, the world of wool and sheep, crops and wild plants, herbs in nature. 18% of the farms included the above presented educational activities in their offers. Another area of education is to familiarize tourists with the cultural heritage of the Pomeranian villages. Visitors learn about the local customs, rituals and folk traditions. Culture means the whole of material and non-material creations of human activity, values and methods of conduct, recognized, objectified and adopted in a given community, transferred to other communities and next generations (Szczepański, 1970). Agritourism is a medium of knowledge for tourists whereas for a village and an agritourism farm, it is a method for saving cultural heritage from oblivion (Firlik, 2007). It creates a possibility of comparing the proper culture in the place of residence of tourists with rural culture. On the one hand, it shows the diversity of these cultures. On the other hand, it teaches tolerance and creates the basis for dialogue between them (Sikorska-Wolak, 2007; Sadowski & Wojcieszak, 2019).

The results of field observations allow to state that there has been a return to old rituals, customs and preservation of traditions in the rural area of the Province of Pomerania. Folklore activities of folk bands, regional cuisine and folk crafts are cultivated as well. The Kashubian and Kociewie patterns are the most vital on the farms under study. Since May 2005, the Kashubian language has been the second official language in 10 communes of the Province of Pomerania (along with dialects: Kociewie, Krajna, Tuchola and new mixed dialects). A part of the village residents aware of the natural and cultural values of the region use these resources in their development plans (Czapliński & Szymańska, 2013). The aesthetics of the countryside is significantly improving thanks to Pomeranian Rural Renewal Programmme, *Beautiful Countryside* competition or the *Checkered Land* project (Wiśniewska, 2017). Dissemination of knowledge about local traditions was included in the offer of over 70% of the surveyed farms (Figure 4).

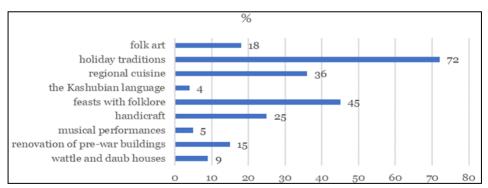


Figure 4. Cultivated local customs and folk traditions on Pomeranian agritourism farms in the Province of Pomerania in Poland in 2017

On Pomeranian agritourism farms tourists can learn to create cut-outs and weave, embroidery, pottery, wickerwork, jewellery production, sculpture. They can also learn to paint, sing and dance. Starting up folk bands is popular as well. Agritourism providers can see a growing demand for so-called folk culture as more and more customers are interested in folk products and they take advantage of it to develop their own businesses. Regional products are becoming trendy again as well. After the crisis of

1990-1992, a slight improvement took place in 1994 (Wierzchowska, 2005), and since then this trend has become more and more popular largely thanks to foreign tourists and art collectors. Currently, almost all guests are interested in folk culture.

The surveyed hosts in Pomerania proudly displayed renovated huts, farmsteads, fences, houses, gates, barns, granaries, roadside shrines or fishing houses. In the coastal area, distinctive cultural elements in the studied farms were: preserved wattle and daub buildings and cultivating the Slovincian tradition. Some of the hosts made guests familiar with specific seaside songs and legends, for example about ghostly fishing boats, monstrous fish and fire people. Nearly 25% of farms in this region offered regional cuisine based on marine fish and poultry (goose meat).

On numerous farms of the Bytowski and Kashubian Lake Districts, many Kashubian traditions are cultivated including embroidery, pottery and ceramics (with specific colours and floral motifs). Some of the hosts and household members are able to communicate in the still used Kashubian language (4%). The hosts also emphasized the participation of their family members in numerous folklore groups and folk bands. Some of them used the so-called Kashubian notes. Tourists on agritourism farms in these regions could get acquainted with Kashubian music including the Kashubian anthem. The Kashubian cuisine was served in nearly a quarter of the farms in the Bytów region and about 70% of the farms in the Kościerzyna region provided food. Most often the offers of the researched farms included such delicacies of the Kashubian cuisine such as: slédze z pulkami (salted herrings with potatoes), szmurowanô wołowina (stewed beef with dried mushrooms) and miodny i kwasny bonk (sweet and sour bean soup).

The Kashubian and Borowiacki traditions are cultivated on the farms of the Tuchola Forest region due to its great ethnic diversity. The hosts have renovated and maintained the specific architecture including: wooden cottages, farms with a well in the middle, rail fences and fences made with interlacing poles, outbuildings and granaries.

Folk traditions are also reflected in music, ceramics and sculpture. Nearly one third of the farms offering board serve traditional cuisine (e.g. *dukacz*, otherwise known as mashed potatoes with milk, bacon and onion, soups: carrot soup, eel broth, mushroom soup and *czernina* (soup made of duck's blood). All aspects of culinary culture deserve particular attention when it comes to the rural tourism market, including traditional raw materials and food products, eating habits, methods of preparing food, and the process of consumption itself. Visible interest in the culinary heritage of rural areas is an opportunity for the development of local entrepreneurship and the preservation of folk culture related directly or indirectly to food (Orłowski & Woźniczko, 2015).

Culinary education is also conducted on Pomeranian agritourism farms. The agritourism providers offered various educational activities that were directed to tourists of all age groups, and their main goal was to acquire or develop practical skills related to learning about regional cuisine. In addition to offering their own culinary products, it was possible to participate in their preparation and production together with the hostess. Tourists had an opportunity (within the specifics of the offered culinary products) to participate in the entire production cycle from the stage of harvesting agricultural products to the final product on the plate (Dorocki & Struś, 2015). The hosts serving regional cuisine encouraged guests to learn about local culinary traditions. Research shows that tourists appreciate educational values that are associated with participation in kitchen work, learning how to prepare regional dishes and drinks, and acquiring skills related to traditional food processing (Marks et al., 2007). Among the culinary educational activities distinguished by Orłowski (2008), the offers of 36% of the surveyed agritourism farms in Pomerania included:

- traditional bread baking,

- baking cakes and cookies for holidays or rituals,
- making and forming butter,
- manufacture of pressed cottage cheese,
- meat preservation drying, salting, smoking,
- meat processing production of sausages, brawn, black sausage, jellies, cold meats,
- smoking and processing of freshwater and marine fish,
- fruit and vegetable processing, i.e. pickling cabbage, pickling cucumbers, drying fruit, making juices, preserves, marmalades, jams and *powidla* (a type of jam made from plums),
 - drying herbs and mushrooms,
 - traditional picking and spinning of honey in an apiary located in a fruit orchard or garden,
- preparing non-alcoholic beverages from forest and garden fruits various types of low-alcohol beverages made from beetroot or bread, birch, maple, mint or elderberry flowers drinks as well as home brew and acorn coffee,
 - preparing alcoholic beverages fruit and herbal tinctures, meads, light and dark beers,
 - preparing regional dishes.

Some of the farms (27%) offered regional dishes produced with the use of traditional equipment, such as: coal stoves, pots, pans, pokers, wooden shovels, churns, barrels, moulds, cheese presses, shredders, stoneware pots and copper cauldrons.On 45% of the farms, so-called culinary feasts were offered – tasting regional dishes and traditional food products prepared according to recipes passed from generation to generation. The offers of most farms under study included Kashubian feasts (with singing, dancing, boar, piglet or ram). Nearly 9% of the farms organized culinary demonstrations combined with cooking classes for various age groups of tourists interested in learning about the rural culinary heritage.

The educational function of agritourism is also fostered by i.a. creating conditions for learning about the local cultural heritage and organizing educational routes based on cultural values. 73% of the surveyed farms included information about cultural facilities and local events in their offers. In the coastal area, the most frequently visited museums were: the Museum of Pomeranian Dukes, the Museum of the Puck Land, the Museum of the Slovincian Village and various events such as traditional peat extraction called the Black Wedding or the sale of local products at the Dominican Fair. Rzucewo was also promoted as a former settlement of seal hunters from the Stone Age as well as Swołowo, so called *Chequered Land*. In the Kashubian and the Tuchola Forest regions, apart from the Kashubian Museum, T. and I. Gulgowscy Kashubian Ethnographic Park Museum, the Tuchola Forest Museum, the National Anthem Museum and the Kashubian Ceramics Museum, tourists were encouraged to visit the Wdzydze Fair, the Kościerzyna Fair of Kashubian and Pomeranian Books, Tczew Land Days "Heritage for the Contemporary" or "Days of Żuławy" in Nowy Dwór Gdański and the annual Kashubian reunions.

Another very important educational aspect of agritourism farms is the **opportunity to shape appropriate attitudes towards nature and landscape protection.**

Nearly 90% of the surveyed farms promoted local natural and landscape values in their offers, the protected areas in the first place. **Ecological education** is conducted on some Pomeranian farms (22%), mostly on the farms located in the protected areas or in their vicinity. Nearly 90% of the households located near Słowiński National Park and 84% of the Tuchola Forest National Park emphasize the possibility of using the resources of these entities. At the same time, the centres of ecological education located in the parks or designated didactic paths were indicated as perfect places to visit by tourists staying in the countryside. The offers of 18% of the surveyed entities included natural and ecological workshops addressed to children and young people staying on the farms under the so-called *green school* project. During the classes, participants followed didactic paths on the farm or in its surroundings (with stops in the garden, in the field, in the meadow, in the forest). They also took care of the farm animals or

worked in the garden (garden cultivation using ecological methods). Activities on the subject of preserving the culinary heritage were also offered. The aim of education in *green schools* was to shape ecological awareness, show life in accordance with the laws of nature and prevent the consequences of over-exploitation of natural resources.

However, it should be emphasised that educational activities undertaken on farms should contribute to the dissemination and deepening of knowledge about nature as well as shape the tourist's sensitivity (Kurczewski, 2007). Unfortunately, in the Pomeranian villages, attitudes that contradict this idea are not uncommon, e.g. improper care of animals (keeping dogs on chains, lack of veterinary care for cats) or other behaviours, such as burning garbage, leaves or stubble fields. Some of the farmers are characterized by little knowledge of the issues of broadly understood environmental protection despite considerable efforts of Agricultural Advisory Centres.

It is worth emphasizing that the educational activity of Pomeranian agritourism farms can be conducted in an organized and formalized form. In 2011, a project of the National Educational Farming Network was implemented (Poland ... 2013) at the initiative of the Agricultural Advisory Centre in Brwinów (Cracow Branch) and with the financial support of the Ministry of Agriculture and Rural Development.

This network aims at disseminating the idea of education on farms and promotes the activities of educational farms. The educational offer includes demonstrations and workshops actively engaging children, youth, families with children and adults. The purpose of the network of educational farms located in rural areas is to raise the prestige of the farmer's job and disseminate knowledge about the origin of food, a diversity of non-agricultural activities and preservation of the cultural heritage of the countryside. Visitors learn about life in the countryside and can acquire knowledge and education in the scope of: agricultural and animal production, crops processing, ecological and consumer awareness, material culture heritage of the country, traditional jobs and trades, handicrafts and folk art. In 2018, 21 entities were associated in the National Network of Educational Farms in Pomerania in Poland.

CONCLUSION

Since the beginning of the nineties, Pomeranian agritourism farms and the rural environment have become a place of education in the field of agriculture, folk culture and ecology. The educational offer includes shows, games, contests, workshops, outdoor activities which actively engage children, youth, families with children and adults. Visitors learn about life in the countryside and acquire knowledge about agricultural production, breeding animals or processing crops. One third of the farms offer active participation in those processes. The material and non-material culture of the Pomeranian villages is a very important element of the educational offer of the farms. The Kashubian and Kociewie patterns are the most outstanding among the entities under study. Handicraft and folk products offered by the farms are generating more and more interest.

Tourists can learn to make cut-outs, paint, sing and dance as well as embroidery, weaving, pottery, wickerwork, jewellery production and sculpture. A demand for folklore activity of folk bands is evident. It is also becoming popular to cultivate regional culinary traditions (especially in the Kashubian region). Culinary education is carried out on some of the farms in the form of workshops, demonstrations and culinary feasts with local folklore. Local natural and cultural values are eagerly promoted in the offers of agritourism farms. On the other hand, conducting ecological education is most often declared by owners who operate in the protected areas or in their neighbourhood. The farms located in the vicinity of Słowiński National Parks and the Tuchola Forest offer natural and ecological workshops addressed to children and young people (as part of the green school project). In 2018, 21 farms joined the National Network of Educational Farms. Summing up, it can be stated that all educational activities carried out on the

agritourism farms under study contribute to the dissemination and broadening of knowledge about the farmer's life and the natural and cultural environment of the Pomeranian villages. They shape the sensitivity of tourists and lead to raising ecological awareness. It is of vital importance to develop and promote a wider educational offer.

REFERENCES

- Balińska A. (2017). Konkurencyjność agroturystyki jako formy spędzania czasu wolnego (Competitiveness of agritourism as a form of spending leisure time), Prace Naukowe Uniwersytetu Ekonomicznego we Wrocławiu, 473, p. 37. (in polish).
- Benea M., & Petroman I. (2006). Bazele turismului, Editura Eurostampa, Timisoara.
- Chiodo, E., Fantini, A., Dickes, L., Arogundade, T., Larnie, R.D., Assing, L., Stewart, C., & Salvatore, R. (2019).

 Agritourism in Mountainous Regions Insights from an International Perspective, *Sustainability*, 11, 3715, doi:103390/su11133715, accessed 10.09.2019.
- Chojnacka-Ożga, L., Ożga, W. & Kobiałka, W. (2007). Gospodarstwa dydaktyczne jako jedna z form działalności agroturystycznej na przykładzie włoskiej Prowincji Mantui (Didactic farms as a form of agritourism activity on the example of the Italian Province of Mantua), in: Sikorska-Wolak, I., (ed.) Turystyka w rozwoju obszarów wiejskich (Tourism in the development of rural areas), Wyd. SGGW, Warszawa, s. 190. (in polish).
- Constantin, E. C. (2014). The Need for effective communication. Elsevier, Procedia Social and Behavioral Sciences, Volume 116, 21, p. 2010-2014.
- Czapliński, P. & Szymańska, W. (2013. The features of economic behavior of the Urban population in the ethnic the region of Kashubia (Kashuby/Cassubia), *Miscellanea Geographica Regional Studies on Development*, Vol 17, no 2, pp. 30-37.
- Dorocki, S. & Struś, P. (2015). Regionalne zróżnicowanie turystyki kulinarnej na terenach wiejskich Francji (Regional differences in culinary tourism in the rural areas of France). *Turystyka Kulturowa*, 7, p. 6-17. (in polish).
- Drzewiecki, M. (1995). Agroturystyka. Założenia uwarunkowania działania (Agritourism Assumptions conditions activities), Instytut Wydawniczy "Świadectwo", Bydgoszcz , p. 27. (in polish).
- Filrlik, I. (2007). Kultura bogactwem turystyki wiejskiej, czyli o skarbach ukrytych w puszczy (Culture the wealth of rural tourism on treasures hidden in the wilderness), in: Sikora, J., (ed.), Turystyka wiejska a edukacja. Różne poziomy, różne wymiary (Rural tourism and education. Different levels, different dimensions), Wyd. Akademii Rolniczej w Poznaniu, Poznań, p. 203-208. (in polish).
- Gozner, M., Tătar, C.F., Stupariu, M. & Măduta, F.M. (2017). Nature, Photography and Tourism in Bihor Vlădeasa Mountains (Romania). *GeoJournal of Tourism and Geosites*, Year X, Volume 20, Oradea Gdansk, Romania-Poland, Editura Universității din Oradea
- Gralak K., Kacprzak M. (2018). Agroturystyka w rozwoju obszarów wiejskich w Polsce stan, problemy i perspektywy (Agritourism in the development of rural areas in Poland its state, problems and prospects), Zeszyty Naukowe. Turystyka i Rekreacja, 2(22), pp.187-195. (in polish)
- Herman, G.V., Wendt, J. A., Dumbravă, R., Gozner, M. (2019). The role and importance of promotion centers increating the image of tourist destination: Romania. *Geographia Polonica*, 92(4), 443-454.
- Holmes K., Tschanz, Y. (2004). Promoting Skills Development. U.N.E.S.C.O. International Institute for Educational Planning.
- Ilies, D.C., Buhas, R., Ilies, M., Ilies, A., Gaceu, O., Pop, A.C., Marcu, F., Buhas, S.D., Gozner, M., & Baias, S. (2018). Sport Activities and Leisure in Nature 2000 Protected Area Red Valley, Romania. *Journal of Environmental Protection and Ecology*, 19, No 1, 367–372.
- Ilies, A., Hurley, P., Ilies, D.C. & Baias S. (2017). Tourist animation —a chance adding value to traditional heritage: casestudys in the Land of Maramures (Romania). *Revista De Etnografie Si Folclor*, New Series 1—2.
- Ilieş, A., Wendt, J.A., Ilieş, D.C., Herman, G.V., Ilieş, M. & Deac, A.L. (2016). The patrimony of wooden churches, built between 1531 and 2015, in the Land of Maramureş, Romania. *Journal of Maps*, Volume 12, 2016, pp 597-602 Issue sup1 (http://dx.doi.org/10.1080/17445647.2016.1243075).
- Kurczewski, R. (2007). Edukacja ekologiczna w agroturystyce (Environmental education in agritourism), in: Sikora, J., (ed.), Turystyka wiejska a edukacja. Różne poziomy, różne wymiary (Rural tourism and education. Different levels, different dimensions), Wyd. Akademii Rolniczej w Poznaniu, Poznań, p. 252-259. (in polish)
- Lincu, A., Ilies, M., Ilies, D.C., Herman, G.V., Baias, S., Gozner, M., Costea, M., & Mihincău, D. (2018). Conservating the traditional cellars of Salacea, Bihor County, Romania. *GeoJournal of Tourism and Geosites*, 23(3), 748–758, https://doi.org/10.30892/gtg.23311-325.
- Maddala, G., S. (2006). Ekonometria (Econometrics), Wyd. Naukowe PWN, Warszawa. (in polish).
- Majewski, M. (2000). Agroturystyka to też biznes (Agritourism is also business), Fundacja Wspomagania Wsi, Warszawa, p. 8. (in polish).
- Marks, M., Jaszczak, A. & Marks, E. (2007). Relacje między agroturystyką a edukacją środowiskową (Relations between agritourism and environmental education), in: Sikora, J., (ed.), Turystyka wiejska a edukacja różne poziomy, różne wymiary (Rural tourism and education. Different levels, different dimensions), Wyd. Akademii Rolniczej w Poznaniu, Poznań, p. 39-49. (in polish).

- Marks, M., Marks, E. & Jaszczak, A. (2006). Działalność agroturystyczna i jej wpływ na zachowanie dziedzictwa kulturowego polskiej wsi (Agritourism activity and its influence on the preservation of cultural heritage of the Polish rural areas), in: Plichta, M., Sosnowski, J., (eds.), Marketing w agroturystyce (Marketing in agritourism), Wyd. Akademii Podlaskiej, Siedlce, s. 13-19. (in polish).
- Momir B., Petroman I., & Merghes P.E. (2014). Ecotourism- a major factor in the preservation of flora and fauna biodiversity in Banat, *Facultatea de Management Agricol*, Timisoara, seria I, vol XVI (4), p. 98-103.
- Mot T. & Petroman I. (2014). Rural and historic tourism potential of Seceani from the Timis county, Banat region, Scientific Papers Animal Science and Biotechnologies, Timisoara, vol.47. p. 334-337.
- Orłowski, D. (2008). Pożywienie ludowe jako znacząca atrakcja turystyki etnograficznej (Traditional food as an important attraction of etnographic tourism), in: Jalinik, M., (ed.), Innowacje w rozwoju turystyki (Innovations in tourism development). Wyd. Politechnika Białostocka, Białystok, s. 181-191. (in polish).
- Orłowski, D. & Woźniczko, M. (2015), Turystyka kulinarna na wiejskim rynku turystycznym turystycznym (Culinary tourism on the rural tourism market), in: Kamińska, W., (ed.), Innowacyjność w turystyce wiejskiej a nowe możliwości zatrudnienia na obszarach wiejskich (Innovation in rural tourism and new employment opportunities in rural areas), Studia KPZK PAN, t. CLXIII, Warszawa, s. 121-142. (in polish).
- Ożdziński, J. (2009). The chances and threats of the development of rural tourism and recreation in Poland, GeoJournal of Tourism and Geosites, 2 (4), p. 174-178.
- Petroman I., Marin Diana & Petroman, C., (2015). Bazele Turismului, Editura Eurostampa, Timisoara.
- Petroman, I., Csosz I., Petroman I., Marin, D., Momir B. & Bejan, C. (2014). Rural tourism products from the Banat area demanded by the European tourist, *Scientific Papers Animal Science and Biotechnologies*, Timisoara, vol.47 (1), p. 338-342.
- Petroman, I., Varga, M., Constantin, E., C., Petroman, C., Momir, B., Turc, B. & Merce, I. (2016). Agrotourism: An Educational Tool for the Students with Agro-Food Profile, *Procedia Economics and Finanse*, 39 (2016), p. 83-97.
- Połucha, I., Młynarczyk, K., Marks, E., Marks, M. & Jaszczak, A. (2003). Rural tourism in sustainable development of areas with unique environmental values, in: Globalization and integration challenges to the rural areas of East and Central Europe. Mat. Konf. Nauk., Lithuanian University of Agriculture and Lithuanian Institute of Agrarian Economics, Kowno, p. 146-148.
- Przewoźniak, M. (2002), Waloryzacja przyrodniczo-turystyczna rejonów fizycznogeograficznych w województwie pomorskim (Nature and tourist valorisation of physical and geographical regions in Pomeranian Province), in: Pankau, F., (ed.), Raport o stanie zagospodarowania przestrzennego województwa pomorskiego (Report on the state of spatial development in the Pomeranian Voivodeship), Pomorskie Studia Regionalne, Urząd Marszałkowski w Gdańsku, Gdańsk. (in polish).
- Sadowski, A. & Wojcieszak, M.M. (2019), Geographic differentiation of agritourism activities in Poland vs. cultural and natural attractiveness of destinations at district level. PLoS ONE 14(9): e0222576. https://doi.org/10.1371/journal.phone.0222576, accessed 15.11.2019.
- Sidali, K.L., Spitaler, A. & Schamel, G. (2019), Agritourism: A Hedonic Approach of Quality Tourism Indicators in South Tyrol. *Sustainability*, 11, 3747, doi:103390/su11133747, accessed 10.09.2019.
- Sikora, J. (2012). Agroturystyka. Przedsiębiorczość na obszarach wiejskich (Agritourism. Entrepreneurship in rural areas), Wyd. C.H. Beck, Warszawa. (in polish).
- Sikora, J. (2016). Edukacja w agroturystyce (Education in agritourism), in: Jęczmyk, A., Uglis, J., Maćkowiak, M., (eds.), *Turystyka wiejska zagadnienia ekonomiczne i marketingowe* (Rural tourism, economic and marketing issues), Tom I, Poznań, p. 9. (in polish).
- Sikorska-Wolak, I. (2007). Turystyka jako system dydaktyczno-wychowawczy (Tourism as a didactic and educational system), in: Sikora, J., (ed.), Turystyka wiejska, a edukacja. Różne poziomy, różne wymiary (Rural tourism and education. Different levels, different dimensions), Wyd. Akademii Rolniczej w Poznaniu, Poznań, p. 12-21. (in polish).
- Staciwa, A. (2018). Agroturystyka a turystyka wiejska (Agritourism versus rural tourism). Pomorski Ośrodek Doradztwa Rolniczego w Lubaniu, Słupsk, p. 2. (in polish).
- Szczepański, J. (1970). Elementarne pojęcia socjologii (Basic notions in sociology), PWN, Warszawa. (in polish) Wiatrak, A. (1996). Wpływ agroturystyki na zagospodarowanie obszarów wiejskich (Influence of agritourism on the development of rural areas), Zagadnienia Ekonomiki Rolnictwa, 1, p. 34-46. (in polish).
- Wierzchowska, M. (2005). Własnymi rękami (With your own hands), *Rzeczpospolita*, 04.03.2005. (in polish) Wiśniewska, A. (2017). Praca i dochody w pomorskich gospodarstwach agroturystycznych w latach 1999-2010 (Work and income in Pomeranian agrituurism farms), Wyd. Akademii Pomorskiej w Słupsku, Słupsk, s. 54. (in polish).
- *** (2013). Polska wieś i rolnictwo, Prezentacja wyników badania 2013, Ministerstwo Rolnictwa i Rozwoju Wsi (Polish countryside and agriculture, Presentation of research results 2013), Warszawa, (in polish)

http://www.zagroda-edukacyjna.pl/, accessed 15.10.2018.

http://www.infoturystyka.pl/, accessed 20.03.2017.

http://www.kaszuby.agrowakacje.pl/, accessed 20.03.2017.

Submitted: Revised: Accepted and published online 18.10.2019 10.01.2020 14.02.2020

TOURISTS' OR RESIDENTS' PRIORITY? A DOUBLE PERSPECTIVE ON AN EMERGING TOURIST DESTINATION

Nicolae POPA

West University of Timişoara, Faculty of Chemistry, Biology, Geography, Department of Geography, 4 Vasile Pârvan, 300223, Timisoara, Romania, e-mail: nicolae.popa@e-uvt.ro;

Mădălina GLONTI*

West University of Timişoara, Faculty of Chemistry, Biology, Geography, Department of Geography, 4 Vasile Pârvan, 300223, Timisoara, Romania, e-mail: madalina.glonti96@e-uvt.ro

Citation: Popa, N., & Glonți, M. (2020), TOURISTS' OR RESIDENTS' PRIORITY? A DOUBLE PERSPECTIVE ON AN EMERGING TOURIST DESTINATION. GeoJournal of Tourism and Geosites, 28(1), 151–163. https://doi.org/10.30892/gtg.28112-459

Abstract: The aim of this paper is to examine, evaluate and compare destination image using two independent samples, tourists and residents. A quantitative research has been conducted in Timisoara. The results have been processed using statistical methods and techniques (T-tests and the Pearson Correlation). In this research, a set of cognitive, affective and unique attributes, as well as the overall image, have been evaluated in order to analyze the perceptions, opinions and beliefs. The results indicated that the same tourist destination may be differently perceived by visitors and locals, with significant implications for the destination image and tourists' behavior.

Key words: Mental representation, Destination image, Tourists' perception, Residents' perception, Tourists' behavior, European Capital of Culture, Timisoara, Romania

INTRODUCTION

Destination image is a multi-disciplinary concept strongly related to tourism, behavioral sciences, marketing and geography. This concept may explain, from a touristic point of view, the difference between space and place, taken into consideration that Tuan (1977) noted that space is a place with a certain meaning. To a broader extent, the image of a destination includes different perceptions and can be used as an indicator of the tourists' satisfaction in order to evaluate and improve the quality of the touristic services on the area in which the study takes place. This paper analyzes the tourist destination Timisoara, one of the most dynamic cities in Romania. Romania's third urban center, with approximately 326.636 inhabitants (data from 1st of July 2019, according to the National Institute of Statistics Romania, 2020), Timisoara is located in Western Romania, in the proximity of the border with Serbia and Hungary, in Banat, a region with old multicultural traditions (Neumann, 1997; Popa et al., 2007).

_

^{*} Corresponding author

The rich architectural legacy and the diversity of the cultural life have recommended Timisoara as the European Capital of Culture in 2021. This title adds to other strong points which make Timisoara a dynamic touristic center (with 46.7% more incoming tourists in 2017, in comparison to 2012), highlights its traditional European openness and contributes to building a successful destination image.

STATE OF THE ART

Destination image has been a constant preoccupation of many researchers conceptualization of this notion, as well as conducting studies, in order to evaluate and measure it. Although the issue of destination image has been put into discussion in the early 1960s, the concept of destination image has gained more attention in the 1990s with the articles of Echtner & Ritchie (1991), (1993), (as cited in Tasci et al., 2007) and Baloglu (1996), Baloglu & Brinberg, (1997), (as cited in Marques, 2011). Revnolds (1965) agrees that a mental representation is built using different information sources - word of mouth, touristic promotional products as well as media (as cited in Echtner & Ritchie, 2003). Mental representations are a result of imagination and could also be derived from "travel stories" (Su, 2010, p. 414). Among the first definitions of destination image is attributed to Crompton (1979), who has defined this concept as a total of beliefs, ideas, and impressions rather as a whole than through its parts (as cited in Tasci et al., 2007). Gartner (1993, p. 193) also states that "destination images are formed by three distinctly different but hierarchically interrelated components: cognitive, affective and conative". Baloglu & Brimberg (1997, p.11) consider that "image is the sum of beliefs, ideas, and impressions that people have of a place or destination" (as cited in Tasci et al., 2007). After an extended literature review, Echtner & Ritchie (2003, p. 43) conclude that "destination image consists of functional characteristics, concerning more tangible aspects of the destination, and psychological characteristics, concerning the more intangible aspects".

As destination image is a dynamic concept, Kim & Chen (2016, p. 155) state that "destination image formation processes are continous mental progressions in which diverse sources of information converge". The paper focuses on the temporal dimension of the process, as the destination image may change in time – before, during and after the trip. Moreover, after the visit, Phelps (1986) found that the image of the destination becomes more complex and realistic (as cited in Echtner & Ritchie, 2003). Different studies focus on the image of the destination as perceived by tourists (Hunt, 1975; Crompton, 1977; Goodrich, 1977; Crompton & Duray, 1985; Gartner & Hunt, 1987; Calantone et al., 1989; Gartner, 1989; as cited in Echtner & Ritchie, 2003; Baloglu, 1996; Bigné et al., 2001; Sönmez & Sirakaya, 2002; Bigné Alcañiz et al., 2005; Hosany et al., 2006; Su, 2010; Kulcsár, 2010; Qu et al., 2011; Prayag & Ryan; 2011; Ben-Dalia et al., 2013), only by residents (Lawton, 2005; Zerva et al., 2006; Stylidis et al., 2017). Also, several studies evaluate the destination image before and after the trip (Phelps, 1986, as cited in Echtner & Ritchie, 2003). Destination image can also be evaluated when analysing the development strategies of the destination, generally developed by the authorities.

Such studies have been conducted in Slovenia (Konecnik, 2008) and in Poland (Kiryluk & Glińska, 2015). When comparing the perceptions of tourists and residents, identity and reputation can be used at the evaluation of mental associations of the destination (Fan, 2006). While identity may play a more "important role for residents, as identity is about self perception" (Fan, 2006, p. 4), reputation is more important to tourists in terms of destination image process. In these studies, the image of the destination is evaluated and measured using different attributes of the destination and the overall image of the destination. Echtner & Ritchie (1991), (1993) state that the destination image is not only composed of individual elements, but also from the general

impression, which has been created in the mind of the others (as cited in Tasci et al., 2007). In addition to Baloglu (1996), in which the overall image is composed of cognitive and affective attributes, Echtner & Ritchie (2003) introduce unique attributes, when evaluating the touristic image. Baloglu (1996) and Baloglu & McClearly (1999), formulate three hypotheses which summarise the process of destination image formation – the cognitive component influence the affective component and the overall image; also, the affective component influence the overall image. After the process of the destination image process is finished, tourists decide whether the destination had a positive or a negative impact on them. The image of a destination influences the tourists' behavor and their intentions to recommend or revisit it (Hunt, 1975; Goodrich, 1977; Calantone et al., 1989; as cited in Echtner & Ritchie, 2003; Woodside & Lysonski, 1989; Bigné et al., 2001; Bigné et al., 2005; Geng-Qing Chi & Qu, 2008; San Martín & del Bosque, 2008; Qu et al., 2011; Prayag & Ryan, 2011; Ajanovic & Cizel, 2016; Phucharoen et al., 2016). Bigne et al. (2005) formulate other two hypotheses, in which they state that the more positive the image destination is, the more likely it is for the tourists to recommend it or visit it. These two aspects are also analyzed in this study. In the last years, researchers have also focused on destination personality (Ekinci & Hosany, 2006; Ekinci et al., 2007; Murphy et al., 2007; Pitt et al., 2007; Usakli & Baloglu, 2011; Kumar & Navak, 2014; Ajanovic & Cizel, 2015). Many of these studies evaluate the dimensions proposed by Aaker (1997): "sincerity", "excitement", "competence", "sophistication" and "ruggedness". These dimensions can be evaluated in destination image studies, but this paper did not analyze these dimensions.

In terms of methodology, studies include both structured and unstructured techniques (Baloglu, 1996; Bigné et al., 2001; Echtner & Ritchie, 1991; Echtner & Ritchie, 1993; as cited in Tasci et al., 2007; Echtner & Ritchie, 2003). Structured techniques use standardized scales, which are easier to process with statistical methods. Several studies use Likert scale (Goodrich, 1977; Gartner, 1989; as cited in Echtner & Ritchie, 2003, Hosany et al., 2006; Qu et al., 2011) or the semantic differential scale (Hunt, 1975; Crompton, 1977; Crompton, 1979; Gartner & Hunt, 1987; as cited in Echtner & Ritchie, 2003). In comparison to structured techniques, unstructured techniques include open questions (Reilly, 1990; Konecnik, 2008; Kiryluk & Glińska, 2015), interviews or focus groups and can identify easier the unique components of a destination, even though the answers depend on the availability and communication skills of each individual.

METHODOLOGY

The scientific approach is based on three hypotheses: First of all, we have started from the premise that destination image is composed of cognitive, affective and unique attributes (h1). Second of all, these attributes are perceived differently by tourists and residents (h2). Thirdly, tourists and residents have a different perception of the same destination – Timisoara (h3). To verify the hypotheses, the methodology of this study is based on quantitative research, as questionnaires were applied to both tourists and residents. The main aim was to evaluate the reflections in the respondent's mental, concerning a series of attributes regarding the tourist destination Timisoara.

Sampling

The study was carried out in Timisoara and the target of this study was visitors (105 questionnaires) in Timisoara and residents (103 questionnaires), in March 2017. Consequently, the study focuses on two different samples. The questionnaires were applied in the main areas of the city – at the International Airport Traian Vuia, Timisoara Railway Station, the center of Timisoara, student campus and other quaters of the city, through random sampling (personally administered to the respondents). The socio - demographic profile (Table 1) of the respondents shows that in the tourists'

sample, men accounted for 52.38% and women for 47.62% of the respondents; in the residents' sample, men accounted for 42.72% and women for 57.28%. In comparison, according to the National Institute of Statistics, in the demographic structure of Timisoara in 2018, there are 46.73% men and 53.27% women. As a consequence, the residents' sample is similar to the demographic reality of this destination.

Table 1. Socio-demographic profile of the respondents

Variable	Tourists (%)	Residents (%)
Gender		
Male	52.38	42.72
Female	47.62	57.28
Age		
18 – 24	44.761	71.844
25 - 34	17.142	16.507
35 – 44	13.333	3.883
45 - 54	16.19	5.825
55 – 64	7.622	0
>65	0.952	1.941
Education level		
Gymnasium school	0.952	0
Professional school	1.907	0
High school	22.857	38.837
Post high school education	4.761	1.941
University	60.952	57.281
Doctorate	8.571	1.941
Occupation		
Student	43.809	57.281
Unskilled worker	0	0
Skilled worker	10.476	7.766
Professor/doctor/ lawyer/ economist/ engineer	23.809	14.566
Entrepreneur/manager	6.666	5.825
Freelancer	3.809	0
Agriculture worker	0.952	0
Retired	1.904	0
Unemployed	0	0.97
Other	8.575	13.592

In both samples, the majority of the respondents belongs to the age group of 18-24 years (44.76% tourists and 71.84% residents). For this reason, when interpreting the results of the study, the average age of the samples (tourists -32.9 years, residents -26.6 years) has been taken into consideration. The interpretation of the results also considers the origin and the residency of the respondents. While all the residents live in Timisoara, for the tourists' sample, the place of residency is diverse, but the majority lives in Romania.

Questionnaire design

The survey for tourists consisted of 6 sections (characteristics of the visit and motivations, destination attributes, tourist attractions, events, touristic promotion and demographic questions) and 27 questions.

The survey for residents consisted of 6 sections (tourism activity in Timisoara, destination attributes, tourist attractions, events, touristic promotion and demographic questions) and 28 attributes. For this study, we only considered the answers from the section "destination attributes". The grid included different attributes (Table 2) – cognitive, affective and unique attributes of the city. Cognitive and unique components

were measured for both tourists and residents, while the affective component was measured only for tourists, as these attributes (A9. Residents' hospitality and A10. Tourist experience) can only be measured from the tourists' point of view.

Cognitive attributes	Affective attributes	Unique attributes
A1. Destination with high	A9. Residents'	A11. Religious, linguistic and
performance infrastructure	hospitality	ethnic multiculturality
A2. Destination with various	A10. Tourist	A12. The events from
accommodation units	experience	December 1989
A3. Cultural and historic diversity		A13. Influences from West Europe
A4. Interesting cultural activities		A14. Architectural legacy and urban landscape
A5. Gastronomic variety and quality		
A6. Customs and interesting traditions		
A7. Party & nightlife		
A8. Parks and green spaces		

Table 2. Evaluated attributes

All cognitive (A1 - A8), affective (A9 - A10) and unique attributes (A11 - A14) have been measured on a 5 - point Likert scale and are displayed in Table 2. The respondents were asked the question: "On a scale from 1 to 5, how important are the following attributes in building the touristic image of Timisoara?". The overall image (B1) has been evaluated also with the Likert scale (1 = boring destination / 5 = full of life destination).

Two further questions were added in the tourists' questionnaire, referring to their intention to recommend (C1) or to revisit Timisoara (C2) (Bigné et al., 2005; Geng-Qing Chi & Qu, 2008; Qu et al., 2011; Prayag & Ryan, 2011; Ajanovic & Cizel, 2016; Phucaroen et al., 2016). The answers to these questions were dichotomous (yes/no).

The sum of the cognitive, affective and unique attributes creates the overall image; based on this overall image, tourists decide on their intention to revisit or recommend the destination. Moreover, we have to note that tourists have only a few days, a week, but maximum one month in which they can create a mental representation of the city, while the residents are already accustomed to the city and therefore, their image of the destination has been already built, but may suffer changes over time.

Data analysis

The attributes were introduced in the database and processed using IBM SPSS Statistics, version 20. The answers were noted in the database, as each attribute works as a parameter: $A_1 - A_14 =$ attributes, $B_1 =$ overall image, $C_1 =$ intention to recommend, $C_2 =$ intention to revisit. In total, a number of 208 entries were evaluated.

RESULTS AND DISCUSSIONS

A t-test for two independent samples was conducted, where all the requirements were met: independent variable (two different samples - tourists and residents), approximately normal distribution and homogeneity of variances. The null hypothesis states that the data from both samples do not connect between each other. The alternative hypothesis states that the data from both samples are connected. If the null hypothesis is rejected, it means that there are differences between the two samples. The two hypotheses were tested for each variable, with a 95% degree of confidence.

Cognitive attributes- comparison between tourists' and residents' perception

Only 2 attributes of the total of 8 (Table 3) rejected the null hypothesis. These

attributes are A1 (destination with high performance infrastructure, t(206) = 2.448, p<0.05) and A6 (customs and interesting traditions, t(206) = 3.035, p<0.05), which means that for these 2 variables, there is a significant difference in terms of perception between tourists and residents. The effect size, according to Cohen (1988), was calculated for both A1 (d = 0.34) and A6 (d = 0.42). The effect size between the two independent samples is small (around 0.20) for A1 and close to medium (0.50) for A6.

Variable	Tourists (N = 105)		Residents (N = 103)		
variable	Mean	SD	Mean	SD	
A1	3.35	1.01	3.00	1.05	
A2	3.56	0.979	3.43	1.02	
A3	3.88	0.963	3.90	0.880	
A4	3.57	0.998	3.53	0.97	
A5	3.55	1.05	3.48	1.03	
A6	3.54	1.08	3.09	1.03	
A7	3.74	1.03	3.85	1.14	
A8	4.08	1.03	4.10	0.98	

Table 3. Descriptive statistics – cognitive attributes

On the one hand, the difference between perceptions in terms of "high performance infrastructure" can be explained taken into consideration the reality of the city. The infrastructure seems more effective to tourists than to residents. The majority of the tourists in this study (52.38%) come from Romania and Timisoara has a better reputation (closer to the Western European culture than any other city from Romania, with innovative economy on a national scale and beautiful architecture) among other Romanian cities; the residents are generally less pleased and satisfied with the accessibility and the traffic in Timisoara, hence the lower score regarding the infrastructure. In a broader context, if we also include attribute A13 (Influences from West Europe), where tourists also had a more positive outlook than the residents, we can conclude that the city is perceived more "occidental" by tourists, than by residents.

On the other hand, the differences of perception for attribute A6 (Customs and interesting traditions) are explained by familiarity. The sample of tourists considered the traditions and customs in Timisoara more interesting than the residents, as residents are normally already used to the local traditions. For tourists, however, it is important they observe the traditions and customs as an element of originality.

For the other 6 variables (A2, A3, A4, A5, A7 and A8), the null hypothesis was not rejected, meaning that there are not significant differences between the tourists' and residents' perception. In addition to this, the descriptive statistics (Figure 1) show that the larger differences, when calculating the mean for every variable, in both samples, are found for A1 (with a mean difference of 0.35) and A6 (with a mean difference of 0.44). For the other variables, the mean differences are smaller and do not pass 0.2).

For a better understanding of the statistics values which are reflected into the touristic phenomena, attributes A1 and A2 can be grouped in a distinct category "equipment and infrastructure". Even though only for the attribute A1 important differences of perception were observed, the variety of the accommodation units was more positive perceived by both samples, in comparison to the infrastructure. Attribute A4 (Interesting cultural activities), A5 (Gastronomic variety and quality), A7 (Party & nightlife) and A8 (Parks and green spaces) can be grouped into an extended category – "free time and services". There are not significant differences between the two samples, the perception is generally favorable, each attribute with a mean score above 3.5, which means that Timisoara offers, as a tourist destination, multiple possibilities of spending

free time. The variable with the highest mean score was A8 (Parks and green places). Even though there are no significant differences between the two samples, the values over 4 mean that the city is perceived as a space with many green areas for both tourists and residents.

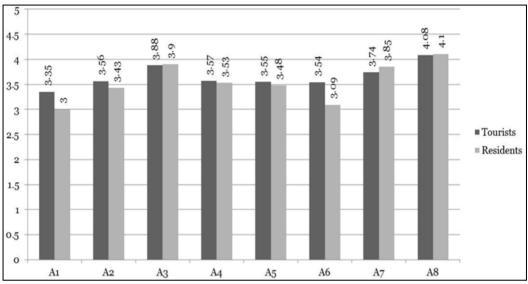


Figure 1. Mean values of cognitive attributes

Unique attributes – comparison between tourists' and residents' perception $% \left(1\right) =\left(1\right) \left(1\right)$

Two attributes of the total of 4 (Table 4) rejected the null hypothesis. These attributes are A12 (the events from December 1989, t(206) = -2.224, p<0.05) and A13 (influences from Western Europe, t(206) = 2.250, p<0.05), which means that for these 2 variables, there is a significant difference in terms of perception between tourists and residents. Cohen's D was calculated for both A12 (d=0.31) and A13 (d=0.31).

	•	-	-	
Variable	Tourists (N = 105)		Residents $(N = 103)$	
variable	Mean	SD	Mean	SD
A11	3.96	1.03	3.85	1.17
A12	3.84	1.22	4.21	1.12
A13	4.01	1.04	3.69	1.06
A14	3.98	1.06	3.88	1.01

Table 4. Descriptive statistics – unique attributes

The effect size shows that between the two independent samples, the effect size is small (around 0.20) for both variables. In this set of attributes (Figure 2) the highest mean score belongs to A12 - residents. In other words, the residents of Timisoara believe that the events from December 1989 are the most important to the image of the city; moreover, for this variable, there is a mean difference of 0.36 between residents and tourists. These values can be explained highlighting the importance of the events from December 1989 for Timisoara, as well as from the population living there. December 1989 is still a powerful moment in the history of the city and has remained in the memory of the residents with a significant meaning. Therefore, the residents consider this attribute more important to the image of the city than tourists' perception of the same attribute.

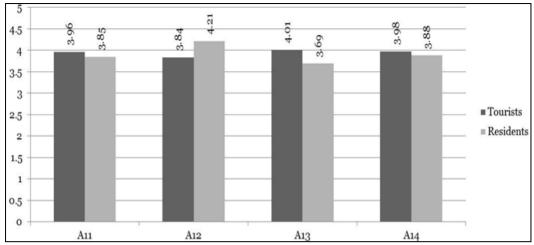


Figure 2. Mean values of unique attributes

For the other 2 variables (A11 and A14), the null hypothesis was not rejected, meaning that there are not significant differences between the tourists' and residents' perception. Even though there are not significant perception differences between the samples, these attributes are very important to the identity of the city. Multiculturality, along with the architectural legacy, the urban landscape and the historical heritage are considered some of the premises for which Timisoara has won the title of European Capital of Culture in 2021. Consequently, these features differentiate Timisoara from other destination and are fundamental features in the process of image destination.

Overall image – comparison between tourists' and residents' perception

Respondents were also asked in the survey to evaluate the overall image of Timisoara. The t-test for the two independent samples did not reject the null hypothesis, meaning that there are not significant differences in the perceptions of the overall image of destination Timisoara, between the two samples. Tourists' perception is slightly more positive than the residents' perception (Table 5) with a difference of 0.20. The mean score for tourists is 3.96 and even though the value is not closed to 5 (on Likert scale, a value of 5 means a destination full of life) Timisoara has a positive destination image.

Table 5. Descriptive statistics – overall image

Overall image	Tourists (N = 105)		Residents (N =103)	
	Mean	SD	Mean	SD
	3.96	0.83	3.76	0.87

Also, tourists had a better overall perception of the city than the residents, as residents are already familiar with the city and its space. First of all, tourists only have contact to the central and touristic areas which are generally more attractive, clean and dynamic and not with peripheral neighborhoods. Secondly, residents are familiar with the city center, as well as with other neighborhoods. Therefore, for the residents of Timisoara, the city is not so attractive and "full of life" as it has been perceived by tourists.

Affective attributes

The affective dimension of the destination was measured with two attributes: A9 - residents' hospitality and A10 - tourist experience and was evaluated only for the sample of tourists (N = 105), using a 5 point Likert scale (Table 6). Tourists have evaluated the tourist experience with a score of 3.95 (where 5 is the maximum score and

means a very pleasant tourist experience). Residents' hospitality were evaluated with a mean score above 4 (4.12). Of all the attributes evaluated by tourists, this is the attribute with the highest mean score. In the process of image destination formation of Timisoara, the residents, their openness to touristic activities and their behavior towards tourists is very important and has a very positive influence.

Table 6. Descriptive statistics – affective attributes

Attribute	Mean	SD
A9	3.95	1.10
A10	4.12	0.755

Pearson Correlation

Each attribute evaluated for both samples was correlated with the attribute B1 (overall image) (Table 7). The Pearson correlation (under normally distributed values, p<0.001) shows the following results:

Tourists (N = 105) Residents (N = 103) A1 0.436 0.534 A2 0.251 0.272 A3 0.403 0.517 A4 0.467 0.375 $\overline{A_5}$ 0.320 0.244 A6 0.404 0.333 A7 0.267 0.475 A8 0.215 0.300 A9 0.302 A10 0.605 A11 0.309 0.210 A12 0.231 0.259 A13 0.189 0.226 0.234 0.195

Table 7. Pearson Correlation

The effect size was calculated using criteria from Cohen (1988): a very weak correlation (r = 0.20), a weak correlation (r = 0.40), reasonable correlation (r = 0.60). The strongest correlations between overall image and attributes are recorded for:

For the tourists' sample, Pearson's coefficient is for attribute A10 - residents' hospitality: r = 0.605, p<0.001. Therefore, between residents' hospitality and the overall image there is a reasonable correlation. Furthermore, residents' hospitality is the attribute with the highest mean score. As a consequence, this attribute significantly influences tourists' perception of the city. For the residents' sample, Pearson's coefficient is for A1 – destination with high performance infrastructure (r = 0.534, p<0.001) and for A3 – historic and cultural diversity (r = 0.517, p<0.001). Moreover, historic and cultural diversity (A3) is linked to religious, linguistic and ethnic multiculturality (A11).

If grouped, these two attributes and A14 (architectural legacy and urban landscape) can be included in an extended category "history and culture". Among these, significant differences for Pearson coefficient between the samples are displayed for the attribute A11 (religious, linguistic and ethnic multiculturality) and the overall image (residents r = 0.309 and tourists r = 0.210). Another difference for Pearson coefficient between the samples (residents r = 0.475 and tourists r = 0.267) was recorded for A7 (party and nightlife), even though between the overall image and this attribute there was a very weak correlation for tourists and a weak correlation for residents. This difference can be explained taken into consideration the respondents' age — the majority belongs to the age group of 18 - 24

years and are more interested in entertainment, parties, nightlife and music. Between the overall image and the unique attributes there are not significant correlations for the two samples and the effect size is very weak. For the residents' sample, the only connection with a higher value, even though it remains a weak correlation, was recorded for A11 (religious, linguistic and ethnic multiculturality, with a mean score close to 4).

Intention to recommend and to revisit

Tourists' behavior after visit is an indicator of destination's attractiveness. The more attractive a destination is and the more positive perceived is, the stronger the intention of the tourists to recommend and revisit it (Bigné et al., 2001). According to the structural model proposed by Ou et al. (2011) the tourists' behavior is influenced and determined by the overall image of the destination. The intention to recommend (C1) and to revisit (C2) are the most important consequences of the process of creating a touristic image: on the one hand, we have to consider tourists' loyalty and their intention to revisit; on the other hand, positive recommendations attract a higher number of tourists (Ou et al., 2011). Both these aspects determine the development of touristic activities. The tourists answered two different dichotomous questions: "Would you recommend Timisoara to others?" and "Would you like to revisit Timisoara?" The answers show that almost all tourists would recommend or revisit Timisoara (Table 8). What is surprising is the higher number of tourists who would revisit Timisoara than recommend it. As almost all the answers were positive, we can conclude that Timisoara offered an experience which was pleasing enough for tourists. There was something about Timisoara that determined this behaviour - the overall image of the city or even an attractive, original or surprising element.

Table 8. Intention to recommend and to revisit

	C1. Intention to recommend (%)	C2. Intention to revisit (%)
Tourists (N=105)	95.24	98.1

CONCLUSIONS

As European Capital of Culture in 2021, it is expected that more tourists will arrive in Timisoara. It is important that we analyze the touristic image of the city, highlighting the strong points, seen as advantages and elements that differentiates Timisoara from other urban destinations and positively contributes to the touristic perception. The hypotheses were totally or only partially confirmed. The first hypothesis (h1), in which it is stated that destination image is determined by cognitive, affective and unique attributes was confirmed. In order to create a general perception of the destination, tourists and residents are in contact with the set of attributes in the survey, without whom the process of creating a touristic image cannot be finished.

The second hypothesis (h2) stated that the same attributes are perceived differently between tourists and residents. This hypothesis was partially confirmed. Of a total of 14 attributes, only attributes A1 (destination with high performance infrastructure), A6 (customs and interesting traditions), A12 (events from December 1989) and A13 (influences from Western Europe) rejected the null hypothesis and are perceived different between the two independent samples. The last hypothesis (h3) was not confirmed. The overall image of Timisoara is not perceived differently between the two samples. Consequently, the first two hypotheses highlight the fact that there are significant differences between residents and tourists for some attributes, but not for the overall image. A positive touristic image also influences the tourists' behavior, as more tourists are likely to recommend the destination or to revisit it. Almost all tourists would recommend or revisit this destination. The surveys, the statistical analysis and the interpretation of the data focus on one urban tourist destination, which is not well known

yet. Until this moment, there have not been conducted any studies regarding destination image for Timisoara. This study could become a starting point for future research.

Using two independents samples for the same destination helps identifying common perceptions, as well as different ones. Moreover, the two samples contributed to a better understanding of the touristic perceptions of Timisoara. Local institutions which are involved in the touristic activity of the city can use these perceptions to develop and build marketing strategies (touristic promotion focused on strong points or market segmentation). In perspective, the research regarding destination image of Timisoara should be extended with qualitative research and open questions, which could identify the particular features, the spirit of the destination and its personality, as well as the most dynamic areas, the most attractive or the least attractive areas, from a touristic point of view (including mental maps). Some elements were already put into discussion in the surveys, but for a better understanding of destination image of Timisoara and what the destination expresses, it is necessary we conduct qualitative research.

This paper brings actual contributions to the knowledge of tourist image of a city, in which an emerged tourism has been developed. The innovative approach is based on the comparative analysis of two independent groups of respondents – tourists and residents. In the international literature, tourists' perceptions and attitudes regarding tourist destination have been analyzed by researchers (Baloglu, 1999; Geng-Qing Chi & Qu, 2008; Murphy et al., 2014; Kim & Chen, 2016 etc.). Only several studies focus on the residents' perceptions of their place of residence as a tourist destination. In many cases, the perspective of residents is overlooked in favor of the common good and investors' interests (Renda et al., 2014; Plumed et al., 2017). Consequently, the paper brings a series of contribution to the process of building the tourist image. There are highlighted not only the similarities and the differences of perception, but also the factors on which these perceptions are based. In fact, these factors take into consideration the differences when building a mental representation on image: on the one hand, there is the perceived space; on the other hand, there is the living space (Lefebre, 1976; Soja, 1989).

Even though tourists have a certain destination experience, it is episodic and, in most cases, this experience is strongly linked only to the tourist areas (Romero, 2018). Therefore, the tourists' experience can build only partly a destination image, whereas for residents, the destination has ample significances. Residents have a more profound experience with the living space and in time, they were the target group of many campaigns for destination image or destination brand (Zenker & Braun, 2010; Kavaratzis & Hatch, 2013), in which there were conducted systematic and specific actions on a local level, especially for emergent destinations (Williams et al., 2014).

The comparison between the two samples, using statistical methods and techniques, emphasized the attributes of the destination which are more important to tourists or residents, as well as the attributes perceived differently by the two samples, from a scientifically point of view. The main conclusion is that the attributes focused on an affective experience, strongly related to a deep significance for the residents, may not have the same meaning for tourists as well. Moreover, "visible" attributes or the attributes based on current experience have a higher chance to be congruent, if before they have not been included in the process of building or deconstruction the destination image.

Another finding suggests that based on location and their cultural values, tourists may differently evaluate the destination and may have closer or farther perceptions from the residents. With the afferent limits, the findings of the study can be extrapolated and verified in order to emphasize a more general approach. Therefore, for future research, it is important we conduct other studies to better understand destination image. These studies may be focused on a detailed analysis and may include different types of tourists –

or residents. This approach has not only scientific meaning, but also a practical use, for better results of the local politics involved in branding and marketing.

REFERENCES

- Aaker, J. L. (1997). Dimensions of brand personality. Journal of Marketing Research, 34(3), 347 356.
- Ajanovic, E., Cizel, B., (2015). Destination Brand Personality, Self-Congruity Theory and the Intention to Visit a Destination. *Mediterranean Journal of Humanities*, VI/1, 1 – 16.
- Baloglu, S. (1996). An empirical investigation of determinants of tourism destination image, (Doctoral Dissertation). Virginia Polytechnic Institute and State University, Virginia.
- Baloglu, S., & Brinberg, D. (1997). Affective images of tourism destinations. *Journal of Travel Research*, 35(4), 11 15. Baloglu, S., & McCleary, K.W. (1999). A model of destination image formation. *Annals of Tourism Research*, 26(4), 868 – 897.
- Ben-Dalia, S., Collins-Kreiner, N., Churchman, A., (2013), Evaluation of an Urban Tourism Destination. *Tourism Geographies: An International Journal of Tourism Space, Place and Environment*, 15(2), 233 249.
- Bigné, J. E., Sánchez, M. I., & Sánchez, J. (2001). Tourism image, evaluation variables and after purchase behavior: inter-relationship, Tourism Management, 22, 607 - 616.
- Bigné Alcañiz, E., Sánchez Garcia, I. & Sanz Blas, S. (2005). Relationships among residents' image, evaluation of the stay and post-purchase behavior. *Journal of Vacation Marketing*, 11(4), 291 – 302.
- Calantone, R.J., Di Benedetto, C.A., Hakam, A., & Bojanic, D.C. (1989). Multiple multinational tourism positioning correspondence analysis. *Journal of Travel Research*, 28(2), 25 32.

 Cohen, J., (1988). *Statistical Power Analysis for the Behavioural Sciences* (2nd ed.), Lawrence Erlbaum
- Associates, Inc., New York.
- Crompton, J. L., (1977). A systems model of the tourist destination selection decision process with particular reference to the role of image and perceived constraints (Unpublished doctoral dissertation). College Station: Texas A & M University.
- Crompton, J.L., (1979). An assessment of the image of Mexico as a vacation destination and the influence of geographical location upon that image. Journal of Travel Research, 17(4), 18 - 23.
- Crompton, J.L., & Duray, N.A., (1985). An investigation of the Relative Efficacy of Four Alternative Approaches to Importance - Performance Analysis. Journal of the Academy of Marketing Science, 13(4), 69 - 80.
- Echtner, C. M., & Ritchie, J.R. B., (1991). The meaning and measurement of destination image. The Journal of Tourism Studies, 2(2), 2-12.
- Echtner, C. M., & Ritchie, J.R. B., (1993). The measurement of destination image an empirical assessment. Journal of Travel Research, 31(4), 3 13. Echtner, C. M., & Ritchie, J.R. B., (2003). The meaning and measurement of destination image. The Journal of
- Tourism Studies, 14(1), 37 48.
 Ekinci, Y., & Hosany, S., (2006). Destination Personality: An Application of Brand personality to Tourism
- Destinations. *Journal of Travel Research*, 45, 127 139. Ekinci, Y., Sirakaya Turk, E., & Baloglu, S., (2007). Host image and destination personality. *Tourism Analysis*,
- 12, 433 446.
- Fan, Y., (2006). Branding the nation what is being branded. Journal of Vacation Marketing, 12(1), 5 14.
- Gartner, W.C., & Hunt, J.D., (1987). An analysis of state image change over a twelve-year period (1971 1983). Journal of Travel Research, 16(2), 15 – 19.

 Gartner, W.C., (1989). Tourism image: Attribute measurement of state tourism products using
- multidimensional sealing techniques. Journal of Travel Research, 28(2), 16 20.
- Gartner, W.C., (1993), Image formation process. Journal of Travel & Tourism Marketing, 2(2-3), 191 216.
- Geng-Qing Chi, C., Qu, H., (2008), Examining the structural relationships of destination image, tourist satisfaction and destination loyalty – an integrated approach. *Tourism Management*, 29, 624 – 636. Goodrich, J.N., (1977), A new approach to image analysis through multidimensional scaling, *Journal of Travel*
- Research. 16(3), 3-7.
- Henkel, R., Henkel, P., Agrusa, W., Agrusa, J., & Tanner, J., (2006). Thailand as a Tourist Destination: Perceptions of International Visitors and Thai Residents, Asia Pacific Journal of Tourism Research, 11(3), 269 - 287.
- Hosany, S., Ekinci, Y., Uysal, M., (2006). Destination image and destination personality: An application of branding theories to tourism places. Journal of Business Research, 58, 638 – 642.
- Hunt, J.D., (1975). Image as a factor in tourism development, Journal of Travel Research, 13(3), 1 7.
- Kavaratzis, M., Hatch, M.J., (2013), 'The dynamics of place brands: An identity-based approach to place branding theory'. Marketing Theory, 13(I), 59-68.
 Kim, H., & Chen, J.S., (2016). Destination image formation process A holistic model. Journal of Vacation
- Marketing, 22(2), 154-166.
- Kiryluk, H., & Glińska, E., (2015). Creation and evaluation of the tourist image of a country the example of Poland. Procedia Social and Behavioural Sciences, 213, 671 - 676.
- Konecnik, M., & Go, F., (2008). Tourism Destination Brand Identity: The Case of Slovenia. Brand Management,
- Kulcsár, E., (2010). Marketing Research on Tourist Consumer Opinions and Behaviour in the Center Development Region. Theoretical and Applied Economics, XVII, 6(547), 75 – 88.

- Kumar, V., & Nayak, J.K., (2014). The role of self-congruity and functional congruity in influencing tourists' post visit behavior, *Advances in Hospitality and Tourism Research*, 2(2), 24 44.
- Lawton, L. J., (2005). Resident Perceptions of Tourist Attractions on the Gold Coast of Australia. Journal of Travel Research, 44(2), 188 – 200.
- Lefebre, H., (1976), The Production of Space. Oxford: Blackwell.
- Marques, C. P., (2011). Mapping affective image of destinations. Book of Proceedings vol. II, International Conference on Tourism & Management Studies, (pp. 1040 1043). Algarve, Portugal.
- Murphy, L., Benckendorff, P., & Moscardo, G., (2014). Linking travel motivation, tourist self-image and destination brand personality. *Journal of Travel & Tourism Marketing*, 22(2), 45 60.
- Neumann, V., (1997). Identités multiples dans l'Europe des regions. L'interculturalité du Banat [Multiple identities. Interculturality of Banat]. Editions Hestia, Timisoara.
- Phelps, A., (1986). Holiday destination image The problem of assessment: An example developed in Menorca, *Tourism Management*, September, 168 180.
- Phucharoen, P., Sriboonlue, U., Assarut, N., (2016). The effects of destination image, destination personality and self congruity on tourists' intention, *International Journal of Applied Business and Economic Research*, 14(13), 8991 9007.
- Pitt, L.F., Opoku, R., Hultman, M., Abratt, R., & Spyropoulou, S., (2007). What I say about myself: Communication of brand personality by African countries. *Tourism Management*, 28, 835 844.
- Plumed, M., Iniguez Berrozpe, T., Elboj Saso, C., (2016), Place Branding Process: Analysis of Population as Consumers of Destination Image. *Tourismos: An International Multidisciplinary Refereed Journal of Tourism*, 11(4), 1-52.
- Popa, N. (coord.), Bioteau, E., Pavel, S., & Isfanescu, R., (2007). Banatul: identitate, dezvoltare, colaborare regională [The Banat: Identity, Development, regional cooperation]. Mirton Editions, Timisoara.
- Prayag, G., & Ryan, C., (2011). Antecedents of Tourists' Loyalty to Mauritius: The Role and Influence of Destination Image, Place Attachment, Personal Involvement and Satisfaction. *Journal of Travel*.
- Qu, H., Kim, L. H., & Im, H. H., (2011). A model of destination branding integrating the concepts of the branding and destination image. *Tourism Management*, 32, 465 476.
- Reilly, M.D., (1990). Free Elicitation Of Descriptive Adjectives For Tourism Image Assessment, *Journal of Travel Research*, 28(4), 21 26.
- Renda, A. I., Mendes, J. da Costa, Oom do Valle, P., (2014), The Destination is Where I live! Residents' Perception of Tourism Impacts. *Journal of Spatial Organizational Dynamics*, 2(1), 72 88.
- Reynolds, W.H., (1965). The role of the consumer in image building, *California Management Review*, Spring, 69 76. Romero Renau, L. del, (2018), Touristification, Sharing Economies and the New Geography of Urban Conflicts. *Urban Science*, 2(4), 104.
- San Martín, H., & Bosque, I.A.R., del, (2008). Exploring the cognitive affective nature of destination image and the role of psychological factors in its formation. *Tourism Management*, 29, 263 277.
- Soja, E. W. (1989). Postmodern Geographies: The Reassertion of Space in Critical Social Theory. New York: Verso. Sönmez, S., & Sirakaya, E., (2002). A distorted destination image? The case of Turkey. Journal of Travel Research, 41(2), 185 196.
- Stylidis, D., Shani, A., & Belhassen, Y., (2017). Testing an integrated destination image model across residents and tourists. *Tourism Management*, 58, 184 195.
- Su, X., (2010), The imagination of Place and Tourism Consumption: A Case Study of Lijian Ancient Town, China.

 Tourism Geographies: An International Journal of Tourism Space, Place and Environment, 12(3), 412 434.
- Tasci, A.D.A., Gartner, W.C., & Cavusgil, S. T., (2007). Conceptualization and operationalization of destination image. *Journal of Hospitality & Tourism Research*, 31(2), 194 223.
- Tuan, Yi-Fu, (1977). Space and place: the perspective of experience, Minneapolis: University of Minnesota Press. Usakli, A., & Baloglu, S., (2011). Brand personality of tourist destination: An application of self-congruity theory. *Tourism Management*, 32, 114 127.
- Williams, H.A., Williams Jr., R.L. and Omar, M. (2014) Gastro-tourism as destination branding in emerging markets. *International Journal of Leisure and Tourism Marketing*, 4(1), 1–18.
- Woodside, A.G., & Lysonski, S., (1989). A general model of traveler destination choice. *Journal of Travel Research*, 17(4), 8-14.
- Zenker, S., Braun, E., 2010, The Place Brand Center A Conceptual Approach for Place Branding and Place Brand Management, in 39th European Marketing Academy Conference, Copenhagen, Denmark, 1st 4th June, 2010. Zerva, K., Palou, S., Blasco, D., Benito, J. A. D., (2018). Tourism-philia versus tourism-phobia: residents and
- Zerva, K., Palou, S., Blasco, D., Benito, J. A. D., (2018). Tourism-philia versus tourism-phobia: residents and destination management organization's publicly expressed tourism perceptions in Barcelona, *Tourism Geographies: An International Journal of Tourism Space, Place and Environment*. Advance online publication. DOI: 10.1080/14616688.2018.1522510.
- *** National Institute of Statistics, www.insse.ro, (accessed on 10 February 2020).

Submitted: Revised: Accepted and published online 06.11.2019 11.02.2020 17.02.2020

THE IMPACT OF KOJA CLIFF DEVELOPMENT ON SOCIAL-CULTURAL AND ECONOMIC: CASE OF COMMUNITY-BASED TOURISM, BANTEN, INDONESIA

Fakhri RAFI

Universitas Indonesia, School of Enviromental Science, Jl. Salemba Raya No. 4, Central Jakarta, Jakarta 10430, Indonesia, e-mail: fakhri_rafi@yahoo.co.id

Herdis HERDIANSYAH*

Universitas Indonesia, School of Enviromental Science, Jl. Salemba Raya No. 4, Central Jakarta, Jakarta 10430, Indonesia, e-mail: herdis@ui.ac.id

Citation: Rafi, F. & Herdiansyah, H. (2020). THE IMPACT OF KOJA CLIFF DEVELOPMENT ON SOCIAL-CULTURAL AND ECONOMIC: CASE OF COMMUNITY-BASED TOURISM, BANTEN, INDONESIA. GeoJournal of Tourism and Geosites, 28(1), 164–174. https://doi.org/10.30892/gtg.28113-460

Abstract: Indonesia has a great geotourism potential formed both naturally and engineered. Koja Cliff is an example of the latter built in the former mining area in Banten Province by local community. The purpose of this research was description geotourism development and relationship among economy and social-cultural for community-based-tourism in Koja Cliff, Banten, Indonesia. The research investigated with 39 respondents as a regular traveler to Koja Cliff and using puposive sampling method. Geotourism descriptive, validity, reliability, and multiple regression were conducted to answer research questions. This research finding shows Koja Cliff as had directly positive influences on social-cultural and economic of community-based tourism.

Key words: geotourism, community-based tourism, social-cultural, economic, Banten

INTRODUCTION

Indonesia's tourism is one of the factor, that has good industrial potential with demand and tourist visits reaching 14 million people in 2017 (OECD, 2018). In general, tourism has an impact on three things, namely economics, social-culture, and environment which have an effect on the community around the tourism area (Cooper et al., 2008). Increasing demand for tourism products in Indonesia can be viewed at the stage of tourist arrivals that continue to increase from year to year. The country of Indonesia is unique in its geological diversity because it is located in the Pacific circum and between three large continental plates (Santosh et al., 2009).

^{*} Corresponding author

Indonesia's geological diversity can be utilized to develop areas in the field of tourism, commonly called Geotourism. Geotourism has been assessed as important for tourism (Pralong, 2006; Piacentini et al., 2011; Cappucci et al., 2015).

Geotourism is a new approach in developing countries (Farsani et al., 2018). Indonesia has great potential because it has geological diversity which is spread throughout the region, some places need to be made as geological heritage areas (Yuliawati et al., 2016). Geotourism is one solution that is strong enough to protect the environment. These alternative solutions can provide better sector relations, reduce leakage of benefits from a country, create local jobs, and foster sustainable development. But Geotourism is still a phenomenon in the paradigm of developing tourism, especially in Indonesia (Khan, 1997). Large geotourism potential exists naturally and artificially formed. Former mining areas can be a potential for geotourism that is unique and rarely found in other areas and then provides an opportunity for the community to manage it.

Achieving development must have a significant influence on people's welfare (Kodir, 2018). Man-made tourism is currently demanded to be innovative and creative in packaging tourism strategies to attract more local and foreign tourists (Carvalho & Costa, 2011) and requires support from various parties needed for long-term sustainability of man-made tourism (Muafi et al., 2018). This study explore a discussion of ex-mining geotourism by examining the impact of geotourism on the economy and social-culture of local communities. The research conducted focuses on the economic and social-cultural investigation of community-based tourism. Geotourism potential from the former mining area that has been managed by the community in the past year is Koja Cliff, so research is needed. This study aims to add to the case study evidence by adding economic and social-cultural aspects. These objectives can be achieved with hypotheses developed that Economics and social-culture simultaneously related to geotourism.

LITERATURE REVIEW Geotourism

Geotourism became known after geology scientist, Tom Hose, in 1995 introduced and published the term which was related to the provision of interpretative purposes for Geoconservation geosites and geomorphosites such as museums, libraries and archive collections, along with artistic output (Hose et al., 2011). The development of geotourism then becomes a holistic approach to sustainable tourism that brings culture, history and nature. This approach is to maximize the use of tourism for community destinations, minimize negative impacts, and establish responsible tourism strategies (Stokes et al., 2003; Gordon, 2012; Dowling, 2013). Tourists also need motivation to visit Geotourism destinations to achieve satisfaction (Shayanddasht, 2017).

Now geotourism is a favorite that is used to encourage sustainable tourism development in various regions of Indonesia. Research to support the development of geotourism such as the construction of geopark is in Ciletuh, Sukabumi (Yuliawati, 2016), biodiversity conversation at Bromo, Malang (Hakim & Soemarno, 2017), geoconservation in Toba, North Sumatra (Ginting et al., 2017), value indigenous culture on Sabang Island, Aceh (Aswita et al., 2018), and geoheritage in Batur, Bali (Rosyidie et al., 2018).

Community-Based Tourism

Tourism growth is increasing so that in order to develop tourism it needs the necessary effort. Meanwhile, community participation is an important part of tourism development because it allows many stakeholders to build strong political leadership and joint consensus efforts to build community participation; delegates propose ideas in developing active community participation (Komarudin, 2013). One effort that can invite

local communities around tourism is community-based tourism. These efforts made stakeholders to make meetings in the Asia Pacific, especially for developing countries.

The community-based tourism at the tourism ministerial meeting was first emphasized with the establishment of the Tourism Charter in Asia Pacific Economic Cooperation (APEC) in Korea in 2000 (APEC, 2000). Community-based tourism must be able to increase sustainable value and long-term sustainability which will depend on how well the stakeholders address new expectations (The Mountain Institute, 2000). Furthermore, Community-based tourism programs can show expertise by producing a variety of tangible products to tourists (Vinodan et al., 2017). The opportunity for the community is to be able to participate in Community-based tourism for planning, development and decision making in tourism, especially Geotourism.

Social-Cultural

Tourism influences the social-culture of the surrounding community (Yoon et al., 2001; Eshliki & Kaboudi, 2012; Chin et al., 2014; Lundberg, 2017). Therefore, social-cultural effects can sometimes be related to quality of life, values, norms, community models and environmental damage (Deery et al., 2012). The lives of people around tourist destinations are more dynamic because they can interact easily with tourists, be able to think broadly, imitate good habits, understand people's habits, want to preserve local culture, accept differences, be able to meet basic needs and encourage people to contribute to tourist activities (Pramanik & Ingkadijaya, 2018).

Social-culture of society also has an influence with the existence of tourism. Eraqi (2007) revealed that tourism development in Egypt provides social-cultural benefits because of the positive value of cultural exchange. However, in contrast to research in Iran, people at 54.9 percent consider many negative impacts of tourism development such as the death of local languages, eliminating local habits, and local clothing (Farsani et al., 2012). Furthermore, on Mount Pinatubo, the Philippine tourists are inspired and amazed at the resilience of indigenous peoples so tourists introspect themselves with their own lifestyles (Aquino et al., 2018).

Economic

Tourism which is a tourist destination from outside will have a positive impact on the economy of the surrounding community so that they get better income. Employment will be open to the community. The tourism business will run well if there is access to infrastructure and public transportation. The future of tourism is expected to be better because global indicators show that tourism's contribution to GDP (Gross Domestic Product) is 9 percent or around USD 6 Trillion per year and creates 260 million jobs worldwide with an average growth of 4% of the year 2011 to 2021 (Tsiotsu & Goldsmith, 2012). Regional tourism can encourage and improve the regional economy through Geotourism (Ginting & Sasmita, 2018; Arjana et al., 2017).

The economy based on the community has a relationship with Geotourism. Dowling and Newsome (2010) argue that community participation will produce an economy for the services provided to tourists during their time at the Geotourism location. High community contributions to Geotourism will provide economic benefits and increase the local economic value of the area. The community economy can increase because they participate in the development of Geotourism. Geo-tourism from geomorphology in Marocco shows economic interest as evidenced by the presence of hundreds of tourists (Bouzekraoui et al., 2017). Then the public perception in the Toba Caldera shows that there is a community economic growth (Ginting & Febriandy, 2018).

Economic alternatives such as Geotourism need to be considered with activities planned for development (Mero et al., 2018). Figure 1 illustrates the concetual framework

of geotourism. In short, there are many literatures which focus on economics, social-culture and Geotourism. This study aims at Geotourism managed by community-based tourism and has a positive influence on the economic and social-cultural aspects of society.

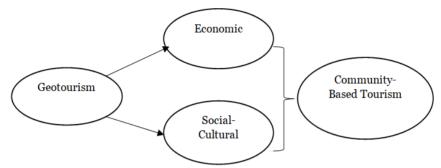


Figure 1. Conceptual framework of geotourism (Source: Cooper et al., 2008; Cottrel & Shen, 2008; Pan et al., 2018)

METHODOLOGY

This study uses a qualitative approach. The approach is chosen based on the character of the study which describes a narrow area, simple variables, meanings, and research data by analysis. The research method used was quantitative methods and qualitative methods (mix methods) which were collected in October-November 2018 in Cikuya Village, Banten, Indonesia. Qualitative methods generally refer to the rules of reduction and triangulation of data from interview result.

In-depth and open interviews are conducted with Geotourism managers, namely communities that get direct economic benefits from the geography of Koja Cliff. Social-cultural interviews with managers of community communities regarding openness and exchanging social-culture to visitors of Geotourism of Koja Cliff from various regions in Indonesia. This data is collected quantitative data to analyze empirical data from responses through questionnaire surveys. Quantitative samples were selected from as a regular traveler to Koja Cliff because they included a type of non-probability sampling, so purposive sampling was chosen. Purposive sampling is a type of non-probability sampling where samples are selected from a group of people who have a direct influence on Geotourism (Sauders et al., 2016). Empirical data from respondents was measured using a Likert type scale with five term categories from "1-Strong Disagree" to "5-Strongly Agree". The data was analyzed using Statistical Package Social Science (SPSS).

RESULTS

Regional Overview

Koja Cliff geotourism began to be developed into tourism in March 2017. This geotourism is located on the border of Tangerang Regency and Serang Regency, and 60 km from southwest of DKI Jakarta. Geotourism placed on latitude 6°18'50.4"S and 6°18'57.6" S, longitude 106°23'34.8"E and 106°23'42" E. Administratively, the Koja Cliff is in Koja Village, Cikuya Village, Tangerang Regency, Banten Province (Figure 2). There are two access routes to the Koja Cliff Geotourism from Balaraja in the North and Maja in the South. Geologically, Koja Cliff geotourism has an important landscape designation regarding the geological history of the Banten area. The geological process in Cikuya Village is a storage area for rock types produced by volcanoes. This is shown in the geological map of the existence of tuffaceous sandstones on very hard cliffs and quaternary (Rusmana et al., 1991).

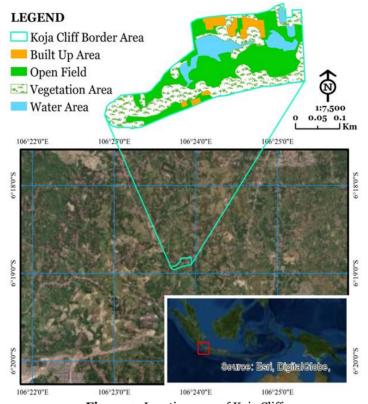


Figure 2. Location map of Koja Cliff

Koja Cliff is a short cliff formed by sedimentary volcanic products. The cliff length is around 200 m and 50 cm wide, has a dominant form of tuffaceous sandstone unit. The Koja Cliff was not used to being because they were underground and because they were rice fields. Because of the economic factors, the landowners discovered the potential of C excavation material to be sold in the period 2009-2016, so that it gave the morphological form as it is now. Cliff is not excavated because it has high violence and landowners do not have the technology to dig the rock because they still use traditional methods to dig sand. After being abandoned there are people seeing the potential of Geotourism in excavated areas because of the unique morphological forms and beauty that are quite rare in the surrounding area. Geotourism grows on the Koja Cliff as an alternative tourist attraction around Jakarta, which is a safe and sustainable geological resource. Every geotourism traveler must walk around the cliff area to get a popular landscape and be able to achieve satisfaction in this geotourism as captured in Figure 3.

Koja cliff tourism has an increasing number of tourists so that many people begin to take part in tourism community communities to increase their income. One part of the community that joins the tourist community is as a trader who sells snacks and drinks as well as shady places for tourists. Then one of the community members in the tourist community followed as a motorcycle taxi (driver) who escorted and picked up visitors from several points around public transportation to visit the Koja cliffs. Local workers who joined the community began to be distributed throughout most villages, although they were still dominated by landowners' relatives.



Figure 3. Popular view point of Koja Cliff

Table 1. Demographic variables of the respondents

V	ariables	Respondent Profile (%)
Gender	Male	76.93
Gender	Female	23.07
	18-28	30.59
Age (years old)	29-39	23.07
Age (years old)	40-50	30.86
	>50	15.38
Martial Status	Married	94.85
Martiai Status	Unmarried	5.15
The Number of	None	7.69
Children (person)	1-2	30.96
Ciliuren (person)	≥3	61.35
	None	7.69
Education	Elementary School	38.56
Education	Junior High School	20.51
	Senior High School	33.24
	Tourism	35.89
	Farmers	5.15
Occupation	Seller	28.20
Occupation	Employee (non-formal)	7.69
	Employee (formal)	7.69
	Other (Driver)	15.38
	<600	5.15
Income non menth	600-1,000	30.96
Income per month (Thousand Rupiah)	1,000-1,800	17.94
(Tilousanu Kupian)	1,800-<3,000	38.56
	>3,000	7.69

Data Analysis

The type of respondents is the tourists who regularly visit Koja Cliff. before filling out the questionnaire, first asked how often respondents visist to Koja Cliff and only those who are more than once in 2 months are selected respondents.

The analysis includes description analysis, frequency analysis, validity test and reliability test which is then analyzed by multiple linear regression. The frequency analysis was conducted to analyze data regarding the profile of respondents. Frequency analysis of respondents' profiles can be seen in table 1. Descriptive analysis concluded that there were 39 respondents surveyed, respondents were dominated by male (76.93%), aged 40-50 years (30.86%), married (94.85%), number of children ≥3 (61.35%), primary school education level (38.56%), employment as tourism (35.89%), and income 1,800- <3,000 in thousand rupiahs amounting to (38.56%).

Validity and reliability were carried out by the questionnaire results of the respondents regarding economic, social-cultural and Geotourism. Test the validity of the correlation of Pearson seen from the total aspects with a value> 0.2673, then the data is valid. Pearson correlation values from 25 statements are between of 0.2890 to 0.9210. The results of the validity test show that 25 statements are valid.

_	Tuble = Validity and roubiney obstitutions of indesipolation variables						
	Indenpendent Variables	Indicator	Pearson Correlation	Cronbach's Alpha			
		Preservation of arts and culture	0.560				
		Behavior of community	0.829				
		Moral values of community	0.823				
1	Social-Cultural	The way think of community changes	0.509	0.612			
		Traffic congestion in the surrounding area	0.467				
		Noise in village	0.389				
		Religious activity	0.389				
		Creating new jobs opportunities	0.779				
		Development of school facilities	0.289				
		Development of health facilities	0.650				
		Construction of road access	0.644				
2	Economic	Development of sports and entertainment facilities	0.427	0.740			
-	Economic	Increase community's purchasing power	0.644	0.743			
		Increase community income	0.320				
		Community's quality life improving	0.921				
		The livelihood of community changes	0.655				
		Development of hygiene facilities	0.330				

Table 2. Validity and reability coefficients of independent variables

In the reliability test, it is done to determine the questionnaire that can be used more than once, at least the same respondents will produce consistent data. Reliability testing using Cronbach'Alpha, data can be relied upon if the value of Cronbach'Alpha is 0.60 and that is good data. The reliability test results show the value of Cronbach'Alpha is between of 0.612 to 0.767 which is reliability data. Likewise the validity and reliability of the dependent ranges from 0.342 to 0.901 and the Cronbach'Alpha 0.767 value is shown in table 2. Correlation value (R=0.939) in Table 4 shows that high relationship of independent variable on dependent variable. Then, social-culture and economy in Table 4 shows that it has an influence of 88.2% on geotourism (R²=0.882). In Table 5 in the T test, economic variables have their own / partial influence on the geotourism variable. Unlike the economy, social-cultural variables have no partial influence on geotourism

variables. The F test provides information that economic and social-cultural variables have a simultaneous / joint effect on the geotourism variable.

Table 2 Validity and reability coefficients of dependent variable

Dependent Variable			Cronbach's Alpha
	Important to be managed by community	0.618	
	Community is involved in geotourism management	0.772	
	Cooperation between government and community	0.432	
Geotourism	Rules in community to manage geotourism	0.901	0.767
	Sanctions or penalties in management	0.452	
	Management regarding with local wisdom	0.764	
	Community and government receive benefit	0.526	
	Migrant communities need to obey rules in geotourism management	0.624	

Table 4. The result of regression analysis

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate		
1 0.939 ^a		0.882	0.876	1.058		
a. Indenpendent Variable: Social-Cultural, Economic						
b. Depend	1 - 1 111 1					

Table 5. The result of Coefficients ^a between variable

Model		Unstandardiz	ed Coefficients	Standardized Coefficients	t	Sig.
		В	Std. Error	Beta		
	(Constant)	-4.955	2.357		-2.103	0.043
1	Social-Cultural	0.110	0.056	0.115	1.965	0.057
	Economic	0.855	0.055	0.907	15.480	0.000
a. Dependent Variabel: Geotourism						

DISCUSSION

This exploration depicts the underlying procedure of geotourism in Koja Cliff, Banten. The start is just as sand uncovering to address network issues. After the sand exhuming is finished, the spot structures morphology that is unique and significant as geotourism for scholastic realizing so network based the travel industry is shaped to oversee geotourism. At that point this investigation recognizes the presence of social-cultural impacts and the economy related with geotourism oversaw by network based the travel industry. This examination is a blend of a few factors that are impacted by the nearness of geotourism. Moreover, it turns into the test of geotourism oversaw by network based the travel industry which has social-social relationships and financial aspects in the territory (See e.g. Farsani et al., 2012; Kodir, 2018; Pramanik & Ingkadijaya, 2018). In addition, the statistical results show that social-cultural does not have a partial influence on geotourism due to differences in the conditions of the community. But things are different from the economy which has a partial influence on geotourism because of the direct effect on the economy of the local community. Geotourism has a simultaneous influence on social-cultural and economic managed by

community-based tourism which is worth 88.2%. This research shows that concepts are made in accordance with the findings, with notes simultaneously (Cooper et al., 2008). This result, geotourism can be used by developing countries in developing their economies and social-cultural background simultaneously.

This study, the complexity of geotourism variables and methodologies (Sauders et al., 2016) can be a challenge because Indonesia has begun to depend on its income in the tourism sector and requires a lot of tourist data to see its potential. The government is also doubtful because its performance in Indonesia is still not good for the community so that the community itself is building the tourism. The potential of geotourism in this study is about social-cultural and economic, while (Shavanddasht et al., 2017) classifies motivations and satisfaction. The research is the same methodology but has different variables from this study. Then the study of Shavanddasht et al (2017) describes Geotourism as a pleasure, the beauty of geosite, knowledge and uniqueness.

Contributions that can be given by the results of this study to community-based tourism of geoturism can increase economic and social-cultural and the presence of visitors who can provide economic and social-cultural influences. Therefore, the results are enjoyed by the community so that there needs to be an increase in visitors to geotourism such as paying attention to superior products and innovation in community service (Muafi et al., 2018). Furthermore, it is necessary to pay attention to the access of transportation, accommodation, and merchandise as interest strategies of the visitors (Arjana et al., 2017). Academic services also play a role by providing geological information to improve the quality of geotourism in the education sector. Geotourism potential needs to be developed and further investigated because it has the hope of a viable alternative for the income of the community, regional and central government.

CONCLUSION

This research is intended to describe the development of geotourism and identify economic and social-cultural aspects of community-based tourism in the Tebing Koja and investigate the relevance of influence with geotourism. Based on the literature review with the conceptual framework made in accordance with the methodology. The research findings can be concluded that social-cultural and economy have a significant and positive influence on geotourism. Social-cultural and economic can explain the direct benefits obtained by community-based tourism from the results of the development of geotourism. The existence of social-cultural and economic is able to explain and predict geotourism managed by the community. Social-cultural and economic identification can be analyzed for the causes of geotourism development and can be improved. The results of the study are expected to be able to help the community develop geotourism and natural resources as a whole. The findings of information research for the community, local government and central government in implementing the geotourism development plan can attract both local and foreign visitors.

Acknowlegdments

The research is under the supervision of the School of Environmental Science of Universitas Indonesia, especially to research cluster "Social System, Human and Environment Interaction". The authors would like to thank the following people for their valuable learnings and comments on this manuscript in the Course of Writing Scientific Environment (Mari Mulyani and Ahyahudin Sodri). The authors would also like to thank the community of Cikuya Village.

REFERENCES

- Arjana, I.W.B., Ernawati, N.M. & Astawa, I.K. (2017). *Geotourism Products Industry Element: A Community Approach*, The 2nd International Joint Conference on Science and Technology (IJCST), September 27-28, in Bali, Indonesia.
- Aswita, D., Suryadarma, I.G.P. & Suyanto, S. (2018). Local Wisdom of Sabang Island Society (Aceh, Indonesia) in Building Ecological Intelligence to Support Sustainable Tourism, in *GeoJournal of Tourism and Geosites*, 22(2), 393–402.
- Aquiono, R.S., Schänzel, H.A. & Hyde, K.F. (2018). Unearthing The Geotourism Experience: Geoutourist perspective at Mount Pinatubo, Philippines, in *Tourist Studies*, 18(1), 41-62.
- Bouzekraoui, H., Barakat, A., Touhami, F., Mouaddine, A. & El Youssi, M. (2017). Inventory and Assessment of Geomorphosites for Geotourism Development: A Case Study of Aït Bou Oulli Valley (Central High-Atlas, Marocco), in *Area*, 50(3), 331-343.
- Cappucci, M., Pavliashvili, N. & Zarrilli, L. (2015). New trends in mountain and heritage tourism: The case of upper svaneti in the context of Georgian tourist sector, in *GeoJournal of Tourism and Geosites*, 15(1), 67-80.
- Carvalho, L. & Costa, T. (2011). Tourism Innovation A Literature Review Complemented by Case Study Research, in *International Conference on Tourism & Management Studies* ALGARVE, Book of Proceedings I, 23-33.
- Chin, H., Lo, M.C., Songan, P. & Nair, V. (2014). Rural Tourism Destination Competitiveness: A Study on Annah Rais Longhouse Homestay, Sarawak, Paper Presented at 5th Asia-Euro Conference in Tourism, *Hospitality and Gastronomy*, May 19-21, in Kuala Lumpur, Malaysia.
- Cooper, C.P., Fletcher, J.E, Gilbert, D.C. & Wanhill, S. (2008) Tourism: Principles and Practice, Prentice Hall Financial Times.
- Shen, F. & Cottrell, S.P. (2008) A sustainable tourism framework for monitoring residents' satisfaction with agritourism in Chongdugou Village, China, in *Int. J. Tourism Policy*, 1(4), 368-375.
- Deery, M., Jago, L. & Fredline, L. (2012). Rethinking Social Impacts of Tourism Research: A New Research Agenda, in Tourism Management, 33, 64-71.
- Dowling, R.K. (2013). Global Geotourism An Emerging Form of Sustainable Tourism, in Czech Journal of Tourism, 2(2), 59-79.
- Dowling, R.K. & Newsome, D. (2010). Global Geotourism Perspective, Oxford, Goodfellow Publishers.
- Eraqi, M.I. (2007). Local Communities' Attitudes Towards Împacts of Tourism Development in Egypt, in Tourism Analysis, 12(3), 191-200.
- Eshliki, S.A. & Kaboudi, M. (2012). Community Perception of Tourism Impacts and Their Participation in Tourism Planning: A Case of Ramsar, Iran, Paper Presented at ASEAN Conference on Environment-Behaviour Studies, June 15-17, in Bandung, Indonesia.
- Farsani, N.T. & Coelho, C. & Costa, C. (2012). Geotourism and Geoparks as Gateways to Social-cultural Sustainbility in Oeshm Rural Areas, Iran, in *Asia Pasific Journal of Tourism Research*, 17(1), 30-48.
- Farsani, N.T., Esfahani, M.A.G. & Shokrizadeh, M. (2018). Understanding Tourists 'Satisfaction and Motivation Regarding Mining Geotours (Case Study: Isfahan, Iran), in *Geoheritage*, 1-8.
- Flecther, J.E., Fyall, A., Gilbert, D. & Wanhill, S. (2018). Tourism: Principles and Practice, Pearson Education.
- Ginting, N. & Febriandy. (2018). Implementation of Geotourism Concept in Developing Natural Tourist Attraction at Parbaba Village, Toba's Caldera, Paper Presented at Friendly City 4 'From Research to Implementation For Better Sustainbility', October 11-12, in Medan, Indonesia.
- Ginting, N. & Sasmita, A. (2018). Developing Tourism Facilities Based on Geotourism in Silalahi Village, Geopark Toba Caldera, Paper Presented at Friendly City 4 'From Research to Implementation For Better Sustainbility', October 11-12, in Medan, Indonesia.
- Ginting, N., Rahman, N.V. & Sembiring, G. (2017). Tourism Development Based on Geopark in Bakkara Caldera Toba, Indonesia, Paper Presented at 1st Annual Applied Science and Engineering Conference, November 18, in Bandung, Indonesia.
- Gordon, J.E. (2012). Rediscovering A Sense of Wonder: Geoheritage, Geotourism and Cultural Landscape Experiences, in *Geoheritage*, 4(1-2), 65–77.
- Hakim, L. & Soemarno, M. (2017). Biodiversity Conservation, Community Development and Geotourism Development in Bromo-Tengger-Semeru-Arjuno Biosphere Reserve, East Java, in GeoJournal of Tourism and Geosites, 20(2), 220-230.
- Hose, T. A., Marković, S. B., Komac, B. & Zorn, M. (2011). Geotourism A Short Introduction, in Acta Geographica Slovenica, 51(2), 339–342.
- Khan, M.M. (1997). Tourism Development and Dependency Theory: Mass Tourism versus Ecotourism, in *Annals of Tourism Research*, 24(4), 988–991.
- Kodir, A. (2018). Tourism and Development: Land Acquisition, Achievement of Investment and Cultural Change (Case Study Tourism Industry Development in Batu City, Indonesia), in *GeoJournal of Tourism and Geosites*, 21(1), 253-265.

- Kamarudin, K.H., (2013), Local Stakeholders Participation in Developing Sustainable Community Based Rural Tourism (CBRT): The Case of Three Villages in The East Coast of Malaysia, Paper Presented at Proceedings of International Conference on Tourism Development, February 4-5, in Penang, Malaysia.
- Lundberg, E., (2017), The Importance of Tourism Impacts for Different Local Resident Groups: A Case Study of A Swedish Seaside Destination, in Journal of Destination Marketing & Management, 6, 46-55.
- Mero, P.C., Franco, G.H., Briones, J., Caldevilla, P., Domínguez-Cuesta, M.J., & Berrezueta, E., (2018), Geotourism and Local Development Based on Geological and Mining Sites Utilization, Zaruma-Portovelo, Ecuador, in *Geosciences*, 8 (6).
- Muafi, W.T., Wijaya, T., Diharto, A.K., & Panuntun, B., (2018), Innovation Strategy Role in Tourists Visit Improvement. Context of Man-Made Tourism in Indonesia, in *Journal of Environmental Management and Tourism*, 9, 304-309.
- Organization for Economic Cooperation & Development (OECD), (2018), OECD Economic Surveys: Indonesia 2018, Paris, OECD Publishing.
- Pan, S.Y., Gao, M., Kim, H., Kinjal, J.S., Pei, S., & Chiang, P., (2018), Advances and challenges in sustainable tourism toward a green economy, Science of the Total Environment, 635, 563-469.
- Pralong, J.P., (2006), Geotourism: A new form of tourism utilizing natural landscapes and based on imagination and emotion, in *Tourism Review*, 61(3), 20-25.
- Piacentini, T., Castaldini, D., Coratza, P., Farabollini, P., & Miccadei, E., (2011), Geotourism: some examples in northern-central Italy, in *GeoJournal of Tourism and Geosites*, 8(2), 240-262.
- Rosyidie, A., Sagala, S., Syahbid, M.M., & Sasongko, M.A, (2018), The Current Observation and Challenges of Tourism Development in Batur Global Geopark Area, Bali Province, Indonesia, Paper Presented at The 4th PlanoCosmo International Conference, April 3-5, in Bandung, Indonesia.
- Rusmana, E., Suwitodirdjo, K., & Suharsono, (1991), Geological Map of Serang Quadrangle, Java, Scale 1:100.000, Geological Survey of Indonesia.
- Santosh, M., Maruyaman, S., & Yamamoto, S., (2009), The Making and Breaking of Supercontinents: Some Speculations Based on Superplumes, Super Downwelling and The Role of Tectosphere, in *Gowdwana Research*, 15(3), 324-341.
- Sauders, M., Lewis, P., & Thornhill, A., (2016), Research Methods for Business Students Seventh Edition, Pearson Education.
- Shavanddasht, M., Karubi, M., & Nekouie, S., (2017), An Examination of The Relationship Between Cave Tourists' Motivations and Satisfaction: The Case of Alisadr Cave, Iran, in *GeoJournal of Tourism and Geosites*, 2(20), 165-176.
- Stokes, A.M., Cook, S., D., & Drew, D., (2003), Geotourism: The New Trend in Travel, Travel Industry Association of America and National Geographic Traveler.
- Pramanik, P.D., Ingkadijaya, R., (2018), The Impact of Tourism on Village Society and its Environmental, Paper Presented at 1st UPI International Geography Seminar 2017, August 8, in Bandung, Indonesia.
- Yoon, Y., Gursoy, D., & Chen, J.S., (2001), Validating A Tourism Development Theory with Structural Equation Modeling, in *Tourism Management*, 22, 363-372.
- Yuliawati, A.K., Pribadi, K.N., & Hadian M.S.D., (2016), Geoturism Resources as Part of Sustainable Development in Geopark Indonesia, in Proceedings of the 2016 Global Conference on Business, Management and Entrepreneurship, August 8, in Bandung, Indonesia.
- Vinodan, A., Manalel, J., & Meera, S., (2017), Factorial structure of community intervention strategies in ecotourism, in *Journal of Environmental Management and Tourism*, 73, 590-605.
- *** Asia-Pacific Economic Cooperation (APEC), (2000), 2000 APEC tourism ministerial meeting: Seoul declaration on an APEC Tourism Charter. https://apec.org/Meeting-Papers/Sectoral-Ministerial-Meetings/Tourism/2000_tourism, acceed on 12 Agust 2019
- *** The Mountain Institute, (2000), Community-Based Tourism for Conservation and Development: A Resource Kit, The Mountain Institute.
- *** Tsiotsou, R.H., Goldsmith, R.E., (2012), Strategic Marketing in Tourism Service First Edition, Emerald Group Publising.

Submitted: Revised: Accepted and published online 03.09.2019 12.02.2020 19.02.2020

MANAGEMENT OF COMMONS AS A TOURISM RESOURCE: CASE STUDY OF THE DARANGYI PADDY IN GACHEON, NAMHAE, SOUTH KOREA

Jung NAM-SICK*

Mokpo National University, Department of Urban and Regional Development, 1666, Yeongsan-ro, Cheonggye-myeon, Muan-gun, Jeollanam-do 58554, Korea, e-mail: for2018@hanmail.net

Citation: NAM-SICK, J. (2020). MANAGEMENT OF COMMONS AS A TOURISM RESOURCE: CASE STUDY OF THE DARANGYI PADDY IN GACHEON, NAMHAE, SOUTH KOREA. GeoJournal of Tourism and Geosites, 28(1), 175–190. https://doi.org/10.30892/gtg.28114-461

Abstract: This study examines the management characteristics of the Darangyi paddy commons, a tourism resource in South Korea under the management of local communities. Through fieldwork and on-site interviews, this study reveals how the Darangyi paddy is managed and utilized by the community. It verifies Ostrom's eight principles of commons management and confirms the need for the concretization of social boundaries for supply and demand regarding commons as well as the need for preparing community-centered conflict resolution and resident participatory communication mechanisms to improve cooperation. The resources are created by the community, requiring government support to operate and integrate tourism resources.

Key words: tourism commons, community, Ostrom, cooperative plan, Darangyi paddy

INTRODUCTION

In South Korea, various commons historically managed by local communities are being used as tourism resources through capital investment and government intervention. Local resources transformed into tourism resources include forests, rivers, sea-fishing grounds, and scenic sites, in which residents have large stakes. However, the influence of independent community organizations in the actual operation and management of the commons is weakening. As the number of participating communities dwindle, commons managed by local communities are emerging, as new challenges must be solved to ensure sustainability, such as disappearing forests and ecosystems, unmanaged rivers, closed seafishing grounds, and damage to scenic agricultural sites because of exploitation. Thus, public policies are now necessary to manage resources and develop both new roles and relationships among community members to address the lack of community participation in the management of commons, which have historically been formed by residents through exchanges. Policy preparation requires reflection on history. Historically, tourism resource development projects utilizing commons adhered to policy objectives or capital interests. In

_

^{*} Corresponding author

this process, communities have played a limited role as opinion makers rather than as decision makers. The difficulty in establishing relationships with communities as project entities is the main reason a tourism development project using local resources, in this case, commons, is considered a market failure. The perspective regarding commons as an object of a tourism resource development project requires a new interpretation. Since Hardin (1968) emphasized the importance of the economic marketability and national management of environmental resources, there has been ongoing research on the limitations of the heterogeneous nature of utilization and preservation (Healey, 2003; Helfrich, 2014).

These concerns can be understood in the context of utilizing environmental resources that focus on maximizing profits through empirical behaviors, which should be accompanied by joint management efforts to solve problems through trust-based interaction. Previous studies on commons utilization and preservation emphasize strategic interaction in human decision-making. Specifically, the model of Hardin (1968), a leading researcher on commons, is meaningful because it clearly presents the roles of humans in resource management. However, one of its limitations is that it generalizes various commons situations, which are formed given the unique characteristics of regions and social exchanges. The selfishness of humans may not be universal in the historical context; thus, the contexts of specific individuals and societies need to be examined in detail. As a society develops and diversifies, people face various situations that require them to overcome conflicts through individual interactions. Contrary to Hardin's (1968) predictions, many studies have found that people cooperate to solve specific problems and even make sacrifices (Arnstein, 1969; Steers, 1991; Healey, 2006; Lee, 2009; Choe & Kim, 2014; Kim & Kwon, 2016).

Many social science studies present evidence that supports the conclusion that human behaviors are not motivated by economics alone. In other words, cooperation, love, sacrifice, and honor can be more important motivators than economic profits to inspire actions (Polanyi, 1957; Ostrom, 1990; Kim, 2014; Kip, 2015; Jung, 2016). Examples of commons being managed as joint financial, tourism, and recreational resources under the participation and interest of local communities are increasing.

This study, through fieldwork and on-site interviews, reveals how the Darangyi paddy tourism resources in the Gacheon Darangyi Village in Namhae-gun, Gyeongsangnam-do, is managed and utilized by the community.

Policy implications and recommendations are then revealed. The Darangyi paddy has been designated as a Korean scenic site, number 15, and described by CNN as one of the must-visit places in South Korea (Son & Kim, 2016). Thus, it possesses strong characteristics of a commons in East Asia, preserved for its historical as well as scenic and environmental values. Specifically, this study verifies the eight principles of commons management proposed by Ostrom (1998), a leading commons scholar. This work is meaningful because it empirically reveals the relationship between local resources, which strongly correspond to commons, and local communities that are required to develop and operate tourism, which strongly corresponds to the economy.

BACKGROUND AND ANALYTICAL FRAMEWORK Characteristics of Commons

Commons, or common pool resources, are natural or artificial facilities characterized by non-excludability and subtractability (or rivalry), and that can be shared or used by many individuals (Ostrom, 1990). Non-excludability means that people cannot be prevented from accessing commons; more specifically, preventing access is expensive. Subtractability means that the amount of available resources reduces as they are used and that the use of

commons by one person affects the amount available for others to use. Rivalry is another term for subtractability. Anyone can access commons, and their amount decreases with use. Thus, goods or services whose benefits reduce with use are included in commons. Commons are not just natural resources (e.g., water resources, forests, natural landscapes, grasslands, wild animals, rivers, and streams, which are natural resources available for the development of tourism), but also infrastructure (e.g., roads, ports, and radio waves), depending on the interpretation. Historically, air and water are strongly associated with public property that has relatively low rivalry compared with commons. Today, these tend to be classified as property, which is strongly associated with commons, as rivalry for these resources is increasing (Poteete et al., 2010; Briassoulis, 2019).

Most studies of commons hinge on three perspectives. The first is the traditional perspective that considers commons to be shared goods or services. The second perspective includes the communing process. The third perspective considers the entities related to the production and reproduction of commons (Kip, 2015). This perspective can be interpreted as being identical to Helfrich (2014), who claimed that commons do not merely exist but are created. That is, there is a trend of perceiving commons as composite outputs of traditional rules and customs of entities around resources, without limiting them to the morphological aspects of goods or services of specific resources. This analysis suggests that commons do not have fixed forms of resources but rather can be recreated through production and operation management processes. This analysis is the rationale for explaining the role of the community in the operational management of commons, which this study examines, and serves as a theoretical basis for explaining the relationship between the community and commons (Van Laerhoven & Orstorm, 2007; Wall & Derek, 2014; Kaivanto, 2018).

Newer perspectives on the concept of commons are being actively researched by environmental and social studies scholars with a keen interest in common pool-resources, such as village forests in agricultural areas, joint ranches in Jeju Island, sea-fishing grounds in fishing villages, and groundwater in water-scarce areas (e.g., Lee & Kim, 2011; Choe, 2013). These studies reveal that existing traditional management systems are at risk of being dismantled when nations and external capital are involved in common-pool resources that have maintained well-preserved traditions around local communities (Yun, 2006; De Moor, 2008; Kwon, 2012; Choe, 2013; Choe & Kim, 2014; Yu et al., 2014; Kim & Jung, 2016; Merino & Cendejas, 2017; Briassoulis, 2019).

Ostrom's Eight Principles for Managing Commons

Ostrom (1994) generalized the community management theory of commons through cases of autonomous communities that successfully solve dilemmas about their usage. According to this theory, the sustainability of a community and common pool resources can be maintained if the community satisfies eight principles, which are described in detail below (Araral, 2014; Lee et al., 2014; Mansbridge, 2014; Thiel et al., 2015; Fedreheim & Blanco, 2017). The first is the principle of clearly defined boundaries. Here, boundaries refer to the physical and social boundaries of various tangible and intangible common pool resources in the community. The second principle is the congruence between appropriation, provision rules, and local conditions.

This principle describes the extent to which institutional devices for local resources consider their characteristics in terms of the physical constraints and circumstances of the resources in the community. The third principle is collective-choice arrangements. This principle defines the rights of internal groups to create and change the rules or conditions for commons in the local community (Nkoka et al., 2004). The fourth principle is monitoring. Monitoring in the community influences the self-monitoring of members. The fifth principle is graduated sanctions.

This describes a progressive punitive device for people who do not abide by the rules agreed upon by the community. The sixth principle is conflict resolution mechanisms. Conflicts regarding commons frequently occur among community members because commons are properties that possess the characteristic of rivalry.

The seventh principle is the minimal recognition of rights to organize. The decisionmaking right of community members must be guaranteed by delegation to be protected from external interference. The eighth principle is nested enterprises. This principle was newly added to address the criticism that the existing principles of Ostrom are limited to small communities. Thus, this principle can be regarded as a general condition for large communities with multi-layered organizations (Agrawal, 2001; Gallardo Fernández & Friman, 2011; Fennell, 2011; Hill et al., 2015; Brenda et al., 2016). As described above, Ostrom's principles for managing commons can also be useful in today's planning process for tourism resources. They can provide valuable clues for designing social governance, especially for commons, which are governed by the coexistence and cooperation of principles in small communities, such as the tourism resources of farming and fishing villages. Specifically, it would be interesting to examine the differences between Ostrom's principles and the historical customs and norms for commons that have been preserved in farming, mountain, and fishing villages in South Korea. However, no study has yet applied Ostrom's principles for managing commons to tourism resources development sites in South Korea (McGrath et al., 2007; Fennell, 2011; Delgado-Serrano, 2015).

RESEARCH METHOD

Commons Characteristics of Namhae Darangyi Village

Commons generally have the characteristics of resources that are not owned by individuals or the government; they have low excludability and high rivalry. In this respect, Darangyi paddies are different from the general concept of commons because both individuals and the national government own them. However, even if they were privately owned, Darangyi Village has a traditional pact to uphold, which is to manage the Darangyi paddy. That is, Darangyi paddies also have the characteristics of commons.

For example, when an aloe farm was built in the middle of the Darangyi paddies as a tourism facility or a greenhouse, the villagers opposed them because they could adversely affect the unique landscape of the area. Thus, even if Darangyi paddies were privately owned properties, they would have strong characteristics of commons regarding the landscape being formed jointly with the village. Darangyi Village was designated as a scenic site in 2005. National cultural properties are preserved and managed at the national level. Regardless of their ownership, the Darangyi paddies and its scenic site must be preserved and managed as a public good. That is, they are managed as commons by village rules and under the Cultural Heritage Protection Act (2018).

Historically, there was low awareness about rivalry as a characteristic of commons regarding the scenic site of the Namhae Darangyi paddy. Until tourism development under the traditional rural theme village project was launched, Darangyi paddies were rainfed paddy fields for double cropping by the community, and the resources had no rivalry. In other words, there was no need or obligation to maintain the scenic sites of the paddy fields. Therefore, the scenic resources had the characteristics of a general private property that had no rivalry. Today, they are considered a scenic site that serves as a tourism product.

However, to be used as a tourism property, the existing rain-fed paddy field had to be continuously managed as a Darangyi paddy scenic site. Owing to the modernization of agriculture and the aging of rural communities, supply shortages have become a reality for the site, which was formed by traditional agricultural activities; thus, a rivalry emerged. The

rivalry in Darangyi paddies appeared around 2005, when they were designated as scenic sites and Darangyi Village has since become a famous tourist destination.

Complementing the Commons Management Principles

The purpose of this study is to verify the applicability of Ostrom's principles for managing commons to the management process of tourism resources in South Korea. So far, no study has applied Ostrom's principles for managing commons to tourism resource development sites in South Korea. The principles underpinning the management of commons were complemented for the target site through a preliminary survey.

The objective of this preliminary survey was to answer the following questions: Are Ostrom's principles for managing commons applied in the field? What is the appropriate level of difficulty of questions for interviewees? A researcher with 15 years of experience in tourism for farming and fishing villages surveyed 10 leaders and residents of Darangyi Village. The researcher noted their responses on detailed status and Ostrom's eight principles and adjusted the difficulty level of the questions. The survey results had a few important indications. First, regarding clearly defined boundaries, their answers concentrated on physical boundaries. For social boundaries, they understood them in the context of native places or places of residence, such as out-of-towners, tourists, and other villagers, and they did not perceive them as boundaries. This perception can cause many problems, but it may not be recognized as a variable because of the difficulty in responding to the questions. Thus, this part needed to be adjusted. The questions were revised to distinguish between physical and social boundaries. The next questions were about the guarantee of autonomy and collective-choice arrangements. The former question was: were there minimal decision-making rights? The latter question was: is the participation of all members guaranteed? However, it was difficult to distinguish between these two variables because Darangvi Village is a small, natural village comprising around 60 households. Hence, these two variables were integrated into collective-choice arrangements. We verified how Ostrom's principles for managing commons were applied to the cooperative planning process in Darangyi. Furthermore, we examined how cooperatively Ostrom's management principles were planned in each step, as well as the level of resident participation. The examination results were coded for categorization.

In-depth Interview and Content Analysis

The main data for this study were collected through in-depth interviews with participants as a group, including community leaders and local administrators. To obtain sufficient and realistic data from residents and administrative agencies, we adopted an interview method based on unstructured questions; however, some structured questions were used as well. The interviews were conducted at convenient places regardless of the format and included group interviews, one-on-one interviews, and one-on-two interviews. Before the interviews, we promised the interviewees that we would keep the interview content confidential and use it only for research purposes. Each interview lasted approximately 90 minutes. The interviews were recorded after obtaining prior consent from participants. Coding was performed based on recorded data. In the coding process, local dialects, personal jokes, and incomplete sentences were revised by the researcher. The in-depth interviews were conducted in December 2017. On December 14 and 15, 2017, interviews were conducted with nine members of the Darangyi Paddy Preservation Society. All participants were former or current village heads, Development Committee chairs, or heads of the Preservation Society.

Examination of Laws, Systems, and Reports

The major disadvantage of interviews with villagers and administrative agencies is that they rely on individual memories. Erroneous information may be conveyed because of individual differences in memory; hence, erroneous information may be coded based on the characteristics of the researcher who interprets them. The objectivity of information was improved through laws, systems, reports, and press articles to address this drawback. This measure aimed to ensure the authenticity of the research results and reviews, which would be based on objective data and assisted in addressing the tendency of the researcher to judge interviewees subjectively during the interviews.

RESULTS AND DISCUSSION

This section describes the final selection results of the community management principles for the Darangyi paddies in South Korea. The selection was achieved through in-depth interviews and a literature review based on Ostrom's eight principles for managing commons with respect to the current state of the target site.

Clearly Defined Physical Boundaries

All 24 residents who participated in the interviews concerning the boundary setting of the scenic site protection zone clearly remembered the progress of the boundary setting for the Darangyi Village scenic site. Furthermore, they also expressed relatively unified opinions about the roles of the residents and Cultural Heritage Administration in the physical boundary-setting process. Thus, the reliability of the interview content is high. The main content of the interviews is as follows.

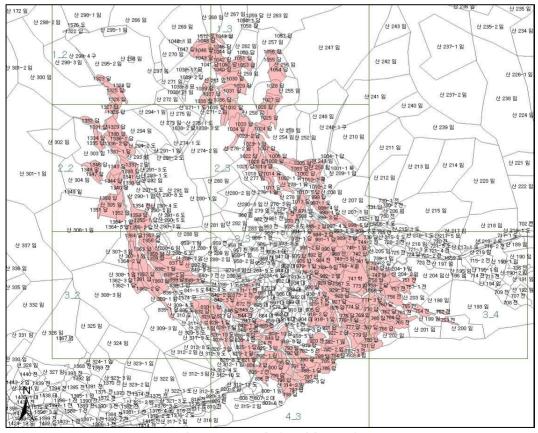


Figure 1. Boundaries of the scenic

The dominant opinion of residents was that some regulations were necessary to provide a high-quality view of the Darangyi paddies to tourists who visit through the traditional rural-themed village project. Thus, designation as a scenic site was smoothly done in accordance with the process. In this process, the boundaries of the Darangyi Village scenic site were confirmed in January 2005, when residents unilaterally accepted the boundaries suggested by the Cultural Heritage Administration. At the time, the area of the designed site was 195,428 m² (274 pilji), and this was expanded to 227,554 m² (304 pilji) in 2008. In other words, the awareness of the physical boundary setting of the scenic site by residents and administrative agencies was confirmed through the in-depth interviews. The clearly defined physical boundaries are also confirmed through the Cultural Heritage Protection Act (Figure 1).

First, Article 13 of this Act (2018) prescribes that a historical and cultural environment preservation area must be placed at least 500 meters from the outer boundary of the designated cultural heritage. According to this criterion, the Namhae Darangyi Village is set 500 meters from the outer boundary of the Darangyi paddy.

Specifically, Darangyi Village is designated as a *myeon* unit protection zone (227,554 m²) instead of a point-unit protective facility, and the preservation area is set in a 500-meter radius of the protected area's outer boundary. A relatively large residential area with a radius of 800–1200 meters was designated as requiring permission for altering the current state. When an area such as the Darangyi paddy is designated as a scenic site, protective facilities or protection zones are designed by the Enforcement Decree of the Cultural Heritage Protection Act (2018). However, these are targeted at zones required for scenic site protection, which has some ambiguity and can be interpreted somewhat independently. In the actual process, the designation of paddy as a scenic site was finally notified after field inspection by the technical experts of the Cultural Heritage Committee via a notice of designation. That is, the current Darangyi paddy can be considered a commons with clearly defined physical boundaries established by expert judgment for an area recognized as a protective facility or a protection zone. Moreover, the community clearly recognizes this designation.

Clearly Defined Social Boundaries

The qualifications of the custodians and users of the Darangyi paddy were investigated during in-depth interviews to examine the social boundary setting of the protection zone in the process of designating Darangyi Village as a scenic site. Most interviewees either had no memories of custodians and users or answered that they did not exist. They answered that most residents cared little about the custodians and users because the Cultural Heritage Administration promised to purchase Darangyi paddies when they were designated as a scenic site. The Cultural Heritage Administration did not initiate any communication with residents in the scenic site designation process because they have no obligation to set social boundaries in the use and management of the scenic site. Thus, there was no clarification on setting user admission fees for visiting the cultural heritage; in addition, there was no clarification on custodians when the entire protection zone for Darangyi Village was purchased. Residents must continue farming in the Darangyi paddies to ensure they are continuously managed as a commons for tourism and recreation activities. Thus, effective communication with Darangyi paddy landowners and farmers should have been undertaken in the scenic site designation process.

Nevertheless, the interviews provided relatively clear answers to the questions about the responsibilities and rights of the regular and associate members of the Village Association and Darangyi Paddy Preservation Society, the traditional organizations in the village. Traces of independent efforts to find solutions to issues regarding social

boundaries not addressed in the upper-level law were found in the lower systems. For example, resident qualifications were separately provided in the independent rules of the Village Association, and the Darangyi Paddy Preservation Society was established. These examples show the efforts of residents concerned about the paddy custodians.

To further examine the content of interviews with residents and administrators, we reviewed the regulations related to the social boundary setting of the scenic site as prescribed in the Cultural Heritage Protection Act. First, Article 34 of this Act (2018) states that when it is deemed difficult or inappropriate for the custodian to manage the heritage, a local government body, corporation, or organization can be designated as the manager. The Cultural Heritage Administration designated Darangyi Village as a state-designated scenic site; however, Namhae-gun is the custodian. Therefore, Namhae-gun must fulfill its obligation as a legal custodian. Apart from the guarantee to prescribe custodians and users of the Darangyi paddies, autonomous rules for recognizing villagers of Darangyi Village were also observed. Moreover, regarding the custodians, as defined in the Cultural Heritage Protection Act and ordinances, the Village Association grants the responsibilities and rights of villagers separately for regular and associate members.

Historically, they only recognized residents who have lived in the village for more than five years as regular members; however, this five-year rule was abolished in 2012 to prevent conflict between original and migrant residents. The Darangyi Paddy Preservation Society separately distinguishes between those who own land and reside in the village (regular members) and those who do not live in the village (associate members) in its articles of association (Delgado-serrano, 2015).

Congruence Between Appropriation, Provision Rules, and Local Conditions

Congruence between appropriation, provision rules, and local conditions refers to the requirement that the rules must be consistent with the social and physical conditions of the community, and the commons must be managed for sustainable supply and demand. Darangyi Village did not discuss these two items in the scenic site designation process. According to the resident responses in the interviews, the farming workforce required to maintain the Darangyi paddies was not planned at the beginning. There are clear differences between the management of Darangyi paddies for livelihood and the management of Darangyi paddies as tourism resources. However, these differences were not discussed. That is, there were no predictions about the supply of and demand for Darangvi paddies. The management of the Darangvi paddy was also difficult because of aging farmers. Many users wanted to engage in a service business (e.g., restaurant, and bed & breakfast) using the Darangyi paddies; however, interviewees responded that suppliers looking to manage the Darangyi paddies as commons were insufficient in number. Historically, Darangyi paddies were cultivated for livelihood; they must now be cultivated for tourism. Another problem is a mismatched scene that occurs when the stone wall construction technique used by the Cultural Heritage Administration is different from the one used historically by local residents. The differences between the stone walls constructed in accordance with the stonework specification of the Cultural Heritage Administration and those traditionally built by villagers are visually glaring. According to the stonework specification of the Cultural Heritage Administration (2014), the stones are piled through frosted work, chiseled work, bush-hammered stone finishing, dabbed finish, and rubbing with water.

However, residents naturally pile up the stones gathered from the surroundings without these processes. Most interviewees think that the management method of the current Darangyi paddy stone wall does not work well with the local conditions.

Thus, to verify this, we examined the stonework manual (2014) in the standard specifications for cultural heritage repair. The specifications introduce stonework methods for various cultural heritage sites. For the Namhae Darangyi paddy stone walls, they used random and dry masonry according to the stonework standards. Specifically, for dry masonry, they ensured a large contact area to enlarge the surface friction because of the method's nature. However, when the front surface of stones is finished, it creates a different view from that produced in the traditional method used by residents.

The use of agricultural water also differs with the local conditions. Some storage is required to supply water to the paddies, but it is difficult to develop new water storage facilities in the cultural heritage protection zone, thereby causing differences in the local circumstances. The Darangyi paddies have the characteristic of a rain-fed paddy field, and locals naturally stopped farming when the water was insufficient. However, when it was designated as a scenic site, agricultural water for managing the designated area as paddies became insufficient. Before the designation, the site could be left fallow because the paddy fields were rainfed. However, under the current system, it is difficult to leave the site fallow. This is another discrepancy between the local circumstances and the provision rules. Regarding agricultural water, we reviewed the Cultural Heritage Protection Act (2018) and the designation notification. Storage must be installed outside zone 3 based on the permission criteria for the alteration of the current state to secure the water storage required for the management of the Darangvi paddy. This means that farmers must supply water from a reservoir 1.3 km away. There is an imbalance between supply and demand because few residents want to persist with the difficult farming method to maintain the view of the unprofitable Darangyi paddies.

Darangyi Village has not solved the problem of correspondence between the farming workforce and management area of the Darangyi paddy, or the agricultural water supply problem in the scenic site designation process. Since 2013, water has been supplied to the farming workforce through the Darangyi Paddy Preservation Society, but more than 60% of the site remains fallow. This phenomenon seems to be caused by the designation of an area as a scenic site, which exceeds the management scope of Darangyi Village. The suffrage of residents using the Darangyi paddies is guaranteed under the establishment and revision of the utilization rules of the Darangyi Paddy Preservation Society, which has been created independently by villagers.

Although this suffrage does not solve the intrinsic problems of the Darangyi paddy utilization rules, the communication channel of the Darangyi Paddy Preservation Society plays a mediating role between the administrative agencies and residents. Consequently, the Darangyi Paddy Preservation Society plays a significant and predictable role in managing the Darangyi paddy fallow field problem.

Hence, to examine the interviews of residents and administrators in more detail, we analyzed the Cultural Heritage Protection Act and articles of association of the Darangyi Paddy Preservation Society. The establishment and revision of the Cultural Heritage Protection Act is the responsibility of the National Assembly and administrative department and is not discussed in this study. Thus, we checked the extent to which the suffrage of residents was guaranteed in the designation, management, and operation of the Darangyi paddies. The qualifications of the Cultural Heritage Committee restrict the participation of general residents because most qualifications are defined in terms of education, expertise, and experience in specialized areas. Moreover, the exclusion conditions regarding member qualifications and the provision that only interested parties related to cultural heritage can be members of the committee make it practically impossible for scenic site villagers to participate in the

committee. By contrast, the Darangyi Paddy Preservation Society, established voluntarily by the residents of Darangyi Village and supported by the local government, ensure the suffrage of villagers. The suffrage of residents regarding membership qualifications, suffrage, and dissolution rights is guaranteed. However, there are limitations in actively coping with important issues such as the supply, utilization, boundary setting, and restriction on actions regarding the Darangyi paddies because the Preservation Society was established to manage the financial support projects of the Darangyi paddies efficiently. The crisis in managing the Darangyi paddies has weakened to some degree through the establishment of the Darangyi Paddy Preservation Society.

In 2012, nearly 92% of the paddies were fallow. Currently, however, it is managed at a 60% level. Although the organization has no right to establish and revise the Darangyi paddy utilization rules, the existence of suffrage organized and granted by the community presents a new direction for the management of the Darangyi paddy.

Collective-choice Arrangements

The in-depth interview questions in this section focus on the process of agreement on major agenda items to find the degree to which the opinions of residents can be collected for the management of the Darangyi paddy by the Cultural Heritage Protection Act, which is an upper-level law. Even now, 14 years after designation as a scenic site by the Cultural Heritage Protection Act, residents' opinions about the designation are mixed. Some have a positive opinion that the designation as a scenic site has increased tourists, diversified economic activities, and prevented the thoughtless development of the Darangyi paddies. Others have negative opinions about increased competition among residents, reduced generosity of villagers, and disadvantages in exercising property rights.

Given the suffrage of villagers about the establishment of a revision of the utilization rules for scenic site designation, the operation and management of the Darangyi paddies are not being guaranteed. However, there was a provision for Namhae-gun and the Cultural Heritage Administration to accept some requests through the Cultural Heritage Committee when villagers collect and present a unanimous opinion about partial adjustments to the scenic site boundaries or seek more active management activities from Darangyi paddy custodians. The scenic site boundaries have been changed twice in the past 14 years, and Namhae-gun has actively supported the establishment of the Preservation Society for the management of the Darangyi paddy. Consequently, the suffrage of villagers regarding the utilization and management of the Darangyi paddies has not increased; however, the existence of some communication channels in the project implementation process has been confirmed.

Monitoring

Ostrom (1998) asserted that the utilization and management of commons by users must be monitored. This study examined monitoring on two major issues regarding the utilization and management of the Darangyi paddies. The first issue is the existence of the provisions related to the monitoring of users in the Cultural Heritage Protection Act, and the second issue is the existence of rules about monitoring in the autonomous village organization. Most residents did not have accurate knowledge about the monitoring provisions in the Cultural Heritage Protection Act; thus, we checked with the Ministry of Government Legislation. The promises that must be kept among the users in the autonomous village organization were confirmed, but there was no adequate method for confirming the existence of the monitoring suggested by Ostrom. The only data for estimation consists in the interviews with villagers.

The question about the existence of monitoring in an autonomous organization can be burdensome for villagers. Thus, we tried to infer the existence of monitoring

through indirect questions such as "What do you do if neighboring guests make noise late at night?" and "Is there a provision for supplying water to the paddies?"

Consequently, we estimated some monitoring in Darangyi Village, where 61 households, living close to each other, rely on traditional customs; although there are no documentary regulations, there is monitoring by residents in the same living space. Thus, monitoring among villagers exists as a way of life. When someone violates the rules, they are advised, or when a problem is detected, an elder in the village is asked to solve it. Such constant monitoring is a critical rule in Darangyi Village.

Regulating or monitoring activities for tourist behavior also works. Darangyi Village experiences severe conflicts between villagers and tourists caused by disagreements about the permitted scope of tourist activities and the preservation scope of farming activities. The perception of the Darangyi paddies for personal farming activities collides with the perception that they are public tourism resources. Residents monitor the behavior of tourists on their own and try to control them. However, this conflict is difficult to resolve unless rules aimed at regulating the behavior of tourists in industrialized scenic sites such as Darangyi Village change. The violation of rules in the community can be detected through monitoring and can be easily solved. When visitors violate rules, such behaviors may be monitored; however, there are limitations because many people make continuous use of the site, and, thus, it is somewhat uncontrollable.

The rules to monitor and regulate visitors are difficult, as they are established through the community's autonomous rules. Hence, the Cultural Heritage Protection Act, an upper-level law, should provide an alternative solution. Article 44 of the Cultural Heritage Protection Act (2018) prescribes the obligation for regular investigation of the current state, management, and repair of state-designated cultural heritage as well as other conditions of environmental preservation. The Cultural Heritage Administration investigates the Darangyi paddies every five years. However, it entrusts the actual investigation to an external specialist agency. Monitoring was important in many of Ostrom's case studies because villagers are the monitoring entities. In the Cultural Heritage Protection Act, the obligation for regular investigation has the character of a resource survey centered on custodians rather than resident-centered monitoring (Ostrom, 1991; Lee, 2009; Choe & Kim, 2014; Helfrich, 2014).

There were no rules for monitoring among the autonomous rules of the village, as mentioned above, although there were documentary rules about sanctions. The autonomous village rules mention incineration, breach of public order, and waste collection as duties that must be fulfilled by villages, but not the monitoring entities that must supervise them. However, all villagers participate in the monitoring activities regarding actual sanctions. As described above, these monitoring activities seem to be carried out conventionally by traditional customs and social relationships.

Graduated Sanctions

Ostrom (1991) explained that progressive punishments for deviant behavior by users are important factors for the sustainable management of commons by the community. That is, Ostrom believed that sanctions for violators of rules on the use of commons influence the sustainability of resource management. There are no provisions for progressive punishment in the Cultural Heritage Protection Act. In South Korea, the punishment level is generally determined by the explicit damage to and implicit pain of the victim. Punitive damage was acknowledged until the 18th century before systematic social control was established. At the beginning of the modern country, compensatory damage was adopted as a basic principle, which does not distinguish between intention and fault (Han, 2015). Thus, there is no basis for graduated sanctions in the current

legislation. However, progressive punishment provisions may exist in the autonomous agreements of traditional organizations, such as autonomous village rules and the articles of association of the Preservation Society. Thus, on the question of the existence of graduated sanctions in the autonomous village rules and articles of association of the Darangyi Paddy Preservation Society, as well as the Bed and Breakfast Association, most participants mentioned the three-strike rule of the latter.

As Darangvi Village became a tourist attraction and demand for bed and breakfasts have increased, original and migrant residents scrambled to operate restaurants and bed and breakfasts. From 2003-2010, Darangvi Village became known to outsiders through village experience programs and the designation of the place as a scenic site. As residents competed for independent economic activities rather than village profits from the commons, the village experience program, which was a joint project among villagers, started to shrink. The number of participants in the experience program was 54,000 in 2008, but this dropped sharply to around 5,000 in 2013. Although the participants of the experience program decreased, over 200,000 tourists visited the village and competition among villagers began earnestly. Owing to this competition, the village entered a period of recession in 2012 and 2013. As it concentrated on individual economic activities, joint projects, such as Darangvi paddy management and the farming village experience program, stagnated and the service quality of restaurants and bed and breakfasts went down because of the competition among farms. This situation resulted in a low tourist satisfaction rate. Darangyi Village faced a crisis during this period, as large pension businesses were built in Honghyeon-ri, a neighboring area. With a keen awareness of the crisis, the villagers decided to act.

They established the Darangyi Paddy Preservation Society to revive the Darangyi paddy scenic site and improved the bed and breakfast and restaurant services through the introduction of the three-strike rule. These decisions decreased fallow Darangyi paddies, and bed and breakfast and restaurant operators began to provide services at a certain level to satisfy the tourism needs of consumers, in accordance with the rules established by the village. Residents responded that mutual promises, such as the three-strike rule, are provided in the articles of association of the Bed and Breakfast Association, but the related provisions do not exist therein. However, the Service Quality Improvement Plan published in December 2012 stated that when guest complaints about the prices and services of a bed and breakfast are received three or more times, it is prevented from taking reservations. We could not confirm the final decision because there were no detailed minutes of the meetings. However, inferring from the interviews and general meeting documents, it was estimated that the three-strike rule had been approved at the general meeting and is being implemented.

Conflict Resolution Mechanisms

Darangyi Village has pursued various government-supported projects, starting with the traditional rural theme village project in 2002. Various conflicts occurred in this process, as mentioned above, which have been addressed and managed well, and the village projects are currently being implemented in a relatively stable manner.

Traditional villages must have conflict management and resolution mechanisms to maintain relationships among villagers. Based on the interviews, the conflict resolution mechanism on which the majority of residents depend was found to be the Senior Citizens Association. This is a community of elders, and most members have worked in the past as village heads, *Saemaul* (new town) leaders, and chairs of the Preservation Society. They can serve as rational moderators, and residents said they trusted them. Ostrom also mentioned the importance of conflict resolution mechanisms. If such a mechanism takes

too much time or is costly, it is difficult to use. However, Darangyi Village is quickly resolving conflicts at a lower cost through the Senior Citizens Associations.

The village rules include provisions for rewards and punishment, but applying sanctions is challenging. However, when a person needs to be sanctioned, it is carried out through the Senior Citizens Association. Since the Association consists of village elders, residents tend to accept its decisions. Nevertheless, there is no conflict resolution mechanism at the administrative agency level in the Darangyi paddy utilization and management processes. Article 3 of the Enforcement Decree of the Cultural Heritage Protection Act (2018) includes local residents among the people from whom opinions should be collected for the establishment of the basic plan for cultural heritage; however, this inclusion seems to be a feedback mechanism rather than a conflict resolution mechanism. The City/Do Cultural Heritage Committees based on Article 71 of the Cultural Heritage Protection Act (2018) are deliberative bodies for the preservation, management, and utilization of local cultural heritage, and it is difficult to consider them as conflict resolution mechanisms. Furthermore, the Darangvi Paddy Preservation Committee installed by Namhae-gun for the preservation and management of Darangyi paddies serves as a consultation body for the administrative agencies regarding the Darangyi paddy rather than as a conflict resolution mechanism. It is prescribed that the representative of Darangvi Village should also participate as a committee member. However, after two or three meetings since its establishment in May 2013, regular meetings have not been held unless there is a special situation.

Nested Enterprises

The most important condition for community-centered commons management is dialog and trust within the community. The conflict resolution mechanism centering on the Senior Citizens Association is a dialog and trust process that has been built among community members as the result of an ancient tradition. However, as the community grew, it became difficult to guarantee the persistence of dialog and trust. Ostrom insisted on the importance of small groups when suggesting the principles for managing commons because she had a concern about the community size at which the dialog and trust process can work. The Namhae Darangvi Village is a small village with a total population of 108 and 61 households as of 2017. Thus, it does not have a problematic decision-making structure that could occur when a community becomes too large, which was Ostrom's concern. On the contrary, the village has many small groups relative to the community size (e.g., Village Association, Women's Society, Youth Group, Senior Citizens Association, Bed and Breakfast Association, Preservation Society, and Development Committee). Each person participates in two to four organizations. Interviewees responded that these concurrent activities because of the small community size allow them to play a mediating role when there are conflicts between organizations. They cannot unilaterally represent the position of one organization because of the concurrent activities. Even if they do not belong to other organizations, their family members likely belong to them. Thus, the possibility of escalating conflicts among small groups is low.

Our review of the related reports were consistent with the interviews of residents. The Village Association, Senior Citizens Association, Youth Group, and Women's Society were in operation as traditional village organizations, and the Bed and Breakfast Association, Development Committee, and Darangyi Paddy Preservation Society were in operation as business organizations. Among them, the Village Association, Senior Citizens Association, Youth Group, Women's Society, and Preservation Society made decisions through regular meetings. On the contrary, the Bed and Breakfast Association and Development Committee had irregular meetings and a temporary organizational structure.

CONCLUSIONS

This case study identifies the need for community-centered commons management policies to serve as measures to overcome the limitations of tourism resources development and commons management policies centered on the nation and market. Based on Ostrom's commons management theory, the commons management principles of the Darangyi paddies in Namhae were analyzed. Consequently, several useful conclusions were derived. First, the importance of low-cost conflict resolution mechanisms was confirmed. Continuous communication through the Senior Citizens Association and Village Association, facilitated by bonding social capital, led to swift and highly cost-effective conflict resolution mechanisms. Accordingly, it was confirmed that low-cost conflict resolution mechanisms are useful tools for managing commons. Therefore, further research on the formation and usefulness of bonding social capital and its interaction with bridging social capital is necessary.

Second, appropriate social boundaries need to be established for the supply and utilization demands of commons. Supply and demand designs of commons are required, such as the designation of a management area appropriate for the abilities of the community or the provision of community management abilities corresponding with the designated or managed area. In the case of Darangyi Village, the final analysis failed to forecast supply and demand. The occurrence of fallow fields every year was because of failed demand predictions by custodians. Some fallow fields are controlled through the Darangyi Paddy Preservation Society; however, the capacity of the local community is insufficient to take responsibility of over 60% of the fallow fields. Thus, institutional support mechanisms are required for entities producing commons such as the Darangyi paddies and the management culture of the commons that they have created.

Third, commons management principles need to be localized. According to the Cultural Heritage Protection Act, the same rules are applied to the Namdaemun Gate, which is architectural, and Darangyi paddies, which are scenic agricultural sites. In particular, the Cultural Heritage Protection Act lacks consideration for the scenic industrial sites formed by community activities. Further research is necessary on the establishment of local ordinances, the change in management policies in accordance with the characteristics of the resources, and the application of appropriate management rules for local areas. Fourth, the future development of tourism resources should focus on communities and their resources rather than the nation or corporations. The Korean tourism industry has developed through the active intervention of the government, as with Korean economic growth. Local tourism resources have public value. Therefore, we cannot reject government intervention to maintain and preserve public value.

Nevertheless, it is critical for the government to make adequate judgments on the areas of intervention and invest resources at the right time. Local communities should be the main agent in the development of tourism resources, and the government must actively support them. The ultimate goal of the development of tourism resources using commons is to stimulate the local economy and integrate communities. Fifth, various institutional supports are required for the development and management of tourism resources because commons consist of tangible entities and intangible activities. The commons, which are objects of the development of tourism resources, have generally been used as market properties or managed as public properties. Local communities, which must serve as custodians, have used local resources to satisfy the greed of individuals or have been indifferent to them while unilaterally being dependent on the administration.

In this process, the customs and rules between the community and commons have been replaced with laws and regulations. Traditionally, tourism resources development policies based on economic growth have been effective. In the future, however, we should concentrate our efforts on tourism resources development policies centered on communities and cooperation. Furthermore, the perspective of commons needs to change to a community-centered one. Lastly, the management principles found in the Darangyi paddies were the customs and rules that residents have traditionally created through cooperation and communication; planners or administrators did not plan them. This kind of resident-led planning process is called a cooperative plan. The power of the community to create principles for managing its resources comes from the advantages of this cooperative planning method. Therefore, new research on the cooperative planning method should be initiated to establish community-centered principles for managing commons. These findings cannot be generalized because of the small sample and focus on one site; thus, other researchers could examine these issues at other sites.

REFERENCES

- Agrawal, A. (2001). Common property institutions and sustainable governance of resources, *World Development*, 29(10), 1649-1672.
- Araral, E. (2014). Ostrom, Hardin and the commons: A critical appreciation and a revisionist view, Environmental Science and Policy, 36, 11-23.
- Arnstein, S. R. (1969). A ladder of citizen participation, Journal of the American Planning Association, 35(4), 216-224.
- Briassoulis, H. (2019). The Catharsis of the Commons. *International Journal of the Commons*, 13(2), 1092–1111. http://doi.org/10.5334/ijc.969.
- Bushouse, B. K., Never, B. & Christensen, R. K. (2016). Elinor Ostrom's Contribution to Nonprofit and Voluntary Action Studies. *Nonprofit and Voluntary Sector Quarterly*, 45(48), 7S–26S.
- Choe, H. (2013). The concept of common resources and the joint ranch of Jeju: Characteristics as a common resource, *Economy and Society*, 98, 12-39. https://www.kci.go.kr/kciportal/ci/sereArticleSearch/ciSereArtiView.kci? sere Article Search Bean.artiId=ART0017744447.
- Choe, H., & Kim, S.P. (2014). Wind in Jeju: The management method adopted common pool resources theory, Tamla Culture Research Institute, 46, 97-126. https://www.kci.go.kr/kciportal/ci/sereArticleSearch/ciSereArtiView.kci? sere Article Search Bean.artiId=ART001893969.
- De Moor, M. (2008). The silent revolution: A new perspective on the emergence of commons, guilds, and other forms of corporate collective action in Western Europe, *IRSH53* (*Supplement*), 179-212.
- Delgado-Serrano, M., del, & Ramos, P. (2015). Making Ostrom's framework applicable to characterise social ecological systems at the local level, *International Journal of the Commons*, 9(2), 808-830. https://doi.org/10.18352/ijc.567.
- Fedreheim, G. E. & Blanco, E. (2017). Co-management of protected areas to alleviate conservation conflicts: Experiences in Norway. *International Journal of the Commons*, 11(2), 754-773. http://doi.org/10.18352/ijc.749.
- Fennell, L. A. (2011). Ostrom's Law: Property rights in the commons. *International Journal of the Commons*, 5(1), 9-27. http://doi.org/10.18352/ijc.252.
- Gallardo Fernández, G. L. & Friman, E. (2011). New marine commons along the Chilean coast the management areas (MAs) of Peñuelas and Chigualoco. *International Journal of the Commons*, 5(2), 433-458. http://doi.org/10.18352/ijc.284.
- Han, T. (2015). Review of possibility of punitive damage system adoption: Expected problem and measures,
 Doctor Degree of Yonsei University. http://www.riss.kr/search/detail/DetailView.do?p_mat_type=
 be54d9b8bc7cdbo9&control no=1b2ee697c1724608ffeobdc3ef48d419
- Hardin, G. (1968). The tragedy of the commons. Science, 162(3859), 1243-1248.
- Healey, P. (2003). Collaborative planning in perspective, *Planning Theory*, 2(2), 101-123.
- Healey, P. (2006). Collaborative planning: Shaping places in fragmented societies (2nd ed.), Basingstoke: Palgrave Macmillan.
- Helfrich, S. (2014). Common goods do not simply exist: They are created. http://wealthofthecommons.org/essay/common-goods-don%E2%80%99t-simply-exist-%E2%80%93-they-are-created (Accessed on 11.6.2018).
- Hill, R., Dyer, G. A., Lozada-Ellison, L. M., Gimona, A., Martin-Ortega, J., Munoz-Rojas, J., & Gordon, I. J. (2015). A social-ecological systems analysis of impediments to delivery of the Aichi 2020 targets and potentially more effective pathways to the conservation of biodiversity, *Global Environmental Change*, 34, 22-34. https://doi.org/10.1016/j.gloenvcha.2015.04.005.
- Jung, Y. S. (2016). Share of theory, reality, and possibility, *The Korean Association for Environmental Sociology*, 18(2), 205-214.

- Kaivanto, K. (2018). Community-level natural resource management institutions: A noncooperative equilibrium example. *International Journal of the Commons*, 12(1), 548-572. http://doi.org/10.18352/ijc.847.
- Kim, H-S. & Jung, C-S. (2016). Study on understanding and application of global code of ethics for tourism for sustainable growth of sport tourism: With focus on the PyeongChang 2018 Olympic Winter Games, *Philosophy of Movement: Journal of Korean Philosophic Society for Sport and Dance*, 24(1), 73-90. http://kiss.kstudy.com/thesis/thesis-view.asp?key=3429089
- Kim, K. & Kwon, S. (2016). Community-based sustainable use of environment: A case of Jeju-Haenyeo's commons resource management, *Journal of The Korean Association of Regional Geographers*, 22(1), 49-63.
- Kim, S. (2014). A theoretical review on the reconstruction of the commons: A reinterpretation of Garrett Hardin's 'The Tragedy of the Commons' model through the theory of space by Henry Lefebvre, *MARXISM*, 11(3), 172-201.
- Kip, M. (2015). Moving beyond the city: Conceptualizing urban commons from a critical urban studies perspective, In Dellenbaugh, M., Kip, M., Bienioik, M., Mueller, A. K., & Schwegmann, M. (eds), *Urban commons: Moving beyond state and market*. Switzerland: Birkhäuser De Gruyter, 42-59.
- Kwon, S. (2012). Neoliberalizing water: Commodification debate and their making in Korea, *Journal of the Economic Geographical Society of Korea*, 15(3), 358-375.
- Lee, E., Jung, C. S. & Lee, M. K. (2014). The potential role of boundary organizations in the climate regime, Environmental Science & Policy, 36, 24-36.
- Lee, L. Y. (2009). Sense of community and its relationship with exterior spatial composition in apartment complex, Doctoral thesis of Chonnam National University.
- Lee, S. H. & Kim, Y. P. (2011). A comparative study on the conservation of rice terraces as cultural landscapes in Korean and Japanese rural areas, *Journal of the Korean Institute of Forest Recreation*, 15(2), 1-14.
- Mansbridge, J. (2014) The role of the state in governing the commons, *Environmental Science & Policy*, 36, 8-10.
- McGrath, D. G., Almeida, O. T. & Merry, F. D. (2007). The Influence of Community Management Agreements on Household Economic Strategies: Cattle Grazing and Fishing Agreements on the Lower Amazon Floodplain. *International Journal of the Commons*, 1(1), 67-88. http://doi.org/10.18352/ijc.54
- Merino, L. & Cendejas, J. (2017). Peace building from a commons perspective. *International Journal of the Commons*, 11(2), 907-927. http://doi.org/10.18352/ijc.773.
- Nkoka, F., Veldwisch, G. J. & Bolding, A. (2014). Organizational modalities of farmer-led irrigation development in Tsangano District, Mozambique, *Water Alternatives*, 7(2), 414-433.
- Ostrom, E. (1990). Governing the commons: The evolution of institutions for collective action, Cambridge: Cambridge University Press.
- Ostrom, E. (1998). A behavioural approach to the rational choice theory of collective action: Presidential address, American Political Science Association, 92(1), 1-22.
- Poteete, A., Janssen, M. & Ostrom, E. (2010). Working together: Collective action, the commons and multiple methods in practice, Princeton: Princeton University Press.
- Polanyi, K. (1957). The great transformation, Boston: Beacon Press Boston. https://www.worldcat.org/title/great-transformation/oclc/317457654.
- Son, H. & Kim, S. (2016). Developing the tourism resources of agricultural heritage by values, *Northeast Asia Tourism Research*, 12(3), 39-58.
- Steers, R. M. (1991). Introduction to organizational behavior (2nd ed), Glenview, Ill: Scott, Foresman.
- Thiel, A., Elias Adamseged, M. & Baake, C. (2015). Evaluating an instrument for institutional crafting: How Ostrom's social–ecological systems framework is applied, *Environmental Science & Policy*, 53, B, 152-164.
- Van Laerhoven, F. & Ostrom, E. (2007). Traditions and trends in the study of the commons, *International Journal of the Commons*, 1(1), 3-28.
- Wall, D. (2014). The Sustainable Economics of Elinor Ostrom: Commons, contestation and craft. New York & London: Routledge. *International Journal of the Commons*, 8(2), 686-687. http://doi.org/10.18352/ijc.544.
- Yu, D., Anderies, J. M., Lee, D. & Perez, I. (2014). Transformation of resource management institutions under globalization: The case of songgye community forests in South Korea, *Ecology and Society*, 19(2), 2.
- Yun, S. J. (2006). The dissolving process of village pasture commons in Jeju Island and its social and ecological implication, *The Korean Rural Sociological Society*, 16(2), 45-88.
- *** Cultural Heritage Administration (2014). A study on the preservation and utilization plan of a national scenic spot, 21-25. http://www.prism.go.kr/homepage/entire/retrieveEntireDetail.do;jsessionid=147B3A3CE85463D39F797 CD93CD96A8E.node02? cond_research_name=&cond_research_start_date=&cond_research_end_date =&research_id=1550000-201400002&pageIndex=526&leftMenuLevel=160.
- *** Cultural Heritage Administration. (2016). Study on preservation management of scenic beauty, 32-33. https://www.cha.go.kr/cop/bbs/selectBoardArticle.do;jsessionid=111n4HXIs1rU2XPeGRnIr2HTBoFg7 Nv5Mg4m5rVAQmo7MPcVoXFn8gBaFx5HVlZ1.new-was_servlet_engine1?nttId=59669&bbsId= BBSMSTR_1021&pageUnit=10&searchCnd=tc&searchWrd=&ctgryLrcls=&ctgryMdcls=&ctgrySmcls=& ntcStartDt=&ntcEndDt=&searchUseYn=Y&mn=NS 01 01.

Submitted: 06.08.2019

Revised: 14.02.2020

Accepted and published online 20.02.2020

FROM SATISFACTION IN ECO-TOURISM TO LOYALTY IN A NATIONAL PARK

Mauricio CARVACHE-FRANCO

Espíritu Santo University-Ecuador, Av. Samborondón, Samborondón 092301, Ecuador, e-mail: mauricio2714@hotmail.com

Orly CARVACHE-FRANCO

Catholic University of Santiago de Guayaquil, Faculty of Business Specialties, Av. Carlos Julio Arosemena Km 1.5, Guayaquil, Ecuador, e-mail: orly.carvache@cu.ucsg.edu.ec

Wilmer CARVACHE-FRANCO*

ESPOL Polytechnic University, Escuela Superior Politécnica del Litoral, ESPOL, Faculty of Social Sciences and Humanities, Campus Gustavo Galindo Km 30.5 Vía Perimetral, P.O. Box 09-01-5863, Guavaguil, Ecuador, e-mail: wcarvach@espol.edu.ec

Cesar VILLAGÓMEZ-BUELE

University of Guayaquil. Faculty of Chemical Engineering, Guayaquil, Ecuador, e-mail: cesar.villagomezb@ug.edu.ec

Citation: Carvache-Franco, M., Carvache-Franco, O., Carvache-Franco, W., & Villagómez-Buele, C. (2020). FROM SATISFACTION IN ECO-TOURISM TO LOYALTY IN A NATIONAL PARK. GeoJournal of Tourism and Geosites, 28(1), 191–202. https://doi.org/10.30892/gtg.28115-462

Abstract: Doing ecotourism in national parks offers a wide array of opportunities to help to preserve nature while performing recreational activities. The goal of this study is to analyze the issues related to the levels of satisfaction after engaging in eco-tourism in a national park. The empirical study was conducted in-situ in Ecuador, at the Machalilla National Park, which has become an important humpback whale sighting destination. 386 questionnaires were analyzed using univariate and bivariate quantitative techniques. The findings showed an overall high level of satisfaction and loyalty to the ecotourism site. The most valued factors in the satisfaction measure were, tranquility, conservation of the natural and cultural patrimony, humane treatment received, and gastronomic quality. In eco-tourism, general satisfaction influences the intentions of returning, recommending, and saying positive things about the visited destination.

Key words: Eco-tourism, Satisfaction, loyalty, demand, Machalilla

INTRODUCTION

Ecotourists typically show significant levels of perceived satisfaction with the experiences lived during an eco-tourism visit (Buckley, 2009; Butler & Boyd, 2000;

^{*} Corresponding author

Lawton, 2001; Weaver, 2008). For the ecotourists, finding megafaunas and impressive ecosystems are key expressive attributes of satisfaction obtained during a visit to protected areas (Blamey, 2001; Curtin, 2003; Hvenegaard, 2002). This is why managers realize the economic importance of meeting the needs of their visitors and providing them with memorable experiences (Fletcher & Fletcher, 2003). Therefore, understanding what constitutes satisfaction allows managers to provide facilities and services that match the expectations of visitors (Borrie & Birzell, 2001; Hornback & Eagles, 1999; Tonge & Moore, 2007). Likewise, visitor satisfaction is a vital aspect of the marketing and management practices carried out at national parks (Hwang et al., 2005; Ramkissoon et al., 2013).

Most studies of protected areas evaluate some necessary attributes of the site, such as boats or trails, identifying a similar trend of high levels of visitor's satisfaction (Fletcher & Fletcher, 2003). Understanding the expectations and what brings about satisfaction to travelers, helps with planning, resource allocation and service provision (Bushell & Griffin, 2006). It also allows adventurers to attain the natural and relaxation benefits they expect (Crilley et al., 2012). Consequently, the optimization of visitor satisfaction is often an important goal that park managers seek to achieve (Tonge & Moore, 2007). Also, marketing approaches that consider tourism satisfaction and behavioral intentions remain as an essential area for research in tourism studies (Prayag et al., 2013). Despite the above, research in destinations related to nature has been neglected in the literature (Castellanos-Verdugo et al., 2016).

The Machalilla National Park in Ecuador is a suitable destination for the practice of eco-tourism. Among its main attractions is the sighting of humpback whales, visiting the Agua Blanca Community, doing water sports, walking through ecological trails and sighting flora and fauna. This article aims to analyze the levels of satisfaction experienced in eco-tourism, to provide information to tourism marketers that will contribute to the planning of efficient marketing strategies. This paper has been organized as follows, after the introduction, the literature is reviewed in a second heading, followed by the third section which describes the study area. After that description, the methodology of the research is looked at, to then move on to the results encompassed. The manuscript ends by presenting the discussion of the results, conclusions, limitations and the researcher's suggestions for future lines of research.

REVIEW OF THE LITERATURE

Satisfaction can be defined in three different ways. First, it can be seen as a post-consumer assessment that determines whether the service obtained meets or exceeds the consumer's expectations (Engel et al., 1993). It can also be construed as an emotional response derived from a consumer's experience (Spreng et al., 1996). In addition, it has been described as the cognitive-affective state resulting from a positive consumer experience (Bosque & Martin, 2008). Satisfaction is a psychological aspect, which comes from visiting an environment. It is an emotional state of mind which emerges after exposure to an opportunity (Howat & Crilley, 2007; Zabkar et al., 2010). Tourist satisfaction refers to the positive feeling or pleasure that is obtained after experiencing or consuming a tourist product (Beard & Ragheb, 1980). The levels of satisfaction experienced by people visiting a national park or a protected area can be indirectly measured through the stimuli they receive at that area, as well as by the experiences to which they are subject when they come in contact with the natural characteristics that create the identity of the protected area (Bigne et al., 2005; Chhetri et al., 2004).

Researchers have also recognized that satisfaction depends on the products and the prices offered, as well as the quality of the services provided and the friendly attitude of the local inhabitants (Crompton & Love, 1995; Li, 1997; Lounsbury & Hoopes, 1985; Ryan, 1999; Stevens, 1992). Additionally, satisfaction is fundamental for tourism given the strong relationship between satisfaction and future customer behavior, meaning that a satisfied consumer will repeat the visit and communicate the positive aspects of such visit to others (Emir & Kozak, 2011; Jang & Feng, 2007; Marcussen, 2011). Satisfaction, then, is the results of a general evaluation performed by the vacationist after the purchase (Devesa et al., 2010; Sun et al., 2013; Yoon et al., 2010), which increases the likelihood that they will call on the destination again and recommend it to their friends and family members (Chi & Qu, 2008; Prayag & Ryan, 2012). Satisfaction is also related to the choice of destination, the consumption of products and services and the decision to return there (Chi & Qu, 2008; Prayag & Ryan, 2012; Žabkar et al., 2010). Therefore, satisfaction is conducive to repeated visits (Baker & Crompton, 2000; Tonge et al., 2011), to achieving visitor loyalty (Chen & Tsai, 2007), and is a powerful marketing tool that helps promoting the touristic site and increasing the frequency of visits (Dharmaratne et al., 2000; Sıvalıoğlu & Berköz, 2012).

Several studies have shown that repeated visits to tourist destinations are related to higher levels of visitor satisfaction, due to the fact that the resulting satisfaction partly motivates those people to return and visit the same destination (Geva & Goldman, 1991; Yuksel, 2001; Rittichainuwat et al., 2002; Tian-Cole et al., 2002). Thus, satisfaction has a positive influence on post-purchase behavior (Anderson & Sullivan, 1990; Cronin & Taylor, 1992; Fornell, 1992; Keaveney, 1995; Oliver, 1980; Oliver & Swan, 1989). In addition, there is a relationship between general satisfaction and the satisfaction obtained from different issues resulting in the intention to return and recommend the visited location (Alegre & Cladera, 2006; Baker & Crompton, 2000; Caneen, 2003; Juaneda, 1996; Kozak, 200; Kozak & Rimmington, 2000; Petrick, 2004; Pritchard, 2003; Ross, 1993; Um et al., 2006; Yoon & Uysal, 2005).

In recent years, there has been a growing interest of tourists in the environment and movements directed towards the enjoyment of the natural environment (Carvache-Franco et al., 2019). In regard to studies focusing on eco-tourism satisfaction, Tsiotsou & Vasioti (2006) who carried out an investigation on tourism services in Greece, identified a series of satisfaction factors which include "staff satisfaction", "satisfaction with food", "satisfaction with the excursion", "satisfaction with socialization "and" satisfaction with the landscape". In contrast, Meng, Tepanon, & Uysal (2008) in their study on the satisfaction of nature-based tourism complexes in southwestern Virginia, identified other "friendly service/quality", "outdoor satisfaction factors. including "accommodation" and "natural landscapes." Lee (2015) came out with the following satisfaction factors: "information services," "recreational facilities" and "safety and sustainability." Adam et al. (2019) studied the satisfaction and motivation ecotourists had in the Kakum National Park by using the following factors, "educational satisfaction," "social satisfaction," "satisfaction with sanitation," and "satisfaction with relaxation." Also, representative examples in eco-tourism include a high visitor satisfaction rate of 66% in the Pirongia Forest Park of New Zealand (Pan & Ryan, 2007) and a 60% satisfaction level in the Amboseli National Park of Kenya (Okello et al., 2008).

STUDY AREA

The research took place at the Machalilla National Park which is located on the coast of the province of Manabí in Ecuador. Machalilla was declared a National Park in 1979; its name comes from a significant pre-Hispanic culture of this region. This important protected territory comprises an area of 41,754 terrestrial hectares and 14,430

marine hectares. This national park has beaches, several small islands near the coastline such as Salango, Sucre, Pedernales, and the Sombrerito, and also De La Plata Island which is an interesting venue because of its flora and fauna. The marine area of the Park was declared a Ramsar site in 1990. The Machalilla National Park's main attractions are The Frailes Beach, which has natural features with several trails ideal for eco-tourism.

De La Plata Island, located 40 kilometers away from Puerto Lopez, has five trails where visitors can observe bird species, and there are also cliffs over the island where travelers can do surface diving. The Agua Blanca Commune has an archaeological museum with pieces from the Manteño-Huancavilca culture. There is also the observation of humpback whales, from July to September, these mammals travel from the cold waters of Antarctica to bequeath to the warm waters to reproduce and have their offspring. There are several operators who with proper boats make this sighting. (Figure 1).

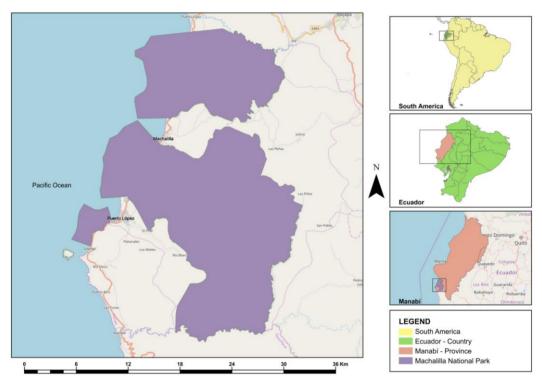


Figure 1. Geographical location of the Machalilla National Park

METHODOLOGY

A questionnaire was prepared based on several previous studies (Adam et al., 2019; Devesa et al., 2010; Lee, 2015; Meng et al., 2008; Tsiotsou & Vasioti, 2006). The instrument was divided into two sections, in the first one sociodemographic information, such as nationality, origin, gender, age, level of training, and professional activity, was collected, while the second section dealt with satisfaction and intentions to return, recommend and say positive things about the destination. The questionnaire was designed with closed-ended questions and a five-point Likert scale to obtain reliable results. The satisfaction scale was developed with 14 items which had to be graded over a five-point Likert scale, corresponding to the different aspects of the destination.

The Crombach Alpha coefficient for the final scale resulted in a robust value of 0.86. Surveys were conducted in-situ during August and September of 2018. The surveyors received training from the authors of this article and took advantage of the moments when tourists were performing recreational activities in the national park or were resting to conduct surveys. The vacationists surveyed were people of legal age, locals or foreigners who were visiting the destination studied. The statistical data that were collected were organized, tabulated, and analyzed through the SPSS program version 22. As a statistical technique, the spearman correlation coefficient was used to know the significant relationships between the different variables. The sample size was 386 valid surveys, and the infinite population was used. With the sample achieved, he studied was conducted with a margin of error of +/- 5%, a confidence level of 95% and variability of 50%.

RESULTS Sociodemographic information

Table 1. Sociodemographic aspects

Demographics	Categories	n	%
Nationality	National	292	75.6
	Foreign	94	24.4
Origin	North America	8	2.1
	Europe	42	10.9
	South America	331	85.8
	Asia	2	0.8
	Rest of the world	5	0.5
Gender	Male	158	41
Gender	Female	227	59
	<20 years old	26	6.7
	20 - 29 years old	162	42
Amo	30 - 39 years old	109	28.2
Age	40 - 49 years old	50	13
	50 - 59 years old	29	7.5
	>59 years old	10	2.6
	Primary	6	1.6
Level of education	Secondary	84	21.8
Level of education	University	239	61.9
	Postgraduate/Master/Ph.D.	57	14.8
	Student	96	24.9
	Researcher / scientist	16	4.1
	Businessman	33	8.5
	Private Employee	110	28.5
Professional activity	Public Employee	55	14.2
Professional activity	Labores del hogar	16	4.1
	Unemployed	10	2.6
	Retired	8	2.1
	Informal worker	10	2.6
	Other	32	8.3
	Alone	15	3.9
Who you visit with	With family	216	56
	With friends	109	28.2
	With partner	42	10.9
	Other	4	1

The sociodemographic information obtained from the surveyed sample can be found in Table 1. 75.6% of the tourists were domestic, and 24.4% came from abroad. In terms of provenance, the majority group was from South America (85.8%) followed by Europe (10.9%). In terms of gender, 59% of the tourists were female while the remaining 41% disclosed to be male. With regards to age, the majority group was formed by those aged between 20 to 29 (42%), followed by the group aged 30 to 39 with 28.2%. 61.9% of visitors explained they had university education, followed by 21.85% of people who said they only had secondary education.

Regarding professional activity, the majority group was private employees (28.5%), followed by the group that was students (24.9%). The tourists surveyed mostly traveled with their families (56%) and those visiting with friends (28.2%).

Overall satisfaction and loyalty to the destination.

As shown in Table 2, on a Likert scale (being 1 a little and 5 a lot), the overall satisfaction of the visitor experience to the destination averaged 4.22, suggesting the high potential of the natural and cultural resources of this protected area. Also, other issues related to loyalty obtained high ratings as well.

The intentions of returning to the destination got an average of 4.32. Also, the intentions of recommending the destination returned an average of 4.49. While the variable saying positive things about the destination obtained an average of 4.56, these findings show the important loyalty of its visitors to these protected areas.

Variables	N	Minimum	Maximum	Mean
Overall satisfaction	386	1	5	4.22
Loyalty				
I intend to return to this national park	386	1	5	4.32
I have the intention to recommend this protected National Park	386	1	5	4.49
When I talk about this Natonal Park, I will give positive comments	386	1	5	4.56

Table 2. General satisfaction and lovalty to the destination

Relationship of general satisfaction with the intentions to return, recommend, and say positive things about the destination.

The relationship between general satisfaction with intentions to return, recommend, and to say positive things about destination was analyzed through a Spearman correlation. As shown in Table 3, the overall satisfaction presented a significant and positive correlation with the intentions of returning, recommending, and saying positive things about the destination. Therefore, by improving the level of general satisfaction of tourists, the intentions to return, recommend and say positive things about the destination would increase. Thus, to improve the level of general satisfaction of tourists, the relationship of general satisfaction with satisfaction in the different aspects of the service should be analyzed, as well as the aspects of the service that have a more significant influence on the overall satisfaction of the service.

Table 3. General satisfaction with the intentions to return, to recommend and say positive things

Variables	Correlation
I have the intention to recommend this protected National Park	.540**
When I talk about this National Park, I will give positive comments	.533**
I intend to return to this national park	.530**

Satisfaction of the visit by aspect

A Likert escalation was used (being 1 a little and 5 a lot) to measure the satisfaction levels in the different service-related aspects of the visit. The findings show that the most valued variables were, tranquility, which reflected an average of 4.22, followed by natural and cultural heritage conservation (4.08), the humane treatment received (3.97) and the gastronomic quality (3.70). Results which indicate that for the visitor, it is essential that the destination conserves well its natural and cultural resources, existing excellent tranquility for the recreation and service with excellent local gastronomy (Table 4).

Minimum Maximum N Mean Ranking Aspects Calmness 386 1 5 4.22 1 Conservation of natural and cultural heritage 386 1 5 4.08 2 How locals treat tourists 386 1 5 3.97 3 Gastronomy 386 1 5 3.76 4 Accommodation 386 1 3.67 5 5 Prices 386 1 3.6 6 5 Traffic signs 386 1 5 3.59 Restaurant facilities/equipment 386 8 1 3.56 5 Tourist information and signs 386 1 5 3.56 9 Accessibility and infrastructure 386 1 10 5 3.55 Complimentary leisure activities (festivals, shows) 386 1 3.42 11 5 **Parking** 386 1 5 3.4 12 Sport facilities 386 1 5 3.3 13 Guided tours 386 3.01 14

Table 4. Satisfaction of the visit by appearance

Relationship of satisfaction by aspects with general satisfaction

The Spearman correlation coefficient was used to analyze the relationship between satisfaction by aspect with general satisfaction. Table 5 shows the said results.

Coefficient	
.450**	
.450**	
.423**	
.423**	
.420**	
.411**	
.408**	
.402**	
.392**	
.369**	
.332**	
.328**	
.313**	
.184**	

Table 5. Satisfaction by aspect with general satisfaction

According to Table 5, all the satisfaction aspect variables presented a significant and positive correlation with the overall satisfaction. The variables that had a greater influence

^{**} Significance at 1%

on the overall satisfaction level are prices, equipment, and facilities of restaurants, accessibility and infrastructure and road signs. These were the service variables that should be improved in order to increase the level of overall satisfaction in this destination.

Relationship of satisfaction by aspect with the intentions of return in to the destination

To analyze the relationship of satisfaction by aspect with the intentions of returning to the destination, the Spearman correlation coefficient was used.

The results are shown in Table 6. According to Table 6, all the satisfaction aspect variables, except for the guided visits, presented a significant and positive correlation with the intentions of returning to the destination. Thus, the variables that had a more considerable influence on the intentions of returning to the destination were tranquility, road signs, accommodation and the conservation of natural and cultural heritage. These are the service variables that can be improved in order to increase the level of intentions to return to this destination.

Table 6 . Satisfaction	by aspect with intentions to	return to the destination
-------------------------------	------------------------------	---------------------------

Variable	Coefficient
Calmness	.379**
Traffic signs	.344**
Accommodation	.344**
Conservation of natural and cultural heritage	.342**
Accesibilidad e infraestructura	.301**
Gastronomy	.308**
Tourist information and signs	.273**
Restaurant facilities/equipment	.271**
Parking	.243**
Prices	.226**
Complimentary leisure activities (festivals, shows)	.217**
How locals treat tourists	.198**
Sport facilities	.189**
Guided tours	.053

^{**} Significance at 1%

Relationship of satisfaction with aspects with the intentions torecommend the destination

To analyze the relationship of satisfaction by aspect with the intentions of recommending the destination, the Spearman correlation coefficient was used. The results are shown in Table 7. According to Table 7, all the satisfaction aspect variables present a significant and positive correlation with the intentions of recommending the visited destination. The variables that had a greater influence on the intentions to recommend the destination were, road signs, tranquility, accessibility and infrastructure, and conservation of the natural and cultural heritage.

The findings show that these were the service variables that should be improved in order to increase the level of intentions to recommend the destination.

DISCUSSION AND CONCLUSIONS

The opportunities offered by a national park to do eco-tourism are varied concerning knowing the nature and culture of the destination. There are activities such as whale observation, hiking trails, visiting communities and doing water sports, and then enjoying the exquisite local gastronomy. In a destination with a high eco-tourism

potential, it is necessary to measure the aspects of the service that influence the general satisfaction of the visitors. In addition to measuring the relationship between the general satisfaction levels with other variables related to loyalty to plan efficient strategies that can improve the level of satisfaction of visitors, increase their return to the destination, improve the image of the destination and bring benefits to the community.

Table 7. Satisfaction by appearance with intentions to recommend the destination

Variable	Correlation
Traffic signs	.369**
Calmness	.360**
Accessibility and infrastructure	·343**
Conservation of natural and cultural heritage	·343**
Accommodation	·335**
Gastronomy	.298**
Tourist information and signs	.282**
Restaurant facilities/equipment	.272**
How locals treat tourists	.256**
Parking	.250**
Prices	.244**
Sport facilities	.208**
Complimentary leisure activities (festivals, shows)	.207**
Guided tours	.101*

The findings show that overall satisfaction was high, along with the intentions of returning to the destination. The most valued factors in the satisfaction reading were, the tranquility, the conservation of the natural and cultural patrimony, humane treatment received, and gastronomic quality. In eco-tourism, general satisfaction influences the intentions of returning to the destination; similar results have been reported (Baker & Crompton, 2000, Chi & Ou, 2008, Prayag & Ryan, 2012, Tonge et al., 2011; Žabkar et al., 2010). Besides, it influences the intentions of recommending the destination, findings which are similar to those accounted for in other studies (Chi & Ou, 2008; Prayag & Ryan, 2012). It also influences the intentions of saying positive things about the destination, analogous to previously identified results (Emir & Kozak, 2011; Jang & Feng, 2007; Marcussen, 2011). Thus, all the variables of satisfaction by aspect influence general satisfaction. Also, all the variables of satisfaction by appearance, except for the variable "guided tour," influence the intentions of returning to the destination. Also, all the variables of satisfaction by aspect influence the intentions of recommending the destination. Similar results were observed in earlier pieces of research (Alegre & Cladera, 2006; Baker & Crompton, 2000; Caneen, 2003; Juaneda, 1996; Kozak, 200; Kozak & Rimmington, 2000; Petrick, 2004; Pritchard, 2003; Ross, 1993; Um et al., 2006; Yoon & Uysal, 2005).

In eco-tourism, general satisfaction is mostly influenced by prices, equipment, and facilities of restaurants, accessibility and infrastructure and road signs. While the intentions of returning to the destination are more influenced by the tranquility, the road signs, accommodation and conservation of natural and cultural heritage.

Instead, the intentions of recommending the destination are more influenced by road signs, tranquility, accessibility and infrastructure and the conservation of natural and cultural heritage. Therefore, it is necessary to improve work on these variables to

increase the level of general satisfaction on the part of the tourists, and in this way increase the intentions of returning and recommending this destination. Among the practical implications we have that companies related to eco-tourism should plan strategies to improve the level of satisfaction in the different aspects of the service taking into account these empirical results. In this way they should be able to improve the level of general satisfaction of tourists, increase future visits and improve the recommendation of the destination, contributing to the sustainable development of the destination and the community. Finally, the main limitation of the present study was the temporality of the information gathering because the demand may vary. As a future line of research, it would be interesting to carry out a study on the relationship that exists between satisfaction and the sustainable economic impact in a national park.

REFERENCES

- Adam, I., Adongo, C. A. & Amuquandoh, F. E. (2019). A structural decompositional analysis of eco-visitors' motivations, satisfaction and post-purchase behaviour. *Journal of Eco-tourism*, 18(1), 60-81.
- Alegre, J. & Cladera, M. (2006). Repeat visitation in mature sun and sand holiday destinations. *Journal of Travel Research*, Vol. 44 No. 3, pp. 88-97.
- Anderson, E.W. & Sullivan, M.W. (1990). Customer satisfaction and retention across firms. in Zeithaml, V.A., Berry, L.L. and Parasuraman, A. (Eds), TIMS College of Marketing Special Interest Conference on Service Marketing, Nashville, TN, September.
- Baker, D. A. & Crompton, J. L. (2000). Quality, satisfaction and behavioral intentions. *Annals of Tourism Research*, 27(3), 785–804.
- Baker, D.A. & Crompton, J.L. (2000). Quality, satisfaction and behavioral intentions. *Annals of Tourism Research*, Vol. 27 No. 3, pp. 785-804
- Beard, J. G. & Ragheb, M. G. (1980). Measuring leisure satisfaction. Journal of leisure Research, 12(1), 20-33.
- Bigne, J.E., Andreu, L. & Gnoth, J. (2005). The Theme Park experience: an analysis, of pleasure, arousal and satisfaction. *Tourism Management*, 26 (6), 833–844.
- Blamey, R. (2001). Principles of eco-tourism. In D. Weaver (Ed.), The encyclopedia of eco-tourism (pp. 5–22). Wallingford: CABI.
- Borrie, W.T. & Birzell, R.M. (2001). Approaches to measuring quality of the wilderness experience. Missoula, MT, US Department of Agriculture, Forest Service, Rocky Mountain Research Station.
- Bosque, I.R.D. & Martin, H.S. (2008). Tourism satisfaction: A cognitive–affective model. *Annals of Tourism Research*, 35, 551–573.
- Buckley, R. (2009). Eco-tourism: Principles and practices. Wallingford: CABI.
- Bushell, R. & Griffin, T. (2006). Monitoring visitor experiences in protected areas. Parks: The International *Journal for Protected Areas Managers*, 16(2), 25–33.
- Butler, R. & Boyd, S. (2000). Tourism and national parks: Issues and implications. Chichester: Wiley (Eds.).
- Caneen, J.M. (2003), Cultural determinants of tourism intention to return, Tourism Analysis, Vol. 8, pp. 237-42.
- Carvache-Franco, M., Segarra-Oña, M. & Carrascosa-López, C. (2019). Motivations Analysis In Ecotourism Through An Empirical Application: Segmentation, Characteristics And Motivations Of The Consumer. *GeoJournal of Tourism and Geosites*, 24 (1), 60–73. https://doi.org/10.30892/gtg.24106-343
- Castellanos-Verdugo, M., Vega-Vázquez, M., Oviedo-García, M. Á. & Orgaz-Agüera, F. (2016). The relevance of psychological factors in the ecotourist experience satisfaction through ecotourist site perceived value. *Journal of Cleaner Production*, 124, 226-235.
- Chen, C. & Tsai, D. (2007). How destination image and evaluative factors affect behavioral intentions? *Tourism Management*, 28(4), 1115–1122.
- Chhetri, P., Arrowsmith, C. & Jackson, M. (2004). Determining hiking experiences in nature-based tourist destinations. *Tourism Management*, 25 (1), 31–43.
- Chi, C.G. & Qu, H. (2008). Examining structural relationship of destination image, tourist satisfaction and destination loyalty: an integrated approach. *Tourism Manage*, 29(4), 624-636. http://dx.doi.org/ 10.1016/j.tourman.2007.06.007.

- Crilley, G., Weber, D. & Taplin, R. (2012). Predicting visitor satisfaction in parks: Comparing the value of personal benefit attainment and service levels in Kakadu National Park, Australia. Visitor Studies, 15(2), 217–237.
- Crompton, J.L. & Love, L.L. (1995). The predictive value of alternative approaches to evaluating quality of a festival. *Journal of Travel Research*, 34 (1), 11–24
- Cronin, J.J. & Taylor, S.A. (1992). Measuring service quality: a re-examination and extension. *Journal of Marketing*, Vol. 56 No. 3, pp. 55-68.
- Curtin, S. (2003). Whale-watching in Kaikoura: Sustainable destination development? Journal of Eco-tourism, 2(3), 173–195.
- Devesa, M., Laguna, M. & Palacios, A. (2010). The role of motivation in visitor satisfaction: Empirical evidence in rural tourism. *Tourism Manage*, 31(4), 547-552. http://dx.doi.org/10.1016/j.tourman.2009.06.006.
- Dharmaratne, G. S., Yee Sang, F. & Walling, L. J. (2000). Tourism potentials for financing protected areas. *Annals of Tourism Research*, 27(3), 590–610.
- Engel, J., Blackwell, R. & Miniard, P. (1993). Consumer behavior. Orlando, FL: Dryden Press.
- Fletcher, D. & Fletcher, H. (2003). Manageable predictors of park visitor satisfaction: Maintenance and personnel. *Journal of Park and Recreation Administration*, 21, 21–37.
- Fornell, C. (1992), A national customer satisfaction barometer: the Swedish experience. *Journal of Marketing*, Vol. 56 No. 1, pp. 6-21.
- $Geva, A.\ \&\ Goldman, A., (1991).\ Satisfaction\ measurement\ in\ guided\ tours.\ \textit{Annals\ of\ Tourism\ Research}, 18, 177-185.$
- Hornback, K.E. & Eagles, P.F.J. (1999). Guidelines for public use measurement and reporting at parks and protected areas. Gland, Switzerland and Cambridge, UK, IUCN.
- Howat, G. & Crilley, G. (2007). Customer service quality, satisfaction and operational performance: A proposed model for Australian public aquatic centres. *Annals of Leisure Research*, 10, no. 2: 16895.
- Hvenegaard, G.T. (2002). Using tourist typologies for eco-tourism research. Journal of Eco-tourism, 7(2&3), 137-146.
- Hwang, S. N., Lee, C. & Chen, H. J. (2005). The relationship among tourists' involvement, place attachment and interpretation satisfaction in Taiwan's national parks. *Tourism Management*. 26(2), 143–156.
- Juaneda, C. (1996). Estimating the probability of return visits using a survey of tourist expenditure in the Balearic Islands. *Tourism Economics*, Vol. 2 No. 4, pp. 339-52.
- Keaveney, S.M. (1995), Customer switching behavior in service industries: an exploratory study, *Journal of Marketing*, Vol. 59 No. 2, pp. 71-82.
- Kozak, M. (2001), Repeaters' behavior at two distinct destinations, Annals of Tourism Research, Vol. 28 No. 3, pp. 784-807.
- Kozak, M. & Rimmington, M. (2000), Tourist satisfaction with Mallorca, Spain, as an off-season holiday destination, *Journal of Travel Research*, Vol. 38 No. 3, pp. 260-9.
- Lawton, L. (2001). Public protected areas. In D.B. Weaver (Ed.), The encyclopedia of eco-tourism (pp. 287 302). Wallingford: CAB International.
- Lee, C. F. (2015). Tourist satisfaction with forest recreation experience: a segment-based approach. Anatolia, 26(4), 535-548.
- Lounsbury, J.W. & Hoopes, L.L. (1985). An investigation of factors associated with vacation satisfaction. Journal of Leisure Research, 17 (1), 1–13.
- Meng, F., Tepanon, Y. & Uysal, M. (2008). Measuring tourist satisfaction by attribute and motivation: The case of a nature-based resort. *Journal of vacation marketing*, 14(1), 41-56.
- Okello, M., D'Amour, D. & Manka, S. (2008). Tourism attractions and satisfaction of Amboseli National Park, Kenya. *Tourism Analysis*, 13(4), 373–386.
- Oliver, R.L. (1980), A cognitive model of the antecedents and consequences of satisfaction decisions. *Journal of Marketing Research*, Vol. 17 No. 4, pp. 46-9.
- Oliver, R.L. & Swan, J.E. (1989), Consumer perceptions of interpersonal equity and satisfaction in transactions: a field survey approach. *Journal of Marketing*, Vol. 53 No. 2, pp. 21-35.
- Pan, S., & Ryan, C. (2007). Mountain areas and visitor usage motivations and determinants of satisfaction: The case of Pirongia Forest Park, New Zealand. *Journal of Sustainable Tourism*, 15(3), 288–308.
- Petrick, J.F. (2004a). Are loyal visitors desired visitors? Tourism Management, Vol. 25 No. 4, pp. 463-70.
- Prayag, G., Hosany, S. & Odeh, K. (2013). The role of tourists' emotional experiences and satisfaction in understanding behavioral intentions. J. of Destination Mark. and Manag. 2(2), 118-127. http://dx.doi.org/10.1016/j.jdmm.2013.05.001.
- Prayag, G. & Ryan, R. (2012). Antecedents of tourists' loyalty to Mauritius: The role and influence of destination image, place attachment, personal involvement, and satisfaction. J. Travel Res. 51(3), 342–356.

Mauricio CARVACHE-FRANCO, Orly CARVACHE-FRANCO, Wilmer CARVACHE-FRANCO, Cesar VILLAGÓMEZ-BUELE

- Pritchard, M.P. (2003), The attitudinal and behavioral consequences of destination performance. *Tourism Analysis*, Vol. 8 No. 1, pp. 61-73.
- Qu, H.L. & Li, I. (1997). The characteristics and satisfaction of mainland Chinese visitors to Hong Kong. *Journal of Travel Research*, 35 (4), 37–41.
- Ramkissoon, H., Smith, L. D. G. & Weiler, B. (2013). Testing the dimensionality of place attachment and its relationships with place satisfaction and pro-environmental behaviours: A structural equation modelling approach. *Tourism Management*, 36, 552–566.
- Rittichainuwat, B.N., Qu, H.L. & Mongknonvanit, C. (2002). A study of the impact of travel satisfaction on the likelihood of travellers to revisit Thailand. *Journal of Travel and Tourism Marketing*, 12 (2/3), 19–43.
- Ross, G.F. (1993) Destination evaluation and vacation preferences, *Annals of Tourism Research*, Vol. 20 No. 3, pp. 477-89.
- Ryan, C. (1999). From the psychometrics of SERVQUAL to sex: measurements of tourism satisfaction. In: Pizam, A., Mansfeld, Y. (Eds.), Consumer Behavior in Travel and Tourism. The Haworth Hospitality Press, New York, pp. 267–286.
- Sıvalıoğlu, P. & Berköz, L. (2012). Perceptual evaluation of the national park users. Procedia Social and Behavioral Sciences, 50(0), 928–940.
- Spreng, R., Mackenzie, S. & Olshavsky, R. (1996). A re-examination of the determinants of consumer satisfaction. *Journal of Marketing*, 60(3), 15–32.
- Stevens, B.F. (1992). Price value perceptions of travellers. Journal of Travel Research, 31 (2), 44-48.
- Sun, X., Chi, C.G. & Xu, H. (2013). Developing destination loyalty: the case of Hainan Island. Ann. Tourism Res. 43(October), 547-577. http://dx.doi.org/10.1016/j.annals.2013.04.006.
- Tian-Cole, S., Crompton, J. & Willson, V. (2002). An empirical investigation of the relationships between service quality, satisfaction and behavioral intentions among visitors to a wildlife refuge. *Journal of Leisure Research*, 34 (1), 1–24
- Tonge, J. & Moore, S. A. (2007). Importance–satisfaction analysis for marine-park hinterlands: A Western Australian case study. *Tourism Management*, 28(3), 768–776.
- Tonge, J. & S.A. Moore. 2007. Importance-satisfaction analysis for marine-park hinterlands: A Western Australian case study. *Tourism Management*, 28, no. 3: 76876.
- Tonge, J., Moore, S. A. & Taplin, R. (2011). Visitor satisfaction analysis as a tool for park managers: A review and case study. *Annals of Leisure Research*, 14(4), 289–303.
- Tsiotsou, R. & Vasioti, E. (2006). Using demographics and leisure activities to predict satisfaction with tourism services in Greece. *Journal of Hospitality & Leisure Marketing*, 14(2), 69-82.
- Um, S., Chon, K. & Ro, Y. (2006). Antecedents of revisit intention, *Annals of Tourism Research*, Vol. 33 No. 4, pp. 1141-58.
- Weaver, D. (2008). Eco-tourism (2nd ed.). Milton: Wiley
- Yoon, Y. & Uysal, M. (2005). An examination of the effects of motivation and satisfaction on destination loyalty: a structural model. *Tourism Management*, Vol. 26 No. 1, pp. 45-56.
- Yoon, Y., Lee, J. & Lee, C. (2010). Measuring festival quality and value affecting visitors' satisfaction and loyalty using structural approach. Int. J. Hosp. Manag. 29(2), 335-342. http://dx.doi.org/10.1016/ j.ijhm.2009.10.002.
- Yuksel, A. (2001). Managing customer satisfaction and retention: a case of tourist destinations, Turkey. Journal of Vacation Marketing 7 (2), 153–168.
- Zabkar, V., Brencic, M.M. & Dmitrovic, T. (2010). Modelling perceived quality, visitor satisfaction and behavioural intentions at the destination level. *Tourism Management*, 31, no. 4: 53746.
- Žabkar,V., Brenčič, M.M. & Dmitrović, T. (2010). Modelling perceived quality, visitor satisfaction and behavioural intentions at the destination level. *Tourism Manage*, 31(4), 537-546. http://dx.doi.org/10.1016/j.t

Submitted: Revised: Accepted and published online 26.10.2019 10.02.2020 xxx.02.2020

PALEONTOLOGICAL RESOURCES FOR GEOTOURISM IN BARMER AREA OF WESTERN RAJASTHAN, INDIA: IMPLICATION FOR A NATIONAL FOSSIL PARK DEVELOPMENT

Mathur SAURABH

Suresh Gyan Vihar University, Centre for Climate Change and Water Research, Jaipur, India, e-mail: saurabh.59659@mygyanvihar.com

SUDHANSHU

Suresh Gyan Vihar University, Centre for Climate Change and Water Research, Jaipur, India, e-mail: cm@mygyanvihar.com

Singh SURAJ KUMAR*

Suresh Gyan Vihar University, Centre for Sustainable Development, Jaipur, India, e-mail: suraj.kumar@mygyanvihar.com

Mathur, S. C.

J.N.Vyas University, Department of Geology, Jodhpur, India, e-mail: sureshsushmao@gmail.com

Citation: Saurabh, M., Sudhanshu, Suraj Kumar, S., & Mathur, S.C. (2020). PALEONTOLOGICAL RESOURCES FOR GEOTOURISM IN BARMER AREA OF WESTERN RAJASTHAN, INDIA: IMPLICATION FOR A NATIONAL FOSSIL PARK DEVELOPMENT. GeoJournal of Tourism and Geosites, 28(1), 203–216. https://doi.org/10.30892/gtg.28116-463

Abstract: A unique fossil assemblage has recently been discovered from Gehun and Lunu sections of Paleocene Barmer Hill Formation in Barmer area, Western Rajasthan, India. These fossil sites have been identified on the basis of previous studies and on the present work of our research group. Aim of the present paper is to conserve the unique and rare geological materials (Asthenopodichnium fossils) as the only fossil site of such type in India. Spectacular Gehun site is easily accessible as it is located within the Barmer city. In addition, this study will also propose an idea of setting up a national fossil park at Gehun in Barmer city similar to the famous Jurassic Fossil Park of Jaisalmer in Western Rajasthan, India. Geotourism is the best tool for their promotion and conservation with additional value as branding of Paleopark for sustainable socioeconomic development of the region. Recently, field work was conducted to observe the present scenario and to identify the threats to the fossil site. Rapid urbanization, developmental activities, fossil hunting and vandalism of fossils by visitors are the main threats to these sites. Aim of the present paper is also to make further efforts to conserve paleontological sites and to recognize such sites as the significant geoheritage resources of India.

_

^{*} Corresponding author

Key words: Barmer Hill Formation, fossil vandalism, national Fossil Park and Paleopark, Promotion of Geotourism, New tourist product

* * * * * *

INTRODUCTION

Unique and rare wood boring trace fossil bearing Gehun section of Barmer Hill Formation (BHF) is located within the Barmer city and Lunu section is located about 12 km away from the Barmer city on Barmer-Bisala Tar Road (Figure 1). Looking to the ideal location and rich fossil assemblage, Gehun section is proposed for a national fossil park.

This fossil park will be a very valuable geotourism element of Barmer to learn about the ancient environment, ecosystem and studying the past history of Earth. Our recent field work in these unique and rare fossil sites clearly noticed that these sites are under threats to rapid urbanization, developmental activities, vandalism of fossils and illegal quarrying of sandstones locally for construction. To protect these rare fossil bearing sites and to increase awareness, no concerted efforts have been made so far.

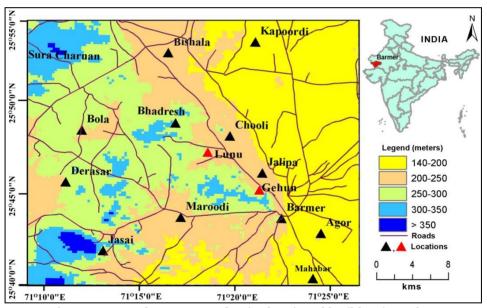


Figure 1. DEM of Barmer Area showing location of fossil-bearing Gehun and Lunu sections of Barmer Hill Formation of Barmer area, Western Rajasthan, India

Conservation of these sites can be achieved by involving the local communities and local administration of Barmer. In this context, objective of present paper is to discuss a brief overview of geology of Gehun section, brief explanation and significance of fossils, identification of major threats to the fossil site and initiate the idea for proposing the ever first fossil park with branding of potential Paleopark in Barmer.

LITERATURE REVIEW

Barmer area is endowed with huge and bold ridges of rocks of Malani Igneous Suite (MIS) and associated alkaline suite of Sarnu Dandali Igneous complex of Cretaceous age

(Srivastava, 1988; Basu et al., 1993). Only a small ridge named here as Gehun section represent sedimentary rocks in this igneous territory of the Barmer city (Mathur et al., 2016). Dasgupta, (1973) first named these sediments as Barmer Hill Formation (BHF).

Recently, India's only and rare wood boring trace fossils, *Asthenopodichnium* (May fly and Rotten algae fossils) have been reported (Mathur et al., 2018) along with petrified wood and *Teredolites* (Mathur et al., 2016); *Gyroliths, Thalassinoids and Ophiomorpha* trace fossils (Shekhawat, 2016) from Gehun section. Earlier, Angiosperm floral assemblage (*Matoniaceous fern, acutifolium, phlebopteris, ptillophylumandcycades, ferns*) have been reported by Dasgupta, (1974) from Lunusection of Paleocene BHF.

To identify and describe the various fossils from BHF, work of Uchman et al., 1995, 2007; Moran et al., 2010; Campbell & Baxter, 1979; Kelly & Bromley, 1984; Hantzschel, 1975 have been utilized. It is important to note here that the *Asthenopodichnium* trace fossils have been recorded earlier only from Lithuania, USA, Egypt, Czech Republic, Argentina, New Mexico (Uchman et al., 2007; Moran et al., 2010) and India's first site indicating international significance of Gehun site of Barmer, India.

METHODOLOGICAL FRAMEWORK

The objective of development of Barmer national Fossil Park with IPA paleopark tag for socioeconomic development of the region can be achieved through the methodology given below (Figure 1, a). Based on previous works and field, Petrographic, paleontological and remote sensing data, georesources of national and global significance were identified in the study area (GGN, 2006). Further, important geosites of significant fossils were identified based on Yang et al., (2011). With proper protection and conservation plan for identified geosites, a national fossil park is proposed which can further get IPA paleopark tag as per Lipps, (2009).

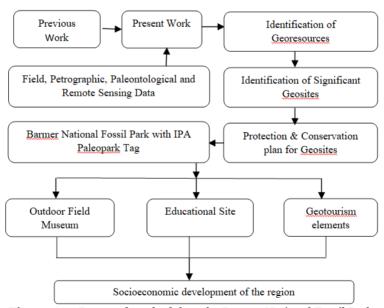


Figure 1, a. Proposed methodology for Barmer National Fossil Park

Additionally, with ideal location, these geosites can serve as an important outdoor field museum showcasing geodiversity among rocks and fossils. Combination of all

these geosites in one complex type geosite will be a centre of education for students and geotourism to enjoy and admire by general public. All these aspects of tourism will contribute to socio-economic development of the region.

GEOLOGICAL ATTRIBUTES OF BARMER AREA:

Excellent to scattered outcrops of fossil bearing Paleocene rocks of BHF are mainly exposed about 5 km in north western direction from Barmer railway station in the Barmer city up to Lunu in north for a strike length of about fifteen km (Figure 1).

BHF unconformably overlay the basement of Rhyolite of Malani Igneous Suite (Dasgupta, 1974; Roy & Jakhar, 2002; Mathur et al., (2016). However Shrivastava, (1988), Basu, (1993) and Shekhawat, (2016) suggested that the rhyolite of MIS extensively exposed in the eastern direction to Barmer city and alkaline complex around Sarnu area in western direction are of Cretaceous age. Late Cretaceous Fatehgarh Formation is underlain by BHF in north western side while BHF is underlain by the Akli Member of Dharvi Dungar Formation in north direction to Barmer (Figure 2; Mathur & Kumar, 2003; Mathur et al., 2006; Paul et al., 2016).

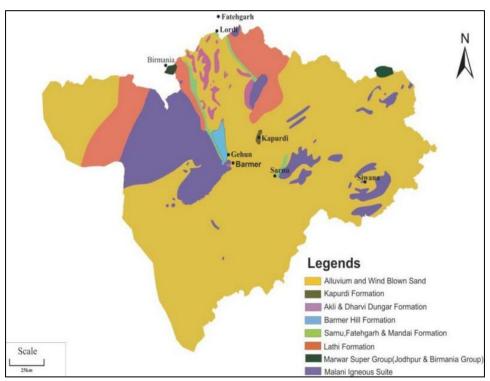


Figure 2. Geological Map of Barmer district showing outcrops of various formations with BHF

With this stratigraphic disposition at Gehun section, BHF forms a beautiful landscape with bold ridges and isolated hills (Plate-1a) pediments and pediment like surfaces covering an area of about two sq. km. Fifty-meter thick BHF at Gehun is divided into Lower and Upper Members on surface outcrops. Lower Member comprise of four fining upward cycles of siliciclastic sequences (Mathur et al., 2018). Each cycle commences with conglomerate at the base. It is followed by pebbly sandstone; coarse,

medium and fine- grained sandstone with interbedded siltstone at the top (Figure 3 and Plate-1b). Fine grained sandstone of each cycle preserves wood logs of *Asthenopodichnium* wood boring trace fossils and petrified wood (Plate-1c, 1d, e, f, 2a and 2b). These cyclic sequences represent channel lag deposits to braided riverine depositional setting of the lower member of BHF with local sediment source from Malani rhyolite. Upper member of BHF is composed of carbonate dominated lithofacies (Plate-2c) which comprise of rich assemblage of *Teredolites*, bivalve shells (Plate-2d, e and f); *Gyroliths*(Plate-3a); *Ophiomorpha* and *Thalassinoid* trace fossils (Plate-3b, c and d) indicate shallow swampy near coastal to subtidal marine environment (Mathur et al., 2016; Shekhawat,2016).

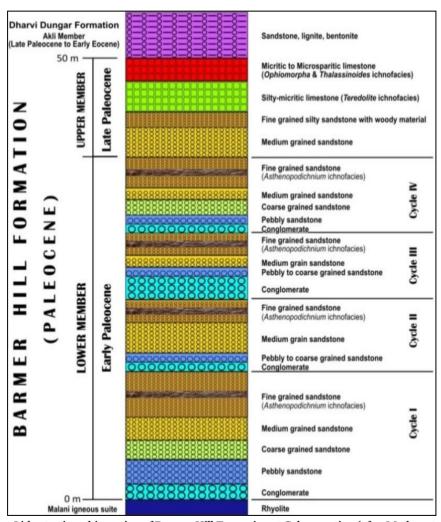


Figure 3. Lithostratigraphic section of Barmer Hill Formation at Gehun section (after Mathur et al., 2018)

1. FOSSIL RECORD OF GEHUN AREA: AN OVERVIEW

Varieties of trace fossils are discussed below from Gehun Section of BHF along with petrified wood based on the work of Mathur et al., 2016; Shekhawat, 2016; Mathur et al., 2018 and identification of many other ideal localities of fossils during our recent field work:

1.1. Asthenopodichnium

Excellently preserved, smaller to larger Asthenopodichnium trace fossils are found in full relief in wood logs in fine grained sand stones of Gehun section of BHF (Plate-1c and 1d). These fossils are identified as Asthenopodichnium lianorum (Plate-1e) and Asthenopodichnium lithuanicum (Plate-1f) which are abundantly and uniformly distributed in ideal and bookish forms parallel to the bedding planes. This distribution of Asthenopodichnium is similar to imbrications structure and their longer pointed part indicates south-south westward paleocurrent direction (Plate-1d). Asthenopodichnium lignorum trace fossils are loosely to tightly packed, pouch-like burrows having lozenge or almond-shaped structures (Plate-1e) while Asthenopodichnium lithuanicum are characteristically J-shaped structures (Plate-1f). Wood logs range in size from few inches to a meter size with 10cm to about 30cm thick forming layers in the fine-grained sandstone (Plate-1d). A. lianorum trace fossils are considered as feeding and dwelling burrows produced by wood-rotten fungi whereas A. lithuanicum are supposed to be feeding and dwelling burrows produced by Mayfly nymphs and larvae (Mathur et al., 2016; Mathur et al., 2018). At Gehun section rare preservation of Asthenopodichnium fossils were possible due to development of iron hydroxide (Goethite) rinds and casts around them. The goethite rinds and casts were probably formed by microbial decay of wood logs submerged in channels or bars of the river, when wood logs and other woody material died. Subsequently, the vascular cambium and secondary phloem undergo decay processes. At the same time when mineral or ion-laden water came in contact with died material and could react to precipitate goethite rinds around the borings which are expressed as positive relief in the horizon. Significantly, it is seventh reporting from the World in Barmer and first reporting from India indicating its international significance and rarity of preservation.

1.2. Petrified Wood

Well preserved, few centimeters to few meter sized wood logs (Plate-1c) and petrified wood (Plate-2a) occur in fine grained sandstones of all cycles in BHF. Petrified wood at Gehun section is probably formed by tree and plants which completely transformed to rock by the process of permineralization. Under this process, organic material has been replaced with silicate minerals, mainly quartz and Jasper which retained the original structure of the stem tissues. Not being impressions or compressions, petrified wood is simply a three-dimensional representation of original organic material. The petrification process commences when wood is buried under fluvial sediments which are initially passes through the environment with lack of oxygen. Subsequently, mineral-laden water start flowing through the covering material in plantcells; as the plant's lignin and cellulose decay, a stonemould of silica forms in its place to form petrified wood (c.f. Campbell & Baxter, 1979). It has been found that petrified wood occurring in fine grained sandstone in the lower cycle are partially coalified, silicified and jasperified. This imparts them a beautiful and attractive colors (Plate 2b). Wood logs with Asthenopodichnium and petrified wood indicate the process of terrestrial fluvial environment. This represents that presently Barmer area which has arid-semi arid climatic conditions presently, was a luxuriant forest during the Paleocene time and a big riverine system was operated here.

1.3. Teredolites

Beautiful preservation of *Teredolites* in the Upper Member of Gehun section occur as clusters of stubby to club-like flask-shaped tubes in wood ground sinmicritic limestone (Plate 2d and 2e). *Teredolites* are developed a pattern which is vertical or oblique to the bedding. These are boring bivalves belonging to the family *Teridinidae* (Kelly and Bromley, 1984). In micritic limestone of BHF, the pieces and fragmentary bivalve shells are abundantly dispersed, showing high energy environment (Plate 2f). *Teredolites* are

considered as dwelling and feeding traces produced by wood-boring bivalves (*Teredinids*) also called Ship-worms (Kelly & Bromley, 1984). *Teredolites* are indicators of brackish to marine environment and normally linked to the base level rise in marginal marine environment. Hence, *Teredolites* occurrences indicate extended estuarine to transgression conditions. The reporting of *Teredolites has* been made from India from many paleontological sites. These include: Ukra Hill Formation, Bhuj Formation, Kaladungar Formation and Vastan lignite mine of Gujarat in Kachchh Basin (Desai & Saklani, 2012; Kumar et al., 2011); Bhuban Formation, Aizwal district, Mizoram (Mehrotra et al; 2001) Garudamangalam Formation, Tamil Nadu of Cauvery Basin (Tiwari et al., 2007). Seventh reporting is from BHF at Gehun in Barmer (Mathur et al., 2016) showing their importance and rarity in India.

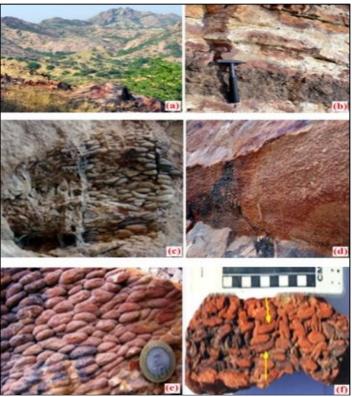


Plate 1 a. Spectacular landscape of rocks of Barmer Hill Formation (Foreground) and rocks of Malani Igneous Suite; b. Outcrop of fining upward sequence showing conglomerate at base to fine grained sand stone at the top; c. A wood log with large Asthenopodichnium preserved in fine grained sandstone; d. A large wood log in fine sandstone showing imbrications of tightly packed pouches of Asthenopodichniu; e. Tightly packed lozege and almond shaped Asthenopodichnium lignorum trace fossils; f. Tightly packed J- shaped Asthenopodichnium lithuanicum trace fossils

1.4. Gyroliths

Well preserved left or right-handed coiled and spiral shaped *Gyroliths burrow* trace fossils are found in microsparitic limestoneof Upper Member of Gehun section (Plate 3a). No surface ornamentation appears in the whorls of *Gyroliths*. Entire burrow structures are ranging in size from 30cm to 50cm while diameter of the burrow tubes vary from 2-3.5cm. *Gyroliths* are feeding and dwelling burrows probably made by decapods,

Crustaceans (Hantzchel, 1975). *Gyroliths*exhibit restricted marginal marine environment (Bromley & Frey, 1974; Fillion & Pickerill, 1990). *Teredolites* and *Gyroliths*clearly indicate that large fluvial system of Barmer grades into marine environment through development of estuarine environment indicating unique ancient ecosystem of the region.



Plate 2 a. Large log of non-coalified petrified wood preserved in fine grained sandstone;
b. Hand specimen of petrified wood showing partially coalified at top and jasperified at the base;
c. Students observing carbonate dominated Upper Member of Gehun section and its fossils;
d & e. Bulb, club and flask shaped tubes of Teredolites preserved in micritic limestone;
f. Pieces and fragments of Teridinae shells preserved in micritic limestone

1.5. Thalassinoids and Ophiomorpha

Thalassinoid and Ophiomorpha trace fossils occur in same horizon of fine grained microsparitic limestone of Upper Member on top of Gehun section of BHF. Fragmented and discontinuous tubes of Thalassinoids are embedded in calcite to clayey matrix in which beddings are not so clear. These trace fossils show both branched and unbranched tubes (Plate-3b). Thalassinoid burrow system at Gehun is deposited horizontal to oblique and sometime vertical to the bedding plane. Theyaresaid to be a feeding burrow system created under oxygenated water inner coastal shallow marine environment (Ekdale, 1992). Preservation of Ophiomorpha commonly occurs as vertical or horizontal and cylindrical tunnel system in fine grained microsparitic limestone of Upper Member of BHF. Sometimes, it is branched and covered by elongated or irregular pellets arranged perpendicular to their longer axis. Some horizontal segments of Ophiomorpha may lack knobby appearance due to differential weathering and erosion which often results into empty tubes as seen on surface and in transverse section (Plate-3c and 3d). Ophiomorpha is considered as feeding and dwelling burrow of crustaceans which normally represents sub-tidal environment (Uchman, 1995; 2007).



Plate 3 a. Gyroliths showing spiral burrow having uniform diameter of burrow tube present in microsparitic limestone; b. Unbranched fragmented tubes of *Thalassinoid*trace fossils preserved in microsparitic limestone; c. Empty *Ophiomorpha* tubes having lack of knobby appearance due to differential weathering as seen on outcrop; d. Hand specimen of *Ophiomorpha* showing depressional tubes without knob; e. Anthropological threat to *Asthenopodichnium* bearing Lower Member of Gehun section being destructed for clearing site to construct houses; f. Threat to fossil site at Gehun section due to illegal mining

2. THREATS TO FOSSIL SITES IN BARMER AREA

Fossil sites of Gehun of Barmer are undoubtedly containing unique and rare fossils which are significant georesources of India. Rare fossil sites of Barmer are under great threats and should be protected for future generation to be handled as proposed below:

2.1. Awareness and Education

Barmer is the place of vast geological education as it is endowed with landscape of globally one of the largest acidic, orogenic and terrestrial volcanic province (Malani Igneous Suite), alkaline suites and its mineralization of REE of Cretaceous age, huge lignite and coal bed Methane occurrences along with one of the largest petroleum and Bentonite deposits of India (Bhushan, 1975; 2000; Maheshwari et al., 1996; Mathur et al., 2009; Compton, 2009, Dolson et al., 2015). Additionally, global phosphogenic and mass extinction events (rich assemblage of fossils of fishes, crocodile, dinosaur, turtle, trace fossils and gastropods) and significant framework elements (magnetic spherule, dust, ejecta material related to KTB of volcanic and impact events in Fatehgarh Formation (Mathur et al., 2005a & b; 2006; 2019a & b) are other specialties along with present fossiliferous site (Gehun) of Barmer area. Being a geologically significant area, many geologists are interested to visit Barmer for study and research purposes. However,

general public and tourists are not aware of geological uniqueness of the region. In order to spread awareness; sign boards, brochures, field guide, tourist guides, articles in newspapers and social media should be prepared and made available by geological fraternity at local and national level to serve the purpose of education and geotourism.

2.2. Rapid Urbanization and Developmental Activities

After 2004 with the petroleum discovery by CAIRN, India in Barmer Basin (Compton, 2009; Dolson et al., 2015), Barmer city has undergone rapid urbanization and development. Secondly, the fossil sites at Gehun are easily accessible and are located in a growing residential colony in the Barmer city. Therefore, this site is severely on the verge of complete exhaustion as outcrops will be lost and one day houses may be constructed utilizing this land and geologically significant rare material for construction. Hence, these outcrops which are excellently exposed should be cared by geologists, local people and administration to safeguard them from urbanization and developmental activities.

2.3. Excavation of fossils bearing rocks and fossil vandalism

Fossil sites of Barmer are partially located on government/public lands and are not under reserve or protected category. For instance, the local people are not aware of the importance of these rocks and rare fossils, so the land is freely available for illegal mining and to excavate fossil bearing rocks to be used for construction purposes by local people (Plate-3d and-3e). Vandalism of fossils by fossil hunters and antique thieves are another threats to the sites as beautiful and rare fossils are collected and are brought for exhibition in museums of institutes by geologists themselves. This practice actually disturbs the *insitu* values of fossils. Collection and vandalism of rare fossils without permission and selling them for price is an unethical act. In absence of rules and regulation against vandalism of fossils in India, important fossil sites including Barmer are endangered for illegal excavation and collection of fossils.

OVERVIEW OF CONSERVATION OF FOSSILS AND FOSSIL SITES:

J.N.V. University, Jodhpur and S.G.V. University, Jaipur are proposing some initiatives to protect and conserve fossils and fossil sites of India including Gehun fossil site in the Barmer area through their joint research collaboration. Additionally, these initiatives also aim to allow scientific study leading to public educational and recreational activities for benefits to empower local community for their economic growth through geotourism from these sites. For this, we should be aware about the importance of paleontological material as the first step and should discourage to display them in museums because, it is considered as unethical act at international level. Rather, one must be encouraged to conserve them *insitu* at their original position in the fossil sites by developing a fossil park mainly for scientific and geotourism purposes. In this context, Lipps (2009), conceptualized that local fossil sites having national as well as international significance should be protected insitu as a paleontological treasure. It has to be made essential through some government rules, acts and legislation because these sites provide an understanding of history of life on Earth to the present and future scientific researchers. Unfortunately, India does not have any rule and regulation till date against fossil vandalism and conservations. In this context, recently on 6th Aug. 2019, Society of Earth Scientists, Lucknow and Indian National Science Academy, New Delhi have proposed a Geodiversity Act-2019 which is planned to be submitted to the government of India. One of the co-authors (S.C. Mathur) was a member of the committee of the first Geoheritage Act of India. Secondly, these significant georesources can be managed by protecting them efficiently by developing fossil parks as done in New Zealand (Heyward, 2009), Malaysia (Dony et al., 2014), Thailand (Kritwon-In & Singtuen, 2018) and in other countries, Many countries have promoted, protected

and conserved their significant paleontological sites in a variety of ways to recognize their paleontological heritage by passing legislation against fossil collection and vandalism.

As a result, under UNESCO's World Heritage Program, 878 sites with cultural and natural heritage values along with 147 Geoparks in 41 countries have been recognized and developed in these countries (globalgeoparks.org and GGN, 2006). Surprisingly, despite of rich geoheritage, India does not have a single geopark. Many of these recognized sites are paleontological and fossil conservation sites. Additionally, International Paleontological Association (IPA) established Paleopark in order to protect endangered fossil sites by establishing fossil parks that conserve fossil sites in ground for a primary source of scientific data, educational opportunities, recreational and geo-touristic activities.

There is no Indian paleontological site or fossil park included under IPA catalog despite of the fact that many of Indian significant fossil sites are endangered and are on the verge of extinction. However, Geological Survey of India (GSI) had declared ten paleontological sites as National Geological Monuments (NGM; GSI 2001a&b), out of which Rajasthan has three NGM and Western Rajasthan has only one (Akal fossil park, Jaisalmer with petrified wood of Jurassic age). Despite of this declaration, no concerted efforts have been done for their detailed study, management and significance. Though, these sites are protected areas, however, lack of proper safety and vandalism practices resulted into the loss of fossils from many significant sites. Unfortunately, at Akal Fossil Park, petrified wood samples has been lost with the time and only few specimens are left in the cage for the observation by visitors. This is one of the great losses of significant georesources of a Jurassic park in India. In light of the above facts, recently discovered rare fossil sites of Gehun in Barmer area can be a significant potential candidate for establishing a national fossil park with Paleopark branding in western Rajasthan, India.

PROPOSED BARMER FOSSIL PARK AND FIELD MUSEUM

The proposed Barmer fossil park will be a significant place where rare fossils and host rocks will be protected and conserved at their *insitu* exposures. Secondly, the park would be an excellent outdoor field museum with different aspects to traditional indoor museum where collection of fossils could be made through the practice of vandalism. Thirdly, this fossil park will be an attractive site with original landscape; its various features and fossils which will provide a broad spectrum and exhibitof the rare fossils in their original place. Ultimately, the site will play an important role not only in conserving the fossils but also would be available *insitu* for education to public, research for geoscientists in order to establish the value of fossils to understand the history of lifeand other geological aspects of Paleocene period of the region. Additionally, these sites are representing a landform of luxuriant forest with large fluvial to marine system of Paleocenetime in this part of India which is presently an arid zone. Internationally, there are several examples of successful establishment of fossil park and Paleontological field museums by protecting and conservation of fossil sites (GGN, 2006; Santucci, 2017).

One can easily understand this unique concept by following excellent examples: Petrified wood park and Dinosaur ridge in USA (Santucci, 2017), Wadi Al-Hatim fossil park (Whale Valley) in Sahara Desert, Egypt (UNEP-WCMC, 2011), Paleontological National fossil parks in China (Yang et al., 2011), PhuKumKhao Dinosaur Paleontological Site, Thailand (Boonchai et al., 2009) and Paleontological Site of Airing, Malaysia (Nazaruddinand Othman, 2014). All thesefossil parks displayed and conserved their unique and rare fossils by establishing fossil park, paleopark and Geopark. Similar efforts should be made for protection and conservation of paleontological sites including Barmer fossil sites in India. For instance, the proposed Barmer fossil park is expected to provide a unique and

interesting view of spectacular landscape and life history of 65 to 55 million years old Paleocene period. The site will attract a wide attention of paleontologists, geologists and researchers for scientific studies pertaining to taxonomy, taphonomy, paleoeclogy, paleoclimatology, paleobiogeography of fossils and depositional environment of sedimentary rocks. Common people and visitors will learn and enjoy the uniqueness of exceptionally beautiful fossils and their preservation process in rocks. Educational tours for students and guided tours for tourists will be an additional benefit of Barmerfossil park along with opportunities for camping, lecture and hiking activities etc.

Looking to the enormous benefits, Barmer fossil sites urgently required protection and conservation through a national fossil park. This can be done by involving all related agencies (academic institutions, research centers, state and central govt. organizations) and individuals (paleontologists, geologists/geoscientists, academicians). For this task, local administration, local tourism organization and tourist industries (travel agent, carriers etc.) who are responsible for tourism development. Based on the present knowledge and through this paper, proposed Fossil Park must have an adequate and acceptable space (boundary) which should be managed by government may be on PPD mode. Each fossil and unique host rock sites proposed willbe described briefly, as sign boards, pamphlets, brochures, small booklets in tangible language (in English and local language) to provide knowledge to a range of visitors i.e. students, tourists, educationists, scientists etc. Since, proposed Barmer Fossil Park is situated within the Barmer city so some facilities (visitor center, café and restaurant etc.) and infrastructure (road and park) should also be designed and built for the comfort of visitors wherein the owner may charge money (ticket) from visitors. After creating such facilities with complete geological information, the site canqualify for a Paleopark for which a Dozier to be prepared and submitted to IPA in coming future.

DISCUSSIONS

Proposed Barmer Fossil Park represents only the site containing unique and rare preservation of Paleocene wood boring Asthenopodichnium trace fossils in India. In addition, it is only seventh such site of the world (Mathur et al., 2018). This discovery of fossils by our group inspired us to protect and conserve themurgently, as it is severely threatened by anthropological and vandalism activities going on there. This site also comprises spectacular outcrops of Paleocene sedimentary rocks and spectacular landscape of rocks of MIS of global significance. Additionally, this small outcrop (two sq. km. area) represents classical fluvial to marine sedimentary sequences and a unique ecosystem and paleolife of these environments. It is collectively a rich representative site and can be proved as important paleontological georesources of Barmer. Despite of being a significant paleontological resource, it is endangered due to the threats of anthropology (development and rapid growth of urbanization) and vandalism activities. Geoscientists and local administration should think creatively to achieve proper protection of this site in form of proposed Barmer Fossil Park by conserving its rocks and unique fossils.

The establishment of field museum in form of Barmer Fossil Park will increase awareness regarding importance of fossils among people, increase government and public interest and also expand geotourism for socioeconomic benefit of the area. This paper is certainly promoting the data of these unique fossils in geoscientific and geotourism aspects to make people understand the geological processes and care for fossils through the conservation of geoheritage and paleolifewhich was significantly developed just after the K/T boundary extinction in this part of India (Mathuretal, 2006; 2019).

Secondly, BHF clearly indicate non-coalification of wood material having rich assemblage of wood boring trace fossils while overlying Akal Member of Dharvi Dungar

Formation witnessed by the presence of huge deposits of lignite (Coalified wood) in the nearby landscapes indicating geodiversity among rocks of the Barmer. These aspects of BHF provide additional international significance to proposed Barmer Fossil Park.

CONCLUSION

Geological features including preservation of fossils which took millions of years to form should be conserved insitu. Fossils contain a range of values that require special care and protection. Gehun section of Barmer is an excellent example of preservation of unique and rare fossils. Unfortunately, fossil bearing outcrops of Gehun section of Barmer have been damaged due to large activities of construction and development works with illegal quarrying. Site is also endangered due to fossil hunting, vandalism and antique theft practices. To protect this fossil site in form of National Fossil Park will not only help in conserving the fossil sites of scientific and educational values but also will promote geotourism in the historical and cultural Barmer city. For this purpose, suitable infrastructure should be developed with respect to protection of natural heritage by involving local communities, geoscientists and government authorities.

Aknowlegments

Authors are thankful to Dr. N.S. Shekhawat for providing and permitting to reuse certain photographs and material used in his research. We sincerely thanks Dr. V.S. Parihar and Dr. S.L. Nama for field work and identification of fossils. We sincerely acknowledge the help and assistance rendered by colleagues and students of Department of Geology, JNVU: Dr. S.R. Jakhar, Dr. Shiv Singh, Dr. C.P. Khichi, Mr. Hukma Ram, Mr. Ashish, Mr. Ganpat, Mr. Bhura Ram and Mr. Jitendra Parihar. Authors are thankful to reviewers for their thoughtful suggestions and comments.

REFERENCES

Basu, A.R., Renne, P.R., Dasgupta, D. K., Teichmann & Poreda, R.J. (1993). Early and late alkali igneous pulses and high³He plume origin for the Deccan Flood Basalt. *Science*, 261,902-906.

Bhushan, S.K. (1975). The Malani rhyolite. Jour. Ind. Min. Geological Survey of India, 30 (2),99-100.

Bhushan, S.K. (2000).Malani rhyolite – A review.Gondwana Research, 3 (1),65-77.

Boonchai, N., Grote P.J. & Jintasakul, P. (2009). Paleontological parks and museums and prominent fossil sites in Thailand and their importance in the conservation of fossils. In Lipps J.H. & Granier B.R.C. (eds.) (2009). Paleopark - The protection and conservation of fossil sites worldwide. - Carnets de Géologie / Notebooks on Geology, Brest, Book, 75-95.

Campbell, J.A. & Baxter M.S. (1979). Radiocarbon measurements on submerged forest floating chronologies. Publishing Group, 278 (5703), 409-413.

Compton, P.M. (2009). The geology of the Barmer Basin, Rajasthan, India, and the origin of its major oil reservoir, The Fatehgarh Formation. *Petroleum Geosciences*, 15, 117-190.

Dasgupta, S.K. (1974). A revision on the Mesozoic-Tertiary stratigraphy of the Jaisalmer. *Jour of Earth Science*, 2(1), 77-94. Desai, B.G. & Saklani, R.D. (2012). Significance of the trace fossil BalanoglossitesMägdefrau, 1932 from the Lower Cretaceous Guneri member (Bhuj Formation) of the Guneri dome, Kachchh, India. Swiss. *JournalPaleontology*, 131(1), 255-263.

Dony, A., Nazaruddin, A. & Othman, R. (2014). Geoheritage Conservation of Paleontological Sites in Aring Area, GuaMusang District, Kelantan, Malaysia. International. *Journal of Advanced Science Engineering Information Technology*, 4 (1), 14-19.

Ekdale, A. (1992). Muckraling and mudslinging: the joy of deposits feedings. In: C.G. Maples and R.R. West (Eds.), Trace Fossils. The Paleontological Society short course in Paleontology, 5, 145-171.

Fillion, D. & Pickerill, R.K. (1990). Ichnology of the upper Cambrian-lower Ordovician Bell Island and Wabana Groups of eastern Newfoundland. *Palaeontogeographica Canadiana*, 7, 119-126.

Hantzchel, W. (1975). Trace fossils and problematica. In: Moor. R.C.(eds.), Treatise on Invertebrate Paleontology, Part W, Supplement 1. *Geol. Soc. America* Univ. Kansas press, 269.

Hayward, B.W. (2009). Protecting fossil sites in New Zealand. Notebooks on Geology, 49-64.

Kelly S.R.A. & Bromley R.G. (1984). Iconological nomenclature of clavate borings. Journal of Paleontology, 27, 793-807.

- KritWon-In & Singtuen, V. (2018). Geoheritage Conservation for Sustainable Geotourism in Petrified Wood Forest Park, TAK Province, Thailand. The Turkish Online Journal of Design, Art and Communication, special volume,1532-1537.
- Kumar, K., Singh, H. & Rana, R.S. (2011). IchnospeciesTeredoliteslongissimus and Teredinid Body Fossils from the Early Eocene of India—Taphonomic and PalaeoenvironmentalImplications.Ichnos,18(2),57–71.
- Lipps, J. H. (2009). PaleoParks: Our paleontological heritageprotected and conserved in the field worldwide. Notebooks on Geology Book 2009/03, [http://paleopolis.rediris.es/cg/CG2009 BOOK 03/CG2009 BOOK_03_Chapter01. pdf].
- Maheshwari, A., Coltori, M., Sial, A.N. & Mariano, G. (1996). Crustal influences in the Petrogenesis of the Malani rhyolites, south-western Rajasthan, combined trace elements and isotope constraints. J. Geol. Soc. India, 7, 611-619.
- Mathur, S.C. & Mathur. S.K. (2003). Sedimentation in Barmer Basin. Journal Geological Society of India, 61 (3), 368-369. Mathur, S.C., Gaur, S.D., Loyal, R.S., Tripathi A., Tripathi, R.P. & Gupta, A. (2005a). First report on magnetic spherules recovered from Maastrichtian bone bed in the sedimentary sequence of Fatelgarh Formation, Barmer Basin, India. Current Science, 89(7),1259-1262.
- Mathur, S.C., Gaur, S.D., Loyal, R.S., Tripathi, A. & Sisodia, M.S. (2005b). Spherules in the Fatehgarh Formation (Cretaceous) of Barmer Basin, India. Gondwana Research, 8(4),579-584.
- Mathur, S.C., Mathur S.K. & Loval, R.S. (2006). First Report of micro-vertebrate assemblage from Cretaceous Fatehgarh Formation. Geological Society of India, 67(6), 759-769.
- Mathur, S.C., Loyal, R.S., Nama, S.L. & Negi, N.S. (2009). Geological Constraints on the Bentonitic facies of the Barmer Basin, Western Rajasthan, India. In: Economic Mineralization, K.L. Srivastava (eds.), Scientific Publisher (India), 274-286.
- Mathur, Saurabh., Shekhawat, N.S. & Parihar, V.S. (2016). First discovery of Asthenopodichnium Lithuanicum trace fossils from the Barmer Hill Formation, Western Rajasthan, India. Geoyouth-2016, M.L.S University, Udaipur, 8-9 (extended Abstract).
- Mathur, S. C., Shekhawat, N. S., Nama, S. L., Khichi, C. P., Soni, A., Mathur Saurabh & Parihar, V. S. (2018). The wood-boring trace fossil Asthenopodichnium from Palaeocene sediments of the Barmer Hill Formation, western Rajasthan, India. Current Science, 114(1544), 1544-1548.
- Mathur, S., Tripathi, R.P., Mathur, S.C., Mathur, Mathur Saurabh. & Gaur, S.D. (2019). Implication from chemical study of Magnetic spherules from a thin ferruginous layer located in Fatehgarh formation of Barmer Basin, India. Jour. Geol. Soc. India,93,56-60.
- Mehrotra, R.C., Mandaokar, B.D., Tiwari, R.P. & Rai, V. (2001). Teredolites clavatus from the Upper Bhuban Formation of Aizawl District Mizoram, India.Ichnos, 8,63-68.
- Moran, K., Hilbert, H. L., Golder, K., Malenda, H. F., Smith, C. J., Storm, L. D., Simpson, E. L., Wizevich, M. C. & Tindall, S. E. (2010). Attributes of the wood-boring trace fossil Asthenopodichnium in the Late Cretaceous Wahweap
- Formation, Utah, USA: Palaeography, Palaeoclimatology, Palaeoclogy, 297,662-669.
 Paul, F., Bodapati, S., Naidu, N., Burley, S.D., Dolson, J., Whiteley & Kothari, N.V. (2015). Geochemical characterization of oils and their source rock in the Barmer Basin, Rajasthan, India. Journal Petroleum
- Geosciences, 21, 321.
 Roy, A.B. & Jakhar, S. (2002). Geology of Rajasthan (North West India) Precambrian to Recent. Scientific Publishers, (India), Jodhpur, 421.
- Santucci, V. L. (2017). Preserving Fossils in the National Parks: A History. Jour. Earth Science History, 36 (2),245-285. Shekhawat, N.S. (2016). Geological Investigation of rocks of Barmer Hill Formation of the petroliferous Barmer Basin, Western Rajasthan, India. (Unpublished thesis), J.N.V. University, Jodhpur, 187.
- Srivastava, R. K. (1988). Alkaline and peralkaline rocks of RajasthanMem., Geol. Soc. Ind. 15, 24-32.
- Tiwari, R.P., Malsawma, J., Sangode, S.J., & Arora, B.R. (2007). Magnetostratigraphy of a part of Middle Bhuban sequence (Surma Group) Aizawl, Mizoram. Journal of the Geological Society of India, 70,667–674.
- Uchman, A. (1995). Taxonomy and palaeoecology of flysch trace fossils: Marnosoarenacea Formation and associated facies (Miocene, Northern Apennines, Italy). Beringeria, 15,3-11.
- Uchman, A., Gaigalas, A., Melešytė, M. & Kazakayskas, V. (2007). The trace fossil Astheropodichniumlithuanicumisp. Nov., from the late Neogene brown-coal deposits, Lithuania. Geological Quarterly, 51, 329-336.
- Yang, G., Chen, Z., Tian, M., Wray, R. A. L. & Ping, Y. (2011). On the growth of national Geoparks in China: distribution, interpretation and regional comparison. Episodes, 34 (3), 157-176.
- *** GGN, (2006). Guideline and criteria for national Geopark Seeking UNESCO'S assistance to join the Global Geopark Network. UNESCO, Division of Ecological and Earth Science,115-118.
- *** GGN Website: http://www.globalgeopark.org/ globalgeoparksnetwork.org
- *** GSI, (2001a). Monument of stratigraphic significance: Malanivolcanics overlain by Jodhpur Sandstone, Memo. Geological Survey of India, 27, 62-64.
- *** GSI. (2001b). National Geological Monuments, Jodhpur. Group- Malani Igneous Suite contact Memo. Geological Survey of India, 27,64-65.
 *** UNEP-WCMC. (2011). Wadi Al-Hitan (Whale Valley), Egypt, UNEP-WCMC World Heritage Information
- Sheets. [Electronic reference]

Submitted: Revised: Accepted and published online 09.10.2019 17.02.2020 24.02.2020

ASSESSMENT OF TOURISTS' PERCEPTIONS ON SAFETY AT THE CAPE COAST TOURIST DESTINATION IN GHANA

Nicholas IMBEAH

Enyedi Gyorgy Doctoral School for Regional Sciences, Szent Istvan Egyetem, 2100, Godollo, Pater Karoly, u.1. Hungary, e-mail: nicholas.imbeah2012@gmail.com

Aniko KHADEMI-VIDRA

Szent Istvan Egyetem, 2100, Godollo, Pater Karoly, u.1. Hungary, e-mail: khademi.vidra.aniko@gtk.szie.hu

Zoltan BUJDOSO*

Eszterhazy Karoly University Gyöngyös, Hungary, e-mail: bujdoso.zoltan@uni-eszterhazy.hu

Citation: Imbeah, N., Khademi-Vidra, A. & Bujdoso Z. (2020). ASSESSMENT OF TOURISTS' PERCEPTIONS ON SAFETY AT THE CAPE COAST TOURIST DESTINATION IN GHANA. GeoJournal of Tourism and Geosites, 28(1), 217–231. https://doi.org/10.30892/gtg.28117-464

Abstract: The study aimed at identifying the precautionary measures taken by tourists before traveling and measures adopted while at the destination. Purposive sampling technique and questionnaires were employed to survey 515 tourists. It became evident that as the level of the tourists' safety satisfaction increased, their safety expectations also increased. Tourists' purpose of visiting did not influence the perception of safety. Majority of the tourists had at least a high school education. Therefore, their impressions could be critical for stakeholders to consider them in tourism safety planning. It recommended that GTA should add installation and repairs of safety equipment in unannounced routine checks. It is expected that this study will lead to further research on tourist safety and security within Ghana and her neighbouring countries in West Africa to reflect the regional position on tourism safety.

Key words: tourist safety, expectations, satisfaction, Ghana, destination

INTRODUCTION Background of the study

The personal safety of tourists at the destination is relevant to tourists and destination managers, and therefore the perceived and actual risk associated with travel and tourism has made safety and security very critical in the promotion of tourism (Mopeli, 2009). The subject of safety and security has become more imperative not only

_

^{*} Corresponding author

for the host-community but also for the tourist who is a guest (Cavlek, 2002, Bujdosó et al., 2011, 2015, Bujdosó-Dávid, 2013, Mátyás and Csege, 2019) in a new environment.

As Mansfeld and Pizam (2006) opined, peace, safety and security are the three prerequisites for thriving tourism development in every destination. Many types of research have been conducted across the world on safety and security of tourists, namely: Lisowska, (2017), Mansfeld and Pizam (2006), Cavlek (2002), Breda and Costa (2006), Reisinger and Mavondo (2005), Ferreira and Harmse, (2000), George, (2003). As usual, these and many other studies concentrated on evaluating the natural destination safety elements, namely, health, terrorism, natural disasters, crime and political instability (Bujdosó, 2009). Admittedly, authors have written on issues of tourism safety and security from a wide range of perspectives, but the perceptions of tourists in Cape Coast tourist destination in Ghana have not been widely explored, and subsequently, this paper seeks to add to the discussion on the personal measures tourists take before travelling. The aims of this paper are to: identify the safety and security facilities at the destination; ascertain tourists' purpose of travelling and examine the precautionary measures taken by tourists before travelling and measures adopted while at the destination. The paper chose Cape Coast Castle, Elmina Castle and Kakum National Park (KNP) in the Central Region of Ghana for the study.

Contribution to the tourism sector in Ghana

The tourism sector in Ghana has remained a steady contributor to economic growth and development. According to the Institute of Statistical, Social and Economic Research (ISSER) (2017), tourism has been a significant source of foreign exchange, employment and government revenue in Ghana. In the report of World Travel and Tourism Council (WTTC), in 2016, travel and tourism generated a total of US\$ 7.6 trillion (10.2% of global GDP) and 292 million jobs, equal to 1 in 10 jobs in the worldwide economy. The contribution of the tourism sector in 2016 to total employment, both direct and indirect was 5.9%, representing 693,000 jobs.

In the assessment of ISSER (2017), tourism arrivals were estimated at 1,322,500 in 2016, representing a 10% increase from 2015. Revenue from tourism also went up by nearly 10% from US\$ 2, 275.2 million in 2015 to US\$ 2, 505.5 million in 2016. Tourism is now either the 3rd or 4th foreign exchange earner in Ghana and its contribution to GDP was around 5.8 in 2017 (Ghana Tourism Authority, GTA, 2017).

Safety in the West African Region

The apparent compelling force for discussion on this subject is the fact that the activities of terrorists might tarnish the right image of tourist destinations in Africa as a whole and West Africa in particular. For example, on 13th March 2016, Al Qaeda al-Jihad in the Islamic Maghreb (AQIM) attacked a beach resort near Abidjan in Ivory Coast, a neighbouring country of Ghana. Armed men carried out the attack on L'Etoile du Sud hotel and hotel Nouvelle Paillote at Grand Bassam's tourist resort, killing 16 civilians and three soldiers and injuring 24 others (Gunaratna, 2016).

Also, on 9th January 2016, the BBC carried the news item that three tourists were stabbed at Hurghada Hotel in Egypt. These foreign tourists were stabbed by two suspected Islamic State militants who stormed into a hotel in Egypt's Red Sea resort of Hurghada (BBC News, 2016). On the 11th December, 2016 a suicide bombing occurred at the Coptic cathedral in Egypt where 26 people were killed and 45 others injured (African Research Bulletin, 2017). Besides, in 2016 militants of Al-Qaeda in the Islamic Maghreb (AQIM) attacked a hotel and killed 29 people in Burkina Faso also Ghana's neighbouring country. The attack happened at the Splendid Hotel and a nearby Cappuccino café in Ouagadougou (BBC News, 2016). In the recent report from OSAC (2019), over eleven destinations in Burkina Faso have been declared as unsafe places to

visit for recreational and tourism activities. In this report, the U.S. Department of State Travel Advisory indicated that travellers should reconsider travel to the country due to terrorism, crime and kidnapping. There is a considerable risk from crime in Ouagadougou, the capital city of Burkina Faso. The surge of these attacks on tourist destinations in West Africa has made research into this topic imperative.

Though Ghana has been a peaceful country in the sub-region, these indiscriminate attacks make Ghanaian tourist destinations susceptible to sub-regional collateral damage. Law enforcement might not be useful in the West African destinations, and this can impact negatively on tourist safety. On the other hand, in a study done by Tran and Bridges (2009), it was observed that in a destination where the law enforcement is effective coupled with government officials who support economic growth emerging from tourism it attracts increasing numbers of foreign tourists to that country. In their studies on "tourism and crime in 46 European nations," it was concluded that lesser crime rates against persons as well as higher security might be the product of tourism and economic development. In West Africa, so far as law enforcement is concerned, there is much room for improvement.

Issues that influence tourists' safety at a destination

Harassment is a prominent feature of the life cycle of tourism growth as a destination progresses from informal phase to consolidation and acceptance and many reports of the most sustained complaints come from popular, high-density resort areas where tourism is highly institutionalised (Kozak et al., 2007). Tourists have a way of observing a destination sometimes through the internet and gossip before they travel there. Tourists are predisposed to react based on their perceptions which are sometimes false. Pizam and Fleischer (2002), observe that individual tourists' actions make them susceptible to harassment. For example, tourists go to places where locals will not dare to go; their way of dressing and how they react to certain circumstances expose them to so many risks. Tourists would mostly want to go out at night because of the desire to have an authentic experience and to have fun, making themselves easy targets for criminals and offenders waiting to take advantage of them.

Harper (2001) identifies another behaviour-cause that can be related to the kind of friends tourists keep to themselves while at the destination. Since the language barrier can be a big problem for the tourists and in the attempt to trying to cope may attach themselves to some natives to feel secure and safe. Consequently, sometimes these friends turn out to be criminals who wait for the right moment to take advantage of the tourists (Pizam & Mansfeld, 1996). At a particular time, a destination may be crowded with foreigners who come to share resources with locals as well and disturb the peaceful nature of the place (Morrison, 2012). Also, there have been cases where some sites and facilities are built up only for tourists and become a no-go area for the local people in the community. This situation compels the locals into acting up towards the very people who disturb their peace. Since the tour is filled with anxiety which may result in psychological and physical reflections of one's home environment, the tourist may behave, understand and react differently to the situation which may generate adverse reactions from the locals including harassment.

Tourists' perception of safety

Tourists develop a negative impression of a destination if they feel unsafe or threatened at a tourist facility while at the destination. This situation can severely affect the destination's tourism industry and image and can end up in the reduction of numbers to the area in question. George (2003) claimed that this reduction in arrivals could happen when:

• Potential tourists decide not to visit the destination because its reputation for chalking a high crime rate is rife.

- Tourists feel unsafe at a destination and are not willing to participate in activities outside their lodging facilities.
- Tourists who have ever been threatened or felt unsafe at a destination are not likely to return to the place for leisure and quite unfortunate are not expected to recommend the destination to other potential tourists.

The role of safety to the destination's image

Little destination knowledge by tourists and the perceived negative reflection generated by poverty, political instability and sometimes terrible humanitarian circumstances (Grosspietsch, 2006) has been among the critical problems when there are high tourist activities. Undoubtedly, destination image has influences on tourist travel decision-making, cognition and behaviour at a destination as well as fulfilment or satisfaction levels and remembrance of the experience. Interestingly, memories and reflections of tourists after the trip to a destination complement the original adventures and desire for a repeat visit. Consequently, tourist destination images play a significant role in tourists' safety since these images influence both the decision-making behaviour of potential tourists and the level of satisfaction concerning the tourist destination.

Tourists depend profoundly upon the image of a particular destination when considering and choosing various holiday destinations. Due to broader choice and the diversity of tourist-destinations, modern-day tourists are likely to select holidays that offer total satisfaction of their travel desires and value for money. A tourist-destination having the right product alone is not enough to favourably compete in the tourism market. The expectations and needs of tourists must be considered whether or not the image is an actual illustration of what a destination has to offer the traveler or not, is less significant than the existence of the image in the minds of the potential tourists (Jenkins, 1999; Strydom & Nel, 2006; Ilies et al., 2018, 2019; Indrie et al., 2019). According to Sönmez and Sirakaya (2002), "positive images of a destination help the policy planner and tour operators to create awareness, and this can serve as the distinguishing factor among competing destinations". Safety and security are without any doubt the sine qua non-primary conditions for the healthy tourism development of every destination, region or country and thus serves as the fundamental determinants of its growth (Mopeli, 2009). Without these conditions, destinations cannot compete successfully in the global market of tourism even if they present through their marketing campaigns, the most attractive and the excellent quality natural and human-made attractions like Castles in Elmina and Cape Coast and the Canopy walkway in Kakum National Park in the Central Region of Ghana.

Tourists' pre-trip conception of safety

In the opinion of Reisinger and Mavondo (2005), it is vital to understand how potential tourists experience their environment or destination in terms of safety to create a conducive environment for tourism development. Sjöberg (2002) explains that safety and physical security are prerequisites for healthy tourism development of every destination. In contemporary tourism issues, safety and security for international travelers have become a global issue, and some reasonable discussion and media space have been assigned to its discourse. This media coverage, coupled with other factors informs the potential tourists of what is likely to be met when they decide to visit a destination at the expense of the other. Mansfeld (2006) observes that inadequate personal safety is seen as a significant deterrent to the international traveler or tourists. Foreign tourists, who feel that their security cannot be assured and could be compromised, may perceive the destination as unsafe to visit. Countries most at times issue out directives to their citizens warning them of not going to some destinations for tourism. For example, Australia issued a warning about inadequacy of safety in some high-risk nations such as Malaysia, Singapore and Thailand (Mopeli, 2009).

Influence of tourist satisfaction on repeat visits

According to Oliver (1981), in the hospitality and tourism industry, the pleasure of tourists is examined as part of tourists' post-purchased and consumed evaluation of the destination. Consequently, positive satisfaction has a positive effect on tourists repurchase decision making (Gotlieb et al. 1994). It is noted in the cornucopia of academic literature that gratification of a tourist at a destination is a good prediction pointer of the tourists' repurchasing and revisiting choices (Choi & Chu, 2001; Petrick, 2002; Tam, 2000) and consequently as opined by Petrick & Backman (2002) tourists who have a positive adventures during the period of one recreational activity will possibly repeat the tourism expedition. Remarkably, the direct correlation between tourist safety and tourist satisfaction has received little attention in the existing literature in tourism. Petrick, (2002) and Yi, (1990), for instance, have done some revisions on consumer satisfaction but absent is the above correlation factor.

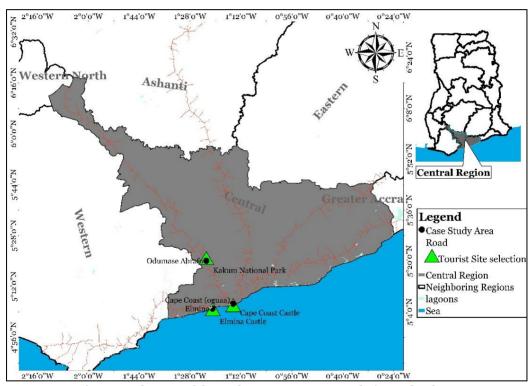


Figure 1. The map of the study area - Cape Coast, Elmina and Kakum (Source: Department of Geography and Regional Planning, GIS Remote Sensing and Cartography Unit, University of Cape Coast, Ghana, 2019)

Moreover, the limited works that did some analysis on the consequences of satisfaction like Anderson and Sullivan, (1993) and Baker & Crompton (2000) that worked on intentions for repeat visit still did not work on the direct influence of tourist safety on tourist satisfaction. Also, it has been proposed by Soderlund (1998) that an increase in consumer satisfaction would not necessarily result in the same rise in consumer loyalty to a service or product. In 2007, Lee et al. (2007) did some study but did do not identify an essential relationship between satisfaction and the tourist's intention to revisit the tourism event. One can say that the intensity of the relationship

between tourist' satisfaction and repeat visit can vary, depending on the service or product being examined and depending on other issues that can also affect the formation of an individual tourist' expectations (Lee et al. 2007) but the impact of tourist safety is still a stronger issue in this debate of tourists' satisfaction (Imbeah & Bujdosó, 2018).

MATERIALS AND METHODS The Case Study Area

Cape Coast Castle is found in Cape Coast in Ghana, and its location is shown in Figure 1 below. In Figure 1 are shown the map of the Central Region in Ghana. Figure 2 also shows the aerial view of the Cape Coast Castle on the Atlantic Coast of Ghana.



Figure 2. Aerial view of Cape Coast Castle on the Atlantic Coast (Source: GMMB, Ghana, 2018)

Cape Coast Castle was built by the Portuguese in 1555 to be used purposely for trading between the European and Ghanaian merchants. During the British colonial time, Cape Coast Castle served as the seat of the then governor and a school premises. Since the attainment of Ghana's independence in 1957, the Castle has remained as a museum with an arts and craft gift shop. Cape Coast Castle is now designated and classified as a World Heritage Monument under UNESCO (Anquandah, 1999). Elmina Castle is found in Elmina, and its location is shown in Figure 1 above. Figure 3 below shows the aerial view of the Elmina Castle on the Atlantic Coast of Ghana. All the building blocks needed for the construction were shipped from Portugal to Elmina. The Castle was built in 1482.

The structure became the first pre-fabricated building of European origin to have been planned and executed in Sub-Saharan Africa purposely to facilitate trading between the Portuguese and Ghanaian merchants. Since 1814 the Castle has been used for several purposes in Ghana. Elmina Castle has become a great tourist resource in Ghana because it draws a higher number of travelers and tourists. The Castle is a place of pilgrimage for many Africans in the diaspora searching for their root in Africa. The Castle is now preserved as a Ghanaian national museum. It was designated and classified as a World Heritage Monument under UNESCO in 1979 (Anquandah, 1999). Kakum National Park is a rain forest park very close to the above two Heritage sites in the Central Region of Ghana. KNP is between Cape Coast and Elmina townships, about 15km apart.

This park was established in 1992 at the resourcefulness of the natives and not by the State Department of wildlife in Ghana (Wellington, 1998). KNP also has a variety of birds and a large variety of butterflies. KNP has a treetop canopy walkway made of seven long bridges and four short bridges. This forest facility is known to be the first of its kind in Africa (Imbeah & Bujdosó, 2018). The location of Kakum National Park is shown in Figure 1 above. Figure 4 below shows the snapshot of the Kakum Canopy Walkway in the forest.



Figure 3. Aerial view of Elmina Castle on the Atlantic Coast (Source: GMMB, Ghana 2018)



Figure 4. Canopy Walkway at KNP (Source: KNP, Kakum, Ghana, 2018)

Furthermore, by observation of tourist consumer behaviour, these three tourist facilities have formed a trio of heritage-ecological tourist destination on the coast of Ghana. Most inbound tourists, especially the Afro-Americans in the diaspora, visit them before leaving the Central Region of Ghana. Hence, this is the reason these facilities and patrons were chosen for the study on assessing tourists' perceptions of safety in a destination. They have now become iconic and established sites in Ghana (Frempong et al. 2015). This work was a case study of two historical heritage sites and one ecological

heritage site in the Central Region of Ghana. These facilities are the most visited sites patronised by inbound tourists in Ghana; they have become iconic of the country. Snapshots of these sites and the map of the case study area are also displayed in the study. Field assistants were trained on the questionnaire administration, and they were educated on ethical issues surrounding the survey. Descriptive statistical presentations and inferential statistical measures were employed in the analysis of the field data.

Sampling and Survey Instrument

The work used a descriptive research design. This type of design did not allow the key variables to be manipulated, but it described and interpreted what existed on the field of study as opined by Creswell (2009) and Babbie (2013). They propose that descriptive study design is concerned with conditions or interrelationships "that exist, opinions that are held, processes that are going on, effects that are evident and trends that are developing in the field". Random responses of 515 tourists were surveyed for the study. Mostly only international tourists do visit the trio of facilities selected within the period of visit before going back to their origin; hence the most significant percentage (97%) of the respondents being non-Ghanaians. Random purposive sampling technique was employed because there was no reliable data on tourists to construct a sampling frame. Selfadministered questionnaires that contained both open and closed-ended questions were used. This instrument was appropriate because most inbound tourists to Ghana to some extent, express themselves in the English language. Also, it helped ensure the independence and anonymity of respondents in the study. For tourists who could not express themselves in English language, research assistants helped them answer the questions. The questionnaires were administered to tourists who had visited these three facilities during the tourism peak season in the Central Region, between June and September 2018. The survey questions that formed core constructs in the questionnaire included: What were the precautionary measures did tourists undertake before travelling and during their stay at the destination? What were the security facilities the tourists find at the attraction sites visited? And what were the general impressions of tourists about safety at the destination? The research assistants used the tool of observation to verify the security facilities identified by the tourists. Before the data collection permission was sought from the managers and heads of the selected attraction sites and facilities.

This permission helped ensure a good rapport with the workers at the attraction sites for easy accessibility to the sites and also to the tourists who visited. The data were analysed with the use of IBM Statistical Product for Social Science (SPSS) software version 20. The data from the field were edited and cleaned to do away with partially filled questionnaires which could affect the validity of the results.

The data was then coded and entered into the SPSS software for analysis. Descriptive statistical presentations which included pie charts, bar charts, crosstabulations and frequencies were run to represent various background characteristics of respondents, their perceptions of safety, among others. Inferential statistical measures like Chi-Square Test of Independence were employed to test for relationships between background characteristics of tourists and their perceptions of safety and security at the destination, purpose of travel and overall impressions and assessment of safety.

RESULTS AND DISCUSSIONS Demographics

A total of 515 respondents was sampled during the survey, but not every respondent answered all the six attributes as shown in Table 1 (gender; age; nationality; the level of education; marital status and employment status) under demographics. It was observed that a little more than half of the respondents (58.8%; 290 tourists) were

females whiles approximately two out of five of them (41.2%; 209 tourists) were males; this indicated that most of the tourists involved in the study were females. Also, close to two-thirds of the respondents (63.1%) were between the ages of 18 - 33 years. About one out of every ten of the respondents (10.6%) was either 50 years or more; this indicated that the tourists who visited the attraction sites at the time of the study were predominantly the youth of not more than 41 years of age, namely 182 tourists were between 18-25 years; 131 tourists fell between 26-33 years; 85 tourists were between 84-40 years; 186-60 y

The tourists involved in the study were virtually international, and the reason was that almost all of the respondents (97.1%; 500 tourists) were non-Ghanaians with only 2.9% (15 tourists) of them being Ghanaians. On the education front, most of the respondents (42.3%; 212 tourists) indicated that they had attended either a university or a college with only a few of them (4.2%; 21 tourists) having attained their primary education. Also, close to one-third of the respondents (30.3%; 152 tourists) reported that they had schooled up to the post-graduate level. Furthermore, 23.2% (116 tourists) indicated that they had had a high school education. These imply that almost all the tourists have had, at least, a high school education. Therefore, their impressions about issues on tourist safety can be reliable and taken for consideration for tourist safety and planning. Furthermore, more than half of the respondents (61.3%; 307 tourists) reported that they were single whiles a little over one-third of them (34.5%; 173 tourists) said that they were married. Similarly, a few of the respondents (4.2%) said that they had ever married (divorced (3.4%; 17 tourists) and widowed (0.8%; 4 tourists). These indicate that most of the tourists involved in the study did not have any marital responsibilities and thus, were able to move freely or venture into adventures like recreational activities and vacation.

The various occupations were grouped into two groups of unemployed (made up of the unemployed, student and retired) and employed (made up of all other trades). More than half of the respondents (58.8%; 291 tourists) indicated that they had occupation while a good number of them (41.2%; 204 tourists) reported that they were not; this meant that engaging in tourism is not necessarily for the employed and it might mean that those unemployed tourists who travelled on their own had already saved funds.

Security facilities at tourist sites

The attraction sites visited by the respondents were: Elmina Castle, Cape Coast Castle, Kakum National Park, Hanson's Cottage, Monkey Forest Resort, Stingless Bee Centre and Elmina Lagoon in the Cape Coast tourist destination in the Central region of Ghana. 32.2 % of respondents indicated that the tourist attraction sites visited had the presence of security guards at post; 28.7 % of the respondents reported that the attraction sites visited had directional signs installed; 19.7 % indicated that safety signs were installed at the tourist attraction sites visited; 8.7 % indicated the observation of CCTV cameras at the tourist facilities visited; 6.5 % of the respondents stated that they saw alarm system at the sites; 3.6 % specified that there was an observation of safety deposit boxes and others 0.6% indicated observed other facilities not classified among the above in the tourist facilities visited. These showed that most of the tourist attraction sites visited had security facilities such as safety guards, directional signs and safety signs installed in place. What was not too specific was whether the CCTV cameras and the safety deposit boxes were serviced periodically or not.

It was observed that safety installations in these facilities were either not working or non-existent and that there was no active supervision for repairs. Table 2 shows that a little more than half of the tourists aged either 50 years or more indicated that they visited the destination for vacation (51.7% for 50-57 years; 75.0% for 58-65 years and

72.7% for more than 65 years). Similarly, most of the tourists between the ages of 18 and 49 years indicated that they travelled to the destination for vacation (39.0% for 18-25 years; 45.2% for 26-33 years; 48.8% for 34-41 years and 47.7% for 42-49 years) and to visit their families and friends (32.6% for 18-25 years; 24.6% for 26-33 years; 22.5% for 34-41 years and 20.5% for 42-49 years). On the other hand, none of those aged 50 years or more travelled to the destination for educational purposes whiles only a few of them (8.3% for 58-65 years and 9.1% for those aged more than 65 years) went there for official purposes. These results meant that there are no significant differences in the tourists' age and their reasons for travelling to the destination.

Table 1. Demographic characteristics of the survey respondents (tourists) (Source: Fieldwork, Imbeah, 2018)

Gender	Frequency	%	Employment S	Status Frequency	7 %
Male	209	41.2	Unemployed	204	41.2
Female	298	58.8	Employed	291	58.8
Total	50 7	100	Total	495	100
Level of education			Age	Frequency	%
Primary/Basic	21	4.2	18-25	185	36.7
High School	116	23.2	26-33	131	26.4
University/Coll	lege 212	42.3	34-41	85	17.1
Post graduate	152	30.3	42-49	45	9.1
Total	501		50-57	30	6.0
100.0			58-65	12	2.4
Marital Statu	ıç		65+	11	2.2
Single	307	61.3	Total	496	100
Married	173	34.5	Nationality		
Divorced	17	3.4	Ghanaian	15	2.9
Widowed	4	0.8	Non-Ghanaian	500	97.1
Total	501	100	Total	•	9/.1 100

Table 2. Purposes of tourists' visits based on their age (Source: Fieldwork, Imbeah, 2018)

	Purpose of visit									
Age (in years)	Busin Confe	ness/ erence	Educ	eation	Vaca	ition		isit s/family	To	otal
	Freq.	%	Freq.	%	Freq.	%	Freq.	%	Freq.	%
18-25	13	7.6	36	20.9	67	39.0	56	32.6	172	100.0
26-33	13	10.3	25	19.8	57	45.2	31	24.6	126	100.0
34-41	15	18.8	8	10.0	39	48.8	18	22.5	80	100.0
42-49	9	20.5	5	11.4	21	47.7	9	20.5	44	100.0
50-57	5	17.2	4	13.8	15	51.7	5	17.2	29	100.0
58-65	1	8.3	0	0.0	9	75.0	2	16.7	12	100.0
65+	1	9.1	0	0.0	8	72.7	2	18.2	11	100.0
Total	57	12.0	78	16.5	216	45.6	123	25.9	474	100.0

A further analysis was conducted to find out if the ages of the tourists had any form of relationship with their purposes for travelling to the destination. The result of the subsequent analysis is presented in Table 3. It can be observed from Table 3 that there were significant enough differences in the reasons for which the tourists travelled to the destination based on their ages (with a Pearson's Chi-square coefficient of 30.782 and corresponding p-value of 0.031). Furthermore, with a Cramer's V coefficient of 0.147 and a corresponding p-value of 0.031, it can be observed from Table 3 that the

strength of the association between the tourists' ages and their reasons for travelling to the destination was slightly excellent and significant. This result implies that the age of the tourists influences their purposes for going to the destination.

Table 3. Chi-Square tests on purposes of tourists' visits based on their age (Source: Fieldwork, Imbeah, 2018)

Tests	Value	Approx. Sig.
Pearson Chi-Square	30.782	0.031
Phi	0.255	0.031
Cramer's V	0.147	0.031
No. of Valid Cases	474	

Table 4. Safety measures employed before travelling to the destination (Source: Fieldwork, Imbeah, 2018)

Safety measures		ponses	Per cent of
		Per cent	Respondents
Acquired comprehensive travelers' health insurance	308	20.5	72.1
Assembled suitable medical/first-aid kits and toilet items for the duration of visit	242	16.1	56.7
Assessed the health risks associated with travelling to the destination	284	18.9	66.5
Consulted travel medical clinic or practitioner before travelling	225	14.9	52.7
Took some vaccinations before travelling	150	10.0	35.1
Obtained prescribed medicine according to the duration of visit at destination	89	5.9	20.8
Brought bottled water/drinks for the duration of stay	105	7.0	24.6
Sought information on the health risks of destination from tour operators, travel agents, airlines		2.3	8.0
Sought information on traffic, animals and sports related accidents	60	4.0	14.1
Other	9	0.6	2.1
Total	1506	100.0	352.7

It must be noted that in responding to safety measures employed before travelling to the destination by the tourists, respondents provided more than one answer to a question and so the percentages are not calculated based upon the number of respondents but on the number of responses. Table 4 shows that 20.5 % of the reactions reported that they acquired comprehensive travelers' health insurance; 18.9 % assessed the health risks associated with travelling to the destination; 16.1 % assembled suitable medical/first-aid kits, and toilet items for the duration of visit and 14.9 % consulted a travel medical clinic or a practitioner before travelling to the destination. 35.1 % took vaccination before moving to the target; 7.0 % went with bottled water/drinks; 5.9 % indicated moving with medicines which would make them through the duration of their visit to the destination.

These suggest that most of the tourists that visited Ghana took precautionary safety measures such as acquiring comprehensive travelers' health insurance; assessing the health risks associated with their travelling; assembling suitable medical/first-aid kits and toiletries for the duration of their visit, and consulting a travel medical clinic or a practitioner as well as vaccinating themselves before travelling to the destination; this confirms the observation made in the literature that African destinations are generally perceived to be unsafe for tourists (Brown, 2000; Levantis & Gani, 2000; Boakye, 2012) hence, various safety measures were employed by tourists before travelling to the destination. It must be noted that in responding to adopted safety measures whiles at the destination by the tourists, respondents provided more than one answer to a question and so the percentages are not calculated based upon the number of respondents but on the

number of responses. It is shown in Table 5 that, 31.3 % indicated eating only foods that were well-cooked or well-packed; 30.7 % reported buying first-aid kits and toilet items whiles living at the destination; 16.3 % specified sleeping under a treated mosquito; 11.6 % said drinking only well-sealed bottled water or drinks from certified producers; as they lived at the destination; 4.2 % determined boiling their drinking water before drinking if they felt doubtful about its safety. These indicate that the tourists had very much been concerned about their safety while staying at the destination.

Table 5. Adopted safety measures whiles at the destination (Source: Fieldwork, Imbeah, 2018)

Safety measures		onses	Per cent of	
		Per cent	Respondents	
Ate only cooked/well-packaged foods	340	31.3	82.1	
Bought first-aid kits and toilet items	333	30.7	80.4	
Slept under a treated mosquito net	177	16.3	42.8	
Consumed only well-sealed bottled water or drinks from certified producers	126	11.6	30.4	
Took boiled drinking water if its safety is doubtful	46	4.2	11.1	
Always used disinfectant to clean hands after every handshake/touching something		5.9	15.5	
Total	1086	100.0	262.3	

Table 6. Perceptions of tourists on safety at the destination and their perceived safety before travelling (Source: Fieldwork, Imbeah, 2018)

	Mean	N	Std. Dev.	Std. Error Mean	Correlation	Sig.
Tourists' overall perception of safety at destination	1.82	467	0.586	0.027	0.370	0.000
Tourists' perception of safety at the destination before their visit	1.91	467	0.659	0.031		

Notes: 1-1.49 = Highly safe; 1.5-2.49 = Safe; 2.5-3.49 = Slightly safe; 3.5-4.49 = Not safe; 4.5-5 = Highly unsafe

It can be observed from Table 6 that there was a mean value of 1.82 for the respondents' responses on "What is your overall perception of tourists' safety at this destination?" On the overall, most of the tourists found the destination as safe. Regarding the tourists' general perception of the safety of the sites before their visit, most of them indicated that they had formed a reliable impression about the area between their travels. Table 6 also shows that there was a relatively strong positive relationship between the tourists' safety expectations of the destination and their actual overall perception of safety at the place (with a Pearson's Correlation Coefficient of 0.370 and a corresponding p-value of 0.000). Since p = 0.00 < 0.05, it can be said that there is enough statistical evidence to infer that as the level of the tourists' safety satisfaction increased, their safety expectations also increased, possibly for future visits. The notion that African destinations are generally unsafe destinations for tourists (George, 2003; Levantis & Gani, 2000) is contrasted by the responses of these tourists in this study at least in the Central Region of Ghana. This result is confirmed by the research done in West Africa by Awaritefe, (2004) that perceptions change completely after visitation to the tourist destination.

CONCLUSION

As opined by Baker & Stockton (2014) in areas and tourist facilities where safety devices are mounted, potential offenders are likely to notice probabilities of detection greater and opportunities for escape more limited in those facilities that are purposely

designed with prevention in mind. In this vein, tourists cannot be quietened into a false sense of security due to the mere presence of skilled guardians visibly stationed in the facility as observed in this destination. If an effort is not made to concurrently reduce the number of motivated criminals from the destination area, simply adding security workers may not produce the intended restraining effect on the part of the offenders. Their results on the study of tourism and crime in America in two major American tourist cities showed that there was a significant correlation between law enforcement employee numbers and reduced crime (Baker & Stockton, 2014). They added that law enforcement and private security personnel are essential to deter crime against tourists and visitors. However, one can say that in Ghanaian situation, law enforcement is weak, and this might be the weakest link in the effort to work to reduce the crime committed against tourists. Over time this can influence tourists' purposes for travelling to this destination which is the tourism hub in Ghana. Levantis and Gani (2000) observed that governments of developing nations (including Ghana) do accept economic gains associated with tourism promotion; so, they should therefore seriously work on the issues of crime and law and solve problems when they arise to stem the loss of revenue from the tourism sector.

It was observed that in the three tourist sites surveyed, safety issues were not highly promoted except the treetop canopy walkway, which is a unique facility at the Kakum National Park, Albeit the tourists saw some safety gadgets in the tourist facilities visited, it was observed that safety installations in these facilities were either out of order or non-existent and there was no supervision, evaluation or repairs of these installations. It is recommended that GTA should add the inspection, installation and repairs of such safety equipment in unannounced routine checks in all the tourist and hospitality facilities in the region. The various tourism-related bodies in the Central Region like Ghana Tourism Authority (GTA), World Conservation Trust, Road and Safety Authority, Ghana Fire Service and Ghana Police Service should be tasked to help maintain safety and security at tourist sites. Training of the safety/security guards should be regular and standard with recognised safety/security agency as a permanent supervisory-trainer. From the observation made at the destination, it would be highly beneficial if GTA can initiate safety exercises in these three facilities to produce a digital-tourist safety documentary about each facility. Application of such digital-technologies promoted in the social media in tourism promotion will help instil surety in the preparation and choice of destination-sites of potential tourists. The study proposes that GTA must draft strategies and policies to curtail unsafe conditions in tourist destinations and improve safety in the region. Tourism stakeholders in this destination can be persuaded to adopt and maintain surveillance technology like CCTV cameras and run safety training for the destination workers. In the longer-term government can put plans in place to install this technology in priority areas throughout the region.

However, any lapse in any tourist destination in the sub-region can equally affect the image of the entire regional tourism development. Therefore, it is expected that this study will lead to further research on tourist safety and security within Ghana and her neighbouring countries in West Africa to reflect the regional position on tourism safety; this is because the following questions must be answered: To what extent can tourists undergo pre-trip preparations before traveling to a destination in West Africa? What type of measures must tourists adopt to stay and enjoy their trips to West Africa? What is the level of cooperation among West African countries in terms of tourist safety and security?

In conclusion, since Ghana has for an extended period maintained a peaceful political, tourism and social ambience in the West African sub-region, international safety standards in developing and managing tourism facilities should be strictly observed. All tourism agencies should be coordinated by GTA and supported to work for the common good. In the drafting of local tourism planning in the Central Region of Ghana, the

responses of tourists about tourists' safety and security should be considered. Since tourists' purpose of traveling does not influence tourists' perception of safety at the attraction sites, the various stakeholders such as the tourism agencies, tour operators and tourism-related enterprises must take the advantage to provide other tourism structures for improving the life cycle of tourism products and activities in the region.

Acknowledgements

The Stipendium Hungaricum Programme supported this work.

REFERENCES

- Anderson, E. W. & Sullivan, M. W. (1993). The antecedents and consequences of customer satisfaction for firms. Marketing Science, Vol. 12, No.2, pp. 125-142.
- Anguandah, K. J. (1999). Castles and forts of Ghana. Ghana Museums and Monuments Board. Accra: Ghana.
- Awaritefe, O.D. (2004). Motivation and other considerations in tourist destination choice: A case study of Nigeria. Tourism Geographies, Vol. 6, No. 3, pp. 303-330.
- Babbie, E. (2013). The practice of social research. 13th ed. Wadsworth: Cengage Learning.
- Baker, D. A. & Crompton, J. L. (2000). Quality, satisfaction and behavioural intentions. Annals of Tourism Research, Vol. 27, No. 3, pp. 785-804.
- Baker, D. & Stockton, S. (2014). Tourism and Crime in America: A preliminary assessment of the relationship between the number of tourists and crime, two major American tourist cities. International Journal of Safety and Security in Tourism, Vol. 5, pp. 1-25.
- Boakye, K.A. (2012). Tourists' views on safety and vulnerability. A study of some selected towns in Ghana. Tourism Management, Vol. 33, No. 2, pp. 327-333.
- Breda, Z. & Costa, C. (2006). Safety and security issues affecting inbound tourism in PRC. Elsevier Butterworht-Heinemann, MA, 187-208.
- Brown, O. (2000). Tourism and foreign investment in Africa. In P. Dieke (Ed.), The political economy of tourism development in Africa (pp. 274-284). New York: Cognizant.
- Bujdosó, Z. (2009). The effect of the county border on the catchment area of cities in the example of Hajdú-Bihar county Debrecen, Hungary: University of Debrecen, p. 211.
- Bujdosó, Z., Dávid, L., Remenyik, B. & Tóth, G. (2011). Connection between tourism and regional development on the Hungarian-Croatian border Central European Regional Policy and Human Geography, Vol. 2, pp. 27-40.
- Bujdosó, Z.; Dávid, L. (2013) Extreme sports and other activities in tourism with special regard to the Mátra Mountain Journal Of Physical Education And Sport 13: 1 pp. 39-45., 7 p.
- Bujdosó, Z., Dávid, L., Wéber, Z. & Tenk, A. (2015). Utilization of Geoheritage in Tourism Development. Procedia - Social And Behavioral Sciences 188 pp. 316-324. , 9 p.
- Cavlek, N. (2002). Tour Operators and Destination Safety. Journal of Tourism Research, Vol. 29, No. 4, pp. 457-534.
- Choi, T. Y. & Chu, R. (2001). Determinants of hotel guests' satisfaction and repeat patronage in the Hong Kong hotel industry. International Journal of Hospitality Management, Vol. 20, No. 3, pp. 277-297.
- Creswell, J. (2009). Research design: qualitative, quantitative and mixed methods approaches. Sage, Thousand Oaks: CA. Ferreira, S. & Harmse, A. (2000). Crime and tourism in South Africa: international tourists' perception and risk.

- Ferreira, S. & Harmse, A. (2000). Crime and tourism in South Africa: international tourists' perception and risk. South African Geographical Journal, Vol. 82, No. 2, pp. 80-85.
 Frempong, F., Dayour, F. & BondzI-Simpson, A. (2015). Visitor satisfaction with Ghana's tourist attractions. Oguaa Journal of Social Sciences, Vol. 3, pp. 104-124.
 George, R. (2003). Tourists' perceptions of safety and security while visiting Cape Town. Tourism Management, Vol. 24, No. 5, pp. 575-585.
 Gotlieb, J. B., Grewal, D. & Brown, S.W. (1994). Consumer satisfaction and perceived quality: complementary or divergent constructs? Journal of Applied Psychology, Vol. 79, No. 6, pp. 875-885.
 Grosspietsch, M. (2006). Perceived and projected images of Rwanda: Visitor and International tour operators' perspectives. Tourism Management, Vol. 27, pp. 225-234.
 Gunaratna, R. (2016). Ivory Coast Attack: Africa's Terror Footprint Expands. A Journal of the International Centre for Political Violence and Terrorism Research, Vol. 8, No. 6, pp. 14-18.
 Harper, D. W. (2001). Comparing Tourists' Crime Victimization. Annals of Tourism Research. Vol. 28, No. 4, pp. 1053-1056.

- pp. 1053-1056.

 Ilies, D.C., Onet, A., Herman, G.V., Indrie, L., Ilies, A., Burtă L., Gaceu, O., Marcu, F., Baias, S., Caciora, T., Marcu, A.P., Pavel, O.I., Costea, M., Ilies, M., Wendt, J. & Mihincău D. (2019), Exploring the indoor environment of heritage buildings and its role in the conservation of valuable objects, *Environmental* Engineering and Management Journal, December Vol. 18, No. 12, 2579-2586.
- Indrie L., Ilies, D. C., Onet, A., Wendt, J. Ilies, M., Timar, A., Ilies, A., Baias, S. & Herman, G.V. (2019). Indoor air quality of museums and conservation of textiles art works. Case study: Salacea Museum House, Romania, Industria textile, Vol. 70 No 1, pp 88-93.
- Ilies, D. C., Onet, A., Marcu, F.M., Gaceu, O.R., Timar, A., Baias, S., Ilies, A., Herman, G.V. Costea, M., Tepelea, M., Josan, I. & Wendt, J. (2018). Investigations regarding the air quality in the historic wooden church

- in Oradea city, Romania, in Environmental Engineering and Management Journal, Vol.17, no.11, pp.2731-2739, http://www.eemj.icpm.tuiasi.ro/pdfs/accepted/204 294 Ilie%C8%99 17.pdf.
- Imbeah, N. & Bujdosó, Z. (2018). Tourist safety and security in the Central Region of Ghana overview and case study. Ecocycles, Vol. 4, No. 2, pp. 33-45.
- Jenkins, O. H. (1999). Understanding and Measuring tourist Destination Images. International Journal of Tourism Research, Vol. 1, No. 1, pp. 1-15.
- Kozak, M., Crotts, J. C. & Law, R. (2007). The impact of the perception of risk on international travelers. International Journal of Tourism Research, Vol. 9, No. 4, pp. 233-242.
- Lee, Y., Petrick, J. F. & Crompton, J. (2007). The roles of quality and intermediary constructs in determining festival attendees' behavioral intention. Journal of Travel Research, Vol. 45, pp. 402 -412.
- Levantis, T. & Gani, A. (2000). Tourism demand and the nuisance of crime. International Journal Social Economics, Vol. 27, No. 1, pp. 959-967.
- Lisowska, A. (2017). Crime in tourism destinations: Research review. Tourism. Vol. 27, No. 1, pp. 32-39.
- Mansfeld, Y. (2006). The role of security information in tourism crisis management: the missing link, MA: Elsevier, Butterworth-Heinemann.
- Mansfeld, Y. & Pizam, A. (2006). Toward a theory of tourism security. *Tourism Management*, 31(6): 855-861. Mátyás, Sz. & Csege, Gy. (2019). Results of empirical research of surveillance camera systems in the light of
- subjective sense of security, Belügyi Szemle. Vol. 10, pp. 71-84.

 Mopeli, M. J. (2009). Impacts of tourists' perceptions of safety and security of tourism marketing of Mpumalanga. (Master's thesis): Durban University of Technology.
- Morrison, A.M. (2012). Marketing and Managing Tourism Destinations. London: Routledge.
- Oliver, R.L. (1981). Measurement and Evaluation of Satisfaction Process in Retail Settings. Journal of Retailing, Vol. 57, pp. 25-48.
- Petrick, J. F. (2002). Experience use history as a segmentation tool to examine golf travelers' satisfaction, perceived value and repurchase intentions. Journal of Vacation Marketing, Vol. 8, No. 4, pp. 332-342.
- Petrick, J. F. & Backman, S. J. (2002). An examination of the determinants of golf travellers satisfaction. Journal of Travel Research, Vol. 40, pp. 252-258.
- Pizam, A., & Fleischer, A. (2002). Severity versus frequency of acts of terrorism: which has a larger impact on tourism demand? Journal of Travel Research, Vol. 40, pp. 337-339.
- Pizam, A. & Mansfeld, Y. (1996). Tourism, crime and international security issues. New York: Wiley.
- Implications Reisinger, Y. & Mavondo, F. (2005). Travel Anxiety and Intentions to Travel Internationally: of Travel Risk Perception. Journal of Travel Research, Vol. 48, pp. 212-225.
- Sjöberg, L. (2002). Factors in risk perception. Risk Analysis, Vol. 20, No. 1, pp. 1-12.
- Soderlund, M. (1998). Customer satisfaction and its consequences on customer behaviour revisited. The impact of different levels of satisfaction on word-of-mouth, feedback to the supplier and loyalty. *International* Journal of Service Industry Management, Vol. 9, No. 2, pp. 169–188.
- Sönmez, S. & Sirakaya, E. (2002). A distorted destination image? The case of Turkey. *Journal of Travel Research*, Vol. 41, No. 2, pp. 185-196.

 Strydom, A. & Nel, R. (2006). Evaluating Bloemfontein's image as a tourist destination. *South African Journal*
- of Economic and Management sciences. Vol. 9, No. 2, pp. 187-195.

 Tam, J. L. M. (2000). The effects of service quality, perceived value and customer satisfaction on behavioral intentions. Journal of Hospitality and Leisure Marketing, Vol. 6, No. 4, pp. 31-43.
- Tran, X.V. & Bridges, F. S. (2009). Tourism and Crime in European Nations. e-Review of Tourism Research (eRTR), Vol. 7, No.3, pp. 52-67.
- Wellington, H. N.A. (1998). Abrafo-Odumase: A case study of rural communities around Kakum conservation area. Kumasi: Department of Architecture and Planning, University of Science and Technology,
- Yi, Y. (1990). A critical review of consumer satisfaction. In V. Zeithaml (Ed.), Review of marketing (pp. 68–123). Chicago, IL: American Marketing Association.
- *** African Research Bulletin (2017). Egypt: Coptic Cathedral Attack, 17.1.2017, 21258.
- *** BBC News, (2016). Egypt attack: Three tourists stabbed at Hurghada Hotel. BBC News. Available at: https://www.bbc.com/news/world-middle-east-35268713. Accessed on 30 December 2019.
- *** BBC News, (2016). Burkina Faso attack: Al-Qaeda 'names' hotel attackers. BBC News. Available at: https: //www.bbc.com/news/world-africa-35342908. Accessed on 30 December 2019
- *** Department of Geography and Regional Planning, GIS Remote Sensing and Cartography Unit, University of Cape Coast, Ghana (2019).
- *** Ghana Tourism Authority (GTA), (2017).
- *** GMMB-Ghana Museum and Monument Board Report, Cape Coast (2018), Annual Report, Accra: Ghana.
- *** Institute of Statistical, Social and Economic Research (ISSER). The State of the Ghanaian Economy in 2016 (2017), University of Ghana, Legon, Ghana.
- *** OSAC- Overseas Security Advisory Council (2019). Burkina Faso 2019 Crime and Safety Report. Available at: https://www.osac.gov/Content/Report/db697e4f-f3b9-41a3-9bdo-165806c8e4ao. Accessed on 3 January 2020.
- *** World Travel and Tourism Council, WTTC (2016). Travel and Tourism Economic Impact 2016, Ghana.

Submitted: Revised: Accepted and published online 24.10.2019 19.02.2020 26.02.2020

GEOTOURISM ATTRACTIONS OF HORMUZ ISLAND, IRAN

Mohsen RANJBARAN*

School of Geology, College of Science, University of Tehran, Tehran, Iran, e-mail: m.ranjbaran@ut.ac.ir

Syed Mohammad ZAMANZADEH

Department of Geography, University of Tehran, Tehran, Iran, Tehran, Iran, e-mail: zamanzadeh@ut.ac.ir

Farzad SOTOHIAN

Faculty of Natural Resources, Department: Environmental Science Department, University of Guilan, Iran, e-mail: farzad sotohian@yahoo.com

Citation: Ranjbaran, M., Zamanzadeh, S.M. & Sotohian, F. (2020). GEOTOURISM ATTRACTIONS OF HORMUZ ISLAND, IRAN. GeoJournal of Tourism and Geosites, 28(1), 232–245. https://doi.org/10.30892/gtg.28118-465

Abstract: Hormuz Island is a salt dome situated in the Persian Gulf waters near the mouth of Hormuz Strait in Hormuzgan province, at 8 kilometers distance from Bandar Abbas. The island is elliptical, and its rock is mostly of the igneous and often volcanic type. Hormuz is one of the most beautiful Islands of the Persian Gulf due to its geological phenomena and related landforms. This island is a mature salt diapir with great mineralogical and lithological diversity. In this research, we focused on fieldwork, which included data gathering and taking photographs and also a review of the published papers and books. The main geotourism attractions of the island include various landforms resulted from differential erosion, as well as very attractive geomorphologic structures such as rocky and sandy beaches, sea caves, colorful salt domes, coral reefs, etc. Besides the geological and geomorphological sites of the region, the ancient and cultural features are also potential attractions for tourism development on the island. Given its natural assests, territorial planning and developed infrastructure, Hormuz Island could be proposed and exploited as a geopark.

Key words: Geotourism, Hormuz Island, the Persian Gulf, geosite salt dome, cultural tourism

* * * * * *

INTRODUCTION

Nowadays, tourism is considered as the most successful industry in the world since it will be followed by significant results and achievements like rich foreign exchange earnings, development of scientific-cultural relations, the improvement of direct and

^{*} Corresponding author

indirect jobs as well as showing the stability and safety of the country (Dowling & Newsome, 2006; Dowling, 2010; Newsome & Dowling, 2010). Geotourism tries to organize and make geological attractions of the earth targeted and prevent the destruction of the works by human beings through creating and defining geoparks (Newsome & Dowling, 2010). Preservation of the environment and its perspectives, keeping it intact and abstaining from interfering with changing the earth's face are some of the main objectives of geotourism. Geotourism is the subset of sustainable tourism, aiming at preserving tourism resources in the destinations (McKeever & Zouros, 2005; McKeever et al., 2010). In today's world, tourism has a wide approach to geotourism.

As one of the subcategories of the tourism industry, geotourism is considered significantly important, since the diversity of geological structures in different points of Iran attracts many geologists as well as the geology and nature lovers from all over the world every year. Based on the environment of knowledge, all materials are divided into geotic, biotic and anthropic categories (Martínez-Torres, 1994). People visit morphological features in the center and edge of the island for a diversity of reasons; the major one is probably the relaxation in nature and uses the wonders of creation (Dóniz-Páez et al., 2011). With our nature-centered tourism, we have many experiences, interactions with people and nature as well as lifestyles (Fanni & Rezazadeh, 2018).

In the meantime, Iran's southern islands like Hormuz, Qeshm, Larak, Hengam, and Lavan are of great importance (Yazdi et al., 2014). Geological diversity is from the assets and geological identities of a country that should be protected. A part of geological diversity is considered as the geological heritage called Geosite. Geosites are the places with outstanding examples of geological history, prominent geological processes contributing to the development of landforms, shapes and globally valuable geological forms. Hormuz Island is known as the geologic pearl of the Persian Gulf that is globally famous due to its great variety of rocks and minerals (Zakeri & Habib, 2013a, 2013b). This diversity of geological structures caused attracting many domestic and international tourists every year. There are many valuable attractions such as beautiful landscapes around the island, ocher mine, coral reefs, rocky shores, sea caves, various shapes and material of coastal banks, native vegetation, resident wildlife on the island and some cultural and historical features. Hormuz Island is known as Paradise of Geologists for its diverse and unique geologic and biologic phenomena and its high potential for becoming a excellent geotourism pole in the Persian Gulf area.

In addition to the geological and natural attractions of the area, the ancient and cultural features of the island, this island has a great potential from ecotourism standpoint due to a variety of its fauna and flora as well (Amrikazemi, 2002, 2004, 2013; Amrikazemi & Mehrpooya, 2006). This paper aims to identify the geological structures of Hormuz Island and its specific features as geotourism attractions.

MATERIALS AND METHODS

Descriptive-analytical and field methods have been used for analyzing the geotourism attractions of Hormuz Island. Documents, reports, geological maps (with a scale of 1:100000), photographs were analyzed. But this research is mainly based on data collected during the field trips in Hormuz Island.

STUDY AREA

Hormuz Island is situated in the Strait of Hormuz at the junction of the Persian Gulf and the Gulf of Oman (56°25′ to 56°30′ East longitude and 27°2′ to 27°5′ North latitude), in the south of Hormuzgan province, Iran. Hormuz Island lies between Bandar Abbas in the northwest and Qeshm and Lark Islands in the southwest (Figure

1a, b). The coastline length is about 31 km. The large part of the island is uneven and represents various landforms. The highest point of the island is 228 meters and the lowest point is zero. If Hormuz Island is divided into two northern and southern halves, then the whole southern half is hilly and rocky, and its northern half is centrally rugged and the height decreases to the north and the plain surfaces are smooth. Hormuz Island is an oval-shaped whose small diameter is 5.5 km and a large diameter ranges between 7.5 to 9 km. Its area is about 42 km². Most parts of the island represent different parts of a salt dome (Talaei Hassanlouei & Rajabzadeh, 2018). Geomorphologically, considering the effect of the forming geological deposits and related tectonic structures, the island and its limited boundaries may be divided into the following units:

a) Uneven ground b) plains and c) Beaches. About 69% of the southern part of the island is rugged and covered with evaporative deposits. The south part of the island is mainly composed of Hormuz evaporates and salt diapir.

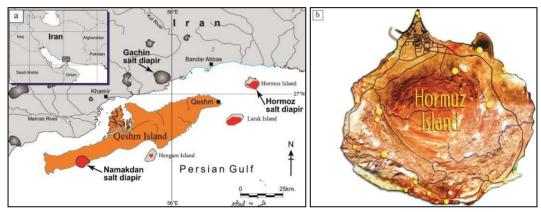


Figure 1. Location of Hormuz Island. a) at the mouth of Hormuz Strait, b) Hormuz Island

GEOLOGY OF HORMUZ ISLAND

The Hormuz Island is a salt diapir, in which the dominant petrography type is volcanic rocks. This island is the location of a specific formation, Hormuz Series with great lithological diversity (Talaei Hassanlouei & Rajabzadeh, 2018).

The Hormuz series on the island includes salt rocks and gypsum in addition to the masses and pieces of igneous and sedimentary rocks. It is significant that the stratigraphic rows of Hormuz series in Iran's salt domes have a cluttered nature, and no row can be detected in it. The stratigraphic column of the Hormuz series in southern Iran was determined by Ahmadzadeh Heravi et al., (1990) as follows (from top to bottom): 1) purple sandstone, coarse-grained sandstone and shale; 2) volcanic, tuff and agglomerate, partially gypsum; 3) dolomite, lime, shale and occasionally rhyolite; 4) salt rock (Talbot, 1988; Talbot et al., 2009a, 2009b). The island is one of the major and most famous salt domes of the Persian Gulf, whose formation has started from the upper Precambrian era.

Regarding construction, Hormuz is almost entirely concentric and based on the studies of Elyasi et al., (1977), from inside to outside, it includes evaporative rocks, iron structures and Miocene-Pliocene sediments. There have been two volcano phases in the geological history of Hormuz, the first of which has been alkaline (including decomposed Basalts and Diabase) and probably occurred before the Permian era; and the latter was acidic (including rhyolite, rhyodacite, and trachyte) and related to the former Triassic era (Ala, 1974; Moein Vaziri, 1996). Aghajari and Mishan formations are other clastic formations of the island from Cenozoic era. The Mishan Formation is mainly composed of

gray marl and clayey limestone, and Aghajari Formation is mostly composed of limestone and red marls. In the central part of the island, between the Aghajari Formation in the south and alluvial zones and slope debris in the north, the Hormuz series is out-bounded.

Materials resulted from the destruction of various layers of Hormuz series extend in the form of low-volume, low-thickness alluvial zones and slope debris in the northern parts of the island (Figure 2a, b, C). Magmatic activities in the Hormuz have been in both forms of output and intrusive rocks. Most of the lava has rhyolite or rhyodacite composition, and some have trachytic compounds and rarely basalt (Moein Vaziri, 1996).

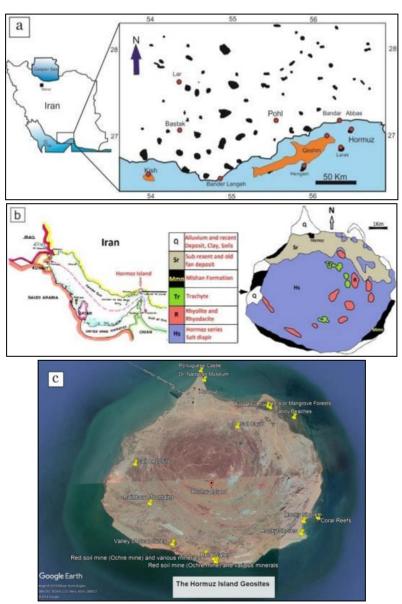


Figure 2. a) Geography of the salt diapirs in south of Iran and Hormuz Island (Talaei Hassanlouei & Rajabzadeh, 2018), b) Simplified geological map of Hormuz Island (Faramarzi et al., 2015) and c) the Hormuz Island geosites

Most volcanic rocks of Hormuz Island have been weathered. The rhyolites have maintained their original qualities more or less. In rhyolitic tuffs, minerals such as quartz phenocrysts remained fresh and feldspars have been completely sericitized.

Basalts have maintained their physical properties regarding color and sometimes texture and structure; however, in mineralogy terms, their degradation and destruction have been so advanced that they can hardly be recognized. The volcanic masses of the island are observed as a relatively strong cap on the salt masses. Volcanic tuffs of Hormuz Island are distinguishable with their white color far away from other igneous and sedimentary rocks of the island (Figure 3a, b).

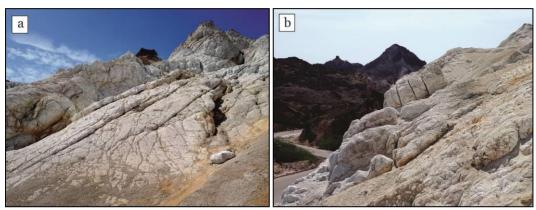


Figure 3. a) Piggy back features in severely jointed rhyolitic rocks on the Hormuz Island b) Extremely weathered light-colored rhyolitic rocks (in the foreground)

GEOTOURISM ATTRACTIONS OF HORMUZ ISLAND

Hormuz Island as the pearl of the Persian Gulf is known because of the different geology and mineralogy of the ore which are other attractions on the island geomorphology for people interested in science (Zakeri & Habib, 2013a). Much of the island is the salt dome. This salt dome occupies about 69 percent of the total area and covers the southern part of the island (Talaei Hassanlouei & Rajabzadeh, 2018). There is a considerable volume of volcanic and evaporative rocks on the island. The high solubility of salt rock compared to the resistance of igneous rocky finally has created a rough surface and erosion of Hormuz salt dome, sharp topography and salt caves, especially in the central part in the west of the island (Bruthans et al., 2006). The colorful valleys have been developed in the southern part of the island due to the mineralization processes as well as the dissolution of the rocks of the igneous deposits. Moreover, the land boundary of the island with seawater has created several beaches (Amrikazemi, 2002, 2004, 2009, 2013; Amrikazemi & Mehrpooya, 2006). Considering the lithology, sedimentology and slope topography, three types of shoreline can be distinguished in different parts of the island, including sandy beaches, mudflats and rocky shore. Among the mentioned shorelines, the sandy beaches are the most attracting geomorphosites due to ease of accessibility and beautiful landscape especially in sunset. Also, the ancient monuments of the island like the Portuguese Castle and other old buildings, can be referred to. Each of the attractions of the island's geotourism will be described below.

Salt Deposits

The majority of the southern part of the island is a salt dome. Intense solubility and erosion of evaporative rocks, in particular, salt rocks, have created various forms of deposits including karrens (Figure 5a), caves (Figure 4a), salt filled pounds (Figure 5b)

all of which represent attractive landscapes for tourists especially for their outstanding dissolution forms and halite crystals. With salt dissolution at altitudes, the streams flowing from the domes of the salt dome downstream have brought them down, laid flat in the slabs and developed the salt plain. The most marvellous landform of this island is seen where the main road of the island enters into salt dome landform.

About five caves are totally found on the island and all of them have been developed by dissolution and fall of the salt layers and their ceilings and floors are covered with white salt crystals in the cauliflower form.

In one of the southern parts of the island, a very a magnificent salt outcrop with an approximate height of 30 meters is observed in the form of a wall (Figure 4 a, b). The surface of this colorful salt wall is adorned by regular vertical threads, indicating the effect of water erosion resulted from atmospheric rainfalls in the area (Figure 5 a, b).

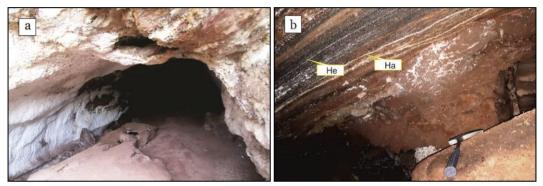


Figure 4. a) Entrance of Cave in the west of Hormuz Island, b) The colorful salt wall composed of alternation of halite (HA) and hematite (HE)

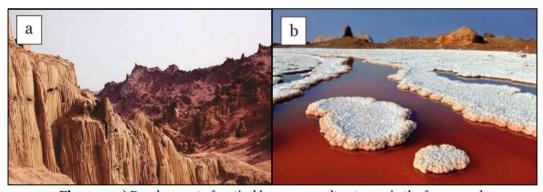


Figure 5. a) Development of vertical karrens on salt outcrops in the foreground, b) Precipitation of halite crystals resulting in the development of salt plains on the bed of the creeks running out of the salt domes, the water is red due to the presence of Fe³⁺ ions

Rainbow Mountains

Due to its diversity and color spectrum, this mountain is one of the main tourist attractions of the island. The colors which are seen in these mountains are due to theresulted from mixing of volcanic and sedimentary rocks as well as the mineralization of hematite. As a result of this mixing and later alteration of rock forming minerals, especially hematite, various minerals, e.g. hematite, goethite and limonite, with various colors are created resulting in the creation of colorful mountains (Yazdi et al., 2013, 2014).

For example, red, yellow and white (rhyolites) colors are more abundant than other colors (Figure 6 a, b). These mountains are located in the southwest coast of Hormuz Island. In addition to the various colors, they have a rugged topography (Figure 6 a, b) due to differential resistance of the various rocks against erosion.





Figure 6. a) a view of rainbow mountains represented by red color (abundance of hematite) in the front and white color (abundance of rhyolite) in the back, b) A valley in the rainbow mountains; the blocks in the front of the image represent less altered volcanic rocks (arrows)

Red soil mine (Ochre mine) and various minerals

The famous Red Soil Mine (Ochre Mine) of Hormuz Island sparkles in the southernmost beach of the island. The average of ocher soil is 70-75 wt. % Fe₂O₃ (Samani, 1988; Waltham, 2008). The most abundant form of iron ore formation is observed as the hematite-limonite-oligist (red soil) layers within Hormuz Formation, sometimes in interlayer form with gypsum and anhydrite (Ahmadzadeh Herayi et al., 1990; Talaei Hassanlouei & Rajabzadeh, 2018; Momenzadeh & Heidari, 1995; Aganabati, 2006; Moein Vaziri, 1996). The red soil of the mine is used in paint, cosmetics and ceramic tiles industry, as well as industrial micronized powders, etc. Furthermore, local people use the soil as a facade for their buildings. At present, the ocher soil mine is inactive due to environmental problems. Mineralization in the igneous masses has resulted in the formation of many kinds of minerals with different lithology and various color schemes such as oligist, quartz, gypsum, pyroxene, apatite, pyrite, etc. in different parts of Hormuz Island (Talaei Hassanlouei & Rajabzadeh, 2018; Mortazavi et al., 2017). This unique diversity in rocks and minerals has created various colors in Hormuz Island and made it a treasure of minerals (Yazdi, 2013). The seawater near the location of hematite mine in the beach is always red in color due to the release of Fe3+ions which produces the red color. The soil dissolution in seawater has turned the water red into several meters and has granted a special beauty to the beach (Figure 7a, b, c).

Valley of Sculptures

Valley of Sculptures is located in the southwestern part of the island. The forms which are called "the sculptures" are indeed the result of differential erosion which affected conglomerates and breccias. It is another geotourism attraction of Hormuz Island;, rocks with different forms can be observed. Sedimentary rocks have been shaped by erosion and weathering in different forms that look like sculptures of animals like bear and legendary creatures such as dragons. These various shapes have been formed by the erosional action of wind and rain and they adorned Hormuz's dry and hot land in the most beautiful way. The form of rocks indicates that during thousands of years that Hormuz Island has gradually come out of the water, the erosional processes have acted in a way that these sculptures were formed and decorated the surface of the land (Figure 8a, b).





Figure 7. a) Red Soil Mine (Ochre), b) Seawater waves formed with rocks containing red soil has made beautiful scenery, c) boundary of seawater with red soils

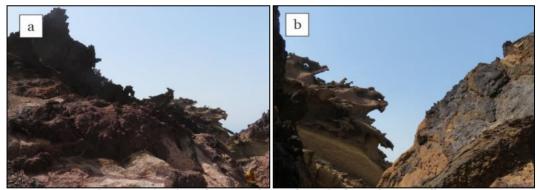


Figure 8. a) a view of some sculpture forms in the sculptures valley, b) a close up view from an erosional landform-created in "sandstone" deposits in Hormuz Island

Coral Reefs

On the southeast beaches of the island, coral reef colonies of shallow water have spread on the seafloor. The reefs are composed of the carbonate parts of different organisms such as corals, bivalves, star fishes, fishes and other organisms along with living forms of them. With a great variety of aquatic animals, the coral reefs provide a suitable habitat for turtles. These corals come out of water when the tide occurs, and they represent one of the attractions of Hormuz Island especially for the ecotourists. In these reefs, different species of crabs, gastropods and sea cucumbers are abundant (Figure 9 a, b).

Hara or Mangrove Forests

Mangrove or Hara Forest, another attraction of Hormuz Island, is seen on the northeast beach. These forests are usually considered as a significant ecotourism site. There are over 60 species of mangroves in the world. The Hara tree is a salt-water plant that is often submerged at high tide. Hara tree's bark has a filtration potential which allows the plant to absorb softened water while eliminating the salt. The tree is a natural water purifier. The Mangrove forests represent an important ecological resource.

Two species of mangrove spread on Hormuz Island. Common types of mangrove on Hormuz Island include Rhizophora macrunata and Avicennia marina (Zahed et al., 2010). The trees of these forests are green all year. Hara forest is the vegetation set including trees and shrubs observed in coastal saline waters in the form of a narrow strip.

Given their suitable conditions, Hara forests are a safe habitat for fish, molluscs, crustaceans and migratory birds from tropical areas (Ghasemi et al., 2010). Hara sets of Hormuz Island are the planting sets lying on a muddy bed. Crabs, gastropods and mudskippers are among the main inhabitants of these areas (Figure 10 a).

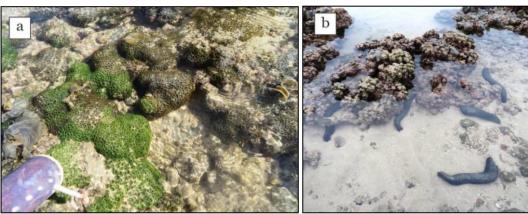


Figure 9. a) Coral reefs colonies of Hormuz in the southeastern beach. They are subaerially exposed in low tide; b) Coral reefs colonies in the same area as

(a) along with sea cucumbers (Holothuridea class)



Figure 10. Planting Hara forests, the habitat of bird and other organisms on the eastern margin of Hormuz Island

Tidal Mud flat

A vast, nearly horizontal, marshy or barren area in shorelines that is alternately covered and uncovered by the tide and consists of unconsolidated sediments (i.e., mostly mud) (Bates & Jackson, 1980). Tidal mud flats with the diversity of different fauna and flora and their various effects on mud flat environments are the other geotourism attraction especially from photography viewpoint. The slopes of the southern beaches are affected by the tidal water hydrologic system the maximum extension of which is more than 4 meters. When the tides occur, the morphology of the fine grained areas will not change because of the cohesion between the mud-sized grains.

Because of the low slope of the coast as well as being protected from sea turbulence and waves, the sedimentary areas are usually rich in organic matter (Mirzabagheri et al., 2018; Noori-Koupaei et al., 2014, 2015). Mudflats of Hormuz Island are located in the eastern and northeastern parts of the island (Bruthans et al., 2006) (Figure 11).



Figure 11. Mudflats near Hara forests in the northern part of Hormuz Island

Sandy Beaches

This type of beach often extends in the form of narrow strips with about 20 to 30 meters in different parts of the island. From the geomorphological point of view, these beaches encompass the littoral, subtidal and backshore zones each of which is dominated by special flora and fauna assemblages. In sandy beaches, all types of sea birds can usually be observed in all seasons. Such beaches have a high tourist potential. The presence of starfish, sea anemones and digging worms is very noticeable in some part of the beaches (Buschbaum et al., 2012; Luttikhuizen & Dekker, 2010) (Figure 12, a, b, c).

Rocky Shores

This type of shores are cliff-dominated ones with or without sandy berms. The sandy berms are usually seen when there is a low tide. In many areas, there are rows of limestone and layers more resistant to water erosion. Rocky shores benefit from coastal biodiversity particularly bivalve species such as oyster and crabs (Zakeri & Habib, 2013a). Most algae zones of the island can be seen in these areas. These shells are from the oysters, firmly attached to hard surfaces and seen in the middle part of the intertidal zone. The rocky oysters have a dedicated strip in the tidal zone, and the oyster origin in this area is located on the rocky surfaces (flat and vertical). The cause of these oysters' density may be the high algal density in the area that is used as molluscan food. One of the attractions of these shores is caves in the South and South West coast of the island. The collision of the waves has led to caves in the lower parts of these rocks and created beautiful views between the sea and the land border (Figure 13 a, b).





Figure 12. a) sandy beach in the eastern part of the island when tide time, b) a set of starfish on sandy beaches when tide occurs and c) Lugworm (*Arenicola marina*) casts on beach



Figure 13. a, b) A rocky beach located on the eastern part of Hormuz Island

Portuguese Castle

In the northern most part of the island, the ruins of "Portuguese Castle" and its protruding nose are the most important historical monument of Hormuz. The Portuguese Castle of Hormuz Island incorporates the geotic, biotic, and anthropic aspects of the monument (Martínez-Torres, 2018). Portuguese castles are observed in many southern islands of Iran. It dates back to the governance of the Portuguese in the southern region of Iran. The materials used in the construction of the castle have been all from the

mineral resources of the island. The castle is in the form of an irregular polygon. The main components of materials include volcanic rocks and residuals of beach rocks and coral skeletons. The Portuguese castle was constructed in June 1507 under the command of Alfonso de Albuquerque, an offensive Portuguese sailor on the northern side of Hormuz Island in the Persian Gulf. The Portuguese occupation of this important naval waterway lasted for 110 years. Over this time, they constructed fortifications and fortresses, such as the fortresses of Qeshm and Lark.

Later, The Imam-Quli Khan's soldiers with the help of the British navy, captured the Portuguese Castle at the Hormuz Island on April 1622. They expelled Portuguese from Hormuz castle and pulled down their flag. The Portuguese Castle in Hormuz Island includes weapon warehouses, large water cisterns, barracks rooms, prison, churches, command base and halls. Today, the remains and ruins of its buildings and balls in the north of the island are the examples for the invaders in Iran (Figure 14 a, b).

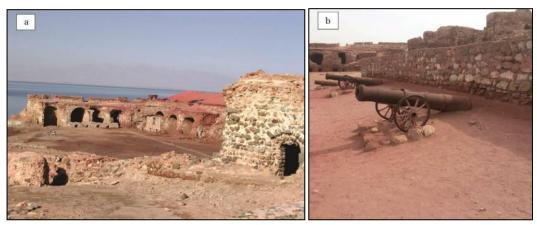


Figure 14. a) a view of the remains of the Portuguese Castle in the north of the island, b) the remained weapons of the portogese in the castle



Figure 15. a, b) Entrance to Dr. Nadalian Museum near the Hormuz Island Harbor Port

Dr. Nadalian Museum

Dr. Nadalian Museum is located in the old part of Hormuz Island near the harbor. In this museum, you will get familiar with the native culture of the old urbanization of Hormuz. It is a permanent museum of environmental arts. Iranian and international artists have painted all the walls and surrounding area with colorful soils of Hormuz. Currently,

there are many painting workshops on the island, where native women implement Ahmad Nadalian's designs using colored soils and the works are sold in the museum (Figure 15 a, b).

CONCLUSION

Hormuz Island is one of the salt domes observed in southern Iran and in the Persian Gulf region. Considering the diversity of volcanic rocks, as well as the various alterations and mineralizations, a very attractive and colorful landscape was created on the island. Also, the coexistence of rocks with the beach as well as the dissolution of the red soils of the island has created amazing geotourism landscapes.

As Iran's geological paradise, Hormuz Island has the abundant potential for expanding the tourism industry, in particular, geotourism. Hence, for optimal use of this potential, and given the special advantages of the island as a geotourism center, due to its natural, ancient and geological attractions, there must be more fundamental works to solve some problems including the lack of facilities, security and health problems, and culturalization in the field of geotourism works among the native peoples of the region. So that, it will be possible to provide ideal social and the economic conditions for the region and the indigenous people of the island. Due to the unique area, variety of geosites, and suitable natural and cultural conditions, this island is prone to be a geopark. Geomorphologic examples of valley sculptures, as well as colored beaches, are one of the exceptional examples of the Hormuz Island.

Aknowlegments

The authors would like to acknowledge the University of Tehran for supports in the field works.

REFERENCES

Ahmadzadeh Heravi, M., & Houshmandzadeh A, & Nabavi, M., H. (1990). New concept of Hormuz formation's stratigraphy and the problem of salt diapirism in south Iran. In: Proceeding Symposium on Diapirism with Special Reference to Iran. *Geological Survey of Iran*, Tehran, p, 1–22.

Ala, M., A. (1974). Salt diapirism in Southern Iran. American Association of Petroleum Bulletin, 58(9), 1758–1770.

Amrikazemi, A. (2002). Introducing Geotourism in Iran. In: 10th International Ecotourism Conference. Australia, Cairns.

Amrikazemi, A. (2004). Atlas of the Qeshm Geotourism, a look at the geological features of the Qeshm Island. Geological Survey of Iran.

Amrikazemi, A. (2009). Atlas of Geopark and Geotourism Resources of Iran. *Geological Survey of Iran Publication*, Tehran.

Amrikazemi, A. (2013). Geoheritage atlas of Iran. Geological Survey of Iran.

Amrikazemi, A., & Mehrpooya, A. (2006). Geotourism resources of Iran. In: Dowling, Newsome D (eds) Geotourism: sustainability, impacts and management. Elsevier, Butterworth, p.78–92.

Aqanabati, S., A. (2006). Geology and Mineral Potential of Hormozgan Province. *Journal of Development of Geology Training*, 12, 4-11.

Bates, R.L., & Jackson, J. A. (1980). Glossary of Geology. AGI, Falls Church, 751 p.

Bruthans, J., Filippi, M., Geršl, M., Zare, M., Melková, J., Pazdur, A., & Bosák, P. (2006). Holocene marine terraces on two salt diapirs in Persian Gulf (Iran): age, depositional history and uplift rates. *Journal of Quaternary Science*, 21(8), 843–857.

Buschbaum, C., Lackschewitz, D., & Reise, K. (2012). Nonnative macro benthos in the Wadden Sea ecosystem. *Ocean Coast Manag* 68, 89-101.

Dóniz-Páez, J., Becerra-Ramírez, R., González-Cárdenas, E., Cayetano Guillén-Martín, C., & Escobar-Lahoz, E.(2011). Geomorphosites and geotourism in volcanic landscape: the example of LA CORONA DEL Lajial Cinder Cone (El Hierro, Canary Islands, Spain). *GeoJournal of Tourism and Geosites*, 2(8), 185-197.

Dowling, R.K., & Newsome, D. (2006) Geotourism. Elsevier, Oxford

Dowling, R.K., (2010). Geotourism's global growth. Geoheritage, 3, 1-13. DOI: 10.1007/s12371-010-0024-7.

Elyasi, J., Aminsobhani, E., Behzad, A., Moein Vaziri, H., & Meysami, A. (1977). Geology of Hormoz Island. Proceeding of the Second Geological Symposium of Iran. The Iranian Petroleum Institute, Iran, p. 31–72 (in persian).

- Faramarzi, N.S., Amini, S., Schmitt, A., K., Hassanzadeh, J., Borg, G., McKeegan, K., Razavi, S., M., H., & Mortazavi, S., M. (2015). Geochronology and geochemistry of rhyolites from Hormuz Island, southern Iran: A new record of Cadomian arc magmatism in the Hormuz Formation. Lithos, p. 203-211. http://dx.doi.org/10.1016/j.lithos.2015.08.017.
- Ghasemi, S., Zakaria, M., Yusof, E., & Danehkar, A. (2010). A review of mangrove value and conservation strategy by local communities in Hormozgan province, Iran. *Journal of American Science*, 6 (10), p. 329–338. http://dx.doi.org/10.1111/j.1365-2451.2008.00686.x.
- Luttikhuizen, P. C., & Dekker, R. (2010). Pseudo-cryptic species Arenicola defodiens and Arenicola marina (Polychaeta: Arenicolidae) in Wadden Sea, North Sea and Skagerrak: morphological and molecular variation. *Journal of Sea Research*, 63,17–23.
- Martínez-Torres, L.M. (1994). Principales tipos de mapas geóticos [Main types of geotic maps]. Servicio Editorial de la Universidad del País Vasco, Bilbao.
- Martínez-Torres, L.M. (2018). Geotourism based upon the Gothic Cathedral of Santa María, Vitoria-Gasteiz, Spain. *GeoJournal of Tourism and Geosites*, 22(2), 373–380. https://doi.org/10.30892/gtg.22208-295.
- McKeever, P., & Zouros, N., (2005), Geoparks: Celebrating Earth heritage, sustaining local communities: Episodes, v. 28, no. 4, pp. 274–278.
- McKeever, P.J., Zouros, N., & Patzak, M., 2010, The UNESCO Global Network of National Geoparks: The George Wright Forum, v. 27, no. 1, pp. 14–18.
- Mirzabagheri, D., Amrollahi Biuki, N., & Taheri Zadeh, M., R. (2018). Distribution pattern and a new coverage range index identification of zoanthids in littoral zone of Hormuz Island, Persian Gulf. *Aquatic Ecology*, 7(3), 9-24.
- Moein Vaziri, H. (1996). An Introduction of Magmatism in Iran. University of Tarbiat Moalem Publication, Tehran (in persian).
- Mortazavi, M., Heuss-Assbichler, S., & Shahri, M. (2017). Hydrothermal systems in the salt domes of south Iran. Procedia Earth and Planetary Science 17, 913 916. doi: 10.1016/j.proeps.2017.01.016.
- Newsome, D., & Dowling R.K. (2010) Geotourism: the tourism of geology and landscape. Goodfellow Publishing Limited, p. 242.
- Noori Koupaei, A., Ghavam Mostafavi, P., Jalil Fallah, M., & Fatemi, S., M., R. (2014). Molecular diversity of coral reef-associated zoanthids off Qeshm Island, northern Persian Gulf. International Aquatic Research, 6:64.doi. 10.1007/s40071-014-0064-8.
- Noori-Koupaei, A., Ghavam-Mostafavi, P., Fallah-Mehrabadi, J., Fatemi, S., M., R., Noori-Koupaei, A., Ghavam-Mostafavi, P., Fallah-Mehrabadi, J., Fatemi, S., M., R., & Dehghani, H. (2015). Biodiversity of order Zoantharia in the Persian Gulf: Hormoz Island. *Journal of Khoramshahr Marine Science and Technology*, 14(1),31-40. (in Persian).
- Samani, B., A. (1988). Metallogeny of the Precambrian in Iran. Precambrian Research, 39, 85–106.
- Talaei Hassanlouei, B., & Ali Rajabzadeh, A.M. (2018). Iron ore deposits associated with Hormuz evaporitic series in Hormuz and Pohl salt diapirs, Hormuzgan province, southern Iran. *Journal of Asian Earth Sciences*. https://doi.org/10.1016/j.jseaes.2018.08.024.
- Talbot, C., J, Farhadi, R., & Aftabi, P. (2009b). Potash in salt extruded at Sar Pohl diapir, Southern Iran. Ore *Geology Reviews*, 35, 352–366.
- Talbot, C., J. (1998). Extrusions of Hormuz salt in Iran. Geological Society, London, Special Publications, 143, 315-334. https://doi.org/10.1144/GSL.SP.1998.143.01.21.
- Talbot, C., J., Aftabi, P., & Chemia, Z. (2009a). Potash in a salt mushroom at Hormuz Island Hormuz Strait. Iran. *Ore Geology Reviews*, 35, p. 317–332.
- Waltham, T. (2008). Salt Terrains of Iran. Geology Today, 24, 188-194.
- Yazdi, A., Arian, M.A., & Tabari, M., M., R. (2014). Geological and Geotourism Study of Iran Geology Natural Museum, Hormoz Island. *Open Journal of Ecology*, 4, 703-714. http://dx.doi.org/10.4236/oje. 2014.411060.
- Yazdi, A., Emami, M., H., & Jafari, H., R. (2013). IRAN, the Center of Geotourism Potentials. *Journal of Basic and Applied Scientific Research*, 3,458-465.
- Zahed, M., A., Ruhani, F., & Mohajeri, S. (2010). An overview of Iranian mangrove ecosystem, northern part of the Persian Gulf and Oman Sea. Electronic Journal of Environmental, Agricultural and Food Chemistry, 9(2), 411-417.
- Zakeri, H., & Habib, F. (2013a). Ecotourism Development Strategy in Hormoz Island using SWOT Model. American Journal of Scientific Research, 90,38-47.
- Zakeri, H., & Habib, F. (2013b). Analyzing Factors Affecting Formation of Cultural Landscape in Hormoz Island. *Advances in Environmental Biology*, 7(6), 988-998.

Submitted: Revised: Accepted and published online 06.04.2019 19.02.2020 27.02.2020

THE RELIGIOUS MEANING OF EQUESTRIAN AND ARCHERY SPORT TOURISM: A PHENOMENOLOGICAL ANALYSIS

Elan JAELANI*

University Padjadjaran, Faculty of Communication Sciences, Street of Bandung Sumedang KM 21, Jatinangor, West Java, Indonesia, 45363 & STAI Bhakti Persada Bandung, Bandung Regency, West Java, Indonesia, 40383, e-mail: elanjaelani@ymail.com

Lukiati Komala ERDINAYA

University Padjadjaran, Faculty of Communication Sciences, Street of Bandung Sumedang KM 21, Jatinangor, West Java, Indonesia, 45363, e-mail: lukiatikomala@gmail.com

ROHANDA

University Padjadjaran, Faculty of Communication Sciences, Street of Bandung Sumedang KM 21, Jatinangor, West Java, Indonesia, 45363, e-mail: rohanda@unpad.ac.id

Susie PERBAWASARI

University Padjadjaran, Faculty of Communication Sciences, Street of Bandung Sumedang KM 21, Jatinangor, West Java, Indonesia, 45363, e-mail: susie.perbawasari@unpad.ac.id

Citation: Jaelani, E., Erdinaya, L.K., Rohanda, & Perbawasari, S. (2020). THE RELIGIOUS MEANING OF EQUESTRIAN AND ARCHERY SPORT TOURISM: A PHENOMENOLOGICAL ANALYSIS. GeoJournal of Tourism and Geosites, 28(1), 246–256. https://doi.org/10.30892/gtg.28119-466

Abstract: Equestrian and archery sports tourism is a popular tourist destination among Indonesian Muslim communities and is a new segment of religion-based tourism. Therefore, this study aims to determine the model of tourists' interpretation of Daarus Sunnah Equestrian tourism, which is one of the first tourism destinations in Indonesia that presents riding and archery. This research method is based on a qualitative method with a phenomenological approach. The results of this study conclude that the model of tourists' interpretation of Daarus Sunnah Equestrian tourism has a variety of meanings, among which are interpreted as sports tourism destinations, religious tourism destinations, have tourist communication attractiveness, and as Islamic missionary activities. The formation of religious meanings and experiences in tourists is inseparable from the role of tourism managers who present the message of Islamic da'wah through various media and ways of delivering messages, both verbal and non-verbal.

Key words: Sport Tourism, Islamic Tourism, Religious Tourism, Equestrian and Arcehry

* * * * * *

^{*} Corresponding author

INTRODUCTION

Equestrian and archery sports are in high demand by Indonesian Muslim communities today, and this is analyzed based on the birth of several equestrian sports and archery communities among Indonesian Muslim communities, especially those living in urban areas. Including in the field of tourism, in several major cities in Indonesia, there are tourism destinations with horse riding and archery activities as the main attractions, such as Daarus Sunnah Equestrian in Bandung City, Da'wah Okura in Pekanbaru City and Westjava Archery in Soreang City. The type of tourism is included in the category of religious tourism because the theme and attraction of tourism refer to the teachings of Islam, one of which is horse riding and archery activities as the main attractions of tourism. Based on the results of research on several Islamic kinds of literature, it was found that the sport of riding and archery is included in the category of worship activities because it is one of the activities ordered by the Prophet Muhammad or known as "As-sunnah."

According to Fazrur Rahman, (1995), As-Sunnah itself is an act of worship worth personified to the Prophet Muhammad and is a reference that must be carried out by Muslims in actions (Dan et al., 2015). The development of Islamic sports tourism in a number of urban areas in Indonesia, is undoubtedly a phenomenon that cannot be separated from changes in the way Muslims look at religion as dynamic, one of which is the understanding of Muslims in interpreting religion is not only limited to ritual activities, but religion can also be interpreted and expressed through other activities such as lifestyle and consumption behavior, one of which is tourism activities (Heryanto, 2011; Yuswohady, 2015). Daarus Sunnah Equestrian is one of the most popular tourist destinations, as well as a trendsetter in the field of horse riding and archery tourism in Indonesia. Geographically, Daarus Sunnah Equestrian is located in the area of North Bandung (KBU), (Figure 1) which is one of the favorite tourist destination areas and one of the areas designated by the Indonesian tourism minister as an area of creativity-based Islamic tourism development (Perbawasari et al., 2019). Based on field findings, since it opened in 2015, the Daarus Sunnah Equestrian Tourism area has been visited by thousands of tourists from various regions and with various types of professional backgrounds.



Figure 1. Location Map for Daarus Sunnah Equestrian

Daarus Sunnah Equestrian is one of the tourism destinations that has its appeal and value for Muslim tourists because Daarus Sunnah Equestrian does not only provide

recreational experiences to meet the needs of external factors but at the same time can provide religious experience for each. Also, tourists can take advantage of tourist activities in the Daarus Sunnah Equestrian as a place to conduct healing therapy and therapy to maintain physical fitness, such as treating problems in the spine, treating mental problems, losing weight, restoring focus and eliminating stress.

Therefore, every visiting tourist has various meanings and perspectives on the Daarus Sunnah Equestrian Tourism. Some of the factors forming meaning are thinking, and each individual can think following the abilities and cognitive capacities or information content they have. Therefore, the meaning will not be the same in every individual, even though the objects they face are the same. Meaning occurs because the way and process of thinking is something unique to each individual, which in turn will produce diversity in the formation of meaning (Maharani, 2014). The phenomenological theory of Alfred Schutz 1967, is the most relevant theory for understanding the phenomenon of Daarus Sunnah Equestrian tourism, because according to Schutz a social action is always based on experience, meaning and awareness (motive), as happens in the actions of tourists who travel to Daarus Suunah Equestrian. In addition to using the Phenomenology theory from Alfred Schuz, researchers also use the Symbolic Interaction theory from G. Harbert Mead 2009, where this theory is used to assist researchers in analyzing the interactions made by tourists during a tour, both interactions with tour guides or interactions with fellow tourists Daarus Sunnah Equestrian.

From the background of the researchers described above, the researchers tried to examine the motivation of tourists in traveling, what tourism experiences and communication experiences experienced by tourists, and how the meaning generated based on the motivation and experience of tourists to tourism Daarus Sunnah Equestrian. By the explanation above and supported by the phenomenological theory and symbolic interaction that the researchers have explained, this research seeks to examine the "Meaning of Daarus Sunnah Equestrian tourism for tourists".

LITERATURE REVIEW Tourism and Islam

Tourism and religion have been widely studied by researchers in various parts of the world, but research on the relationship between tourism and Islamic religion is still a little literature (Battour et al., 2013). Furthermore, research conducted by researchers is still covered in two focus studies, namely the study of pilgrimage (for example pilgrimage conducted by Muslims) and Halal tourism, which is defined as tourism products specifically designed to meet the needs of tourists such as the fulfillment of sharia aspects in services or tourism products (Battour & Ismail, 2016). Even though in reality, Muslims are one of the biggest tourist markets in Indonesia and the world, but knowledge related to Islamic tourism is still inadequate in the related literature (Eid & El-Gohary, 2015). Therefore, the focus of the study on Islamic tourism itself has many different problems, such as aspects: participation and involvement (by Muslims), tourism destinations, tourism products (housing, food, entertainment, beverages, etc.), tourism destinations (Islamic destinations), dimensions (social, economic, cultural and religious) and related aspects of service and marketing (Duman, 2011; Namin, 2013).

Here are some definitions of Islamic tourism found in various literature (Table 1).

Referring to the opinion of Collins-Kreiner and Wall (2015), in general, the study of the relationship between tourism and Religion often has a separate focus and less attention to the actual interactions or relationships between the two whereas the position of religious tourism cannot be established and developed without a good understanding of Religion, its practices, and their impact on tourism and tourist activities (Kreiner & Wall, 2015). Likewise, also about research that specifically examines the experience of religious tourism is still relatively rare (Garcês et al., 2018; Albayrak et al., 2018). Whereas religion has long been an influential motivating factor for travel, both for tourists seeking spiritual attainment or travelers seeking entertainment or cultural experiences (El-Gohary, 2016). even if it refers to a change in the tourism system from "economy" to "experience economy," the main focus of tourists is to find more personal and transformational experiences, where spirituality is one of the factors (Wiley, 2007).

Table 1. Islamic Tourism Definitions

Author	Definition
Dogan	Islamic tourism covers tourism activities by Muslims in seaside destinations
	for the purposes of relaxation and entertainment
Michele Carboni	Tourism by Islam, which involves Muslim people who are interested in keeping
	up with their religious habits while traveling
Duman	All tourism activities that originate from Islamic motivation, are carried out by
	Muslims and are realized by Sharia principles.
Ala-Hamarneh	An economic, cultural and religious (conservative) concept.
Hendarson	All tourism product development and marketing are designed and aimed at Muslims.
Hasan	Types of Tourism that adhere to Islamic values.

Religious Tourism Experience

The experience of religious tourism in principle cannot be separated from the concept of spirituality, spirituality itself is an essential part of human experience and basically about how people construct meaning, understand the purpose of life, and move towards greater authenticity (Barkathunnisha et al., 2017). In the context of tourism, spirituality is born through experiences and processes of interaction between tourists and guides, interactions with tourism elements, or with fellow tourists themselves. Wilson further explained that the spiritual meaning could also be obtained by tourists through the background of personal experience of the tourists themselves, such as the experience of loss, feeling fear, experiencing physical or mental health problems, suffering from addictions, or existential crises (Willson et al., 2013).

Furthermore, Wlison added that religious tourism experience could also be obtained through entertainment tourism activities. However, it must pay attention to some aspects of the objectives, including the creation of positive experiences, learning experiences about religion through fun activities, and entertainment activities in order to admire the beauty of religious monuments. When referring to the literature and previous research on the experience of religious tourism, in general, the experience felt by scientists is not always homogeneous but consists of various types of experiences (Kreiner & Wall, 2015). The difference depends on several factors, such as choice of travel time, interpretation of religious symbols, and tourist perceptions of holiness (Huang & Chu, 2019). Previous research also concluded that several factors could influence tourist experiences, including community background, motivation, and visiting patterns (Terzidou et al., 2017. Furthermore, the religious experience of tourists could also be seen from several aspects, including dress code, participation, and tourism activities, the intensity of tourist visits, motivation and also demographic characteristics characteristics (Juoling & Wu, 2016; Huang & Chu, 2019).

METHOD

The research method used is a qualitative method with a phenomenological approach. Phenomenology is one of the research traditions that can be used to examine individual consciousness based on the experiences they have, or it can also be

interpreted as an approach to understand people in life based on human subjective experiences and their interpretation of the world. The definition of qualitative research is research using a scientific setting, to interpret phenomena that occur and is carried out by involving various existing methods (Denzin & Lincoln, 2005). The subject in this study was Daarus Sunnah Equestrian tourists, and then the research subjects were selected purposively based on the intensity of tourist visits to Daarus Sunnah Equestrian, namely the category of tourists who have visited at least twice a month. Determination of these characteristics is also intended to obtain a quality source of informants, especially concerning the knowledge and understanding of tourists about horse riding and archery activities. Data collection was carried out through several methods, including observation, in-depth interviews, and literature study.

RESULT & DISCUSSION Tourist Motives In Traveling

In the context of travel, motivation becomes one of the critical factors in the implementation of a tourism trip, and the motivation usually consists of several objectives, including in order to arouse feelings, obtain new ideas, obtain new views, and complement other living needs (Oka, 1996). Therefore, in order to understand why a tourist can be involved in a tour, theory and study of motivation are needed (Suhud & Allan, 2019). The motive is a motivating factor for someone to act or behave. Some motives come from internal processes, some from external processes. Also, according to Schutz (1967), motives are divided into two, namely motives for reasons or motives (because motives), and some are also referred to as purpose motives commonly called motives for (in order to motive). Furthermore, Elida Prayitno (1989) also explained that motivation could also be categorized into two types of motives, namely intrinsic motives (originating from oneself) and extrinsic motives (motives arising from other people).

Based on the explanation above, the researcher draws the conclusion that the motivation of tourists of Daarus Sunnah Equestrian consists of two categories of motivation that encourage tourists to travel, namely motivation because (*because motive*) consisting of disbursement of self-existence and physical & psychological needs factors, and goal motivation (*in order to motive*) consisting of; motivation based on factors training ability, motivation based on factors of pleasure, motivation based on factors of Religion (Figure 2). Another vital tourist motivation is that there is a desire to practice horse riding and archery, and it is not uncommon for tourists to prepare time, money, and distance that is quite far from the place of residence to the tourist sites.

Riding and archery activities are activities that cannot be carried out by just anyone, so special skills and abilities are required. According to Sukadiyanto (2006), training is one's effort to improve the improvement of the organism and its function to optimize sports performance and performance. The comfort of the atmosphere is another factor that is one of the reasons tourists come and visit Daarus Sunnah Equestrian. Convenience itself is based on a sizeable Indonesian dictionary is a comfortable situation (Setiawan, 2011). Based on the research findings, there are several criteria of comfort felt by tourists of Daarus Sunnah Equestrian, including easily accessible tourist locations, there are tourist facilities to relax, natural and Islamic atmosphere, and finally, there are representative worship facilities, so that visitors feel comfortable and not comfortable. Difficulties in carrying out worship while in the Daarus Sunnah Equestrian.

Next is the end motivation based on religious factors. Indeed, it is a common thing if religious factors become one of the driving factors that are most commonly found in most tourists of the Daarus Sunnah Equestrian because historically, the Daarus Sunnah Equestrian tourism was formed for reasons of Islamic da'wah. Its founder was

one of the famous Islamic religious figures in Indonesia. Another reason is that, based on research findings, some tourists come from various religious groups and communities, such as religious groups, Muslim youth communities, Muslim student communities, and members of other religious organizations. Therefore, it is not surprising that some tourists who visit Daarus Sunnah Equestrian have a relatively good religious understanding, so that it has the potential to influence travel motivation that cannot be released from religious factors such as the principle of devotion to God (Worship), Value of merit, Islamic brotherhood and Islamic da'wah. Another motivation is based on health factors because the wider community already knows the sport of riding and archery as a sport that contains many health benefits. The benefits of archery include increasing hand and eye coordination and exercising balance, relaxing one's body, growing patience, and increasing concentration (Yulinar & Kurniawan, 2011). Furthermore, the benefits of riding sports include increasing body muscle strength, preventing muscle cramps, increasing responsibility, patience, discipline and self-confidence, and training body balance (Yulinar & Kurniawan, 2011; Santoso & Idris, 2016). So do not be surprised if some tourists have motivation because of health factors or aim to undergo health therapy to eliminate illness, relieve stress, restore mood, and restore the focus of mind.

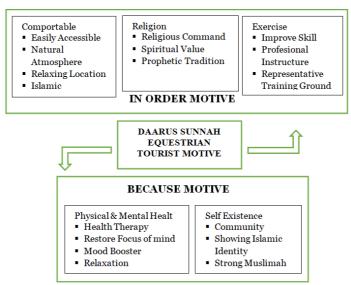


Figure 2. The Daarus Sunnah Equestrian Tourist Motivation Model

According to Zaenal Abidin 2006, existence can be interpreted as "something that can get out of its existence" or "something that can surpass itself," and the outside world can influence that existence itself. Furthermore, in the context of tourist motivation, the existence factor can be seen from the activities of tourists who tend to use the Daarus Sunnah Equestrian as a place to build a community, such as building a community based on the similarity of hobbies and similarities in the field of Islamic da'wah. Secondly, in the group of women tourists, an effort was found to make the Daarus Sunnah equestrian as a medium to build a healthy self-image of Islamic women, as well as an arena to show that a woman can also engage in extreme sports activities such as horse riding and archery. Third, Daarus Sunnah equestrian is often functioned by tourists as a place to display self-image and Islamic identity, and this is usually done by tourists' activities of various images and stories in online media.

Tourist Communication Experience

Phenomenology is a method for describing meaning that comes from a life experience experienced consciously by someone (Nurtyasrini, 2016). Experience can be broadly interpreted as an experience of sociology and psychology that produces subjective mental conditions (Chan & Baum, 2007). The experience itself can be obtained through an event that contains specific information or messages, and then through that information, it is possible to get knowledge. Thus, each event experienced can increase personal knowledge. An event that contains elements of communication will be a communication experience for individuals, and communication experience that is considered necessary will be the experience that is most remembered and has an extraordinary impact on the individual, often even used as a basis for individuals to take action (Fortunately, 2018; Hafiar, 2012). The communication experience referred to in this study is an experience experienced by tourists during tourism activities in the Daarus Sunnah Equestrian. Furthermore, the experience is created through a process of interaction that occurs between fellow tourists, guides, and other tourism elements. So from the interaction process formed experience and subjective meaning for each tourist. Furthermore, from these experiences will be the basis or reference for tourists in determining attitudes and actions, the actions in question are actions that bring tourists to the tourist experience and religious experience. The following is a diagram of the Daarus Sunnah Equestrian tourist communication experience model:

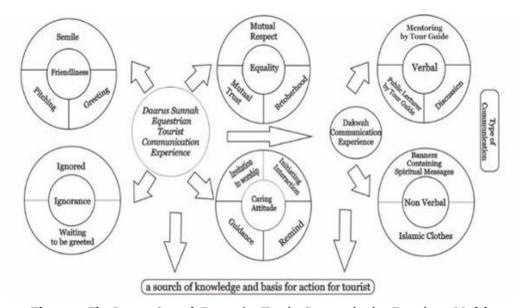


Figure 3. The Daarus Sunnah Equestrian Tourist Communication Experience Model

The communication experience experienced by tourists Daarus Sunnah Equestrian consists of several types of categories, including hospitality experience, openness communication experience, caring communication experience, ignorance communication experience, and Da'wah communication experience (Figure 3). The hospitality experience consists of: the attitude of enthusiasm, showing polite attitude, nonverbal movements, and greeting. Hospitality is a polite attitude towards all people so that others feel comfortable and happy when with us, while the form of friendly attitude consists of honesty, smiling, gentle, polite, respectful, sociable and flexible (Basuki & Wibowo,

2014). The attitude of friendliness is classified as simple communication activities, but the results obtained have an impact that is quite effective in order to open relationships of interaction between fellow tourists. The hospitality experience occurs in the interaction between loyal visitors and new visitors, as well as interactions between visitors with tour guides. The experience of open communication is created through mutual respect, mutual trust and brotherhood. This open communication usually involves loyal tourists with tour guides. The openness of communication itself is a critical success factor in the process of social interaction (Johnson, 1990). The openness of communication can be held if it fulfills several factors, including the presence of safety experiences, general preferences, and social backgrounds. In the end, if open communication has been established among fellow tourists or with tour guides, it will create a meaningful tourism experience and create a good impression for tourists so that it impacts on decision making and tourist decisions in the future.

Ignorance experiences consist of experience ignored by fellow tourists, waiting for each other's initiative to start an interaction, and not greet each other. Ignorance is one of the processes of interaction that occurs between fellow tourists, but ignorance is a communication experience that is not expected by tourists. Ignorance usually involves old tourists and new tourists, and this happens because between them had never known each other before and adapted concern from one party when there is an initiative to start an interaction, because it is feared that it will disturb the comfort and privacy.

The experience of caring is one of the factors in the implementation of effective communication and the establishment of a positive reciprocal relationship between fellow tourists so that the experience of caring communication is one of the critical factors that determine the actions and way of looking at tourists. Caring is one of the exciting communication experiences and has a positive impression on tourists because the experience makes tourists feel valued, feel comfortable, support each other, even the forms of caring experienced to touch on religious aspects, such as mutual support to study religion consistently, support each other in spreading Islamic da'wah and remind each other in the implementation of worship. Therefore, the experience gained by the Daarus Sunnah Equestrian tourists not only benefits tourism recreation but also religious and brotherhood experience. Finally, the Da'wah communication experience, according to Bambang (2010) Da'wah communication is the process of delivering religious messages in various forms of communication and communication models so that the congregation is called about the importance of Islam for life.

In the Darrus Sunnah Equestrian Tourism context, the process of preaching communication that occurs involves all elements involved in tourism activities, tourists, tour guides, and the organization of tourism itself. Next is the form of Da'wah communication used between verbal Da'wah communication and non-verbal Da'wah Communication. Verbal preaching communication is the process of delivering Islamic messages which are carried out directly using verbal and non-verbal preaching communication done using symbols, images, writing, or referring to movements, facial expressions, clothing, actions, or behavior and environmental situations (Bambang, 2010).

The form of Da'wah communication experienced by tourists consists of, the experience of verbal preaching communication, for example, such as the implementation of mentoring by tour guides towards tourists, the implementation of religious discussions among fellow tourists and finally is the implementation of public lectures that are routinely carried out by tourism managers. Furthermore, the experience of nonverbal propaganda communication of tourists is formed through the interaction of tourists with various Islamic symbols and expressions such as the use of Islamic clothing used by the majority of visitors and tour guides, and there are various banners that contain religious messages.

The Meaning of Tourism

Husserl is the first figure to introduce the basic principles of phenomenological research that explains how to expose meaning, according to Husserl meaning can be exposed by explicitly implicitly structuring the experience of experience, while the meaning itself is a valuable content that arises from the experience of human consciousness (Fortunately, 2018). Schutz, 1967, further explained that the task of phenomenology is to link scientific knowledge with everyday experience, and from the activities where experience and knowledge originated. In other words, basing social action on experience, meaning, and awareness (Kuswarno, 2009). Based on the results of the interpretation of the motives and experiences of tourists Daarus sunnah equestrian, the meaning of Tourism which is constructed by tourists include the Daarus Sunnah Equestrian as a sports tourism destination, religious tourism destination, tourist communication as a tourist attraction and as an Islamic missionary activity. Based on the three categories of meanings, indirectly provide answers to the phenomenon that is becoming developed among Indonesian Muslim communities, namely Islamic sports tourism (Figure 4).

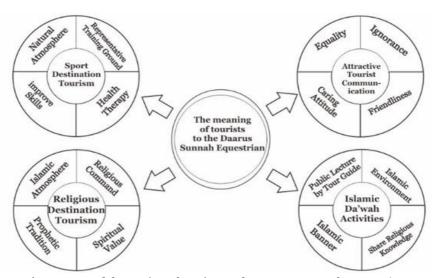


Figure 4. Model Meaning of tourists to the Daarus Sunnah Equestrian

The meaning of Tourism *Daarus Sunnah Equestrian* as a destination for sports tourism, is constructed based on the patterns of experience and activities of tourists while interacting in the tourist area, here are a number of experiences and activities that form meaning for tourists, including: experience of the natural atmosphere of the tourism area, the experience of horse riding and archery, sports experience in the context of health therapy and experience accompanied by professional instructors in the field of equestrian sports and archery. The meaning of Tourism *Daarus Sunnah Equestrian* as religious tourism is constructed based on the following experiences and activities; the experience of enjoying the Islamic atmosphere in the Daarus Sunnah Equestrian tourist area, the experience of traveling in order to carry out religious orders, the experience of traveling in fulfilling spiritual needs such as blessings, rewards and tranquility of the soul, and finally the experience of traveling in order to civilize the traditions of the Prophet. The meaning of Tourism Daarus sunnah equestrian as

Tourism, which has the attraction of tourist communication is constructed based on experience Interactions that occur between fellow tourists or with tour guides, the form of experience including equality communication experience, family communication, caring communication experience, and ignorance communication experience.

Finally, the interpretation of Daarus sunnah equestrian tourism as an Islamic Da'wah activity, is constructed based on the pattern of experience and tourist activities consisting of: the experience of tourists participating in lecture activities organized by the tourism manager, the experience of discussing religion with fellow tourists or with tour guides, and finally is an experience interact with a number of media propaganda spread throughout tourism locations, such as in the form of banners.

CONCLUSION

This study reveals the meaning of tourists to the *Daarus Sunnah Equestrian* has several meanings, including the meaning as a destination for sports tourism, the meaning as tourism that has the attraction of tourist communication, and the meaning as an activity of Islamic Da'wah. The meaning is constructed based on the communication and tourist motives in conducting tour activities. Furthermore, based on the results of this study it is pointed out that there are exciting experiences felt by tourists from the Daarus Sunnah Equestrian, namely that tourists do not just get recreational tourism experiences, but also can experience religious tourism experiences.

REFERENCES

- Abidin, Z. (2006). Human Philosophy. Bandung: Remaja Rosdakarya Publishing.
- Al-Hamarneh, A., & Steiner, C. (2004). Islamic tourism: Rethinking the strategies of tourism development in the Arab world after September 11, 2001. *Comparative Studies of South Asia, Africa and the Middle East*, 24(1), 173–182.
- Albayrak, T., Herstein, R., Caber, M., Drori, N., Bideci, M., & Berger, R. (2018). Exploring religious tourist experiences in Jerusalem: The intersection of Abrahamic religions. *Tourism Management*, 69 (June), 285–296. https://doi.org/10.1016/j.tourman.2018.06.022.
- Bambang, S. M. (2010). Communication Da'wah Paradigm in Action. Bandung: Simbiosa Rekatama Media.
- Barkathunnisha, A. B., Lee, D., & Price, A. (2017). Transcending towards a spirituality-based platform in tourism higher education: A contemplation of the pedagogical implications. *Journal of Hospitality, Leisure, Sport and Tourism Education*, 21(November), 174–184. https://doi.org/10.1016/j.jhlste. 2016.11.003.
- Basuki, D.W., & Wibowo, E.A. (2014). Analysis Of Influence Of Hospitality (Case study at PT. Toko Utama Nagoya Batam). 1(1), 1–22.
- Battour, M., Battour, M., & Bhatti, M.A. (2013). Islamic Attributes of Destination: Construct Development and Measurement Validation, and Their Impact on Tourist Satisfaction. *International Journal of Tourism Research*. https://doi.org/10.1002/jtr.
- Battour, M., & Ismail, M.N. (2016). Halal tourism: Concepts, practises, challenges and future. *Tourism Management Perspectives*, 19, 150–154. https://doi.org/10.1016/j.tmp.2015.12.008.
- Carboni, M., Perelli, C., & Sistu, G. (2014). Is Islamic tourism a viable option for Tunisian tourism? Insights from Djerba. *TMP*, 11, 1–9. https://doi.org/10.1016/j.tmp.2014.02.002.
- Chan, J.K.L., & Baum, T. (2007). Ecotourists' perception of ecotourism experience in Lower Kinabatangan, Sabah, Malaysia. *Journal of Sustainable Tourism*, 15(5), 574–590. https://doi.org/10.2167/jost679.0.
- Dan, K.A., Dalam, T., & Hairillah, H. (2015). The position of as-sunnah and its challenges in terms of the actualization of Islamic law. *Jurnal Mazhib*, *XIV*(2), 291–203. https://doi.org/10.21093/mj.v14i2.347.
- Denzin, N.K., & Lincoln, Y.S. (Eds.). (2005). *The SAGE handbook of qualitative research (4th ed)*. Thousand Oaks: SAGE Publications, Inc.
- Dogan, M. (2011). De islami turizmin gelişimi: 2002-2009. *In Political Economy, Crises and Development*, 471–487. Duman, T. (2011). The Value Of Islamic Tourism: Perspectives From The Turkish Experience. *Islam and Civilisational Renewal*, (July), 12–13.
- Eid, R., & El-Gohary, H. (2015). The role of Islamic religiosity on the relationship between perceived value and tourist satisfaction. *Tourism Management*, 46, 477–488. https://doi.org/10.1016/j.tourman.2014.08.003

- El-Gohary, H. (2016). Halal tourism, is it really Halal? In *Tourism Management Perspectives* (Vol. 19). https://doi.org/10.1016/j.tmp.2015.12.013.
- Fortunately, A. (2018). The Meaning of Travel Tours for Backpackers (Phenomenology Study of Backpackers for Traveling to West Sumatra). *Jom Fisip*, 5, 1–16.
- Garcês, S., Pocinho, M., & de Jesus, S.N. (2018). Review of optimism, creativity and spirituality in tourism research. *Tourism and Hospitality Management*, 24(1), 107–117. https://doi.org/10.20867/thm.24.1.6
- Hafiar.H. (2012). Disability and Achievement Through the Communication Experience of Athletes with Disabilities: Phenomenology Studies. University Padjadjaran, Bandung.
- Hariono, A. (2006). *The Physical Training Method of Pencak Silat*. Yogakarta: Sports Science Faculties, UNY. Hassan, A.R. (2007). *Islamic tourism revisited, a note from the editor*. Retrieved from http://www.islamictourism.com/PDFs/Issue 32/English/2.pdf.
- Henderson, J.C. (2010). Sharia-Compliant Hotels. *Tourism and Hospitality Research*, 10(3), 246–254. https://doi.org/10.1057/thr.2010.3.
- Heryanto, A. (2011). Islam and Popular Culture In Indonesia and Malaysia (A. N. Weintraub, Ed.). New York: Routledge. Huang, J., & Chu, J. (2019). Tourist Experience at Religious Sites: A Case Study of the Chinese Visiting the Sheikh Zayed Grand Mosque. Journal of China Tourism Research, 00(00), 1–25. https://doi.org/10.1080/19388160.2019.1658678.
- Johnson, D.W. (1990). Reaching Out; Interpersonal Effectivenss and Self Actualization (4th ed.). Englewood Cliffs: Prentice Hall.
- Juoling, S.R., & Wu, B.H. (2016). A 30-year review of domestic and international religion tourism researches. *Tourism Tribune*, 31(1), 111–125.
- Kreiner, N.C., & Wall, G. (2015). The changing world religion map: Sacred places, identities, practices and politics. *The Changing World Religion Map: Sacred Places, Identities, Practices and Politics*, (January), 1–3926. https://doi.org/10.1007/978-94-017-9376-6.
- Kuswarno, E. (2009). Fhenomenology: Conception, Guidelines and Examples of Research. Bandung: Widya Padjadjaran. Maharani, D. (2014). The Meaning of Kemaro Island Tourism According to Visitors and Communication Behavior. Jurnal Kajian Komunikasi, 2(1), 73–84. https://doi.org/10.24198/jkk.vol2n1.8
- Namin, T. (2013). Value Creation in Tourism: An Islamic Approach. *International Research Journal of Applied* and Basic Sciences, 4(0).
- Nurtyasrini, S. (2016). Experience Of Screen Communication Experience On Self-Health Care And Environment In Tpa Bantar Gebang. Journal of Communication Studies, 4(8), 219–228.
- Oka A.Y. (1996), Introduction to Tourism Science, Bandung: Angkasa Publishing.
- Perbawasari, S., Sjuchro, D. W., Setianti, Y., Nugraha, A. R., & Muda, I. (2019). Halal tourism communication formation model in west Java, Indonesia. *Geojournal of Tourism and Geosites*, 25(2), 309–320. https://doi.org/10.30892/gtg.25203-361.
- Prayitno, E. (1989). Motivation to learn. Jakarta: P2LPTK.
- Rahman, F. (1995). Open the door of ijtihad. Bandung: Pustaka Publishing.
- Santoso, H., & Idris, P.S. (2016). Therapeutic Riding For Children Learning Problems. 10(1), 30–38. https://doi.org/10.13170/jp.10.1.4825.
- Schutz, A. (1967). The phenomenology of the social world. George Walsh: Northwestern University press.
- Setiawan, E. (2011). Indonesia Dictionary. Jakarta: Language Centre.
- Suhud, U., & Allan, M. (2019). Exploring the Impact of Travel Motivation and Constraint on Stage of Readiness in the Context of Volcano Tourism. *Geoheritage*, 11(3), 927–934. https://doi.org/10.1007/s12371-018-00340-3
- Terzidou, M., Scarles, C., & Saunders, M. N. K. (2017). Religiousness as tourist performances: A case study of Greek Orthodox pilgrimage. *Annals of Tourism Research*, 66, 116–129. https://doi.org/10.1016/j.annals.2017.06.009.
- Wiley, J. (2007). The Formation of the Tourist's Loyalty How Does It Affect Price Discounts? *International Journal of Tourism Research*, 9(August), 453–464. https://doi.org/10.1002/jtr.
- Willson, G.B., McIntosh, A.J., & Zahra, A.L. (2013). Tourism and spirituality: A phenomenological analysis. Annals of Tourism Research, 42, 150–168. https://doi.org/10.1016/j.annals.2013.01.016.
- Yulinar, & Kurniawan, E. (2017). Sports In Islamic Views. *Prosiding multi-disciplinary seminar at Abulyatama University*, 1(1), 9–11.
- Yuswohady. (2015). Marketing to The Middle Class Muslim (Revised ed). Jakarta: Gramedia Publishing.

Submitted: Revised: Accepted and published online 06.11.2019 20.02.2020 27.02.2020

THE RELATIONSHIP BETWEEN HERITAGE PRODUCTS AND TOURISM IN THE DEVELOPMENT DOCUMENTS OF TOWNS IN HAJDÚ-BIHAR COUNTY

Bence MONYÓK

University of Debrecen, Faculty of Science and Technology, Department of Social Geography and Regional Development Planning, Egyetem tér 1, 4032 Debrecen, Hungary, e-mail: bence.monyok@gmail.com

Tibor KECSKÉS

University of Debrecen, Faculty of Science and Technology, Department of Social Geography and Regional Development Planning, Egyetem tér 1, 4032 Debrecen, Hungary, e-mail: kecskestibor@freemail.hu

Gábor KOZMA*

University of Debrecen, Faculty of Science and Technology, Department of Social Geography and Regional Development Planning, Egyetem tér 1, 4032 Debrecen, Hungary, e-mail: kozma.gabor@science.unideb.hu

Citation: Monyók, B., Kecskés, T. & Kozma, G. (2020). THE RELATIONSHIP BETWEEN HERITAGE PRODUCTS AND TOURISM IN THE DEVELOPMENT DOCUMENTS OF TOWNS IN HAJDÚ-BIHAR COUNTY. GeoJournal of Tourism and Geosites, 28(1), 257–267. https://doi.org/10.30892/gtg.28120-467

Abstract: Heritage tourism can be considered as one of the fastest developing branches of tourism today but the prerequisite of the success of local authorities in this filed is a proactive approach. In the spirit of the above, the aim of the present paper is to examine the development documents of the most important settlements of Hajdú-Bihar county (Hungary) and to answer the question how the heritage products appear in the specific documents concerned. As a result it can be concluded that firstly From among the values to be preserved in connection with heritage, the biggest emphasis is on the build environment; at the same time – due to the unique historical past of the towns – a very significant role is also given to the unique settlement structure. Secondly among the possible areas of the utilisation of heritage, the first place is occupied by the physical appearance of the settlements (building stock, settlement structure); at the same time, an important role is also played in the social life of the towns (e.g. the preservation of identity, shaping communities).

Key words: heritage products, tourism, Haidu-Bihar county

INTRODUCTION

Heritage tourism can be considered as one of the fastest developing branches of tourism today, which intends to attract new visitors to settlements relying on historical

_

^{*} Corresponding author

assets. In order to raise the interest of tourists, it is necessary to develop attractions that differentiate the given destination from its competitors. At the same time, however, this requires a proactive approach by the local authorities: they need to assess the available resources, and then develop a suitable strategy relying on them in the interest of their utilisation. In the spirit of the above, the aim of the present paper is to examine from the above point of view the development documents of the most important settlements of a specific territorial unit in Hungary, Hajdú-Bihar county, which is located in the eastern part of the country. The questions we primarily seek to answer include how the heritage products appear in the specific documents concerned, and what changes can be observed over time between the documents prepared in different periods.

In the course of our analysis, we have devoted particular attention to exploring what extent local authorities consider elements of the built heritage as resources that can also be used in the framework of tourism. The paper can be fundamentally divided into four main parts. The first chapter explores the theoretical background of the topic concerned, which is followed by a discussion of the materials used and the research methodology applied. The third chapter includes the analysis of the documents concerned, while in the final chapter, a summary of the main findings can be found.

THEORETICAL OVERVIEW

In connection with the concept of heritage, researchers have formulated different opinions in the recent period (Jones et al., 2017). Initially, heritage decisively meant the built heritage; however, in recent decades, the meaning of the term became broader, and more emphasis has been placed on its close relationship with society, nature and culture. In this spirit, according to the phrasing of Prentice (1994), "heritage is an inheritance or legacy that is passed from one generation to the next", while Timothy and Boyd (2003) defined heritage as "those elements of past that society wishes to keep."

If we examine the possible uses of heritage, we can fundamentally differentiate between three areas. In the framework of use for societal purposes, certain elements of the historical past are used in the interest of strengthening the local identity and the shaping of communities, which is of outstanding significance in the everyday life of the given settlement (O'Neill, 2006; McDowell, 2008; Csurgó & Szatmári, 2014; Ilies et al., 2018, 2019; Indrie et al., 2019). When used for political purposes, the main effort is aimed at supporting an ideological current, notion or the activities of a political party with reference to the historical past, legitimizing various political values (Allen, 2010; Husz, 2014). The third – and actually best known – type is use for economic purposes, in the course of which, in the framework of heritage tourism, the effort is aimed at increasing the number of visitors to the given area, thereby increasing the revenues of society, as well as of the local and the central government (Timothy, 2011; Kozma & Czimre, 2014; Bujdosó et al., 2015; Gozner et al., 2017; Ilies et al., 2018; Lincu et al., 2018; Rapidah, 2018; Deac & Gozner, 2019; Perez-Galvez et al., 2019;). This branch of tourism has a significant history (for example, in the 17th and 18th centuries, many English noblemen travelled to Continental Europe in order to view to classic Greek monuments, as well as the treasures of German, French, Italian and Dutch cities), but it only became widespread from the 1980s.

The utilization of heritage, as outlined above, however, also makes it necessary to manage it in a planned way: it is not enough only to think of preservation, and in this respect but we must adopt a dynamic approach and proactively manage the existing assets and create a well-marketable product (Fairclough, 2008; Smith, 2015; Janssen, 2017). The creation of the heritage product that satisfies the demands of the individual "target groups" is possible in several steps (Figure 1). The *historic resources* are composed of the

wide and quite varied sum of the architectural relics, events, personalities and mythologies of the past which are in some way related to the given place. During the *selection process*, the elements of this set of sources are partly selected randomly (what remained and what are easily remembered) and partly – and to a greater extent consciously – what could be attractive for the potential consumers (thus, in the case of the conscious selection the really important factor is not the supply, but the demand side).

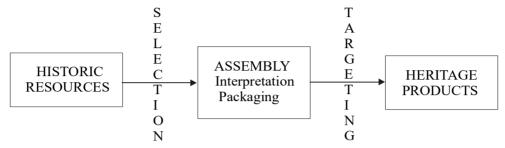


Figure 1. The model of the development of the heritage product (Source: Tunbridge - Ashworth, 1996, p. 7)

The next stage is constituted by the *presentation* when the product to be sold is assembled from the selected sources and "packaged". In the course of this, two important things need to be taken into consideration. On the one hand, not the physical elements (like castle walls and buildings) are set into the centre but those hardly tangible emotions which are related to them including pride, nostalgia and fantasy. On the other hand, different heritage products may be produced from the same sources suiting the emerging demands. The last stage is the *targeting* when the developed product is forwarded to the consumers.

MATERIALS AND METHODS

In the course of this research project, we analysed Integrated Urban Development and Integrated Settlement Development Strategies. The documents of the former type fundamentally played an increasingly important role in the spirit of the Leipzig Charter on Sustainable European Cities adopted in 2007, in the second half of that decade (Barta, 2009), and in the 2017-2013 programming period only those cities had to prepare such a strategy that wanted to receive funding from the urban rehabilitation grants available under the Regional Operative Programmes. An Integrated Settlement Development Strategy is a medium-term development programme simultaneously serving the achievement of the environmental social and economic aims included in the settlement development concept (Section 2, point 12 of Act LXXVIII of 1997 on the Development and Protection of the Built Environment). In connection with the content of the given documents, there were some common elements (e.g. analysis of the situation, formulation of overall objective, medium-term thematic objectives, neighbourhood objectives, drawing up of anti-segregation programme). The provision of law applicable to the preparation of the latter (Government Decree 314/2012 (XI. 8.) on the settlement development concept, the integrated settlement development strategy and the settlement planning tools and on the specific settlement planning legislation), at the same time, contained much more detailed rules in many areas (e.g. it regulated more precisely the content of the so-called foundational examinations). In the selection of the materials, in addition to their easy accessibility (these documents had to be published by the local authorities on their websites), a role was also played by the fact they were

prepared with more or less the same content, thereby providing an opportunity for comparisons in temporal and spatial terms. Both documents were available in case of 18 cities; therefore, the paper provides an examination of these (Figure 2).



Figure 2. Geographical location of 18 towns in Hajdú-Bihar county examined

Table 1. The points assigned in the course of the analysis of the documents concerned

Items examined	points
Situation-analysis chapter	
descriptive part: occurrence of the word "heritage"	1 point/occurrence
- descriptive part: occurrence of the word "heritage" in connection with tourism	1,5 point/occurrence
– SWOT-analysis: reference to heritage	1 point/occurrence
– SWOT-analysis: reference to heritage in connection with tourism	1,5 point/occurrence
Strategy chapter	
 reference to heritage in the vision/overall objective 	1 point
 reference to heritage in connection with tourism in the vision/overall objective 	1,5 point
 reference to heritage in the description of the thematic objective 	0,5 point
- reference to heritage in connection with tourism in the description of	1 point
the thematic objective	

In the course of the analysis, we handled the chapters of the development documents dealing with the analysis/evaluation of the existing situation and those addressing the creation of strategy separately. In case of the former, we examined the appearance of the expression "heritage" in the textual part, while in the SWOT-analysis summarising the most important findings, it was already the examination of the occurrence of findings/conclusion related to the built environment that was usually in the focus. The chapter including the development strategy can be fundamentally divided into two parts. The plans of the settlements for the next 10 to 15 years are summarized by the vision/overall objective, the accomplishment of which is possible by way of the various thematic objectives/priorities. In the course of the analysis, we examined the elements referring to heritage on these two levels. In case of both the analysis of the situation and the strategy chapter, we have made an effort to quantify the occurrences related to heritage in the interest of ensuring that the changes over time can be traced well, and we also assigned separate points for elements related to tourism (Table 1).

RESULTS

Based on the examination of the chapters dealing with the analysis of the situation, a certain progress can be observed from the 2007-2013 to the 2014-2020 period (Table 2): the number of points given in the course of the quantification increased in every aspect of occurrence. At the same time, no significant increase in the number of documents can be observed, since in each of the periods there were 3 settlements in the development materials in which no reference to heritage occurred in any form. This fact refers to the fact that the local authorities concerned placed more emphasis on this aspect and included heritage in their completed strategies in a prioritized way. It is fortunate that the number of settlements recognizing the importance of heritage in tourism increased; at the same time, the proportion of these settlements did not reach 50% either the description, or in the SWOT-analysis part.

Table 2. References to heritage in the analysis of the situation-analysis part of the settlement development documents prepared in the periods 2007-2013 and 2014-2020 (in brackets: the number of the occurrence of the given item: the number of documents in which the given item occurs) (Source: Integrated Urban Development Strategies and Integrated Settlement Development Strategies of towns)

	O	1 0
	Integrated Urban	Integrated Settlement
	Development Strategy	Development Strategy
Description – general aspect	7.5 (8)	9.5 (7)
Description – connected to tourism	3.0 (2)	4.5 (3)
SWOT-analysis – general aspect	16.0 (14)	23.0 (14)
SWOT-analysis – connected to tourism	7.0 (5)	10.0 (7)
Total score	33.5	47.5

See the method in Table 1

In terms of their form of appearance of heritage, we can fundamentally distinguish between three larger groups. The most important rule was played by buildings located in the central parts of the cities (from the 13 settlements mentioning heritage in each of the two periods, only one in each did not refer to such a building), and in connection with these, the development documents primarily considered the preservation of the image of the settlement as the most important task. Their special position is shown by the fact that six analyses of the situation mention concrete items (Balmazújváros – Semsey Castle, Téglás – Dégenfeld-Schomberg Castle, Hajdúböszörmény – Skansen, Hajdúdorog – Greek Catholic Church, Biharkeresztes – Reformed Church, Hajdúsámson – Csiha mill) in the SWOT analysis as strengths of the given settlement (Figure 3).

The second place is occupied by the characteristic settlement structure (this occurs in the documents of four settlements), in the background of which we can find a unique

feature of the region, the existence of the so-called "double infield" settlement types (Figure 4). In the towns concerned, the population first settled in the centre (where small-sized plots were created due to fragmentation), and the economic activity (which primarily meant livestock farming) was concentrated on the outskirts of the settlement. At the same time, however, due to the increase of population, after a certain time the settlement parts further out on the periphery were also populated, the plots became more fragmented, and economic activity was pushed out to the boundary of the settlement. This process resulted in a characteristic internal structure (certain elements of which – such as a system of circular roads on the periphery and streets of radial structure – can even be observed today), which can be considered as typical in Eastern Hungary.



Figure 3. Dégenfeld-Schomburg Castle in Téglás (Source: www.degenfeldkastely.com)

The third important factor of cultural heritage was applied folk art, which was considered by a single settlement, Nádudvar, famous for its traditional craft of black pottery making (Figure 5), as a feature distinguishing it from its competitors.

In the course of the analysis of the part of the settlement development documents pertaining to strategy, as mentioned before, the vision/overall objective summarising the 10-to-15-year plan of the settlements was examined first. The analysis of the data reveals that heritage/tradition receives little attention on this level: from the 18 settlements examined, the Integrated Urban Development Strategies mentioned them 6 times, and the Integrated Settlement Development Strategies 8 times, while in connection with tourism they are only mentioned once in each group of strategies (Box 1). It can be regarded an interesting fact, however, that from these cases, there are only two settlements (Nádudvar and Hajdúböszörmény) where the given element of both strategies refers to the heritage. In our opinion, this can be explained by the fact that in case of the other settlements, heritage can be regarded as an endowment that can be less put to use, and therefore, it was not always included in the vision/overall objective, which can be considered as one of the most important messages of these documents.

262

¹¹ In Hungarian: "kétbeltelkes" (also referred to as "szálláskertes") settlements, where the farms and farm buildings were on strips of land surrounding the settlement proper, or even farther off



Figure 4. Urban structure of town Hajdúböszörmény in 1782 (Source: www.hajduboszormeny.hu)



Figure 5. Black pottery made in Nádudvar (Source: www.feketekeramia.eu)

Tiszacsege is a small town of culture, preserving its traditions, relying on secure economic bases, which can ensure employment for the local population also in the long run. With the improvement of the quality of the natural and built environment, as well as the development of the services provided, it satisfies the expectations of both the local population and the visitors arriving there.

Box 1. Vision of town Tiszacsege (Source: Integrated Urban Development Strategy of town Tiszacsege)

The second level of the examination concentrated on the thematic objectives (Box 2), in the framework of which the settlements defined the most important areas to which they wish to devote most attention in the next period of time (7-8 years).

- T1. Creating the conditions of a competitive economy
- T2. The development of the local cultural life and attractiveness for tourism
- T3. The development of the settlement's environment and infrastructure, increasing energy efficiency
 - T4. The development of public services, the strengthen of the microregional role
- T₅. Encouraging municipal and regional cooperation, strengthening community consciousness, local identity and social inclusion in the interest of reducing the disadvantageous position

Box 2. Thematic objectives of town Kaba (Source: Integrated Settlement Development Strategy of town Kaba)

A general examination of this level of the strategies reveals that in their development strategies, settlements formulated quite different numbers of thematic objectives; the average, however, was similar in the two periods of planning (Table 3).

The local authorities fundamentally considered the development of tourism as an important task: this sector was included as a separate thematic objective in half of the development documents prepared. From the point of view of heritage, it can be considered as having an outstanding significance that, in contrast with the period between 2007 and 2013, when a link between tourism and heritage could only be observed in 5 cases, in the Integrated Settlement Development Strategies, heritage was already included in 9 out of 10 of the thematic objectives related to tourism as a possible force of attraction. One of the exceptions in both periods was Hajdúszoboszló, which is fundamentally due to the fact that the town, as the location of one of Central Europe's largest spa complexes, placed the main emphasis in the given thematic objective on the development of health, wellness and thermal spa tourism.

Table 3. The appearance of tourism and heritage in the thematic objectives (Source: Integrated Urban Development Strategies and Integrated Settlement Development Strategies of towns)

	Integrated Urban Development Strategies	Integrated Settlement Development Strategies
minimum and maximum number of thematic objectives	3 – 10	3 – 10
average of thematic objectives	6.4	6.4
the appearance of tourism in the names of the thematic objectives (times)	9	10
- of which, reference to heritage in the description of the thematic objective	5	9

In light of the points put forward in the theoretical overview, the question arises in what other aspects the issue of heritage arises. An analysis of the titles of the thematic objectives allows us to set up 8 larger categories, which can be placed in the three groups on the basis of the values (Table 4). Standing out from among them is the built environment and its protection (Box 3), as well as tourism (Box 4), from among which the former can primarily be explained by way of the fact that heritage, in the thinking of the majority of people, means some kind of a historic monument/building. The second large group (culture and education, preservation of public identity – Box 5, the shaping of local community – Box 6) is fundamentally related to the human side of settlements, and it indicates the increasing importance of heritage in the shaping of the life of the settlement.

The third group is very complex; in addition to certain areas of comprehensive, summary nature (general infrastructure development, general economic development), settlement structures related to urban architecture can be found in this group.

Table 4. The appearance of heritage in the thematic objectives in terms of their titles (%) (Source: Integrated Urban Development Strategies and Integrated Settlement Development Strategies of towns)

title of the thematic objective	proportion of appearance
the built environment and its protection	27.1
the development of tourism	23.7
serving culture and public education	10.2
the preservation of local identity	10.2
the shaping of the local community	10.2
the protection/development of the settlement structure	6,8
general infrastructure development	6.8
general economic development	6.8

In the creation of the urban design, a criterion of special importance is taking the architectural traditions, as well as the opinions and expectations of the population into consideration, as is also the prior surveying of the investors expected to settle there.

Box 3. Connection between heritage and architecture in development strategy of town Téglás (Source: Integrated Settlement Development Strategy of town Téglás)

The protection of the cultural and natural heritage, facilitating its preservation and development are necessary, on the one hand, in the interest of local identity and pride; on the other hand, it also contributes to the urban image and may even serve, in certain cases, as tourist attractions.

Box 4. Connection between heritage and tourism in development strategy of Hajdúdorog (Source: Integrated Settlement Development Strategy of town Hajdúdorog)

The value-preserving utilisation of the traditions and character-bearing elements of settlements are also important components of the population's identity and the image of the settlement

Box 5. Connection between heritage and local identity in development strategy of Nyíradony (Source: Integrated Settlement Development Strategy of town Nyíradony)

Folk traditions and culture, as an important element carrying and expressing identity, should come to the foreground and contribute to the building of the community and the formation of self-awareness.

Box 6. Connection between heritage and shaping local community in development strategy of Püspökladány (Source: Integrated Settlement Development Strategy of town Püspökladány)

On the basis of the examination of the values of the individual settlements (Table 5), we can conclude that three settlements, Hajdúböszörmény, Nádudvar and Balmazújváros, can be placed in the first category, and these are the same towns that have the highest score in the area of tourism. Hajdúböszörmény is the second most populous settlement of the county, and until the administrative reform in the second half of the 19th century, it served as the centre of the Hajdú district (it is still mentioned today as the capital of Hajdús), and is also the most representative example for "double infield" settlements (Figure 4), which are features explaining its special position. The prestigious position of Nádudvar can be traced back to its black pottery that is unique in the country (Figure 5), in case of Balmazújváros, the outstandingly valuable building stock justifies its favourable

position, while the significant size of Debrecen is the reason behind its 4th position. The settlements towards the end of the list (e.g. Kaba, Polgár, Nyíradony) are mainly the smaller ones in terms of populations (less than 10,000 inhabitants) and without a significant historic past (Hajdúsámson is located in the proximity of Debrecen, and its quick growth of population is due to large numbers of people moving there from the county seat), which is the reason for their low scores. At first sight, the position of Berettyóújfalu, a town with a population of approximately 15,000 people, may be surprising; however, the settlement only started its real development in the first half of the 20th century (it became the seat of Bihar county after Oradea, formerly known as Nagyvárad, became a part of Romania as a result of the Trianon peace treaty, and this led to some major investments in the town), and it therefore its historical heritage is limited.

Table 5. The appearance of the topic of heritage in the development documents of the settlements (Source: Integrated Urban Development Strategies and Integrated Settlement Development Strategies of towns)

	situation-	mission/general	thematic	total	tourism
	analysis	aim	objective		in total
Hajdúböszörmény	12.5	2.0	2.0	16.5	6.5
Nádudvar	9.0	2.0	5.0	16.0	8.0
Balmazújváros	9.5	1.0	3.5	14.0	5.0
Debrecen	6.0	1.0	3.0	10.0	3.5
Hajdúhadház	5.0	1.5	1.5	8.0	1.5
Hajdúnánás	6.5	0.0	1.5	8.0	0.0
Tiszacsege	3.5	1.5	3.0	8.0	4.0
Püspökladány	3.5	1.5	2.5	7.5	0.0
Hajdúszoboszló	3.0	1.5	3.0	7.5	1.5
Hajdúdorog	5.0	0.5	1.5	7.0	1.0
Biharkeresztes	4.0	1.0	1.0	6.0	2.0
Komádi	2.0	0.0	3.0	5.0	1.0
Kaba	3.5	0.0	1.5	5.0	2.5
Téglás	2.0	0.0	2.0	4.0	1.5
Polgár	2.5	0.0	1.5	4.0	1.5
Hajdúsámson	2.0	0.0	1.5	3.5	0.0
Berettyóújfalu	0.0	0.0	3.0	3.0	2.0
Nyíradony	1.0	0.0	1.5	2.5	1.0

See the method in Table 1

CONCLUSION

The most important findings of the study could be summarised as follows. Based on a comparison of the Integrated Urban Development and Integrated Settlement Development Strategies, we can conclude that, as we move forward in time, increasing emphasis is given to this area in the development documents of the local authorities, and the above progress can be observed in both the chapter devoted to the analysis of the situation and in the strategic part of the materials. From among the values to be preserved in connection with heritage, the biggest emphasis is on the build environment; at the same time – due to the unique historical past of the towns – a very significant role is also given to the unique settlement structure.

Among the possible areas of the utilisation of heritage, the first place is occupied by the physical appearance of the settlements (building stock, settlement structure); at the same time, an important role is also played in the social life of the towns (e.g. the preservation of identity, shaping communities). The primary factors behind the difference in the importance attached to heritage are population size and the historical past.

REFERENCES

- Allen, R. (2010). Heritage and nationalism. In Harrison, R. (ed) Understanding the politics of heritage. Manchester University Press in association With The Open University. pp. 217–230.
- Barta, Gy. (2009). Integrált városfejlesztési stratégia: a városfejlesztés megújítása (Integrated Urban Development Strategy: the renewal of urban development). Tér és Társadalom, 23(3), pp. 1-12. (in Hungarian).
- Bujdosó, Z., Baros, Z., Dávid, L., Baiburiev, R. & Gyurkó, Á. (2015). Potential use of the coal and ore mining related
- industrial heritage for tourism purposes in the North Hungarian Region. *Acta Geoturistica*, 6(1), pp. 21-29. Csurgó, B. & Szatmári, A. (2014) Vidéki kultúra, helyi közösség, lokális identitás (Rural cultural, local
- community, local identity). *Metszetek*, 3(3), pp. 33-51. (in Hungarian).

 Deac, L.A., Gozner, M. & Sambou A. (2019). Ethnographic Museums in the Rural Areas of Crișana Region, Romania Keepers of Local Heritage, Tradition and Lifestyle. GeoJournal of Tourism and Geosites, 27(4), 1251-1260.
- Fairclough, G. (2008). New heritage, an introductory essay people, landscape and change. In Fairclough, G., Harrison, R., Shofield, J., Jameson, J. H. (eds.), *The heritage reader*, Routledge: Abingdon, pp. 297–312.
- Gozner, M., Tătar, C.F., Stupariu, M. & Măduta, F.M. (2017). Nature, Photography and Tourism in BihorVlădeasa Mountains (Romania). GeoJournal of Tourism and Geosites, Year X, Volume 20, OradeaGdansk, Romania-Poland, Editura Universității din Oradea.
- Husz, M. (2014). Az örökségkonstrukciók geopolitikai kerete (Geopolitical frame of heritage constructions). Földrajzi Közlemények, 138(1), pp. 64-73. (in Hungarian).
- Ilies, D.C., Buhas, R., Ilies, M., Ilies, A., Gaceu, O., Pop, A.C., Marcu, F., Buhas, S.D., Gozner, M., & Baias, S. (2018). Sport Activities and Leisure in Nature 2000 Protected Area - Red Valley, Romania. Journal of
- Environmental Protection and Ecology, 19, No 1, 367–372.
 Ilieş, D. C., Onet, A., Marcu, F.M., Gaceu, O.R., Timar, A., Baias, S., Ilieş, A., Herman, G.V. Costea, M., Țepelea, M., Josan, I. & Wendt, J. (2018). Investigations regarding the air quality in the historic wooden church in Oradea city, Romania, in Environmental Engineering and Management Journal, Vol.17, no11, pp.2731-2739, http://www.eemj.icpm.tuiasi.ro/pdfs/accepted/204_294_Ilie%C8%99_17.pdf.
- Ilieş, D.C., Onet, A., Herman, G.V., Indrie, L., Ilieş, A., Burtă L., Gaceu, O., Marcu, F., Baias, S., Caciora, T., Marcu, A.P., Pavel, O.I., Costea, M., Ilieş, M., Wendt, J. & Mihincau D. (2019), Exploring the indoor environment of heritage buildings and its role in the conservation of valuable objects, Environmental Engineering and Management Journal, December Vol. 18, No. 12, 2579-2586.
- Indrie L., Ilies, D. C., Onet, A., Wendt, J. Ilies, M., Timar, A., Ilies, A., Baias, S. & Herman, G.V. (2019). Indoor air quality of museums and conservation of textiles art works. Case study: Salacea Museum House, Romania, *Industria textile*, Vol. 70 No 1, pp 88-93.

 Janssen, J., Luiten, E., Renes, H. & Stegmeijer, E. (2017). Heritage as sector, factor and vector: conceptualizing
- the shifting relationship between heritage management and spatial planning. European Planning Studies, 25(9), pp. 1654-1672.
- Jones, T., Mozaffari, A. & Jasper, J. M. (2017). Heritage Contests: What Can We Learn from Social Movements?, Heritage & Society, 10(1), pp. 1-25.
 Kozma, G., & Czimre, K. (2014). Role of historical elements in the slogans and logos used by Hungaroan places
- in toursim promotion. In Faracik, R. (ed) Enhancing competitiveness of V4 historic cities to develop
- toursim Aspects of cultural heritage, Krakow Debrecen, pp. 63-75.
 Lincu, A., Ilieş, M., Ilieş, D.C., Herman, G.V., Baias, S., Gozner, M., Costea, M., & Mihincău, D. (2018).
 Conservating the traditional cellars of Salacea, Bihor County, Romania. GeoJournal of Tourism and Geosites, 23(3), 748-758, https://doi.org/10.30892/gtg.23311-325
- McDowell, S. (2008). Heritage, Memory and Identity. In Graham, B., Howard, P. (eds) The Ashgate research companion to heritage and identity. Ashgate: Aldershot, pp. 37-54.
- O'Neill, M. (2006). Museums and Identity in Glasgow. International Journal of Heritage Studies, 12(1), pp. 29-48, Melnychuk, A., & Gnatiuk, O. (2019). Public perception of urban identity in post-Soviet city: the case of Vinnytsa, Ukraine. *Hungarian Geographical Bulletin*, 68(1), pp. 37-50.
- Pérez-Gálvez, J. C., López-Guzmán, T., Medina-Viruel, M. J. & Torres-Naranjo, M. (2019). Heritage tourism in Ubeda Y Baeza (Spain). GeoJournal of Tourism and Geosites, 12(3), pp. 808-820.
- Prentice, R. C. (1994). Heritage: a key sector of the new tourism. In Cooper, C. P., Lockwood, A. (eds) Progress in tourism, recreation and hospitality management vol 5., John Wiley: Chichester, pp. 309-324.
- Rapidah, M. S., Mohamed, K. R., Ali, C. A., Leman, M. S. & Saidin, M. (2018). The application of market appealrobusticity matrix: a case study of the arceological heritage of Lenggong Valley, Perak, Malaysia. GeoJournal of Tourism and Geosites, 11 (3), pp. 702-718.
- Smith, J. (2015). Applying a cultural landscape approach to the urban context. In Taylor, K., St. Clair, A., Mitchell, N. (eds.) Conservering cultural landscapes. Challenges and new directions, Routledge: New York, pp. 182–197.
- Timothy, D. J. (2011). Cultural heritage and tourism: an Introduction. Channel View Publication: Bristol
- Timothy, D. J. & Boyd, S. W. (2003). Heritage tourism. Prentice Hall: Harlow.
- Tunbridge, J. E. & Ashworth, G. J. (1996). Dissonant Heritage: The Management of the Past as a Resource in Conflict. John Wiley & Sons: Chichester.

Submitted: Revised: Accepted and published online 21.02.2020 02.03.2020 22.11.2019

THE ROLE OF VIRTUAL MUSEUM IN PROMOTING RELIGIOUS TOURISM IN JORDAN

Issam Mohammad AL-MAKHADMAH*

Al-Balqa Applied University, Tourism Management Department, Ajloun College, Jordanoo962785156100, e-mail: isammakhadmeh@bau.edu.jo

Citation: AL-MAKHADMAH, I.M. (2020). THE ROLE OF VIRTUAL MUSEUM IN PROMOTING RELIGIOUS TOURISM IN JORDAN. GeoJournal of Tourism and Geosites, 28(1), 268–274. https://doi.org/10.30892/gtg.28121-468

Abstract: The religious motivation is one of the important reasons that drive tourists to travel with the intention of visiting the holy place. However, many obstacles still stand in the way of access to the holy places due to the religious privacy of some places where only non-followers are allowed to visit those places. This study reviews the hypothesis of setting up virtual museums of holy religious sites in Jordan to meet two goals; the first is to overcome the religious privacy of some Islamic or Christian holy places, and the second goal is to give an opportunity for all followers of religions to see the holy places of others. The results of the study showed that the idea of virtual museums represents the ideal solution for the tourist promotion of religious tourist places, and that virtual museums contribute to overcoming obstacles related to religious privacy, which provides an opportunity to see those places.

Key words: virtual museums, religious tourism, Jordan

* * * * * *

INTRODUCTION

Museums are one of the important tourist facilities where the visitor meets directly with the past's archaeological, civilization and historical achievements, and this results in a solid, deep-rooted scientific outcome, paralleling with that the importance of the museum in creating a coherent fabric that forms the basis of social, cultural and intellectual construction of societies, so museums have a great role in encouraging Scientific research by specialists through the preservation and documentation of cultural heritage, which is the most proper place to stimulate the cultural memory of people and societies and support it rich and constantly renewed, and it attracts tourists to it, which supports its role in the development of the tourism sector.

Consequently, the development of museums as attractions for tourism is one of the central issues for societies, as they are no longer a place that includes collections of art pieces or rare works only, but they have become educational institutions that complement the educational role of all educational institutions, which are historical references that

^{*} Corresponding author

document the past and are concerned with preserving the heritage of nations and people; Physical evidence includes aspects of human civilization, homeland history and the cultural identity of people. Carrozzino and Bergamasco (2010) indicates that try contemporary museums has become more than simply allocating places for displaying human heritage through its various stages of development, but has now been seen as a distinct means of communication and making culture available to the mass public. Through the use of new technologies in museum presentation. Styliani et al. (2009) stresses that museums seek to take advantage of technological development not only to keep cultural heritage, but also to contain of information available to the public more widely in an attractive way, and modern technology has contributed to overcoming the traditional problems of museums such as Museum congestion, the high cost paid by the visitor.

Important virtual museums lies in the fact that they give an opportunity to overcome the obstacles of tourism, such as the high cost and the privacy of visiting some places, especially religious ones, where some religions prevent visiting the holy places except to follow them, which prevents others from seeing opportunities for these places, and so, virtual museums join the best model for overcoming On those obstacles.

STUDY PROBLEM

Religious motivation is one of the reasons that drive people to tourism in order to learn about religious attractions (Bayih, 2018). However, many tourists still find it difficult to visit the religious places due to the religious privacy imposed by some religions, and to overcome that problem the current study seeks to learn about the possibility of making use of virtual museums as one of the ways through which the difficulties of religious tourism can be overcome.

Jordan represents a mixture of religious and archaeological sites for Muslims and surveyors, but the opportunities to visit these places are still below because of the religious privacy of some tourist sites, in addition to the high costs of tourism in Jordan compared to other countries. Therefore, the problem of this study unites by identifying the role of virtual museums in encouraging religious visits to Jordan.

STUDY QUESTIONS

- 1- What is the concept of virtual museums and what is its importance?
- 2- What is religious tourism and what are its obstacles?
- 3- How can the religious visit of various religions to religious sites in Jordan be encouraged?

THE AIMS AND IMPORTANCE OF THE STUDY

This study aims to:

- Identify the concept of virtual museums.
- Knowing the importance of religious tourism.
- Investment the virtual museums to encourage religious tourism.

For the importance of this study, hoped that this study give to knowing the impact of technology use in promoting tourism in Jordan, which reduces the challenges facing visiting religious places.

LITERATURE REVIEW

Concept and importance of virtual museums:

Guazzaroni (2020) in his book (Virtual and Augmented Reality in Education Art and Museums) aimed to explore how the combination of art and VR may affect human emotions. For this purpose, a real experience, regarding an art exhibit is described.

Many literature has dealt with the concept of virtual museums, according to (Hong et al., 2001). Are a diverse group of multimedia objects that may be web pages, video clips, and animation museum collections designed to meet the needs of visitors. As for (Yang et al., 2007) defined as the use of a web page and technical tools such as multimedia or some electronic programs to display museum collections via the Internet.

The virtual museum created within three stages: the information collection stage, the archiving stage, and the stage of converting information into digital information, and since the users of the virtual museums are three groups; students, teachers, and researchers, the virtual museum provides three ways to create virtual exhibitions of these three user groups (Yang et al., 2007):

- 1- Information produced from each artifact, to give information tailored to the various groups of users.
 - B- Contain the displayed page set in different ways to meet user appreciation.
- A- Several pre-defined template templates provided for displaying content in Adaptive Display Styles.

According (Wang et al., 2014), it refers to the advantages of virtual museums, which are form an integrated educational environment, and easy to use, as the person can roam between the pillars of the museum using the mouse or the arrow button, and provides a wide audience in different countries the opportunity to see the museum collections, bypassing that complexity Time and space, and cut the burden on the museum itself, so there is no crowding between visitors and thus contribute to preserving the museum's infrastructure. Despite the advantages of virtual museums, (Yu-Chang et al., 2008) pointed out that the new technology marred by many defects that affected traditional museums. For example, the traditional museum has become more isolated and without basic functionality and devoid of visitors. The museum has lost the possibility to communicate with others, and it assumed that the new technology is complementary to the work of the traditional museum, but that it happened that the virtual museums almost invaded the traditional museum, and the traditional value of the museum has eroded after the conversion to the virtual museum.

METHODOLOGY

The current study adopted the descriptive research methodology by taking advantage of the results of research and studies related to the importance of virtual museums and their role in developing religious tourism, and then extracting the importance of virtual museums in overcoming difficulties related to the religious privacy of some of the holy tourist sites.

RELIGIOUS TOURISM

Religious tourism receives people attention of different religions. People often travel for reasons related to the religious aspect in order to obtain the purity of people or enhance their spiritual side. Henama and Apleni (2018) Confirms the possibility of using social media to market tourism, which is an opportunity to support the growth of the local economy. Religious tourism as a concept means the transfer of followers of religions from one place to another individually or in groups as pilgrims or missionaries (Petroman et al., 2011) or is a type of tourism or a form of travel stimulated by faith or religion reasons. Accordingly, religious tourism includes all religions and the religious places associated with them, the emotional and spiritual attachments of these centers and the infrastructure for tourists (Sharpley & Sundaram, 2005).

Several of the earlier literature indicates which main goal of religious tourism is to visit the holy places (Wang et al., 2014), while other studies have revealed that the

motivation to visit the holy places is more comprehensive than just the spiritual aspect, as tourists see the holy places as attractions. Tourist includes cultural, heritage, curiosity, discovery and spirituality and not religious ones (Gyan et al.2015).

In the same context (Pinkney & Whalen, 2018), affirms that religious tourist places are not limited to their followers only, but that these places may represent a tourist motive to follow other religions, while the followers of a particular religion visit a specific place because it represents a sacred part of their religion, we find the followers of other religions visit the same place for purposes that may be cultural or exploratory.

The importance of religious tourism lies in the fact that it enhances the positive values of the person, as visiting religious places contributes to achieving happiness and psychological stability for tourists and enhances the positive emotion they have, so many researchers in the field of psychology recommend the need to visit religious places because of this a great impact in promoting the spiritual values of individuals (Kim &Kim, 2019). Despite all the justifications cited by researchers, religious privacy remains one of the most important reasons that prevent visiting holy places, where supporters of some religions believe that there are special religious places to follow and it is not acceptable to allow non-followers to visit these places. Here the importance of building virtual sites for these places appears, as it allows a wide audience in different religions the opportunity to see those places, bypassing the temporal and spatial complications.

RELIGIOUS TOURISM IN JORDAN

In Jordan, there are many shrines and sacred places for monotheistic religions, where researchers believe there are sites and places of prophets and companions. Religious travel, however, these places are not accessible to non-Muslims due to religious privacy. In contrast, there are many Christian tourist places in Jordan that date back to the fourth century when Christian pilgrims began reaching the church on Mount Nebo (Jawabreh, 2017). There are many Islamic holy sites in Jordan, such as the shrines of Ja`far bin Abi Talib, Zaid bin Haritha, Abdullah bin Rawahah, Abu Ubaidah Amir bin Al Jarrah, Moaz bin Jabal, Sharhabeel bin Hasna, Amir bin Abi Waqqas, and Dirar Al Azwar. Jordan also has Christian holy sites. It is the site of baptism, Mount Nebo, Our Lady of the Mountain, and the shrines of Mar Ilya and Macwer.

The Vatican recognized these holy sites as pilgrimage sites in 2000, eight are included. These holy places are of great religious and tourist importance, whether for Muslims or Christians, whether Islamic or Christian. In addition, according to statistics obtained from the Ministry of Tourism and Antiquities, these sites are the most targeted by tourists and pilgrims for religious purposes and motives (Baral, 2012).

Several studies show that the problem of religious tourism in Jordan is represented in the inadequacy of the environment of religious places for storing museum pieces, as the site is an important part of preserving the heritage, where damage factors are found in the store environment in a large way such as: (humidity, temperature, presence fungi and dust accumulation (Debajah, 2006). In (Ilieş et al., 2018) indicated that there is also need to protect and reduce the risks related to the health of tourists by providing a healthy environment in tourist places. A study in Jordan also pointed to the need for the traditional documentation system used in the Jordan Heritage Museum to develop a computerized system that is appropriate to the needs of the museum in keeping pace with technological development (Sha'aban, 2007).

DISCUSSION

The importance of the virtual museum in stimulating religious tourism Modern technology contributes to promote museums, as the International Council of Museums

(ICOM, 2013) confirmed that museum visits all over the world are witnessing a decline in the number of visitors after the global economic recession, which led many countries in the world to Reinvesting in the museum sector through the extensive use of technology because there is a strong and documented relationship between the success of arts and culture, and regional economic success. Paterno and Mancini (2000) believes that technological progress should invest to balance the management of groups and visitors, as new technologies in museum exhibitions become an important part of the interaction between visitors and museum management. According to (Peacock et al., 2009) the display of tourist sites on the Internet contributes to promote these sites and enhances public information about them. For example, in its 2007 and 2008 annual reports, the Victoria Museum recorded triple online visits compared to the number of physical visits. This report also shows a double increase in the number of visits to the "discovery program" on the Internet compared to the previous year, as happens in the Virtual Museum of Canada) which recorded millions of visits every year.

With these outstanding figures, the ability to foster this type of learning environment has become an important agenda for many forums around the world.

Web-based technologies offer opportunities to enhance website design, online tourism environments. As a result, many museums around the world are adopting ICT tools that emphasize the use of web-based multimedia, which enrich and carry out the learning experiences of their visitors (Alwi & Mckay, 2009).

In this regard (Wang et al., 2014) refers to several advantages of virtual museums, which are the formation of an integrated learning environment, and easy to use, as the individual can roam between the pillars of the museum using the mouse or the arrow button, and provides a wide audience in different countries the opportunity to see the museum collections Overcoming the temporal and spatial complications, reducing the burden on the museum itself, so there is no crowding between its pillars and thus give to preserving the museum's infrastructure. The success of virtual site design depends on the design quality so that it is consistent with the aspirations of the user and satisfies him, so the measurement of the virtual site quality carried out from two angles: the programmers and the end users (Liburne et al., 2004). Zihou (2009) indicates that the quality of the virtual sites depends on several factors, the most prominent of the contents clarity of the virtual site and the ease of use by users, the technical elements that the site includes (response time, transaction output and reliability) that effect the efficiency of use, the flexibility of the website.

This provides an opportunity to constantly update and develop. In the same context, the results of a study (Schweibenz, 2004) indicated that virtual museums do not pose any competition or risk to traditional museums due to their digital nature, and the second result is that these virtual museums save time and money effort. Accordingly, we believe that the solution to the religious privacy problem of some tourist places done by building a virtual reality for those places by designing virtual sites for religious places where virtual reality technology adds real environments to multiple advantages, through which the sizes and measurements of the components of the real environment can be modified to make an ideal vision that differs.

What is available in reality, as well as changing opinion of the vision where the user can navigate the virtual environment and see digital objects from any place that he selects, and from which side he chooses, and give explanatory information that is difficult to get in the real environment, in addition to that Virtualization gives the user the opportunity to go through experiences that are difficult to meet in reality, whether

the risk factor or the distance, and give the user freedom to move and explore the virtual environment without any restrictions where the three-dimensional environments give the user a non-linear visit, and allows him to take part and contribute in building the content, as well as encouraging social interactions between. A large number of users without any spatial or temporal considerations.

CONCLUSION

Religious motivation is a reason to travel in order to visit the holy places and it is necessary for overcoming the religious privacy of some holy places, and this allows all religions to see the holy places.

Therefore, the importance of virtual museums lies in overcoming these tourist obstacles, and helps reduce the financial cost and religious privacy of some places. In light of what exposed from the folds of this research, the study concluded the following conclusions:

- 1- The development of the tourism sector depends mainly on the extent of using modern technology to enhance the tourism sector.
- 2 Religious tourism in the world still faces a great challenge due to the religious privacy of some religions of the Holy Places.
- 3- Jordan has a variety of places of religious tourism between Christian and Muslim, but the problem lies in the lack of tourism promotion on the one hand in addition to the obstacles to religious privacy for some Islamic places that prevent non-Muslims from visiting.
- 4- Virtual museums can be an ideal solution to overcome the problem of religious privacy of some religious tourist sites, which help others be able to see those sites and learn about the civilizations of others.

RECOMMENDATIONS

In light of the previous results, the researcher recommends the following:

- 1- Overcoming the religious privacy of some tourist places by establishing a virtual museum that includes Islamic and Christian religious sites in Jordan.
- 2- Media promotion of the virtual museum, as it is part of the Jordanian tourism system, that would contribute to promote religious tourism in Jordan.
- 3- Benefiting from international experiences in establishing virtual museums to build a virtual museum that includes the holy places in Jordan.
- 4- Cooperation between the government and private sectors in Jordan to create virtual museums of religious tourism sites.

REFERENCES

- Alwi, A. & Mckay, E. (2009). Investigating online museum exhibits and personal cognitive learning preferences.

 Ascilite Auckland2009. 1-10.
- Baral, N. (2012). Empirical analysis of factors explaining local governing bodies' trust for administering agencies in community-based conservation, *Journal of Environmental Management*, 103 (30): 41–50.
- Bayih, B. (2018). Potentials and Challenges of Religious Tourism Development in Lalibela, Ethiopia, *African Journal of Hospitality*, Tourism and Leisure, Volume 7 (4) ISSN: 2223-814X.
- Carrozzino, M. & Bergamasco, B. (2010). Beyond virtual museums: Experiencing immersive virtual reality in real museums, *Journal of Cultural Heritage*, 11(4) 452-458.
- Debajah, M. (2006). Museum Storage Assessment: A case Study from the Museum of Jordanian Heritage", A thesis Submitted In Partial Fulfillment of Requirements for the Degree of Master, Yarmouk University: Irbed, Jordan.

- Ilieş, D.C., Oneţ, A., Marcu, F.M., Gaceu, O.R., Timar, A., Baias, Ş., Ilieş, A., Herman, G.V., Costea, M., Ţepelea, M., Josan, I. & Wendt, J. (2018). Investigations Regarding the Air Quality in the Historic Wooden Church in Oradea City, Romania, in *Environmental Engineering and Management Journal*, Vol.17, no11, pp.2731-2739.
- Guazzaroni, G. (2020). Virtual and Augmented Reality in Education Art and Museums Università Politecnica delle Marche, Italy.
- Gyan ,N., Timothy, D., & Poude, lurya. (2015) Understanding Tourists in Religious Destinations: A Social Distance Perspective. *Tourism Management*, 48: 343–53.
- Henama, U. & Apleni, L. (2018). A theoretical approach into tourism, immigration and multiculturalism: the case of South Africa, *GeoJournal of Tourism and Geosites*, 23(3).772-779.
- Hong, J., Bai-Hsuen, C., & Jieh, H. (2001). XSL-based content management for multi-presentation digital museum exhibitions. Research and Advanced Technology for Digital Libraries, 5th European Conference (ECDL 2001) (pp. 378-389).
- Jawabreh, O.A.A. (2017). Distinction of Jordan as a Destination for Religious Tourism. *Journal of Environmental Management and Tourism*, (Volume VIII, Fall), 6(22): 1171-1182.
- Kim, B. & Kim, S. (2019). The effect of religious tourism experiences on personal values. In International Journal of Religious Tourism and Pilgrimage, Vol. 7: Iss. 2, Article 9. doi:https://doi.org/10.21427/5gvy-hh90.
- Liburne, B., Devkota, P. & Khan, K. M. (2004) Measuring Quality Metrics for Web Applications. in 2004 IRMA International Conference, New Orleans, USA, August 2004.
- Paterno, F. & Mancini, C. (2000). Effective levels of adaptation to different types of users in interactive museum systems, *Journal of the American Society for Information Science*, 51 (1) (2000) 5–13.
- Peacock, D., Tait, S., & Timpson, C. (2009). Building digital distribution systems for school based users of museum content: New initiatives in Australia and Canada. Paper presented at the Museum and the Web, Indianapolis, USA.
- Petroman, I., Petroman, C., Buzatu, C., Marin, D., Dumitrescu, A., Statie, C. & Rus, I. (2011). A Religious and Ethnic Tourism Profile of Europe. Timisoara, Romania.
- Pinkney, A.M. & WhalenBridge, J.(2018) Religious Journeys in India: Pilgrims, Tourists and Travelers (Eds.), 2018, Sunny Press, New York USA.
- Schweibenz, W. (2004). Virtual museums: the development of virtual museums: focus Icon news, no.3, university of Saarland, Germany.
- Sha'aban, B. (2007). An Evaluation of Collection Management in Museum of Jordanian Heritage, Theses, Yarmouk University.
- Sharpley, R. & Sundaram, P. (2005). Tourism: a Sacred Journey? The Case of Ashram Tourism, India. *International Journal of Tourism Research*, 7(1), 161-171.
- Styliani, Sylaiou, Fotis, L., Kostas,K. & Petros, P. (2009). Virtual museums, a survey and some issues for consideration, *Journal of Cultural Heritage*, 10 (2009) 520–528.
- Wang, R., Dong, H., Minwen & Wu, Q. (2014). Research and Design of Digital Museum Based on Virtual Reality. Advanced Materials Research, Vols. 926-930 (2014) pp 2516-2520.
- Yang, R., Ramaiah, C. & Foo, S. (2007). Virtual archival exhibition system: An authoring tool for developing Web-based virtual exhibitions, Int'l Conf. on Dublin Core and Metadata Applications, 196-105.
- Yu-Chang, L., Wee-Chung, L. & Veronica, Al. (2008). The digital museum: Challenges and solution, Conference
 Title 2012 8th International Conference on Information Science and Digital Content Technology (ICIDT
 Zihou, Z. (2009). Evaluating Websites Using a Practical Quality Model, Thesis, De Montfort University.
- *** International Journal of Religious Tourism and Pilgrimage 7(2)85-93.
- *** International Council of Museums 2013 ICOM Code of Ethics for Museums. Paris: ICOM.

Submitted: Revised: Accepted and published online 14.12.2019 24.02.2020 02.03.2020

NORTH CAUCASUS IMAGE INSIDE RUSSIA IN THE CONTEXT OF TOURISM CLUSTER DEVELOPMENT

Tatiana LITVINOVA*

Moscow State Institute of International Relations, Department of Regional Governance and National Politics, 143000, 3, Odintsovo, Novo-Sportivnaya st., Russia, Moscow region, e-mail: tantin@mail.ru

Citation: Litvinova T.N. (2020). NORTH CAUCASUS IMAGE INSIDE RUSSIA IN THE CONTEXT OF TOURISM CLUSTER DEVELOPMENT. GeoJournal of Tourism and Geosites, 28(1), 275–288. https://doi.org/10.30892/gtg.28122-469

Abstract: The article is devoted to the North Caucasus image assessment inside Russia as the important factor of tourists' attraction to this territory. The growth of tourist cluster in the North Caucasus is one of the main tasks written in Strategy of socio-economic development of the North Caucasus Federal District untill 2025. But in the public opinion of Russians the North Caucasus was for many years perceived as a territory of socio-political instability. The research is based on the Internet survey conducted by author (n=1012). The results of survey are matched with mass media news about tourist objects development and also compared with statistic of visits of the North Caucasus by Russian and foreign citizens. The conclusion says about the growth of positive assessments of the North Caucasus image among Russians, but some stereotypes still remain. The ski resorts in Dombay and Elbrus region, which are in demand among lovers of skiing, need modernization and expansion of infrastructure. Recreational resources of cultural and ecological tourism of the republics of the North-East Caucasus are poorly used. Statistics show that the resorts of the Krasnodarsky krai constitute serious competition to the North Caucasus.

Key words: territory image, tourism cluster development, public opinion, internal tourism, North Caucasus

* * * * * *

INTRODUCTION

The dynamic changes of last years are followed with the growing mobility of citizens, financial, material and intangible resources, which are basic factors of economic growth. The government of the Russian Federation faces a serious challenge to revise the methods and tools of management and development of its regions. The North Caucasus Federal District of Russia includes seven subjects inhabited by different peoples and ethnic groups: the Kabardino-Balkarian Republic, the Karachay-Cherkessia Republic, the Republic of Ingushetia, the Chechen Republic, the Republic of North Ossetia – Alania, the Republic of Dagestan and Stavropol krai. The region is rich in natural and recreational resources, but characterized by the presence of a significant number of socio-political

_

^{*} Corresponding author

problems. The North Caucasian republics have rather low socio-economic indicators compared to other regions of the country. Thus, according to the Federal State Statistics Service, monthly per capita cash income in the North Caucasus Federal District for the first quarter of 2019 amounted to 279 euro, which is lower than the average all-Russian indicator (411 euro) and the average indicators of the neighboring South Federal District – 337 euro (Federal State Statistics Service, 2019). The lowest monthly income of population showed Republic of Ingushetia, Karachay-Cherkessia Republic and Kabardino-Balkarian Republic. One of the serious problems of the North Caucasus region is unemployment, especially among youth. An excess of young economically active population with an insufficiently developed production infrastructure is a serious problem for further socio-economic growth. That's why the priority task is to strengthen the economic positions of the North Caucasus of the Russian Federation.

For this purpose, in the "Strategy of socio-economic development of the North Caucasus Federal District until 2025" (2010), tourism sector was designated as one of the directions for the North Caucasus development, mainly in the ski and mountain cluster. Further development of tourism in the North Caucasus, the creation of an appropriate infrastructure and management system can provide jobs for unemployed youth and a development impetus for new business entities. The "Strategy of the socio-economic development of the North Caucasus Federal District until 2025" (2010) identifies regional problems that currently hamper the development of tourism in the North Caucasus: first of all, this is a security problem, as well as functional problems such as a low level of service and a low level of development of the transport network, low hotel availability, poor distribution of the international hotel classification system in the North Caucasus, negative image of the North Caucasus Federal District, Holland (2016) conducted a retrospective analysis of the content and objectives of the "Strategy" correlating them with the economic opportunities of the region. He noted that the North Caucasus has a significant natural base: highlands of the Greater Caucasus, the coast of the Caspian Sea and mineral springs in the Stavropol krai, Kabardino-Balkaria and Karachay-Cherkessia.

At the same time, E. Holland said: "Tourism infrastructure in the region remains underdeveloped, however, and the "Strategy" identifies the ongoing security threat as limiting investment in this sector" (Holland, 2016, 53). The North Caucasus can provide a variety of leisure activities from the snowy peaks of Elbrus in the west to the Caspian Sea in the east of the region and, first of all, this territory should become an object of attraction for Russian tourists. But in the public opinion of Russians, the North Caucasus for many years was perceived as a territory of socio-political instability and ethnic conflicts with a high level of terrorist threat. Obviously, breaking these stereotypes in the minds of people and creating a positive image of the North Caucasus within the country is a rather difficult task. The aim of this study is the assessment of the North Caucasus image inside Russia as a factor of the tourist cluster development in the region.

One of the latest policy documents setting new goals for governance offered the new approach to the regional development. On February 13, 2019, the Government of the Russian Federation approved the "Strategy of the spatial development of the Russian Federation for the period until 2025" (2019). This document proposed a new mechanism for the territories' economic growth with a special regime for doing business, taking into account promising specializations of specific subjects of the Russian Federation.

The Strategy of the spatial development in the number of other priorities for the North Caucasus macroregion named the tourism sector development and some connected spheres such as: the creation of new development institutions, including special business regimes; assistance in the preservation and development of traditional folk crafts; increase in passenger and freight traffic through seaports and international checkpoints

in the Caspian Sea. According to the Passport of the State Program "Development of the North Caucasus Federal District" (2019), the budget allocation to the regional economy in 2019-2022 will be approximately 1.2 billion euros (including 356.8 million euros for tourist cluster). The planned volume of attracted investments to the North Caucasus economy for 2020-2025 in addition to budget funds will amount to 2.2 billion euros.

The developed tourism sector stimulates economic growth in the region, helps to attract investment, and, ultimately, leads to the welfare increase of the population. Spatial development lays the foundation for comparing regions of Russia in terms of attractiveness for life, doing business, investment, and developing tourism. In Russia, with its wealth of natural and cultural objects, tourism is considered as one of the priority sectors. However, in order to increase the influx of tourists and income in this area, it is necessary to form the appropriate infrastructure, as well as to create a positive image, not only of the country as a whole but of its variouse regions.

MATERIALS AND METHODS

The theoretical foundations of the study of the territorial image were laid by the works of P. Kotler, a recognized specialist in the field of places marketing. Territorial marketing is the most effective tool for creating a competitive and attractive image of a particular place. Kotler et al. defined the "country image" as "sum of people's beliefs, ideas and impressions about a certain country" (2002, 141). A rapid increase of the product diversity in the previously non-commercial fields has led to the greater attention paid to the image and the brand of the territory (Matlovicova et al., 2019). Territorial image has become the object of not only marketing but also geografic studies. Geographers focus on a purposeful geographic brand building policy, which requires appropriate adaptation of brand concept and the creation of institutional structures to ensure this activity (Matlovic & Matlovicova, 2012, etc.). Modern tourism management was expanded with the new directions of research of territorial (destination) image from the micro-level (city, town, destination) and meso-level (republic, district) to the macro level (country, continent) (Novenkova & Kalenskayaa, 2015). It is first of all connected with the concept of sustainable tourism and analysis of the environment system within destination areas (Hunter, 1997). The second approach is practical solutions in response to the challenge of reinventing spatial and territorial development planning through digital transformation, using smart tools: territorial development indexes and quantitative analyses (Visan, 2019).

The image of a country (region, territory) is formed at several levels: household, socio-economic, business, financial and others. It is also extremely important from the point of view of those who live in the country. The psychological aspects of the perception of the territory have particular importance: the desire to live on it, a sense of comfort and security, the expectation of a prosperous future for yourself and your children, the desire to visit, do business. There are two sides to the image of the territory: the internal image, "what citizens think about their own country," and the external, "what others/foreigners think about the country" (Jenes, 2008, 67). In the case of the North Caucasus, which is part of Russia, we are still forced to state that for many citizens who do not live in the south of Russia, it is a strange and distant. According to the research of another recognized place branding specialist Anholt (2013), when forming a national image, it is necessary to take into account that most people tend not to change their opinion about a particular country, and their opinion may be adequate to reality or completely distorted.

It is formed on the basis of stereotypes, historical circumstances and relations with other states. In cases where opinion changes, it changes gradually and the process can take decades. Image building is a long process that can be compared with a collective project, it brings results only in the long term, requires a clear strategy, action plan and

coordination. Although there are various methods and ways to improve the image of the territory, "but that better image can only be earned; it cannot be constructed or invented" (Anholt, 2008, 2). Echtner & Ritchie (1993) investigated the destination image and tried to propose the appropriate techniques for its measurement which included images, holistic impressions, and functional characteristics of the place, and also psychological characteristics. They conclude that to form a successful image of the territory and increase its tourist attractiveness, the destination must clearly differ from its competitors, must have a strong position in the minds of people and the memories of tourists.

Stavropol scientists Andreyanova & Ivolga (2018) addressed their study to the potential for tourism development in the North Caucasus. Their methodology was based on the investigation of various nature zones in the region, analysis of the socio-economic development of the territories and their tourist attractiveness. They named the following most popular tourism destinations:

- spa holidays;
- pilgrimage;
- mountain and ecological tourism;
- cultural tourism.

At the same time, they identified the following internal problems hindering the tourism development in the North Caucasus: 1) low development of infrastructure, including in areas where objects of attraction are located; 2) linguistic and cultural barriers; 3) management errors in the development of the tourism industry; 4) although the current political situation is quite stable, the "shadow" of the Chechen war and other regional conflicts (Andreyanova & Ivolga, 2018). A lot of articles of the North Caucasian authors were devoted to the resort potential of separate republics: Dagestan (Matyugina et al., 2019), North Ossetia (Bestaeva & Kodzaeva, 2018), Ingushetia (Pogorova & Dudurgova, 2019). They argue that the tourist and recreation potential of republics is still low used. The image of the region consists of people's ideas about its population, economy, leaders, architecture and cultural objects, history, geography and landscape. The most important image-building tool is the media, and in recent years, mainly online publications and social networks. It reinforces the meaning of network research of people's perceptions of a particular geographical location (Stepchenkova & Morrison, 2006).

Among recent publications on the North Caucasus image there is the work of Yezhova & Maslyuk (2018). They analyzed the content of publications on the personal pages of Vkontakte (Russian popular social network service), Facebook and Twitter users. Their study came to the conclusion that the image of the North Caucasus as a region of Russia inside country, mostly negative, it is associated among users with ethnic conflicts and military incidents. At the same time, positive associations dominate in the internal image of the North Caucasus among those who live in region: traditional values, respect for elders, friendship, religion, crafts, unique natural objects and history. From their investigation we can see the gap between external views and local residents' perseptions. While there are many studies studying the external image of the territory, limited attention is paid to the analysis of local residents based on their perception of the place in which they live as a tourist destination (Stylidis, 2018).

To manage special economic zones in the tourism cluster of the North Caucasus Federal District, Decree of the Government of the Russian Federation of October 14, 2010 No. 833 established the Joint-Stock Company "Resorts of the North Caucasus". At present, it oversees six projects, mostly in the skiing sector: "Armkhi" and "Tsori" in Ingushetia, "Arkhyz" in Karachay-Cherkessia, "Veduchi" in Chechnya, "Elbrus" in Kabardino-Balkaria, Caspian coastal cluster and "Matlas" in Dagestan (Figure 1). For the period 2015-2025 JSC "Resorts of the North Caucasus" planned to create 14.2 thousand

placements at these facilities and attract 53.7 billion rubles of private investment (Resorts of the North Caucasus, http://www.ncrc.ru). The development of the tourism sector will increase the tax collection of residents in the budgets of the republics of the region. However, the success of these projects directly depends on the influx of tourists. The official website of the JSC "Resorts of the North Caucasus" has the news line which informs about tourist cluster development in very positive tone. On the contrary the online news site "Caucasian Knot" (Kavkazskii Uzel) publishes more negative news about problems that tourist objects face (Caucasian Knot, https://www.eng.kavkaz-uzel.eu/). Monitoring of online media can give us the contradictory but interesting materials for analisys and they also influece the North Caucasus image.



Figure 1. The planned ski resorts in the North Caucasus republics

The informative source for assessement the North Caucasus image inside Russia can be a sociological survey. To find out the possibilities of creating a positive image of the North Caucasus in order to increase its tourist attractiveness, we conducted an online survey "Image of the North Caucasus inside Russia" (n=1012) on the Webanketa platform.

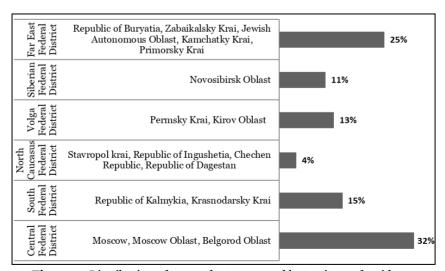


Figure 2. Distribution of respondents surveyed by territory of residence

The survey covered residents of 16 subjects of the Russian Federation from diffrent parts of our country (Figure 2): Central Federal District, Volga Federal District, South Federal District, Siberian Federal District, and Far East Federal District. Among the respondents, 4% were residents of the North Caucasus Federal District (Stavropol krai, Republic of Ingushetia, Chechen Republic, Republic of Dagestan).

Among participants of survey there were 46% of men and 54% of women. The age of respondents is from 17 to 69 years. The disadvantages of the sample are that more than half of the respondents (53%) were young people aged 17-29, 29% of respondents were people from 30 to 45 years old, 18% were over 45 years old. The difficulty of following sampling quotas by age and gender of respondents is one of the significant difficulties of online surveys. On the other hand, young people have greater chances to travel to the North Caucasus for tourist purposes. The proposed questionnaire focused on ascertaining the awareness of respondents about the current situation in the republics of the North Caucasus, associations that arise when the North Caucasus is mentioned in the media.

We were interested in whether the respondents were considering the opportunity to go to the North Caucasus, and what types of recreation they would prefer for this trip. But before presentation of the survey results, we shall observe the official statistics of visits of Russians and foreigners in the republics of the North-Caucasian Federal District to compare it with the public opinion and mass media publications. So the research is based on the above mentioned methods: 1) statistics data analisys; 2) monitoring and content-analisys of mass media; 3) online survey conducted by the author.

RESULTS DISCUSSIONS

The subjects of North West and North East Caucasus differ in set of recreational resources and tourist infrastructure readiness. The Stavropol krai is famous territory rich in mineral waters with resorts well known since the 19th century. A number of mountainskiing facilities in Karachay-Cherkessia and Kabardino-Balkaria have been known and popular among lovers of mountain-skiing and mountaineering since the Soviet period. This is Dombay mountainous territory in Karachay-Cherkessia and Elbrus region a balneoclimatic resort area in Kabardino-Balkaria. With the start of the project "Resorts of the North Caucasus", the young "Arkhyz" ski resort in Karachay-Cherkessia is gaining popularity, which has certain prospects of becoming a modern center for mountaineering and recreation. As for the North East Caucasus the tourist infrastructure of Chechnya, Ingushetia, North Ossetia and Dagestan is still in progress. So these republics are not so popular for torist visits. The dynamics of tourism of Russian citizens in the North Caucasus Federal District is shown by official statistics on the number of Russian citizens who stayed in collective accommodation facilities (hotels, resorts, campings, etc.) from 2013 to the first half of 2019 (Table 1). The table shows an increase of 43% in the number of Russians in collective accommodation facilities in the regions of the North Caucasus, but we see that the leaders in the number of annual visits are Stavropol krai, Kabardino-Balkaria and Karachay-Cherkessia. However, we should remember the fact that resorts and sanatoriums of the Krasnodar krai (including mountain skiing) in Sochi and Krasnaya Polyana constitute significant internal competition to the resorts of the North Caucasus.

The dynamics of domestic tourism in accommodation facilities in the North Caucasus showed dependence on international sanctions. So, in the winter season of 2014-2015 "Arkhyz" resort was visited by 90 thousand guests, which exceeded the tourist flow of the previous reporting period by 2.5 times. That year, the Minister of North Caucasus Affairs L.

Kuznetsov said that "given the noticeable reorientation of the tourist flow to domestic resorts" – the demand for holidays in Karachay-Cherkessia and Kabardino-Balkaria grew by 20% (More than 230 thousand people visited "Arkhyz" resorts in Karachay-Cherkessia and

"Elbrus-Berezengi" in Kabardino-Balkaria (in the Elbrus region) during the winter season, 2015). However, statistics on the number of Russian citizens who used collective accommodation facilities in the North Caucasus Federal District for 2015 as a whole shows a decrease in all republics, including Karachay-Cherkessia and Kabardino-Balkaria.

The growth of tourist accommodation dynamics began in the next 2016, and by the end of 2018, 120 thousand Russian tourists visited the Kabardino-Balkarian Republic, 102 thousand Russians – the Karachay-Cherkessia Republic. Official statistics (Table 1) show that the Chechen Republic has the largest growth of the annual number of Russians staying in hotels and other facilities for 2013-2018 (almost 3 times). In the first half of 2019, the republic was visited by twice as many guests as in the whole of 2013.

, 1 1			,	1			
Region	2013	2014	2015	2016	2017	2018	January- June 2019
North Caucasus Federal District	1102,5	1146,7	1069,4	1368,52	1401,08	1584,5	747
The Republic of Dagestan	79,1	69	67,4	138,32	113,57	184,1	58,8
The Republic of Ingushetia	5,6	8,5	3	2,59	7,03	10	3,9
Kabardino-Balkarian Republic	85,5	87,5	84,9	104,6	117,36	120,4	61,2
Karachay-Cherkess Republic	86	101,6	77,3	113,71	99,08	102,1	65,9
Republic of North Ossetia - Alania	52,1	43,3	39,7	40,91	51,27	67,9	32,2
Chechen Republic	24,3	33,8	29,4	30,57	55,41	65,6	46,9
Stavropol krai	769,9	803,1	767,8	937,82	957,36	1034,3	479,1
Krasnodar krai (South Federal District)	2463,2	3649	5233,5	5662,6	6451,4	7820,9	2463,2

Table 1. The number of citizens of the Russian Federation placed in collective accommodation facilities, thousand people (Data source: EMISS. State statistics, 2019, https://fedstat.ru/indicator/44040)

For comparison, we cite data on the placement of foreign citizens in hotels, resorts and campings of the North-Caucasian Federal District subjects for 2013-2018. The number of visits by foreign citizens during this period almost doubled. However, the dynamics of visits by foreign citizens to individual republics is very uneven.

For example, in Kabardino-Balkaria, the annual number of foreign guests is almost tripled (from 1.7 thousand people in 2013 to 6.2 thousand people in 2018), but in Karachay-Cherkessia the annual number of foreign guests in collective accommodation facilities almost halved by 2018 (from 2 thousand people to 1.1 thousand people).

Over the same period, the annual number of foreign guests in the Chechen Republic has grown in almost five times (from 1.2 thousand to 5.8 thousand). In Dagestan, we see a jump in visits by foreigners in 2015, which was associated with the celebration of the 2000th anniversary of the oldest city of Russia, Derbent (Table 2).

thousand people (Data source: EMISS. State statistics, 2019, https://ledstat.ru/indicator/44042)							
Region	2013	2014	2015	2016	2017	2018	January- June 2019
North Caucasus Federal District	36,0	43,3	67,1	49,8	56,9	65,8	28,1
The Republic of Dagestan	1,0	1,8	8,9	1,1	2,4	3,2	1,0
The Republic of Ingushetia	0,2	0,1	1,0	0,5	1,3	1,2	0,4
Kabardino-Balkarian Republic	1,7	2,3	4,2	2,8	5,4	6,2	2,6
Karachay-Cherkess Republic	2,0	2,0	3,9	1,7	0,8	1,1	0,7
Republic of North Ossetia - Alania	0,6	2,2	1,2	1,8	1,6	2,0	1,0
Chechen Republic	1,2	0,4	3,2	2,5	2,1	5,9	1,8
Stavropol krai	29,2	34,6	44,6	39,3	43,2	46,2	20,7

288,6 326,8 143,6

77,3

Krasnodarsky krai (South Federal District)

Table 2. The number of foreign citizens placed in collective accommodation facilities, thousand people (Data source: EMISS. State statistics, 2019, https://fedstat.ru/indicator/44042)

116,5

In their study of the international tourism to Russia L. Andrades and F. Dimanche (Andrades & Dimanche, 2017) made a conclusion that despite great potential, tourism development in Russia had met many challeges such as: destination image, infrastructure development, workforce training and education, quality management, and sustainable management. Further more, they also rightly noted that Russia, the largest country in the world, should develop tourism consistently from East to West paying attention to regional perspective. Meanwhile, many recreation areas of the North Caucasus encounter serious difficulties in their development, both those which have long been established and those are only gaining popularity among tourists. For example, the "Dombai" resort, unlike the "Elbrus" resort, was not included in the JSC "North Caucasus Resorts".

Admiring the beauty of the mountains, tourists often note the presence of garbage and some problems with the infrastructure in Dombay. In turn, the implementation of the "Elbrus" project was faced with the problem of unresolved land relations in the Kabardino-Balkarian Republic. Owners of small hotels, cafes, restaurants, rentals and other enterprises that have been working for decades have not been able to register land or building rights and obtain a resident status, and have lost the possibility of tax benefits, and are at risk of losing their business. In the early days of 2019, due to the large flow of tourists on the ski slopes of "Elbrus", large lines formed. Vacationers reported in social networks that in the early days of the new year, a rush of crowds occurred in the resort, and traffic jams formed at the entrance to the foot of Elbrus mountain. In July 2019 Caucasian Knot published "The construction of new routes and cable cars in the "Elbrus" resort was estimated at \$ 5.7 billion" (https://www.kavkaz-uzel.eu/articles/337492/).

At the same time, media often reports that the part of the territory of the "Elbrus" resort belongs to the lands of the national ecological park of Elbrus region, on which it's prohibited to build sports facilities (TASS: The development of the Elbrus resort in the KBR depends on the solution of the land issue, 2019). The special geo-ecological situation created in the Caucasus requires special environmental management, an integrated approach to targeted use and management, which provides for the identification of environmental risks caused by natural and man-made impacts (Tsereteli et al., 2011).

Difficulties in development are also experienced by the territories of the North-East Caucasus, which have only recently declared themselves as new objects of attraction for mountain-skiing tourism. Ambiguous news appeared about the "Veduchi" resort in the Chechen Republic, opened for tourists in early 2018. Due to the insufficient snow cover, the republic's authorities had to arrange snow delivery during the winter holiday period (The ski season at the "Veduchi" resort began with artificial snow, 2019).

Another pressing problem is that the resort mainly employs imported personnel from other regions, so the development of the tourism cluster in Chechnya does not solve the problem of employment of local youth yet. Among Chechens, it is traditionally considered shameful to serve and work in the service sector. Most preferred employment for men is the army, law enforcement, government, for women is household and outside the house teaching. In May 2018, JSC "Resorts of the North Caucasus" declared about postponing the implementation of two projects in Ingushetia, "Tzori" and "Armkhi", as well as a project in Dagestan "Matlas", as far as corporation will deal with facilities that has been already launched such as "Arkhyz" in Karachay-Cherkessia, "Elbrus" in Kabardino - Balkaria and "Veduchi" in Chechnya (http://www.ncrc.ru/press-center/publikatsii /publik atsii-smi/ia-regnum-realizatsiya-kurortov-armkhi-tsori-imatlas-otodvigaetsya-na-2023-god. html? sphrase_id=7282). For some time, the implementation of the "Mamison" all-season resort project in the Republic of North Ossetia-Alania was also frozen. It is still hard to imagine that the tourist flow for sanatorium and skiing holidays in all the republics of the North Caucasus will increase so much that the turn will come to these projects.

The most obvious reason why the resorts of the North-East Caucasus are developing more slowly and less successfully is the high competition with resorts in the North-West Caucasus and the neighboring Krasnodar krai. Their recreational advantages are largely leveled with the territorial proximity of already developed recreational complexes. Regional authorities hope to make their republics places of attraction for the ski cluster, but in this situation, it is better to bet on alternative types of recreation and specialized facilities of individual republics as unique recreation areas, especially since there are such facilities (Figure 3). For example, Ingushetia and North Ossetia possess not only recreational opportunities comparable to neighboring republics, but also unique historical monuments. A striking architectural object in Ingushetia is the medieval tower complex of Voynushki. On the territory of the Republic of Ingushetia is the Christian temple of Thaba-Erdy built in the 8th – 9th centuries (Pogorova & Dudurgova, 2019). The Republic of North Ossetia-Alania is also rich in cultural objects: in the Alagir district there is a shrine of the Ossetian people – Grove Khetaga, in the village of Nuzal there is a chapel of the 10th century with preserved wall paintings, Alansky Holy Assumption Monastery (the highest monastery in Russia) and many other objects (Bestaeva & Kodzaeva, 2018).

Dagestan also presents the historical and cultural heritage which can attract tourists. Unique place is the oldest city in Russia, Derbent, listed in the UNESCO World Heritage sites (Beck, 2006). In Dagestan there are also the Dzhuma Mosque in the village of Kumukh (XIII century), the high-mountain village fortress Kala-Koreish (XI century), the remains of the Russian fortress in Nizhny Gunib from the time of the Caucasian war and other objects (Matyugina et al., 2019).



Figure 3. Natural and cultural heritages of the North Caucasus

One of the competitive advantages of the Republic of Dagestan is access to the sea; the swimming season on the Caspian Sea lasts more than four months. In the Caspian region, there are all balneological groups of mineral waters. Over 300 mineral springs have been identified, and for health cures purposes only 5 wells are used near by Makhachkala. Mineral water sources in Pyatigorsk and Zheleznovodsk (Stavropol krai) are the closest undisputed competitors. Assessing the image of the North Caucasus inside Russia, we asked

respondents about the main associations that they have when they hear about the region. The answers are dominated by geographical (mountains, Elbrus, Caspian) and cultural-historical (Islam, highlanders, Lezghinka, Dzhigits) associations. The third place in the associative row was occupied by the Chechen conflict of the 1990s (44% of respondents), 27% recalled the Caucasian War of 1816-1864, which the Russian Empire waged against the highlanders. There are also extremely negative associations: 26% of respondents associate the North Caucasus with terrorism, 14% with separatism. Nevertheless, it is worth noting that positive and neutral associations clearly prevail, which gives hope for the formation of a positive image of the North Caucasus within the country (Table 3).

Table 3. "What associations do you have when you hear about the North Caucasus?" (multivariate choice) (Data source: Author's research, 2019)

Answers	%
The mountains	80
Islam	45,6
Chechen conflict	44,4
Lezginka	42,2
Caucasian war	26,7
Highlanders	26,7
Terrorism	25,6
Elbrus	23,3
Dzhigits	22,2
"Prisoner of the Caucasus" (film or book)	14,4
Separatism	14,4
The Caspian	13,3

We also asked respondents "What famous personalities from the North Caucasus do you know?" (Table 4). It should be noted the high awareness of Russian residents about famous people from the North Caucasus region, only 3% of respondents said that they did not know anyone from the proposed list of personalities.

Table 4. "What famous personalities from the North Caucasus do you know?" (multivariate choice) (Data source: Author's research, 2019)

Answers	%
Ramzan Kadyrov	92,2
Khabib Nurmagomedov	67,8
Shamil Basaev	54,4
Akhmat Kadyrov	52,2
Dzhokhar Dudaev	46,7
Rasul Gamzatov	46,7
Imam Shamil	42,2
Ruslan Aushev	30,0
Sultan Khan Girey	12,2
Kosta Khetagurov	10,0
Magomed Amin	6,7
I don't know anyone	3,3

Among the most famous personalities who took the first three places are the Head of the Chechen Republic Ramzan Kadyrov (92%), the famous champion Khabib Nurmagomedov (68%) and the terrorist Shamil Basayev (54%). In the fourth place by fame is the first President of the Chechen Republic Ahmad-Hadji Kadyrov. More than 40% of respondents said that they knew such representatives of the North Caucasus as:

Rasul Gamzatov the Soviet Dagestan poet, Dzhokhar Dudaev the leader of the Chechen separatists, Imam Shamil the leader of the Caucasian tribes in the period of the Caucasian war of the 19th century. The list also included the first president of the Republic of Ingushetia, Ruslan Aushev, the Circassian ethnographer Sultan Khan-Girey, the Ossetian poet Kosta Khetagurov, the leader of the Circassians during the Caucasian War, Magomed Amin. One of the aimes of the questionnaire was to identify stereotypes and ideas about the typical features of the peoples of the North Caucasus among Russians.

It should be noted that in the respondents' assessments, positive traits significantly prevailed: traditionalism (67%), hospitality (64%), religiosity (63%), pride (51%), and love of freedom (37%). At the same time, 62% of the respondents also considered the peoples of the North Caucasus to be militant, and 24% unpredictable, which shows the survivability of some stereotypes about the peoples of the North Caucasus among residents of other parts of Russia. Speaking about media coverage of events in the North Caucasus, more than ½ respondents noted that "there are enough both positive and negative news" from the region, 22% considered that there was more negative news, 14% of respondents answered that positive news prevailed. Only 12% of respondents admitted that they did not pay attention to news from the North Caucasus (Figure 4). We see that neutral and positive assessments of news from the studied region prevail.

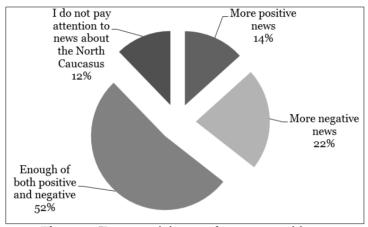


Figure 4. "In your opinion, are there more positive or negative news in the media about the North Caucasus?" (single choice)

Respondents were also asked about how, in their opinion, the socio-political situation in the North Caucasus has changed over the past five years. More than half (56%) replied that the situation had changed for the better, 14% thought that the socio-political situation had changed for the worse, and 22% did not think that the sociopolitical situation had somehow changed. Thus, in public opinion, the prevailing view is that the situation is changing in a positive direction. An important question was to highlight the priority sectors in the North Caucasus which need to develop (Table 5). Respondents named tourism as the highest priority, the second place in importance, according to the respondents, was agriculture, the third - education. Meanwhile, more than a third of respondents (34%) said that there are other problematic regions in Russia, and their development should be in priority. Among the important spheres for the North Caucasus were also named healthcare, oil production and refining, trade and transport. About 8% of respondents found it difficult to identify priority sectors for the development of this region. Important sectors of the economy of the Republic of Dagestan, such as ship repair and the fishing industry, gained

about 3% of the vote. So, the majority of respondents share the opinion of the federal government about the need to develop tourism in the North Caucasus, while other industries are also called. At the same time, a significant proportion of respondents believe that other regions of Russia also need the attention of the authorities.

Table 5. "What spheres do you think are priority
in the development of the North Caucasus of Russia?" (multivariate choice)

Answers	%
Tourism	47,8
Agriculture	41,1
Education	34,4
There are other problematic regions of Russia, they need to be in priority	34,4
Healthcare	30,0
Oil production and oil refining	22,2
Transport	18,9
Trade	18,9
Difficult to answer	7,8
Fishing industry	3,3
Shipbuilding and ship repair	3,3

When asked if they would like to visit the North Caucasus, 69% answered in the affirmative, including 21% of the respondents who would certainly visit the region, the rest were not against such a trip. Only 12% of respondents chose the answer option "I won't go for anything", while 15% found it difficult to answer. Thus, the majority of respondents are considering the option of the trip to the North Caucasus.

Finally, we asked about preferred types of recreation that respondents would choose to visit the North Caucasus. Almost ½ preferred excursion tourism (visiting the ancient city of Derbent, as well as the capital cities of the region) to skiing, which was chosen by a little more than ¼ of those surveyed (20% are ready to climb the top of Elbrus, 5.5% would like to ski). Only 10% of the survey participants decided that they had no reason to go to the North Caucasus (Figure 5).

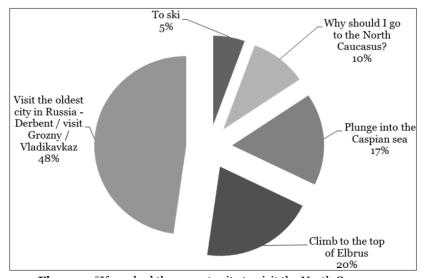


Figure 5. "If you had the opportunity to visit the North Caucasus, what type of vacation (tourism) would you prefer?" (single choice)

Survey data showed that respondents from other regions of Russia, when visiting the North Caucasus, would be more enthusiastic about excursion tourism than vacationing in the skiing sector. But we can mention that the resources of cultural and ecological tourism of the North Caucasus are poorly used yet.

CONCLUSION

In general, the results of the study show an increase in the positive perceptions of the North Caucasus in the public opinion of Russians. Although, according to the respondents, there are enough positive and negative news in the media about the North Caucasus, the majority of respondents considered that the socio-political situation there has improved. Positive associations with the North Caucasus, as well as the identification of the positive traits inherent in the North Caucasian peoples, clearly prevail. Although we can see some stereotypes remained. Residents of Russia, including youth, are well aware of the history and significant personalities from the North Caucasus. All this gives hope for the formation of a positive image of the region within the country, which is so necessary for the development of tourism and socio-economic growth.

Statistics show that the resorts of the Krasnodar krai constitute serious competition to the North Caucasus. Moreover, the republics of the North Caucasus themselves compete with each other, JSC "Resorts of the North Caucasus" oversees projects for the development of mountain ski resorts, the same type of recreation areas are created in sufficient proximity. The "Dombai" and "Elbrus" resorts, traditionally in demand among lovers of skiing, need modernization and expansion of infrastructure, which requires significant investment, and in the Elbrus region also the solving of the land issue. Meanwhile, a region with a rich history is of great interest not only for sanatorium and skiing, but also for sightseeing tourism: the most ancient city of Derbent with the Naryn-Kala fortress, the village of Kubachi in Dagestan, the complex of medieval watchtowers of Vovnushki in Ingushetia and many other objects.

Opportunities for ecological and cultural tourism in Dagestan, North Ossetia and Ingushetia remain poorly exploited. The Chechen Republic in recent years has demonstrated a steady increase in the number of visits by both Russian and foreign tourists. The reputation of the region can be improved only in the long term, therefore the image formation should be considered consistently and strategically.

It is necessary to expand the information background of positive messages from the North Caucasus, conduct cultural and educational events, implement new economic projects, attract investment, and develop infrastructure.

REFERENCES

- Andrades, L. & Dimanche, F. (2017). Destination competitiveness and tourism development in Russia: Issues and challenges. *Tourism Management*, 62, 360-376.
- Andreyanova, S. & Ivolga, A. (2018). The Tourism Potential of the North Caucasus: the Formation, Characteristics and Development Prospects. *GeoJournal of Tourism and Geosites*, 22 (2), 347–358.
- Anholt, S. (2008). Place branding: Is it marketing or isn't it? *Place Branding and Public Diplomacy*, 4, 1, 1-6. Anholt, S. (2013). Beyond the Nation Brand: The Role of Image and Identity in International Relations.
- Anholt, S. (2013). Beyond the Nation Brand: The Role of Image and Identity in International Relations. Exchange: Journal of Public Diplomacy, 2, 1, 6-12.

 Role W. (2006). Nametries of World Hosticus in Traval Childhooks. International Journal of Horitage.
- Beck, W. (2006). Narratives of World Heritage in Travel Guidebooks. *International Journal of Heritage Studies*, 12 (6), 521-535.
- Bestaeva, I.M. & Kodzaeva, L.M. (2018). Prospects for the development of tourism in the Republic of North Ossetia-Alania. Actual problems of the humanities and natural sciences, 10, 32-35.
- Echtner, C. M. & Ritchie, J.R.B. (1993). The measurement of destination image: An empirical assessment. Journal of Travel Research, 31 (4), 3–13.
- Holland, E.C. (2016). Economic Development and Subsidies in the North Caucasus. *Problems of Post-Communism*, 63, 50–61.

- Hunter, C. (1997). Sustainable tourism as an adaptive paradigm. Annals of Tourism Research, 24 (4), 850-867.
- Jenes, B. (2008). Reconsidering the measurement of country image theory and practice. FIKUSZ 2008

 Business Sciences Symposium for Young Researchers: Proceedings, ed. by László Áron Kóczy.

 Budapest: Óbuda University, Keleti Faculty of Business and Management, 65-80.
- Kotler, P., Haider, D. & Rein, I. (2002). Marketing Places. New York: Free Press, 400 p.
- Matlovic, R. & Matlovicova, K. (2012). The social relevance and branding of geography. *Geografie*, 117 (1), 33-51. Matlovicova, K., Tirpakova, E. & Mocak, P. (2019). City brand image: semiotic perspective a case study of Prague. *Folia Geographica*, 61 (1), 120-142.
- Matyugina, E. G, Pozharnitskaya, O.V & Vusovich, O.V. (2019). The natural potential as the basis for the formation of the tourist and recreational profile of the territory (on the example of the Republic of Dagestan). South of Russia: ecology, development, 14, 2 (51), 132-149.
- Novenkova, A. M. & Kalenskayaa, N. (2015). The Formation of the model branding of the territory under an asymmetric institutional environment. *Procedia Economics and Finance*, 23, 1388 1393.
- Pogorova, Z. M. & Dudurgova, T. M. (2019). Tourism in the Republic of Ingushetia and its development prospects. *Colloquium-journal*, 14(38), 61-62.
- Stepchenkova, S. & Morrison, A.M. (2006). The destination image of Russia: From the online induced perspective. *Tourism Management*, 27 (5), 943-956.
- Stylidis, D. (2018). Residents' place image: a cluster analysis and its links to place attachment and support for tourism. *Journal of Sustainable Tourism*, 26, 6, 1007-1026.
- Tsereteli, E., Gobejishvili, R., Bolashvili, N., Geladze, V. & Gaprindashvili, G. (2011). Crisis intensification of geoecological situation of the Caucasus Black Sea coast and the strategy of risk reduction. *Procedia Social and Behavioral Sciences*, 19, 709-715.
- Visan, M. (2019). Spatial and territorial development planning: digital challenge and reinvention using a multidisciplinary approach to support collaborative work. *Procedia Computer Science*, 162, 795–802.
- Yezhova, E.N. & Maslyuk, D.S. (2018). The dominant image of the North Caucasus in the Russian segment of social networks. *Strategic communications and business in politics*, 4, 332-339.
- *** Federal State Statistics Service (2019)., http://www.gks.ru/wps/wcm/connect/rosstat_main /rosstat/ru/statistics/population/level/ (accessed 04.02.2020)
- *** More than 230 thousand people visited "Arkhyz" resorts in Karachay-Cherkessia and "Elbrus-Berezengi" in Kabardino-Balkaria (in the Elbrus region) during the winter season, (2015). January 4 / Rostourism, https://www.russiatourism.ru/regions /? fedokr = 112 & freg = 147 & article = 7078 (accessed 04.02.2020).
- *** Resorts of the North Caucasus (2018) May 28. http://www.ncrc.ru/press-center/publikatsii/publikatsii-smi/ia-regnum-realizatsiya-kurortov-armkhi-tsori-i-matlas-otodvigaetsya-na-2023-god.html? sphrase_id = 7282 (accessed 04.02.2020).
- *** State program of the Russian Federation "Development of the North Caucasus Federal District", (2019). As amended by Decree of the Government of the Russian Federation of February 11, 2019 No. 111. http://pravo.garant.ru/SESSION/PILOT/main.htm (accessed 02.02.2020).
- *** Strategy of socio-economic development of the North Caucasus Federal District until 2025, (2010). Approved by order of the Government of the Russian Federation of September 6, 2010 No. 1485-r, https://rg.ru/2010/10/05/skfo-site-dok.html (accessed 02.02.2020).
- *** Strategy of the spatial development of the Russian Federation until 2025, (2019). Approved by order of the Government of the Russian Federation dated February 13, 2019 No. 207-r, http://government.ru/docs/35733/ (accessed 02.02.2020).
- *** TASS: The development of the Elbrus resort in the KBR depends on the solution of the land issue, (2019).

 **Resorts of the North Caucasus, April 2, http://www.ncrc.ru/press-center/publikatsii/publikatsii-smi/tass-razvitie-kurorta- elbrus-v-kbr-zavisit-ot-resheniya-zemelnogo-voprosa.html? sphrase_id = 7283 (accessed 04.02.2020).
- *** The construction of routes and cableways on Elbrus is estimated at 5.7 billion, (2019). Caucasian Knot, July 5, https://www.kavkaz-uzel.eu/articles/337492/ (accessed 04.02.2020).
- *** The number of citizens of the Russian Federation placed in collective accommodation facilities, (2019). *EMISS. State statistics*, https://fedstat.ru/indicator/44040 (accessed 04.02.2020).
- *** The number of foreign citizens placed in collective accommodation facilities, (2019). *EMISS. State statistics*, https://fedstat.ru/indicator/44042 (accessed 04.02.2020).
- *** The ski season at the "Veduchi" resort began with artificial snow, (2019). Caucasian Knot, January 4, https://www.kavkaz-uzel.eu/articles/329955/ (accessed 04.02.2020).
- *** Caucasian Knot, (2020), https://www.eng.kavkaz-uzel.eu/ (accessed 04.02.2020).

Submitted: Revised: Accepted and published online 22.10.2019 25.02.2020 03.03.2020

ARCHAEOLOGICAL SITES AND TOURISM: PROTECTION AND VALORIZATION, CASE OF TIMGAD (BATNA) ALGERIA

Louardi KHERROUR*

Houari Boumediene Sciences and Technology University, Department of Geography and Territorial Planning, Algiers, Algeria, e-mail: louardi.kherrour@yahoo.fr

Sofiane HATTAB

Houari Boumediene Sciences and Technology University, Department of Geography and Territorial Planning, Algiers, Algeria, e-mail: sofianehattab@yahoo.com

Mohamed A. REZZAZ

Houari Boumediene Sciences and Technology University, Department of Geography and Territorial Planning, Algiers, Algeria, e-mail: drezmas@yahoo.fr

Citation: Kherrour, L., Hattab, S. & Rezzaz, M.A. (2020). ARCHAEOLOGICAL SITES AND TOURISM: PROTECTION AND VALORIZATION, CASE OF TIMGAD (BATNA) ALGERIA. GeoJournal of Tourism and Geosites, 28(1), 289–302. https://doi.org/10.30892/gtg.28123-470

Abstract: The archaeological site of Timgad, located in the high plateaus East of Algeria, more precisely in the of Batna province, represents an outstanding universal value, it was classified in the world heritage of UNESCO in 1982, it attracts a significant number of tourists each year and represents an important economic resource. Timgad has benefited from legal and technical instruments of protection and valorization, but these instruments and means have not had the expected success. The objective of this study is to identify this heritage and the tourism reality in this site on the basis of the field study, which has determined the socio-economic characteristics of the visitors and their impressions on the archaeological site and assess the available opportunities. Because the preservation of Timgad which of Roman origin means the protection of heritage, history, art, archeology and science, these potentialities will make tourism an important resource for local and national development. In fact the diagnosis of the current situation confirms the absence of an adequate and coherent tourism planning which allowed us to propose a strategy that combines protection and valorization, while preserving the cultural heritage which is an asset for sustainable development. To accomplish this study, we begun with an analysis of documents and reports concerning the instruments of protection and valorization of archeological heritage. Followed by a field study in form of questionnaires, as well as statistical and geographical data analysis. We finished with a presentation of the results and their interpretation. We finally concluded with some recommendations.

Key words: Archaeological site, Heritage, Tourism, Protection and Valorization, Timgad, Algeria

* * * * * *

_

^{*} Corresponding author

INTRODUCTION

The archaeological site is defined by the International Council of Monuments and sites ICMOSE as a place that gathers traces of a human activity, it is a place laden with history and symbols that express themselves through movable objects or buildings (European Commission, 2004). And Algerian legislation defines it as built or unbuilt spaces which do not have an active function and which testify the actions of man or the actions of man and nature, including the Subsoil which has a historical, archaeological, religious, artistic, scientific, ethnological or anthropological value (Law 98-04, 1998). In this context, it is necessary to define more fully the values of archaeological sites for all mankind, present and future, and to develop processes to manage and present these sites (CSAM, 1995). The Algerian territory is dotted with archaeological sites of an invaluable richness, covering different periods, prehistory, Greek, Phoenician, Roman, Byzantine, Arab and Muslim (Hafsi, 2012; Khouadja, 2016). Where the importance of archaeological sites require cultural, historical, artistic, social and economic values, embodying the history of nations and people and constituting an alive testimony and a highly significant symbol on the genius of human creativity throughout the evolution of the civilizational and human history. Tourists are subjugated by these monuments and sites guided by the desire to discover new environments regions, as well as various civilizations bequeathed by nations and people disappeared ages ago. Antiquities (also remote areas they are) are therefore part of the components of cultural tourism.

Algeria accounts six sites classified World Heritage which are exploited in the cultural tourism: the Kasbah of Algiers, the M'Zab valley, the National park of the Tassili, Qal'a of Beni Hammad, the site of Djemila and the archaeological site of Timgad (Boutemedjet, 2011), which obviously require the protection and valorization. World Heritage has proven to be very popular, it attracted the attention of not only the heritage professionals, but also of tourists, tourism industry and scholars (Tijana, 2007). Algeria has ratified the International Convention for the protection of the urban and natural heritage (Order, 73-38) enacted in 1973, which focused on the need to integrate the objectives of protection and conservation (objectives of development) in order to provide investments in the field of tourism. In this context one of the requirements of the new Algerian political development of the Territory planning (Perspectives 2030) is the protection and enhancement of the cultural heritage, as a factor of sustainable development of the Territory and the registration in the existing policies.

This strategy implements a total and coherent process passing through the inventory, and then the classification, the restoration and finally the valorization. The national strategy for a prospective development and planning of the territory (Perspectives 2030) aims to preserve the national identity and to ensure a territorial and social cohesion through a valorization of cultural heritage (Meradi et al., 2013). The management of the cultural heritage and the promotion of tourism intervene, at the end of this process for the preservation and safeguarding of cultural values. It is possible to enhance the cultural heritage, at the service of tourist activities creators of wealth and employment, which will reconfigure the territory and give it a vocation well precise (Lazzarotti, 2003).

The indices of the World Tourism Organization confirm that cultural tourism will occupy in the next few decades a prominent place in the world tourist offer, thus be susceptible to play a catalytic role in the economies of some countries through the sources of income that they could obtain and provide employment opportunities for the local communities. World Heritage related to research quickly gained momentum in scholarly circles; this resulted in numerous publications in scholarly journals, books and international conferences related to the topic (Tijana, 2007). The relationship between tourism and world heritage emerged recently as a major problem which raises a number of important conferences and work (Laurent et al., 2012). Timgad is an archaeological site classified in the World Heritage of Humanity in 1982 for its Outstanding Universal Value

became a zone of cultural tourism, it welcomes more than 100,000 visitors per year given its qualifications and available opportunities. However the study area has not yet reached the required level, because of the inefficiency of the adopted instruments of protection and exploitation, and the lack of equipments and tourism infrastructure.

In the light of this, several questions are raised and deserve answers:

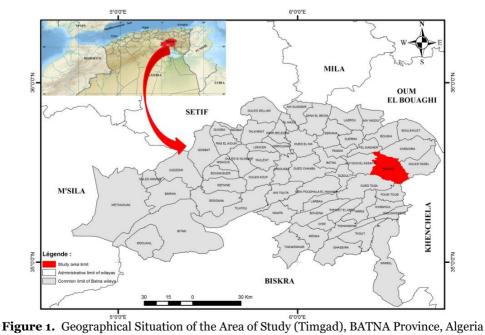
- What are the technical and legal instruments for the protection and valorization?
- 2. What is the reality of the tourist movement?
- 3. What are the most effective methods and the tourist projects for the valorization of the archaeological heritage?

STUDY OBJECTIVE AND METHODOLOGY

The objective of our research is to highlight the outstanding universal value of the studied area, and to show the relationship between the archaeological site and the tourism in the context of the instruments of development (Protection and valorization), and to know the reality of tourism through field study, and to show the importance of the heritage in the development of tourism, and how to make the site more attractive by projects proposed by researchers, as well as to promote the image of Timgad in the national and international tourism markets, to achieve economic, social and cultural benefits, and increase revenues.

To carry out this study, we relied basically on the following steps:

- Field study through 360 questionnaires (elaborated on the basis of direct interview method, have been distributed to tourists) (May 2016). These quantitative and qualitative data are the main constituent elements of the tourism sector and its evolution. In addition to observations and interviews established to know the strengths, weaknesses and opportunities available for the planning and valorization of the site.
- Reports and documents containing laws and instruments, in addition to a few sources and references related to the subject of the study.
 - Geographical and statistical data collected using the ArcGIS program
 - Results and recommendations.



THE STUDY AREA

The study area (archaeological site of Timgad) dating back to the Roman era, is located in the north-east of Algeria, in a narrow high plain stretching between the northern slope of the Aures massif and Jebel Bouarif, in the territory of the commune of Timgad Batna province (Figure 1). It is located 35 km at east of the place chief of Batna province, 490 km to the southeast of Algiers, 110 km south of Constantine and 68 km to the west of Khenchela. Bounded by the following geographic coordinates: longitudes: 6° 25 East 6° 35 East and latitudes: 35° 27 North and 35° 36 North, its area is 222.26 km², located at 900 meters of altitude.

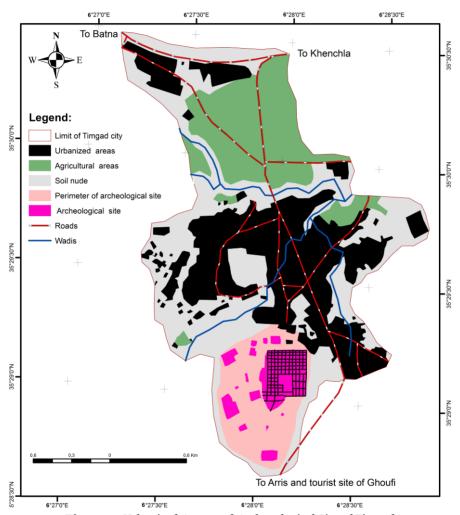


Figure 2. Urbanized Areas and Archaeological Site of Timgad

The study area is characterized by a mild climate throughout the year, with mean annual temperatures ranging up to 28 degrees in July and 10 degrees in December, which gives it a comparative advantage for the following tourist season. Timgad was a colonial Roman city, founded by the Roman emperor Trajan around year 100 after J.C, before it was invaded by the Vandals in the 5th century and then by the Byzantines in the year 535, which have been dismissed by the Berbers in the 7th century (Monograph Timgad, 2017).

The Roman city has been covered by a layer of earth up to its excavation in 1881. From 1948, the need to protect the archaeological site and accommodate the people led to the project of building a new city of Timgad, the design and construction in 1957 of the city to the north of the Roman ruins (Monograph Timgad, 2017). The present city has reached in 2017, 15000 inhabitants. The archaeological site in the north side is threatened by the urban fabric (Figure 2). The distance that separates the site from the urban area does not correspond to national and international standards that estimate between 200 and 500 meters. The physical limits of the site extend to surrounding areas, so that the area of separation between the archaeological site and the urban area should be defined. Because, according to the standards of urban planning, the perimeter of the site of Timgad is a "non-Sector urban sable", where any construction or other use of soils is strictly prohibited. The modern city was created in 1957, to be built at 1000 m to the north of the ruins of the Roman city, the extension of the city is close gradually.

PROTECTION AND REVALORIZATION INSTRUMENTS

The United Nations UNESCO has adopted a number of international principles with regard to the archaeological excavations indicating the criteria to use to develop the archaeological sites (Samuel et al., 2014). Heritage sites should be managed effectively in a way that ensures preservation of heritage resources and their presentation to the public (Alazaizeh, 2014). In Algeria the (Law 98-04, 1998) related to the national cultural heritage, is the main reference in the field of protection, followed by a series of regulatory texts, which has led to the change of concepts, standards and controls relating the protection, procedures of classification, general provisions, standards relative to the restoration. It is certain that this innovative approach, need to be reinforced and supported concerning the implementation of plans for the protection and enhancement of archaeological sites (SNAT, 2010).

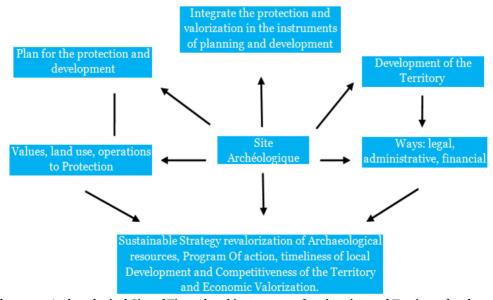


Figure 3. Archaeological Site of Timgad and instruments for planning and Territory development

We note that the elements of the archaeological heritage of Timgad are taken into consideration by the procedures organized in the field of Urban and Territorial

planning at several levels (Figure 3), national scheme for Territory planning (SNAT). Scheme of Space of territorial programming of the East High plateaus (SEPT), the Land Use Plan Batna province (PAW) and the Master Plan for Development and Planning of the commune of Timgad (PDAU). All development plans incorporate the valorization of heritage and tourism potential, for example the National Scheme of Territory planning (SNAT) proposes the creation of an economic pole of heritage around the archaeological site of Timgad. This strategy aims to build a project in consistency with the local identity and create an active cultural environment. On the operational plan, Timgad is regulated by a plan of protection and Development (PPMVSA), it is a legal and technical instrument which determines all the actions for the conservation and management.

The plan highlights the current state of archaeological values for which is established the PPMVSA, and lays down the general rules for the use of land and easements as well as the operations envisaged in the framework of the protection, management, operation and enhancement of the site, including those relating to the determination of the activities that can be performed within the limits of the Classified site and its Protection Zone (Executive decree 03-323, 2003). This intervention method is directed towards a Social, economic, cultural and touristic development as a tool for local sustainable development. Therefore, the strategy for the protection of heritage areas often requires the form and measures of plans and methods of restoration, conservation, rehabilitation, leading to an exemplary conduct in respect of heritage sites. It is then essential to better understand the mechanisms of the economic spinoffs, their impacts at the local level and to demonstrate that the development of the heritage is not only a burden but an asset that can generate profits in the tourism sector (UNESCO, 2013).

Algeria is seeking since long time ago to achieve development objectives and to promote the tourism sector using various planning and development instruments (Benzarour et al., 2016). Tourism planning is able to promote the development of archaeological and heritage sites in order to qualify them for tourist attraction and the implementation of sustainable tourism development projects resulting from economic, social and cultural interests and benefits, at the national and local levels (Kabachi, 2010). Nowadays, tourism is a completely different concept comparing past times and its economical background is exceeding day by day (Bagherzadeh et al., 2016).

In the framework of the national policy for the development of tourism and the development of the Territory, the commune of Timgad has benefited from an area of expansion and tourist site (ZEST) in 2010 on an area of 852 hectares for the development of tourist infrastructure (Executive decree 10-131, 2010). Located in the south of the urban area said Morri, outside of the limits of the archaeological area in the west of the site (Figure 4), the area is classified as lands belonging to the State, with a topography almost perfectly flattened. It also has a potential of infrastructures and water, sanitation, electricity and gas networks. In this context, the study area has benefited from a plan of touristic development PAT (Currently under study), the plan must include natural, social, economic, cultural and environmental aspects in the data, indicators and standards, (Executive decree 07-86, 2007) as well as the overall approach to the touristic attractions planning and variables of development (variables and hypothesis) for the development of projects and appropriate activities.

The steps of Tourism Development planning process:

- Diagnosis and potential for tourism;
- Analysis, evaluation of the variables and strategies of development;
- Strategy chosen, prospects for planning and tourism development:
- Regulation of land use;
- Implementation program.

The plan proposes the creation of a touristic village of 73 hectares (PAT, 2015), providing for short-term: structures of accommodation and a range of hotels and of cultural and sports facilities, leisure parks, public gardens, green spaces, equipment, services, equestrian area, and other projects, complying with the national and international standards in the context of the local specificities. For the implementation and monitoring of touristic and development plan (PAT) on the ground, steps have been taken to the creation of the National Agency of Development of Tourism in charge of ensuring the protection and preservation of the touristic extension zones, and to conduct studies, development, and acquisition of the land required for the implementation of touristic infrastructures (Executive decree 98-70, 1998). The State undertakes the development of works leading to the preparation and completion of the studies, the private sector performs the different projects (Structures and Equipment), within the framework of laws and regulations.

The study area has benefited from certain development programs, in the framework of the instruments for Territory development:

- Pole of economic heritage (PEP), which constitutes a form of revalorization of archaeological resources;
- Plan for the protection and enhancement of archaeological sites and their zone of protection (PPMVSA), legal and technical instrument which determines all the actions of conservation and management;
 - Area of expansion and tourist site (ZEST);
 - Plan of tourism development (PTD), for the achievement of tourism infrastructure.

The protection of the archaeological heritage is among the objectives of the instruments of development and Territory planning for a better integration and reconciliation of the requirements of the protection and tourism development. Despite its tools and instruments, no intervention has been carried out on the study area. The touristic pole center located near the picturesque areas (mountains, forests, water plans), is also close to other touristic sites, such as the Ghouffi, Tazoult, medracen, Chelia, and others (Figure 4).

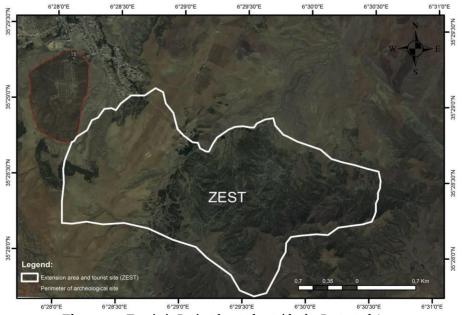


Figure 4. Touristic Project located outside the Protected Area

FROM HERITAGE TO TOURISM

Timgad is considered one of the most important archaeological sites in Algeria, it was baptized by the Romans by the name of Thamugadi around the year 100 after J. C, where it flourished until the fifth century AD. Timgad was initially predestined for military strategic purposes, but subsequently transformed into a residential area, and constructed according to an orthogonal design (checkerboard plane), around two main and perpendicular axes (the Cardo and The Decumanus), it represents a unique and distinctive model of construction type and organized planning. It was incorporated into the World Heritage of mankind List in 1982 (SDZAH, 2007).

Timgad takes up the precepts of the planned urban planning of the Roman period, governed by a remarkable orthogonal checkerboard plan, thus constitutes a typical case of an urban model (Sebahi, 2016). It is a unique and singular work; it embodies an important model of construction type and regular planning. The monuments of the site are: The Forum, the theatre, the library, the Capitol, the Arch of Trajan, the thermal baths, the individual habitat and others. The presence of Timgad in the picturesque region of Aures has given it great cultural and natural touristic specificity. Heritage creates a high degree of multiplicity of natural and cultural heritage that may play an important role as a possible motor for truly sustainable development from the standpoint of geo- and cultural tourism more in general (DI Gregorio et al., 2014).

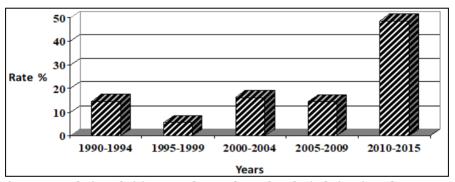


Figure 5. Evolution of Visitors number on the Archaeological Site Timgad, 1990-2015

According to Figure 57 (Timgad Archaeological Department, 2016) we notice that the number of tourist arrivals who visited the archaeological site of Timgad, during the period (1990-2015) reached 1132880 tourists (domestic and foreign). The period 2010-2015 occupies the first position with 49%, where tourism has an upward trend in continuous growth, due to the stability of the security as well as the promotion of tourism in the region. The number of foreign visitors is very low compared to the number of Algerian visitors reaching 1780 in 2015 (DTA, 2015). While the period 1995-1999 was relegated to the last row with a rate of 5.64%, due to the security events experienced by Algeria during this period, which diminished number of tourists in the direction of Algeria and Timgad in particular. Tourism in the study area is characterized by two seasons: the first in spring (March-April-May) with 50% and the second during the summer months (June-July-August) with 25% of the total number of tourists (Figure 6). This is obviously due to the good climatic conditions enjoyed by the study area during these two seasons, the ideal atmosphere having an appropriate positive impact on the tourist attendance rate. The Timgad International Festival is one of the most important tourist and media attractions in the region in July of each year. During the 10 days of the festival, the attendance recorded in the Roman city was of 15230 tourists (Kherrour et al., 2016). The

Ministry of Culture has transferred the activities of the annual Festival of Timgad to the outside of the site, which will mitigate the negative impacts on the area (Sebahi, 2016).

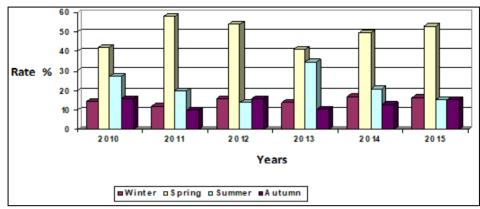


Figure 6. The relative distribution of the of the Touristic movement seasonality, Timgad 2010-2015

We notice that the touristic movement is still very modest for the rest of the year, the general trend is very significant in terms of the marked and noticed tourist traffic during the spring and summer and culminating at the rate of 75%, as we underline a significant increase in the tourist flow during the official holidays and the annual events. Heritage tourism has become one of the main tools to maintain heritage sites (Alazaizeh, 2014).

RESULTS AND INTERPRETATIONS

After the analysis of the touristic movement in terms of the evolution between 1990 and 2015, and the number of tourists according to the seasonality (2010-2015), we will highlight the tourism reality through the social and economic characteristics of tourists, as well as the General impressions on the archaeological site to that end. 360 questionnaires have been distributed to tourists (May 2016).

The main results of the questionnaire are:

Age category and Place of accommodation

The reading of the Table 1 allows us to say that the most represented age category is between 21 and 40 years with 69%, which corresponds to the young seniors, followed by that of 41-60 years with 14%, then by the category of less than 20 years with 13%, indicating that this category moves in group (students). And according to the inquiry the tourists originating in the Batna province represent 67%. The tourists stay duration: 79% which do not exceed a day, 15% up to 3 days and 6% for a week, but for most of the tourists the duration of the stay does not exceed 24 hours, they are traveling in the region especially during weekends. There is a fairly significant percentage of tourists 44% which do not specify their place of stay and who come to spend a few days in Batna province, and concerning the percentage of accommodation in hotels it hardly exceeds 11%, where we note only the existence of two hotels: the Hotel El Kahina with 44 beds (Not classified) and the hotel of the Ruins with 60 beds (Under the renovation and rehabilitation). Therefore we note a significant Inadequacy, in particular with the existing hotel facilities in terms of quantity and quality, to meet touristic standards at international levels. The number of rooms identified in the hotels is evaluated to 84 rooms only, which requires an increase in the capacity of accommodation in order that the dynamics and the development of tourism pouring in the city can be absorbed in order to achieve the balance of supply and demand in tourism. We note that the youth hostel with a capacity of 40 beds plays a preponderant role in the movement of the internal tourism where the universities and the different institutions prefer to organize trips in the region and stay in the youth hostel; which actually represents a significant portion of the city tourism capacity.

Table 1. Indicators on the Tourist Movement in the Archaeological site of Timgad (Source: survey accomplished by the students of urban planning (license degree FSTGAT, May 2016)

Indicators	Alternative	Number of Interviewed	%
Sex	Man	233	64
	Woman	127	36
Marital status (family)	Married	141	39
	Single	219	61
Age	Age under 20 years	50	13.8
	Between 21 years and 40 years	250	69.4
	Between 41 years and 60 years	51	14.3
	Over 61 years	9	2.5
Education Level	Primary	24	6.6
	Middle cycle	83	23
	Secondary	109	30
	University	122	34
	Higher	22	6.4
Place of residence according	Batna province	241	67
to the Provinces	Outside the Batna province	119	33
Stay duration	One day	284	79
	Between 1 and 3 days	54	15
	More than a week	22	6
Place of accommodation	Hotel	37	10.2
	Flats	142	39.4
	Cottage	21	6
	Other	160	44.5
Attractiveness	Yes	338	94
	No	22	6
Motives of the touristic	Archaeological site	172	48
movement	Rest and leisure	90	25
	Scientific tourism	62	17
	Cultural Festival	36	10

Motives of the tourist movement

The site of Timgad is the factor of an essential touristic attraction at the region level with 48% of tourists (the Survey 2016), however, the rest and relaxation are most important, estimated at 25%, as well as the scientific tourism with 17%. Most people interested by the rest and relaxation, as well as ecotourism (natural areas, mountain and aquatic basins) are residents of neighboring municipalities. The dam of Koudiet Lamdaouar, located in the north of the city, at 7 km constitutes an economic and touristic resource to the local and regional level and which has given the area an environmental character, making the region a destination highly appreciated by the local tourists residents on the territory of Batna province. The Mont Bouarif, which is located in the north of the municipality to a height of 1745 m, is an area of excellence dedicated to mountain and environment tourism which encourages the establishment of structures and touristic facilities.

General Impressions

The knowledge of the tourists wishes and their satisfaction is related to the beauty of the site, the cleanliness of the environment, services, expenditures, security, stability, recreational activities, etc. This information helps to develop plans and strategies for the

development of tourism. According to the data of the questionnaire (2016), the beauty of the site is the first element of tourists satisfaction, 94% have expressed their desire to return soon, and recommend to their relatives or friends to visit the site in the future. Most of the negative impressions of the tourists and visitors to the archaeological site are mainly related to the lack of various activities and services.

Attractiveness of the Territory

The development of new services will generate new employment opportunities and will increase the opportunities for the improvement of local revenues. For example, a tourist in the archaeological site, buys a ticket of entry, uses a guide, buys local products (purchases, restaurants, transport, accommodation, and other touristic activities). These expenses are an important and effective factor for the local economy in addition to the traditional crafts which constitutes one of the elements of intangible heritage in the region, mainly in the traditional clothing, pottery, the engraving and jewelry (gold and silver), given that the region is rich in its distinctive folklore, thanks to the diversity of the cultural resources and the different civilizations of the Aurès. The local heritage contributes to the promotion of tourism and ensures the attractiveness of the Territory (Julie, 2013).



Figure 7. Arch of Trajan



Figure 8. Theater

The relationship between the archaeological heritage and tourism is dynamic, so that the site must be maintained in a sustainable way for present and future generations. The cultural heritage (figure 7, 8), and the International Festival of Timgad are among the most important touristic attractions of the region. The economic benefits that heritage sites bring to the tourism destination are through the increasing of visitation and the extensions of stay (Du Cros, 2008). The cultural heritage is regarded as an important sector of the regional and local economy and a key factor of development. The cultural tourism is today a major factor in the economies of some countries and recent studies indicate that the proportion of cultural tourism worldwide is situated between 12 and 15% of tourism in general and sometimes even 20% in the areas richest in heritage. It is clear from the foregoing aspects that the number of visitors to the study area has experienced a rising trend, and most of the impressions of the tourists and visitors to the site are mainly related to the lack of services and activities. And the lack of hotel establishments responding to the touristic standards of high level is limited to the existence of two non classified Hotels. The cultural tourism is not developed because of the negligence of modern methods to administer and manage the site, and the failure of the media to advertise in order to attract tourists. The commune of Timgad needs a plan for touristic development adapted to the nature of the region, in order to assess and develop tourism. However Timgad has an area of tourist expansion in conformity with the executive decree 10-131 of 2010, which is an important factor for the development of tourism as well as the attraction of foreign and domestic investments that can have a positive impact on the region.

CONCLUSION AND RECOMMENDATIONS

This study focused on the theme of archaeological site and Tourism (Protection and valorization), taking as a case study Timgad. The results of the research show that the State has integrated the protection and enhancement of the archaeological site in the instruments of development and sustainable development of the Territory, through a series of legislative and regulatory texts and various instruments, but the impact of the strategy toward the heritage and tourism, required several actions and means (legal, administrative, technical, financial, and public-private partnership), which has led to the failure of the application of the instruments on the ground. This is confirmed by the results of the 2016 investigation, no intervention has been carried out on the site in the framework of the protection in addition to the lack of equipment and tourist infrastructure in the commune of Timgad. Through the results of the study, we have suggested a series of recommendations aiming to:

- Preserve the site which is a key factor of tourism attraction through the restoration of monuments, and the stoppage of urban extension towards the archaeological site.
- Develop an operational plan for the protection and valorization of the site, this protection will only be sustainable if the archaeological sites are valued as economic resources that attract investment, this valorization must be included in Territory development programs (Hafsi, 2012).
- The strategy of protection and revalorization requires the development of tourism investment and the creation of structures of accommodation, services and leisure. The East area of the site is particularly adapted to the expansion of the proposed projects, because the standards of protection require a natural space between the site and the tourism projects, to move away from the protected area, in order to demonstrate the vision of the archaeological monument and provide a natural environment.
- Each new construction must comply with the standards of protection in terms of types, height, forms, facades, construction materials, colors, use and compatibility with the local and archaeological environment.

- Realize investments with touristic vocation adapted to the nature of the region (structures of accommodation and services), and develop the international tourism by establishing hotels to host the expected growth in the number of tourist, given that heritage is an important part of the international tourism market (Mohinder, 2013).
- Establish a cultural center and a museum of heritage to stimulate cultural and scientific events, and the insertion of the heritage in the development, because museums today play an important role at the global level and are more active due to the application of modern techniques applied in the museum exhibitions. For example, tourism represents for France a very important economic sector, World Heritage sites as Versailles with 6 million visitors per year, or the Museum of the Louvre with 9 million visitors per year (UNESCO, 2013).
- Develop the Craft industries, organize festive events that reflect the aspects of local life and captivate the admiration of tourists.
- Develop a plan for information by using modern tools to promote the tourist attractions, cultural events, festivals, exhibitions and scientific seminars, and to put in value its assets as well as to capture the investment opportunities.
- Raise the level of awareness of the population from the region regarding the importance of the cultural heritage and its role in the economic and social development. For the realization of touristic projects, it is necessary to carry out preliminary impact studies which include an analysis of the archaeological heritage and its environment and makes it possible to conceive the project of development according inheritance protection rules.
- Touristic projects become a key element of development and an important source of income that is beneficial to the commune and its residents, thus contributing to the improvement of their standard of living and the creation of direct and indirect jobs, which therefore makes the development based on the tourist activity a tool for the stimulation of other sectors such as urbanization, construction, transportation, trade, agriculture, and various services.

Through the recommendations we aim to:

- Strenghten the attractiveness of the region;
- Develop a sector of cultural economy (heritage);
- Create tourism development from the archaeological site.

These projects will become a source of income, employment and development, in the commune of Timgad, which suffers from a lack of resources and income. Timgad, this archaeological site of an international, historical, cultural and civilization value, requires exceptional measures, for a new culture of sustainable development. It should be protected, rehabilitated and landscaped to keep its authenticity and guarantee the competitiveness and sustainability of the heritage, in order to reach a sustainable model in which the heritage plays a dominant role and is a tourist resource of the first order.

REFERENCES

Alazaizeh, M, M. (2014). Sustainable Heritage Tourism: A tourist-Oriented approach for managing Petra Archaeological Park, Jordan, Doctor of Philosophy Parks, *Recreation and Tourism Management*, Clemson University, États-Unis, P1.

Alazaizeh, M.M, Jeffrey, C. Hallo, Sheila & Backman. J. (2018). Giving, voice to Heritage Tourists: Indicators of quality for a sustainable Heritage Experience at Petra, Jordan, *Journal of Tourism and Cultural Change*, Mar 2018.

Bagherzadeh .A & Keshavarz. A. (2016). Analyzing the effective factors on tourism demand in elgoli jungle park of tabriz city, iran, *GeoJournal of Tourism and Geosites* Year IX, no. 1, vol. 17, P 64.

Benzarour, C, & Satour, R. (2016). Tourism and Economic growth in Algeria: Evidence of Cointegration and Aalgiers causal University 3, Blida University 2, Algeria, P11.

- Boutemedjet, S. (2011). Policies for the Conservation of the Archaeological Heritage, the Case of the Archaeological Site of Madaure, wilaya of Souk Ahras, Memory of Magister, Faculty of Earth Sciences, University of Annaba, Algeria, P22.
- DI Gregorio, F, Frongia, P, Piras, G, & Forresu, R. (2014). Map of the Natural and Cultural Heritage in the landscape of the carignano wine district of the sulcis region (sw sardinia), *GeoJournal of Tourism and Geosites*, Year VII, no 1, vol 13, P 66
- Du Cros, H. (2008). Too much of a good things, Visitor congestion management issues for popular world heritage tourist attractions. *Journal of Heritage Tourism*, 2(3), P 225–238.
- Hafsi, F, Z. (2012). For an integrated conservation of archaeological sites in the national policy for Territory planning, example of study: Souk Ahras province, memory: magister (Master degree), Faculty of earth Sciences, geography and Territory planning, Universite MENTOURI, Algeria.
- Julie, A, (2013). Archaeological Heritage, Tourism and attractiveness of territories.
- Kabachi, H.K, (2010). Tourism Planning and its impact on the areas and sites of Archaeological Heritage, Review of the University of Shendi, Sudan, N 9, P127.
- Kherrour, L., Souiher, N., & Drias, A. (2016). Toward a setting in Eco-cultural tourism development in the area of the Ghoufi Batna province, Algeria, *Review Geographia Napocensis*, Anul 1. P13.
- Khouadja, S, H, (2016). The protection of archaeological property through the law of cultural heritage, review Cahiers of Politics and Law, Kasdi Merbah Ouargla University, Algeria, No. 15, P 71.
- Laurent, B, Maria Gravari-Barbas, & Robinson, M. (2012). Tourism and world heritage, 'Laval University. Canada, 2012, P17.
- Lazzarotti, O, (2003). Tourism and heritage, Annals of geography, Volume 112, No. 629. P91-110.
- Meradi, O, Belattaf, M & Albagli, C. (2013). National Scheme for Territory planning and cultural changes in Algeria, Euro-Mediterranean Dialog of Public Management, MED 6, 7, 8 & 9 October, 2013, Marseille, France. P9.
- Mohinder, C, (2013). Residents perceived benefits of heritage and support for tourism development in Pragpur, India, *Journal of Tourism*, Vol 61 / No 4, P 379.
- Samuel J, & Fernandoe, Soberanis. (2014) Alternative Tourism and Archaeological Sites in Yucatan, Mexico, *Téoros Review*, 33, 2.
- Tijana, R. (2007). World Heritage: Issues and debates, Journal of Tourism, Vol. 55 No 2, P 209.
- *** CSAM, (1995). The Conservation of Archaeological Sites in the Mediterranean region, international conference organized by IE Getty Conservation Institute and Ie J. Paul Getty Museum, from 6 to 12 May 1995, P13.
- *** DTA. (2015). Tourism and Handicrafts Directorate. BATNA province, Algeria.
- *** European Commission (2004). Development of archaeological sites in urban areas, Directorate general of Research, Belgium. P24.
- *** Executive Decree 07-86, (2007). Laying down the procedures for the establishment of the plan of tourist development of the areas of expansions and tourist sites, Algeria, in *Official Journal of the Algerian Republic*. n° 17.
- *** Executive Decree n ° 10-131, (2010). Bearing delimitation, Declaration and classification of expansion areas and touristic sites. Algeria, in *Official Journal of the Algerian Republic*, n° 30
- *** Executive Decree No. 03-323, (2003). Concerning the modalities for the establishment of the plan for the protection and enhancement of archaeological sites and their zone of protection (PPMVSA), Algeria. in *Official Journal of the Algerian Republic*, n° 60.
- *** Executive Decree No. 98-70, (1998). The establishment of the National Agency for the tourism development and laying down its statutes, in *Official Journal of the Algerian Republic*, no 11.
- *** Law, 98-04. (1998). Related to the protection of the cultural heritage, Algeria, Official Journal of the Algerian Republic, n° 44.
- *** Monograph (2017). Commune of Timgad, Batna, Algeria.
- *** Order, n°73-38. (1973). On Ratification of the Convention concerning the protection of the World Cultural and Natural Heritage, in *Official Journal of the Algerian Republic*, n° 69.
- *** PAT. (2015). Plan of Touristic Development in the Area of expansion and touristic site ZEST Timgad, Tourism and Handicrafts Directorate. BATNA province, Algeria.
- *** PDAU. (2012). Urban planning and development master plan of Timgad commune, Algeria.
- *** SDZAH. (2007). The Master Scheme of archaeological and historical areas, Ministry of Culture, Algeria, P113.
- *** SEBAHI S. (2016). Property Algeriens inscribed on the world heritage list, P1,2.
- *** SNAT. (2010). National Scheme for the Territory planning, ministry of the Territory planning of the Environment and the city, Algeria. P14.
- *** Timgad Archaeological Department. (2016). BATNA province, Algeria.
- *** UNESCO. (2013). Tourists and inhabitants in the World Heritage Sites, acts of the 4th day: The Chair "Culture, Tourism, Development "The IREST and the EIREST, University of Paris 1 Panthéon-Sorbonne 22 October 2013. P7, 8.

Submitted: Revised: Accepted and published online 02.10.2019 26.02.2020 03.03.2020

PERCEPTION OF BUSINESS TRAVELLERS TOWARDS TECHNOLOGY ADOPTION: AN EMPIRICAL STUDY OF ONLINE TRAVEL PORTALS

Bivek DATTA*

Amity University Uttar Pradesh, Amity Institute of Travel and Tourism, Sector-125, Noida, India, e-mail: bdatta@amity.edu

Citation: Datta, B. (2020). PERCEPTION OF BUSINESS TRAVELLERS TOWARDS TECHNOLOGY ADOPTION: AN EMPIRICAL STUDY OF ONLINE TRAVEL PORTALS. GeoJournal of Tourism and Geosites, 28(1), 303-312. https://doi.org/10.30892/gtg.28124-471

Abstract: The technology has revolutionized the tourism industry today. Many tourism businesses have utilized the power of the Internet to the fullest in their online as well as direct marketing initiatives. The business travellers who are an integral part of the tourism industry are exchanging information than never before as the world is witnessing a drastic shift in online travel space. This study suggests and tests a mechanism to assess the perception of business travellers towards adopting technology while booking their trips. To assess the perception of business travellers regarding technology adoption, 12 variables were selected. Factor Analysis was utilized to reduce these 12 variables into 3 factors. A multiple regression was employed to eventually identify the perception of business travellers towards technology adoption. The ANOVA (F-test) specifies that the scale/ factor i.e. "Responses of Business Travellers" was quite significant. Further statistical Analysis displays that the significant value (p-value) of F-test came out to be 0.000, which means that all three explanatory variables i.e. service, awareness and network are highly significant with respect to the responses of Business Travellers regarding technology adoption.

Key words: Business Travellers, perception, technology, online travel portals

INTRODUCTION

Business travel in spite of being identified as a big commercial activity today has hardly caught the attention of the academia, government and researchers. It has received limited attention because of its complex nature. Rob Davidson was the pioneer in reshaping business tourism in 1994. Business tourism deals with individuals travelling for their work (Davidson, 1994). It is a highly complex and varied discipline as it has further subdivisions. Out of the many subdivisions the most extensively researched are meetings, conferences, conventions. Davidson did extensive research on this highly critical aspect. Researches indicate that meeting is also part of business tourism (Davidson, 1994). A small assembly is a meeting but a meeting on a large scale is called as a conference in the United Kingdom of Great Britain and Northern Ireland, called as a convention in the US

_

^{*} Corresponding author

and called congress in the continental Europe. The advent of ICT has transformed the online cyberspace into a vital component of the marketing mix where the consumers and service providers interact with each other. There are many theories that surround the birth of the Internet but the exact year is still unknown. The literatures pertaining to it are also not definitive or complete. In India the Internet was launched on 15th August 1995 by the pioneering works of Videsh Sanchar Nigam Limited. The birth of the Internet has opened the door for computer mediated environment (CME) as it has increased the interactivity between various business formations (Chatterjee, 1995). Since the volume of usage of the Internet has increased exponentially it is indispensable to study the online consumer behaviour. Tourism has become a very big business with a global economic contribution of 7.6 trillion USD in 2016 (Statista, 2016). Therefore, it is imperative for the scholarly community to study the tourist behaviour which has drastically changed with the advent of Technology. Tourism industry has emerged as a major economic tool in the world with a direct economic impact of 2.3 trillion USD in 2016 (Statista, 2016).

In numerical terms both in terms of arrivals and earnings it has grown exponentially in the last sixty-five years. The advent of technology has served as a boon for the dynamic tourism industry and it has welcomed the Information Technology sector with open arms. This has become possible as it reduces cost, enhances the service delivery and customer experience. This is the era of competition as businesses are competing against each other to develop and maintain their competitiveness. Tourism Industry is no exception in this dynamic business environment. In order to sustain the businesses, need to attain and apply updated information to help in its management and marketing operations. ICT will be of valuable help in this direction as it will help the businesses to manage information and help to take wise and appropriate decisions. The diffusion of ICT in the tourism industry has profoundly increased and at a remarkable degree (Connolly & Lee, 2006; Singh & Kasyana, 2005). ICT can revolutionize the tourism industry as it can change the outlook of viewing tourism processes, information search, businesses in the tourism sector and competition between them. Those tourism organizations who fail to utilize the tool of ICT will find it hard to manage and achieve their information exhaustive businesses objectives (Law & Jogaratnam, 2005). Tourism organizations need to have a sound understanding of the applications of ICT in this highly dynamic business environment to improve their processes and systems and counter competitiveness.

LITERATURE REVIEW

Gefen (2000) studied the importance of corporate websites and their role in brand building. He opined that the faith is an important factor which needs to be built in corporate websites and will in the long run help in building corporate branding. Buhalis & Licata (2002) stated that the array of tourism offers on the web might strengthen some service providers such as Air Carriers and might challenge traditional players such as outmoded service providers which are still in operation. Cho (2002) discussed the importance of the travel websites. The researcher was of the view that the portals should be self-explanatory. The contents of the websites should be catchy and appealing to the prospective travellers such as virtual tours of the desired destination. The virtual display should have an intermix of both audio-visual contents. Glitzy pictures, videos will help in this direction. Kim (2004) said that e- commerce is a blessing imparted to the ever-expanding travel and tourism industry and has come a long way in altering the outmoded way to the technological mode. Wolfe et al. (2004) emphasized that in order to develop trust business organizations can use various instruments in order to increase their client base and this can be done through effective use of advertisements. The knowledge they

can borrow from successful case studies utilized by online travel portals and this will help them to gain an entry into the market share of traditional and brick and mortar travel agencies. Hsu et al., (2007) stated that tourists share their information online due to personal cognition and social influence. Sen & Lerman (2007) opined that one who shares his tourism product knowledge online is an e-fluential tourist and appears as free revealing innovator. Buhalis & Law (2008) stated that Information and Communication Technology has huge impact on many aspects of Tourism. Litvin (2008) was of the view that level of interaction on social media can be Asynchronous or Synchronous. Asynchronous includes blogs, virtual communities, emails, websites, product review sites. Synchronous includes instant messaging, news groups. Garson (2008) emphasized the importance of information pertaining to planning for travel and eventually resulting in booking of trips. Both the researchers were of the view that the contents of the portals and the information it contains bridges the gap between electronic word of mouth and the traditional word of mouth communication pertaining to a destination desired to be visited. Shih (2009) stated that emergence of internet has transformed the tourism industry and the mechanism adopted by the tourists to buy and experience travel related products and the portals which are viewed as a risk to the supremacy of the organization.

Cai et al.,(2009) emphasized that importance of the Destination Management Organizations pertaining to the publicizing and upgrade may change due to the information and communication technology. Mamaghani (2009) studied the behavioral patterns of the travellers. Mamaghani (2009) was of the view that the advent of electronic commerce had an impact on the behavioral patterns of the consumers and they have the switching tendency to other portals if not satisfied with the earlier one. Mamaghani (2009) explained the impact of Information and Communication Technology and electronic commerce on the information extraction pattern of the consumers. Mamaghani (2009) described that the customers with the power of technology have the option to select the portal which has an array of information, easy to use and is user friendly.

Mamaghani (2009) tried to differentiate the facilities available in web based systems and traditional network of service providers. The researcher was of the view that the advent of Information and Communication Technology is to develop trust in the portals so that the customers can derive advantage of technology and use the digital process more in comparison to the traditional service providers. Mamaghani (2009) described the array of information the companies should offer on display to the prospective customers. The researcher was of the view that in order to adopt the ICT and use its advantages to the fullest the company should primarily display the complete array of services on offer, special schemes, add-on facilities which should be all available on the portal to catch the eyes of the prospective customers. Laffey & Gandy (2009) focused on the role of electronic commerce and travel intermediaries in pertinent travel information search. The researcher was of the view that Internet and online intermediaries can design themselves in such a manner so that there is continuous flow of information and cost saving offers which the customers are always on the lookout for.

Qualman (2009) opined that social media is very successful in many countries whereas ubiquitous in some countries. Yoo & Gretzel (2009) said that Online Travel Reviews are considered to be more reliable information than contents posed by tourism bodies. Buss & Strauss (2009) said that social media takes advantage of emotional influence as digitization and feeling online pronounced as dissemination philosophy by the first authors and culture of exposure by the second author. Volo (2009) is of the view that though blogs are in fashion in the beginning of the new millennium but can have disproportionate reach and so dependable as direct conversation and feedback and the

magnitude of genuine travellers contributing and sharing on this medium is a big question mark. Enoch & Grossman (2010) explained that exploratory and descriptive pertaining to the development of theories relating to the contents and electronic social media platforms. Xiang & Gretzel (2010) discussed about the numerous platforms available on social media, virtual communities, position of social platforms in search engines, social media adoption and its impact on destination branding strategies.

Baym (2010) put forward the dimensions of media such as interactivity, temporal structure, social cues which looks into context richness, its reach, mobility, reach out to people irrespective of place, space for recording, reproducing communicative acts. Xiang & Gretzel (2010) were of the view that in comparison to the outmoded mass media tools such as contents in print media and television on social media encourages high level of interaction and usage amid participants. O'Connor (2010) tourism intermediaries benefit a lot from the knowledge created by tourists. TripAdvisors gain commercially through the user generated contributions of the tourists. Christodoulou (2010) was of the view that because of convenience and ease of online booking it has more or less become a norm rather than exception. Munar (2011) opined that the digitized matter and consumer involvement in the portal can be checked to look into the vital scope of improvement in the travel portals. Jacobsen & Munar (2012) focused on the online contribution of the tourists and the limitations of social media. Chiu et al., (2012) reiterated that in the fiercely competitive retail market the importance of knowing the online consumers is on an all-time high. Pertinent literatures in the areas of consumer behavior and decision making will give an insight of the purchase and decision making processes.

According to them it is also imperative to understand the decision making processes that consumers follow. In addition to this the studies on ICT will examine the behavior of online consumers. Some studies of online consumer behaviour have poured in consumer research. Lee et al., (2013) opined that there is a tremendous power game and inequality between the suppliers and Online Travel Agencies but since Online Travel Agencies have a greater reach through the Internet and better understanding of the buying needs of the consumers than the actual suppliers they have the opportunity of exercising a greater bargaining power. Clemes et al. (2014) and Gatautis et al. (2014) deduced that service quality and value have a positive impact on online purchase behaviour. Immonen & Sintonen (2015) reiterated that with the development of the society electronic devices are seen more into operation and therefore it becomes imperative to analyze the factors of technology adoption. Chong et al. (2015) suggested factors to understand consumer behaviour behaviour such as convenience, features of website, adoption and innovativeness. Chang et al. (2016) found that online customers perceived risk has a negative effect on perceived satisfaction and purchase intention. Chen et al. (2017) verified the effects of perceived usefulness and cognitive complexity on the effect of recommended information on the technology adoption intention. Datta et al. (2018) deduced that business travellers value confidentiality, security and product quality the most while choosing the Online Travel Portal to book their trip. Datta et al. (2018) deduced that income and age group influence the online purchase attitude of travellers. Koundinya (2019) deduced that trust, perceived usefulness, convenience and website are significant factors that influence consumers intention to adopt online channels.

RESEARCH METHODOLOGY

The data was collected from 400 business travellers regarding their perception towards technology adoption at Delhi National Capital Region. Descriptive and analytical statistics were used to derive inferences from the data. Both primary and secondary data

were used to present meaningful explanations. A structured questionnaire was chosen to collect the primary data from the business travellers visiting Delhi National Capital Region. In total 400 Business Travellers were surveyed to understand their opinion pertaining to technology adoption through Online Travel Portals. The Data Analysis was carried out through the following steps:

- a. Primary Data was collected from business travellers pertaining to availing the services of online travel portals for their trips, whether they are aware of different facilities provided by online travel portals, whether they have availed the services of Travel Portal Service provider for the business trip in the past, whether they are getting good value for their money, whether they receive unique offers from online travel portals, whether they find the timings of these technological interfaces flexible and suitable ,whether they receive discounts from Online travel portals, whether they receive facilities and features in totality on the website, whether they receive all the pertinent information about various services easily through their service providers, whether they perceive that the portal has a good network of service providers, whether they perceive that the travel portal is easily accessible and visually appealing, whether the online travel portals respond to original grievance and take final action on complaint filed by business travellers
 - b. Descriptive and Analytical Statistics is employed
 - c. Employing statistical tools

DATA ANALYSIS, INTERPRETATION AND RESULTS FACTOR ANALYSIS

Kaiser-Meyer-Olkin (Kaiser, 1974) measure of sampling adequacy was done for applying factor analysis. It was equal to 0.823 (Table 1) that specified goodness of sample greater than 0.5 of acceptable limit. Bartlett's test of sphericity was applied and the data delivered a value of 0.00 which was less than 0.05 and reinforced the rationality of the data for factor analysis.

KMO and Bartlett's Test (Responses of Respondents)				
Kaiser-Meyer-Olkin Measure of Adequacy of Sample 0.823				
	Chi-Square value	309.342		
Bartlett's Test of Sphericity	Df	10		
	Sig.	0.000		

Table 1. KMO and Bartlett's Test (Responses of Business Travellers)

Kaiser (1974) endorses that any value of 0.5 arrived through KMO and Bartlett's is acceptable and factor analysis can be applied in this case. If the value arrived is less than 0.5 then we can think of gathering more data. The values arrived between 0.5 and 0.7 are considered to be the average ones, the values arrived between 0.7 and 0.8 are considered to be rather good, and values in the range of 0.8 and 0.9 are considered to be great and values above 0.9 are excellent. In our case the value arrived is 0.823, which is highly reliable and great in nature. Factor analysis is suitable and appropriate pertaining to our data. EFA was carried out on the 12 variables in order to condense the number of variables into factors. The variables are condensed into 3 factors with Eigen value greater than 1 and the total variance explicated being 80.056% and is considered to be good displayed in Table 2.

Variables loaded into three factors have been extracted through Varimax which is the best orthogonal rotation technique as it enhances the interpretability of the factors (Table 3). EFA was carried out for all the 12 variables. These variables are condensed into three different factors which explicated around 80.056 % of the total variance.

The first factor explained about 42.419% of the total variance. The second factor explained about 25.129% of the total variance and third factor explained 12.508% of the total variance. All the three factors explained about 80.056% of the total Variance.

Table 2. Factor Analysis Extraction Method: Principal Component Analysis

	Factor Analysis								
Compo	Init	tial Eigenv	ralues		traction S uared Lo		Rotation Sums of Squared Loadings		
-nent	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	5.400	45.003	45.003	5.400	45.003	45.003	5.090	42.419	42.419
2	2.859	23.826	68.829	2.859	23.826	68.829	3.015	25.129	67.548
3	1.347	11.226	80.056	1.347	11.226	80.056	1.501	12.508	80.056
4	.876	7.300	87.356						
5	·575	4.793	92.148						
6	.513	4.279	96.427						
7	.237	1.974	98.401						
8	.141	1.179	99.579						
9	.034	.280	99.859						
10	.015	.122	99.980						
11	.002	.020	100.000	•					
12	-7.818E -16	-6.515E -15	100.000						

Table 3. Rotated Component Matrix Extraction Method: Principal Component Analysis

Rotated Component Matrix				
Variables/Factors	Component			
·	1	2	3	
Business travellers avail the services of online travel portals for their trips	.030	.768	.114	
Business Travellers are aware of different facilities provided by online travel portals	031	·739	.049	
Business travellers have availed the services of Travel Portal Service provider for the business trip in the past	.781	.418	141	
Business travellers are getting good value for your money	.187	.901	.138	
Business travellers receive unique offers from the Online travel portals	.908	.288	.188	
Business travellers find the timings of these technological interfaces flexible and suitable	.756	423	331	
Business travellers receive discounts from Online travel portals	.102	.638	621	
Business travellers receive all facilities and features in totality on the website	.934	.082	.169	
Business travellers receive all the pertinent information about various services easily through their service providers	.968	.042	.177	
Business travellers perceive that the portal has a good network of service providers	.518	.084	.578	
Business travellers perceive that the travel portal is easily accessible and visually appealing	.971	102	.155	
Business travellers think that the Online Travel Portals respond to your original grievance and take final action on your complaint	.142	.447	.709	

Rotation Method: Varimax with Kaiser Normalization

a. Rotation converged in 5 iterations

Table 4. Identification of New Parameters by factor analysis (Source: Developed from Research)

Factors	Variables					New Parameters
Factor 1	Variable 3	Variable 5	Variable 6	Variable 8	Variable 9 and 11	Service
Factor 2	Variable 1	Variable 2	Variable 4	Variable 7		Awareness
Factor 3	Variable 10	Variable 12				Network

All the 12 variables are condensed into 3 factors. The extraction of the factors was carried out through the Varimax method and through principal component analysis where the Eigen value should be more than 1.

Regression Analysis (Algina & Olejnik, 2003)

The theories and ideologies developed in dealing with sample linear regression (i.e. one explanatory variable) may be protracted to deal with numerous explanatory variables.

Multiple regression equation:

 $Y = C + \beta x_1 + \beta x_2 + \beta x_3 + \beta x_4 + \beta x_5 + \dots + \beta x_n$

Y = prediction relationship of types of variables towards Service Quality

(Responses of Business Traveller)

C = Constant value

B = Unstandardized Coefficient

 $X_1 X_2 \dots = Dimension of independent variable$

The Regression Analysis predicts the extent of dependence of various factors as its exploratory variable. This was carried out by statistical testing and utilizing the first result of the regression analysis i.e. ANOVA (F-test). Further, R square value of the regression analysis is calculated to demonstrate the degree to which the explanatory variables explain the dependent factor. The second result of the regression analysis i.e. t-test along with significant value (p-value) indicates the most significant explanatory variable that influences the dependent variable. The R square value of the above model is 0.978, which means the dependent variable **Responses of Business Traveller** is influenced by all these three explanatory variables Service, Awareness and network i.e. 97.8 percent which is a good indicator for establishing travel portal awareness (Table 5).

Table 5. Multiple Regression Summary Output (Responses of Business Travellers)

Multiple Regression Summary Output (Responses of Business Traveller)					
Regression Statistics					
Multiple R	0.989				
R Square	0.978				
Adjusted R Square	0.984				
Standard Error	0.020				
Observations	400				

Table 6. Multiple Regression (ANOVA)

	Model	Sum of Squares	Df	Mean Square	F	Sig.
	Regression	84.614	3	28.205	4604.336	.000*
1	Residual	2.426	396	.006		
	Total	87.040	399			

^{*}Sianificant at 1 per cent level

The ANOVA (F-test) indicates that the scale/ factor i.e. "Responses of Business Travellers" was quite significant. All the explanatory variables i.e. three factors for studying responses of Business Travellers regarding technology adoption are quite

significant. Further, table 7 depicts that the significant value (p-value) of F-test came out to be 0.000, which means that all three explanatory variables are highly significant with respect to the explained factor i.e. "Responses of Business Travellers" The above Table 6 determines acceptable result as the significance level of the model is less than 0.01 (1% level). Thus the model employed in this research is considered to be good.

Table / Manaple Regression elements (Responses of Business Traveners)						
Factors	Coefficients	Standard Error	t Stat	P-value		
Intercept	-0.002	0.002	-0.998	0.321		
Factor 1	0.194	0.002	100.327	0.000*		

100.809

100.574

0.000*

0.000*

Table 7. Multiple Regression Coefficients (Responses of Business Travellers)

0.012

0.132

Table 8. Factors and New Parameters developed from Research	

Factors	New Parameters
Factor 1	Service
Factor 2	Awareness
Factor 3	Network

^{*}Significant at 1 per cent level

0.200

0.214

Factor 2

Factor 3

Based on the Multiple Regression Output table of "**Responses of Business Traveller**" and its constituent variables, we were able to derive the following equation.

Responses of Business Travellers (Y) = -.002 + 0.194 (F1) + 0.200 (F2) + 0.214 (F3)

It can be further deduced that the increase of 1 unit of delivery of Factor 1(F1), may incur the raise of 0.194 units in **Responses of Business Travellers** (Y). The highest Beta value indicates that independent variables are the most significant variables towards the dependent variable. From the table 7 depicted above, the independent factor 3 of 0.214 is highest among all. This means that independent Factor 3 has contributed the most and has stronger effect towards the technology adoption as compared to other independent variables. Further, it is seen from Table 7 that the significant value (p-value) of t-test for all items are 0.000, which means that all the three condensed factors arrived through factor analysis are highly significant with respect to the dependent variables i.e. "**Responses of Business Travellers**" (Table 8).

The application of the ANOVA (F-test) indicates that the scale/ factor i.e. "Responses of Business Travellers" regarding technology adoption was quite significant. All the explanatory variables i.e. three factors for studying responses of Business Travellers are quite significant i.e. Service, Awareness and Network. Further statistical Analysis displays that the significant value (p-value) of F-test came out to be 0.000, which means that all three explanatory variables are highly significant with respect to the explained factor i.e. "Responses of Business Travellers regarding technology adoption".

DISCUSSIONS AND FUTURE IMPLICATIONS

Though this study is a modest and earnest effort from the researcher to investigate the online behaviour of Business Travellers in Delhi NCR and it is a herculean task to study all the aspects of this emerging segment due to limited resources and abilities of the researcher and confidentiality issues of the business travellers. Hence the study may not be comprehensive to all situations. The study was conducted with a view to provide an all-inclusive view of the online purchase behaviour of Business Travellers. This study proposed useful strategies for the online travel portals for meeting the online needs of

Business Travellers which is emerging as a very lucrative segment considering its immense revenue generating capabilities. It presented the factors which affect the business travellers purchase behaviour and the requirements of the business travellers while booking their business travel through Online Travel Portals. It also provided few insights on how the online travel portals can address the concerns of business travellers. Online Travel Portals needs to understand the expectations and satisfaction of business travellers on various parameters and thereby focus on improving their facilities.

LIMITATIONS OF THE STUDY

- 1. The study is conducted in Delhi National Capital Region. There are other principal business centers such as Hyderabad, Bengaluru, Mumbai, and Kolkata. The findings of the study may not be generalized to these areas.
- 2. The data pertaining to this sector is majorly internal in nature and has seldom become public knowledge. The statistics are not maintained uniformly. This made selection of sample very difficult.
- 3. Online Travel Aggregators are reluctant and hesitant to reveal information pertaining to their data base.
 - 4. No prior major research work has been conducted in this area.
- 5. The study is restricted to the aspect of travel booking decision pattern of Business Travellers through Online Travel Portals whereas other variables such as personality, attitude, and life-style can be further studied.

REFERENCES

- Algina, J., & Olejnik, S. (2003). Sample size tables for correlation analysis with applications in partial correlation and multiple regression analysis. *Multivariate Behavioral Research*, 38(3), 309-323.
- Baym, N.K. (2010). Personal connections in the digital age. Malden, MA: Polity Press, pp 1-196.
- Buhalis, D. & Law, R. (2008). Progress in information technology and tourism management: 20 years on and 10 years after the internet: The state of eTourism research. Tourism Management, Vol.29 (4), pp.609–623.
- Buhalis, D. & Licata, M.C. (2002). The future of eTourism intermediaries, *Tourism Management*, Vol.23 (3), pp. 207-220. Buss, A. & Strauss, N. (2009). The online communities' handbook: building your business and brand on the web. USA: New Riders.
- Chang, S.H., Chih, W.H., Liou, D.K. & Yang, Y.T. (2016). The Mediation of Cognitive Attitude for Online Shopping. *Information Technology & People*, 29, 618-646.
- Chatterjee (1995). Commercial Scenarios for the Web: Opportunities and Challenges. *Journal of Computer Mediated Communication*. Volume 1,Issue,pp 3,0-0.
- Chen, H.Q., Wang, H. & Liu, L. (2017). Research on the Influence of Recommended Sources on the Adoption Intention in Online Shopping Environment. *Journal of Service Science and Management*, 10, 413-424.
- Chiu, C. M., Hsu, M. H., Lai, H., & Chang, C.M. (2012). Re-examining the influence of trust on online repeat purchase intention: The moderating role of habit and its antecedents, Decision Support System).
- Cho, B.H. (2002). The Effect of Virtual Reality Cognitive Training for Attention Enhancement. Vol. 5, pp.129–137. Chong, A.Y.-L., Liu, M.J., Luo, J. & Ooi, K.-B. (2015). Predicting RFID Adoption in Healthcare Supply Chain
- from the Perspective of Users. International *Journal of Production Economics*, 159, 66-75. Christodoulou, K. (2010). Liability of the network provider for its insults private sphere. *Media Law and*
- Communication Law. 7 (3) 328-330. Clemes, Michael, D., Gan, C.& Zhang, J. (2014). An empirical analysis of online shopping adoption in Beijing,
- China, Journal of Retailing and Consumer Services, Elsevier, vol. 21(3), pages 364-375.

 Connolly, D. J., & Lee, S. (2006). Developing Information Technology Proficiencies and Fluency in Hospitality Students. Journal of Hospitality & Tourism Education, Vol. 18(3), pp. 15-29.
- Datta, B., Sajnani, M., & Thomas, J. (2018). The Decision Making Of Business Travellers In Selecting Online
 Travel Portals For Travel Booking: An Empirical Study Of Delhi National Capital Region, India.

 GeoJournal of Tourism and Geosites. 22(2), 339–346.
- Datta, B., Sajnani, M., & Thomas, J. (2018). Travellers Attitude Towards Online Purchase Of Travel Products: An Empirical Study Of Online Travel Portals. *GeoJournal of Tourism and Geosites*.21(1),133-142.

- Davidson, R. (1994). Business Travel. Addison Wesley Longman.
- Enoch, Y. & Grossman, R. (2010). Blogs of Israeli and Danish Backpackers to India. *Annals of Tourism Research* .Vol.37 (2),pp.520–36
- Garson, D.G. (2008). Factor Analysis: Stat notes. Retrieved March 22, 2008, from North Carolina State University Public Administration Program
- Gatautis, R., Kazakeviciute, A. & Tarutis, M. (2014) Controllable Factors Impact On Consumer Online Behaviour. *Economics & A Management*. 19 (1), pp.63-71.
- Gefen, D. (2000). E-commerce: the role of familiarity and trust. Omega 28(6), 725-737 Hoffman, Thomas P. Novak, Patrali.
- Hsu, M.H., Ju, T.L., Yen, C.H., & Chang, C.M. (2007). Knowledge sharing behavior in virtual communities: The relationship between trust, self-efficacy, and outcome expectations. *International Journal Human-Computer Studies*, Vol. 65(2),pp 153-169
- Immonen, M. & Sintonen, S. (2015), Evolution of technology perceptions over time, Information Technology & People, Vol. 28 No. 3, pp. 589-606. https://doi.org/10.1108/ITP-12-2013-0219
- Kaiser, H. (1974). An index of factor simplicity. Psychometrika 39: 31-36
- Kim, J. & Larose, R.(2004). Interactive E-Commerce: Promoting Consumer Efficiency or Impulsivity? Journal of Computer-Mediated Communication, 10: 00. doi:10.1111/j.1083-6101.2004.tb00234.x.
- Koundinya, C. (2019). Predicting Online Travel Adoption Intention of an Indian Consumer: A SEM-Neural Network Approach. *Theoretical Economics Letters*, 9, 348-375. doi: 10.4236/tel.2019.92026.
- Kristian, Steen, Jacobsen, J. & Munar, A.M. (2012). Tourist Information Search and Destination Choice in a Digital Age Tourism Management Perspectives, vol 1, no. 1, pp. 39-47. DOI: 10.1016/j.tmp.2011.12.005.
- Laffey, D. & Gandy. A. (2009). Applying Stabell and Fjeldstad's value configurations to E-commerce: A cross-case analysis of UK comparison websites. *The Journal of Strategic Information Systems* archive Volume 18 Issue 4, December, 2009, pp 192-204.
- Lee, H., Guillet, B.D. & Law, R. (2013). An Examination of the Relationship between Online Travel Agents and Hotels A Case Study of Choice Hotels International and Expedia.com. Cornell Hospitality Quarterly, 54(1), 95–107.
- Liping A. Cai, , William, C. Gartner, & Munar, A.M. (2009). Chapter 1 Tourism Branding a Community Affair, in Liping A. Cai, William C. Gartner, Ana María Munar (ed.) Tourism Branding: Communities in Action (Bridging Tourism Theory and Practice, Volume 1) Emerald Group Publishing Limited, pp.1 14.
- Litvin, S.W., Goldsmith, R.E. & Pan, B. (2008). Electronic Word-of-Mouth in Hospitality and Tourism Management. *Tourism Management*, Vol.29,pp. 458-468.
- Mamaghani, F. (2009). Impact of e-commerce on travel and tourism: An historical analysis International. Journal of Management, 26(3), pp1-365.
- Munar, A.M. (2011). Tourist-created content: rethinking destination branding. *International Journal of Culture, Tourism and Hospitality Research*, Vol. 5(3),pp. 291–305.
- O'Connor, P. (2010). Managing a hotel's image on TripAdvisor. Journal of Hospitality Marketing & Management.Vo.19 (7), pp 754-772.
- Qualman, E. (2009). Socialnomics: how social media transforms the way we live and do business. John Wiley & Sons, New Jersey.
- Rob, Law, & Giri, J. (2005). A study of hotel information technology applications, *International Journal of Contemporary Hospitality Management*, Vol. 17 Issue: 2, pp.170-180.
- Sen, S., Lerman (2007). Why are you telling me this? An examination into negative consumer reviews on the web. J Interact Mark 2007.Vol. 21(4),pp76–94.
- Shih, C. (2009). The Facebook Era. Tapping online social networks to build better products, reach new audiences and selling more stuff. Prentice Hall Publication, pp. 85-128.
- Singh, A. J., & Kasavana, M.L. (2005). The Impact of Information Technology on Future Management of Lodging Operations: A Delphi Study to Predict Key Technological Events in 2007 and 2027. *Tourism & Hospitality Research*, Vol. 6(1),pp 24-37.
- Volo, S. (2009). Conceptualizing experience: a to.urist-based approach. *Journal of Hospitality Marketing and Management*. Vol. 18(2-3),pp 111-126
- Wolfe, K., Hsu, C.H.C. & Kang, S.K. (2004), Buyer characteristics among users of various travel intermediaries, *Journal of Travel and Tourism Marketing*, Vol.17, pp. 51–62.
- Xiang, Z. & Gretzel, U. (2010). Role of social media in online travel information search. *Tourism Management*, Vol.31 (2),pp. 179-188.
- Yoo, K.-H., Lee, Y., Gretzel, U. & Fesenmaier, D.R. (2009) Trust in Travel-Related Consumer Generated Media. In: Hopken, W., Gretzel, U. and Law, R., Eds., Information and Communication Technologies in Tourism 2009, Springer Verlag, pp.49-59.
- https://www.statista.com/.

Submitted: Revised: Accepted and published online 21.11.2019 27.02.2020 04.03.2020

COMMUNITY PARTICIPATION, RISK MANAGEMENT AND ECOTOURISM SUSTAINABILITY ISSUES IN GHANA

Gabriel ESHUN*

Tourism Programme, KNUST, P.M.B. Kumasi, A/R. Ghana; University of Johannesburg, School of Tourism and Hospitality, South Africa; e-mail: gabriel_eshun_knust@yahoo.co.uk.

Tembi M. TICHAAWA

University of Johannesburg, School of Tourism and Hospitality, College of Business and Economics, South Africa, e-mail: tembit@uj.ac.za

Citation: Eshun, G. & Tichaawa, T.M. (2020). COMMUNITY PARTICIPATION, RISK MANAGEMENT AND ECOTOURISM SUSTAINABILITY ISSUES IN GHANA. GeoJournal of Tourism and Geosites, 28(1), 313–331. https://doi.org/10.30892/gtg.28125-472

Abstract: This study analysed the nexus of risk management and local community participation within the context of ecotourism sustainability. A mixed-methodological approach was employed in data collection and analysis. A sample of 210 people were conveniently selected from the two study communities. The study results were categorised under the following themes; NGOs and their roles in ensuring ecotourism participation toward sustainability: community ecotourism sustainability: government's role in ecotourism marketing and mechanisms; local communities' understanding of ecotourism sustainability, and tourist relationship with local communities. Overall, the study revealed land encroachment, illegal logging, extreme weather, poaching, bushfires and robbery as the main risks threatening the sustainability of the ecotourism sites in Ghana. In sum, the empirical and theoretical outcomes of the study can help toward developing practical risk management strategies for sustainable ecotourism development in Ghana.

Key words: Locals, Risk management, Sustainability, Ecotourism Development, Ghana

INTRODUCTION

The concept of sustainability in ecotourism literature continues to receive research attention especially in the developing countries, owing to it being seen as a win-win strategy for purposes of biodiversity conservation and economic development (Amoako-Acheampong, 2013; Yang & Nair, 2014; Romero-Brito et al., 2016; Ramón-Hidalgo et al., 2018). Although ecotourism cannot replace mass tourism, it is moving away from simply being considered a niche-market to becoming a flagship tourism market in such countries as Ecuador, Nepal, Costa Rica, Kenya and South Africa (Honey, 2008; Akama et al., 2011; Fennell, 2014). However, a number of ecotourism sites are either rapidly degrading, or

_

^{*} Corresponding author

have already been degraded (Honey, 2008; Fennell, 2014; Romero-Brito et al., 2016). Current works on the degradation of ecotourism sites have cited issues of poaching. human-animal conflicts. local community marginalisation. greenwashing, marginalisation of local ecological knowledge, leaking and diversion of funds for biodiversity conservation as the overarching causes (Adiewodah & Beier, 2004: Yang Romero-Brito et al., 2016; Ramón-Hidalgo et al., 2018; Eshun & Tichaawa, 2019). Indeed, literature on ecotourism positions community participation congruently with the goal of achieving sustainability through the niche-market (Tosun, 2000; Scheyvens & Momsen, 2008; Akama et al., 2011; Becken et al., 2014; Eshun & Tonto, 2014; Harilal & Tichaawa, 2018b). The above has called for critical research into the nexus of community participation in ecotourism, risk management and ecotourism sustainability (Kanlayanasukho, 2014; Yang & Nair, 2014; Rogerson, 2015; Harilal et al., 2019).

Despite the increasing research on the potential of ecotourism in sub-Saharan African countries (Akama et al., 2011; Agyeman, 2013; Amoako-Acheampong, 2013; Mensah & Adofo, 2013; Eshun & Tagoe-Darko, 2015; Dumbe et al., 2018; Harilal & Tichaawa, 2018a; Eshun & Tichaawa, 2019), little published evidence from sub-Saharan Africa exists, that teases out the nexus of sustainability, local community participation and risk management at ecotourism sites. Literature on tourism is replete with the premise that health, safety and security issues greatly influence a destination's appeal to actual and potential visitors (Bentley et al., 2004; Moreira, 2007; Gabbatt, 2010; Tarlow, 2011; Idowu et al., 2014; Yang & Nair, 2014; Hajibaba et al., 2016). Indeed, empirical work into the nexus of risk management and ecotourism is germane from the standpoint that ecotourism as nature-based tourism involves coming often in direct contact with especially faunal species, which can pose a direct danger to visitors (Honey, 2008; Amoako-Acheampong, 2013; Yang & Nair, 2014). The panoply of activities that can be associated with ecotourism sites such as traipsing through rainforests, climbing mountains, scuba diving, canopy walking, sleeping in treehouses, camping in the woods, canoeing, paragliding, direct contact with local communities among others place risk management issues directly within the milieu of ecotourism sustainability (Tosun, 2000; Tarlow, 2011; Pennington-Gray & Schroeder, 2013; Becken et al., 2014; Ural, 2015).

Since the 1990s, Ghana has been receiving visitors who could be classed as ecotourists. Currently, Ghana is ranked among the top 25% of African countries with the greatest diversity of wildlife, inter alia: mammals (220 species), birds (725 species), and butterflies (850 species). Ghana is also home to many endangered International Union for Conservation of Nature (IUCN) – Red Data Book Species, including plants (34 species), birds (10 species), mammals (17 species), and reptiles (5 species) (Eshun, 2014). In 2018, the tourism industry in Ghana maintained its position as the fourth highest foreign exchange earner for the country after cocoa, gold and oil and gas. This notwithstanding, risk management practices at ecotourism sites are largely absent in literature despite the impressive literature on ecotourism in the country (see Hens, 2006; Amoako-Acheampong, 2013; Mensah & Adofo, 2013; Eshun & Tonto, 2014; Dumbe et al., 2018; Eshun & Tichaawa, 2019). According to the National Disaster Management Organisation ([NADMO], 2015), tourism sites in Ghana, for the past five years, have recorded the occurrence of avoidable accidents. An example of such an accident is the one that occurred at the Bunso Arboretum, where the canopy walkway collapsed, due to poor managerial attitudes that neglected the walkway's precise physical carrying capacity. The above signifies that good sustainable practices are not ensured at some of the ecotourism sites, thus militating against ecotourism goals serving as a viable tool for the attainment of biodiversity conservation and local development. The current paper, therefore, seeks to contribute to the filling of this knowledge gap in ecotourism research.

LITERATURE REVIEW

Ecotourism, in depicting the interaction between the tourists and the local resources, focuses on capitalist and community development, poverty alleviation and the conservation of wildlife and plants (Regmi and Walter, 2017). The unique selling proposition of ecotourism is its much-publicised image of generating local benefits and also the way in which it affects how tourists perceive, experience and learn about nature, as well as about its landscape, biodiversity, habitats and cultural relics (Kiper, 2013; Eshun and Tagoe-Darko, 2015). Rusko and Prochazkova (2011) note that sustainable development is concerned with development that does not erode ecological, cultural, social, economic and political systems. Recent studies have outlined that sustainability has grown beyond the environment to include human assets and institutions.

In addition, Ural (2015) argues that the sustainability of a tourism destination is significantly influenced by its ability to adapt to changing market conditions, to use resources efficiently and to deliver innovative planning and development strategies regarding risk management. One key consideration that falls under sustainable ecotourism is the consideration of minimising risks, especially at ecotourism sites, so as to ensure safety, health and cutting-edge experiences for the visitors (Eshun, 2011; Amoako-Acheampong, 2013). The 'moments of truth' for ecotourism business lie in its adherence to sustainable tourism principles (Fennell, 2014). Such moments may be seen in the quality of the drinking water, the degree of security provided for tourists, the good culinary services, and environmental education (Angelkova et al., 2012). Ultimately, the rubrics of risk, crisis and disaster management reflect the congruence of tourism risk management (Moreira, 2007). Although the rubrics are used interchangeably, they are not without their fine distinctions. Though the term 'risk management' can be nebulous in meaning, such management in tourism refers to the planning and implementation of processes that are directed towards managing the adverse effects of crises and disasters on tourism (Tarlow, 2011). As the marketplace is moving at a nanosecond pace, tourism risk management has become an ongoing process, entailing the regular monitoring and review of hazards and the elements at risk, as well as the progress, outcomes and efficacy of risk treatment measures (PATA [Pacific Area Travel Association], 2011).

Generally, a crisis affecting the tourism sector manifests as an event that damages the market potential and the reputation of a tourism business and the neighbouring regions (PATA, 2003; PATA, 2011; Yang & Nair, 2014; World Travel and Tourism Council, 2019). For example, due to the outbreak of Ebola in 2014 in West Africa, of which the Gambia did not report even a single case, the tourists' hotel reservations dropped by 65% (Idowu et al., 2014). Some authors distinguish between a 'crisis' and a 'disaster', with the key differences being that crises tend to be more predictable, are caused by anthropogenic action, evidence an observable build-up, and tend to be of relatively long duration, whereas disasters tend to be more sudden, less predictable, caused by natural forces, and generally shorter in duration (Tarlow, 2011; Hidalgo, 2015). Disasters are often defined as high-severity events, and they are seldom frequent (Kuto & Groves, 2004; Ural, 2015; Agyeman et al., 2019). Crises in the tourism industry can take many shapes and forms, inter alia deadly disease outbreaks, terrorism, acts of nature, such as hurricanes or earthquakes, or a jet crashing into a hotel, and vandalism (Tarlow. 2011). Tarlow (2011, p. 2) posits that "the tourism risk manager must be well versed with knowledge on the potential crisis, and the probability of the crisis occurring and must have a plan ready to attempt to prevent the crisis before it occurs".

Pennington-Gray and Schroeder (2013), in discussing safety and security risks, suggested seven types of perceived risk for tourists, namely crime, disease, physical challenges, equipment failure, weather, cultural barriers, and political crises. A cardinal

component of risk management, therefore, is to spearhead communication and consultation among the stakeholders. Risk communication and consultation has to be undertaken at each stage in the process, so as to ensure that all the stakeholders involved contribute to the tourism risk management process (Moreira, 2007; Tarlow, 2011; Ural, 2015). Another important component of risk management is the monitoring and reviewing activity concerned. The component helps to ensure continual improvements and the relevance of the tourism risk management process (Granger, 2000; Yang & Nair, 2014). Ultimately, risk management processes must identify, analyse, evaluate, treat, monitor and review risks to the tourism destinations (Figure 1).

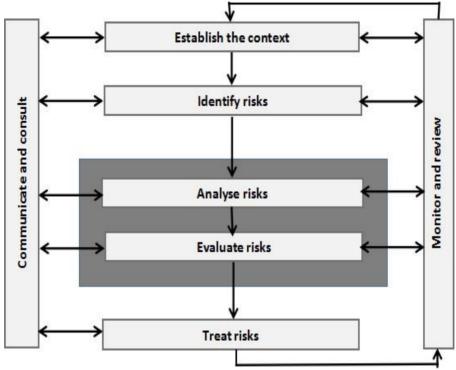


Figure 1. Stages in risk management (Source: Granger, 2000: 20)

Although often ignored in tourism risk management, how the various subsectors in the tourism industry demand different risk management scholarship and practice are important. A clear example of an attempt made to fill the existing knowledge gap, in the above respect, was performed by Bentley et al. (2004). The researchers examined the parameters of the New Zealand tourism industry to establish priorities for intervention, so as to reduce adventure tourism risk, and so as to identify the existing client injury control measures, with the view to establishing guidelines for the development of effective adventure tourism safety management systems. Agyeman et al (2019) maintain that sites with mountains and coasts are likely to be more vulnerable than are those that depend on cultural, or historical, attractions. In addition, risk management in tourism, especially in Africa, is often an ad-hoc activity for addressing what is often catastrophic and cataclysmic events (Eshun, 2011). Bentley et al. (2004), thus, caution tourism risk managers to focus on both the minor (e.g. slips, trips and falls), as well as the catastrophic, events. Hidalgo (2015) also cautions that, with the ascendance of

agritourism, enotourism and ecotourism in the rural areas, there is an urgent need to build the capacity of especially the local communities in addressing climate change impacts on their livelihoods and properties, as well as on the natural environment. Some of the major crises that have occurred in the twenty-first century have had ramifications for tourism. For instance, Regmi and Walter (2017) show that a massive earthquake of 7.6 magnitude hit central Nepal on 25 April 2015, with it being followed by an aftershock of 6.8 magnitude on May 12. The occurrence killed about 9000 people, injured about 23 000, and affected one-third of Nepal's population of 28 million people (National Planning Commission, 2015). Another instance is the case of the Pacific Island countries.

The World Bank (2006) reported the occurrence of 207 major natural disasters (of which 157 were windstorms) between 1950 and 2004 in the region. The disasters concerned affected about 3.5 million people in the region, with an economic damage cost of over US\$6.5 billion. Also, more recently, the 1990s were believed to have endured disaster damage of around US\$2.8 billion in the South Pacific (World Bank, 2006). In the Maldives, the combined direct and indirect costs to tourist resorts, and the loss of government revenue from reductions in the number of tourist arrivals as a result of the 2004 Indian Ocean tsunami, were estimated to exceed US\$300 million (Becken et al., 2014).

Two broad categories of tourism-related crisis exist. The first category includes those crises that are beyond the control of the managers, the politicians and the policymakers (e.g. natural disasters and sudden global economic events). The second category includes those crises that are marked by poor management in tourism development, and the destruction of the existing infrastructure, due to fire, war, terrorism and political upheavals (COMCEC Coordination Office, 2017). Currently, some of the attempts that have been made to address the nexus of tourism and risk include the UNWTO Toolbox for Crisis Communications, the UNEP Climate Change Adaptation and Mitigation in the Tourism Sector, and the UN Tourism and Disaster Risk (PATA, 2011; Kanlayanasukho, 2014). The above notwithstanding, the impacts of crises on tourism are often silent in terms of risk management assessments undertaken at tourism sites, and more so at the ecotourism sites situated in the developing countries (Regmi & Walter, 2017). Regmi and Walter (2017) note further that, despite the devastating nature of Nepal's earthquake in 2015, the National Planning Commission Post-Disaster Needs Assessment sidelined the tourism sector, and no assessment of the earthquake's impact on ecotourism has yet been undertaken.

Noteworthily, destination branding and risk management are regarded as being coterminous (Qu et al., 2011). Many authors posit that destination branding is ineluctably intertwined with a destination's competitiveness in the marketplace, since the existing destinations are becoming replaceable, due to increasing competition from new and emerging destinations worldwide (Goeldner & Ritchie, 2003; Assaker et al., 2011). Indeed, destination branding becomes a key strategy after crises have occurred at sites, since the occurrences often affect a destination's image, in terms of the evoked set of actual and potential visitors (Qu et al., 2011; Angelkova et al., 2012). Hajibaba et al. (2016), showed how the Bali nightclub bombings of 2002 resulted in a 50% drop in the number of tourist arrivals in the six months following the attacks, but gradually the destination is once more gaining market share, due to successful rebranding.

MATERIALS AND METHODS

The current study used a cross-sectional study design and a mixed methodological approach. 'Risk', as a term, is embedded within quantitative-related paradigm, with it often sidelining qualitative studies (Korstanje, 2011; Gozner et al., 2017; Ilieş et al., 2018; 2019; Lincu et al., 2018; Deac & Gozner, 2019;). However, the constructivists posit that

risk is socially constructed and that it is interpreted differently across varying social structures and cultures (Yang & Nair, 2014). Thus, the current study employed the mixed-methodological approach to allow for the undertaking of a nuanced investigation, as the strength of one approach can cover up for the weakness in another (Eshun, 2011; Manful & Eshun, 2015). The study population was drawn from Wechiau and Larabanga, which are the study communities that host the Wechiau Hippo Sanctuary (WHS) and the Mole National Park (MNP), respectively (Figure 2)

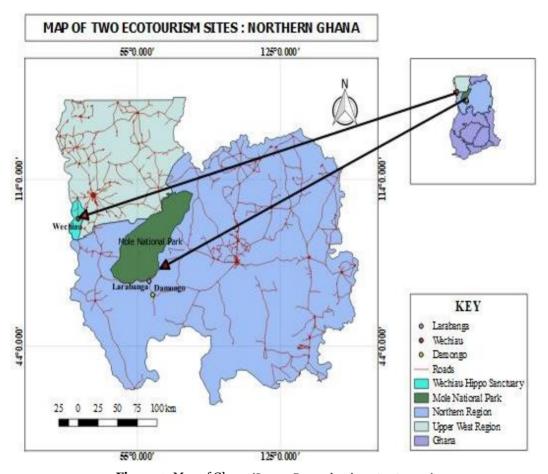


Figure 2. Map of Ghana (Source: Researchers' construct, 2020)

The WHS was initiated by the local community in 1999, which consists of a 40km stretch down the length of the Black Volta River. In terms of biodiversity, the site is a habitat to bats, chameleons, hedgehogs, lizards snakes and over 200 species of birds. Hippos are the flagship species at the Sanctuary (Wildlife Division, 2000). Of the 17 reviews at TripAdvisor on the Sanctuary as at December 2019, 47.1% indicated excellent ecotourism experience, 17.6% very good, 35.3% average and none being poor.

The site is an excellent location for bird watching, village tours, river safaris, and nature walks (Wildlife Division, 2000; Eshun, 2011). The MNP is close to Damongo, the District capital of Larabanga in the Savannah region of Ghana. The Park is the largest of Ghana's national parks and covers 4,840 kms² of undulating terrain in the northern part

of the country. The vegetation is pristine Guinea Savanna with gallery forests along the rivers and streams. Some 742 plant species are represented in the Park. Furthermore, the Park contains 93 mammal species, 33 reptile species, nine species of amphibians and about 300 species of birds. Large animals include the elephant, buffalo, roan antelope, kob, hartebeest, waterbuck, lion, leopard, hyena, four primate species and crocodiles. About 600 elephants are estimated to live in the Park (Wildlife Division, 2020).

Of the 124 reviews on MNP at TripAdvisor as at December 2019, 50.0% indicated excellent ecotourism experience, 32.3% very good, 16.1% average and only two (1.6%) reviewers indicated a poor experience. While Kakum National Park enjoys high visitorship numbers in southern Ghana, MNP is the most popular ecotourism site in northern Ghana (Wildlife Division, 2000). The convenience technique was used to derive information from the residents by means of the administering of semi-structured questionnaires. Churchill and Brown (2004) note that obtaining an accurate sample size in a study relies on the nature of the population, and on the purpose of the study.

The quantitative facet of the study involved 210 people as the sample size, with 105 being selected from each of the two categorised study areas. The purposive sampling technique was employed to select the experts required for the study. Through the conducting of interviews with the experts, the qualitative data were collected. The key stakeholders interviewed included the site managers from the two ecotourism sites, four officers from the Ghana Tourism Authority (GTA), and an officer each from the Environmental Protection Agency, NADMO and the Forestry Commission. Each interview took between 30 to 55 minutes. Following ethical standards as espoused by Manful and Eshuh (2015), informed consent was sought from all the interviewees before any audio-recording was done. The data collected from the survey were processed using descriptive and inferential statistics, with the aid of SPSS version 25. The tools used included correlation and frequency, and the results were presented in tables and charts. The qualitative data were thematically analysed (Eshun, 2011; Mkono, 2013; Eshun, 2014).

RESULTS DISCUSSIONS Sociodemographic data of the respondents

Of the 210 respondents involved in the study, 105 were selected each from Wechiau and Larabanga, which are the leading local communities for WHS and MNP, respectively. The data gathered from Mole revealed that 43% of the respondents were women, whereas, in Wechiau, 42% were women. The 2010 population census shows that there were 20 681 men and 20 499 women in Mole, which reflected the percentage of males to female respondents. Also, the 2010 population census estimated a ratio of 52% men to 48% women to reside in Wechiau (Ghana Statistical Service, 2010). In both areas, the data revealed a relatively young population, with 38% and 47% of the respondents in Mole and Wechiau, falling in the age range of 29 to 39 years respectively. The educational level in both areas was relatively low, with 23% and 46% of the respondents at Mole and Wechiau respectively, holding only secondary school education certificates.

Also, significant to the study was that majority of the respondents have resided in the study communities for more than five years, and therefore all things being equal, were well-informed to provide rich data for addressing the study objectives. In addition, the level of unemployment in Mole was alarming, with 21% of the respondents being jobless, which explained why some 30% of the respondents in Mole earned no income. Also disapprovingly, the percentage of workers earning less than 100 Cedis per month constituted a relatively large proportion, with the majority of such persons being married and resident in the community for longer than five years. In Wechiau, 15% of the respondents received less than 100 Cedis per month (Table 1).

Table 1. Sociodemographic characteristics of the respondents (Data source: Fieldwork, 2018)

Characteristics	% of responses from Mole n=105	% of responses from Wechiau n=105
Sex		
Male	57	58
Female	43	42
Age (in years)		
18-28		
29-39	46	37
40-49	38	47
50<	16	8
	О	8
Occupation		
Farmer	4	5
Herder	4	3
Unemployed	21	12
Civil servant	8	9
Teacher	11	21
Trader	34	26
Driver	4	0
Automechanic	2	0
Guard	3	0
Carpenter	1	0
Nurse	0	12
Traditional leader	0	2
Student	8	10
Educational status		
Basic	55	22
Secondary	23	46
Tertiary	11	25
Uneducated	11	7
Length of stay		
<1 year	4	13
Between 1 and 5 years	3	21
>5 years	93	66
Income generation	, -	
(per month, in Cedis)		
>100	35	15
100-400	31	68
>500	4	7
No income	30	10

Table 1 shows statistics giving Wechiau a slight edge over Mole, which can be seen in the level of income of those employed. Also, 68% of the Wechiau respondents earned between 100 and 400 Cedis per month, which surpassed the same earning level at Mole (31%). Furthermore, in Mole, 30% of the respondents earned no income, compared to 10% of the respondents at Wechiau. In addition, 4% and 7% of the respondents in Mole and Wechiau respectively earned over 500 Cedis per month. The lack of personal development and growth could have been the underlying factor for the reason for the relatively low extent of development in the communities.

NGOs and their roles in ensuring ecotourism sustainability

Ecotourism sustainability involves the taking of much effort by the stakeholders within the industry, of which one is the NGOs (Belsky, 1999; Tosun, 2000). The NGOs, according to the site manager at WHS, had done well in using tourism as a medium for combating some of the economic challenges faced by the local communities. When asked whether the NGOs conducted activities in Wechiau and Mole, all the respondents

answered 'yes', making the affirmative vote 100% for both areas. The study assessed the effectiveness of the roles played by NGOs in terms of the issues of sustainability related to both the study areas (Figure 3). Eshun (2011) argues that NGOs contribute to ecotourism sustainability, especially where they work concurrently with local community members. For instance, an NGO like Agriculture and Natural Resources Management (AGRM), which operates in collaboration with the Canadian government, is involved in tree-planting projects, in providing good drinking water to the locals, and in fencing the Sanctuary. The supply of potable water can fluctuate widely in the study areas concerned.

Furthermore, the NGOs, such as USAID and World Vision, are very active in providing most of the social intervention schemes in the form of financial support, like scholarships for students who distinguish themselves, and social infrastructure, like the construction of Community-Based Health Planning and Services (CHPS), compounds in Larabanga and Damongo, as well as market centres and the rehabilitation of health and school facilities. In Wechiau, at the time of the current study, WindRock International was helping to equip women with skills that helped them to produce Shea butter and other products that they intended to sell to the visitors. The study found that the direct impact of NGOs on ecotourism was the reality in Wechiau, whereas Mole enjoyed other interventions, though not ones that were directly related to ecotourism. There exist some level of interesting research on ecotourism development in Ghana attesting to the fact that the benefits from CBEs tend to be higher than that which accrue from SLEs to local communities (Eshun, 2011; Agyeman, 2013; Amoako-Acheampong, 2013).

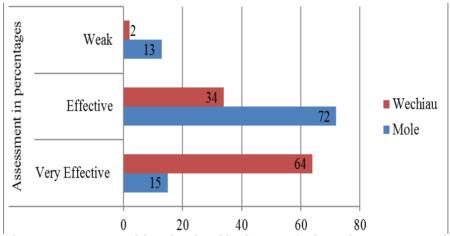


Figure 3. Assessment of the roles played by the NGOs in the study areas concerned (Source: Fieldwork, 2018)

Community participation in ecotourism sustainability

Of the 105 respondents in Mole, 18.1% admitted to being stakeholders in tourism operations in the park, 5.7% were uncertain about their stake in tourism business or operations in the community, and as many as 76.2% of the respondents categorically stated that they had no stake in ecotourism management and development, which also affected their attitude toward ecotourism and its sustainability in the community. A weak linear relationship of (r=0.326) was found to exist between the attitude of the respondents and their view on their stake in the ownership of tourism in the Mole community. The implication was that the attitude of the respondents toward tourism development depended on whether or not they perceived themselves as the owners of

tourism ventures. The presence of a weak linear relationship implies that other factors were affecting the attitude of the respondents towards ecotourism development and sustainability, than just having a stake in the ownership, or not. Eshun (2011) show that some local residents around ecotourism sites in Ghana take their direct or indirect employment as a form of involvement. Furthermore, the study showed that 15.2% of the 105 respondents admitted to receiving some form of benefit that influenced their attitude towards ecotourism development, and some 84.8% indicated otherwise. Based on the minimal benefits accruing to community members at Larabanga, the Pearson Correlation establishes a weak positive relationship between community members' attitude towards ecotourism development at MNP (see Table 2). The above re-establishes the cogency of the earlier argument that economic benefits had the highest influence on the locals in terms of biodiversity stewardship (Tosun, 2000; Eshun, 2011; Fennell, 2014; Eshun & Tagoe-Darko, 2015; Romero-Brito et al., 2016; Eshun & Tichaawa, 2019).

Correlations What has been the Do you see the community attitude of the community as being the stakeholders members towards in terms of ownership? ecotourism development at the site? Do you see the Pearson 1 .326** community as the correlation stakeholders in terms Sig. (two-tailed) .001 of ownership? N 105 105

**Correlation is significant at the 0.01 level (two-tailed)

Table 2. The relationship between community members' attitude towards ecotourism development (Data source: Fieldwork, 2018)

The community could not be sidelined on the basis of their poor educational background, or on that of their lack of knowledge regarding ecotourism since they were well situated to achieve successful ecotourism in Mole. The findings were very different in relation to Wechiau, in relation to which 98% of the respondents admitted to being a part of the stakeholders in ecotourism, with only two replying in the negative, on the basis that they, as individuals, were not consulted when decisions were made. The 98% of the respondents at Wechiau acknowledged that they felt the impact of ecotourism directly, due to the position of WHS as a CBE initiative. In addition, the study teased out the relationship of community members to ecotourism in their domain.

Copious literature posits that when synergy exists among the various stakeholders, ecotourism is able to contribute to sustainably to conservation and local well-being (Honey, 2008; Fennell, 2014; Eshun & Tichaawa, 2019). A prime reason for setting up the Tourism Management Committees, especially at the CBE sites in Ghana, was to ensure that the local interests were taken on board, and to ensure that the issue of directing economic benefits toward local well-being were not sidelined (Eshun & Tagoe-Darko, 2015; Eshun et al., 2016). The manager at WHS stated:

"Tourism has thrived in Wechiau because the people understand the chiefs, management and the other stakeholders. We encourage idea cross-fertilisation, and the rapport that now exists is due to transparency, and accountability created that."

The above statement notwithstanding, the traditional authority in the Wechiau area sometimes marginalised the other subgroups (i.e. the farmers and fishermen in the area were seen as immigrants, and, therefore, had less of a stake in biodiversity conservation

and in the benefits that should have accrued to them from the ecotourism based on the Sanctuary (Adjewodah & Beier, 2004). To ensure full participation in ecotourism, the different groups within the communities concerned, including the women, men and youth, require representation on the Tourism Management Committee (Belsky, 1999; Tosun, 2000; Scheyvens & Momsen, 2008; Eshun, 2011).

Government's role in ecotourism marketing and mechanisms

Tourism development in Ghana has largely been championed by the Ministry of Tourism, the GTA and the Forestry Commission (Amoako-Acheampong, 2013). Currently, the GTA remains the National Tourism Organisation, largely responsible for the marketing of tourism sites across the country (Eshun, 2014). The Forestry Commission, especially through its two organs – the Forestry Service and the Wildlife Department – are in charge of the ownership and development of the especially prominent ecotourist attractions across the country (Mensah & Adofo, 2013). Eshun (2011, p.24) argues that tourism development in Ghana has largely focused on managing the national parks and the slave castles. In the above respect, a respondent forcefully noted:

"Ghana has lost about 32 tourist sites over the last two decades, due to three main factors: the absence of effective marketing strategies, ineffective risk management policies, and institutional weakness in the area of development and maintenance. The existing 34 tourism attractions, including ecotourism sites, will reduce so far as these three factors mentioned are not tackled."

The current study showed that 53.3% of the sample of respondents indicated that the tourists learned about the ecotourism sites through the Internet. However, disparities were present in the results. At Mole, 40.9% of the respondents noted that there was no government initiative to market the site, while 59% agreed partially with the above. Also, 40.3% (of n= 62) further stressed that the community members did nothing to market the Park. At Wechiau, many respondents (77.1%) indicated that the government was not involved in the marketing of the site, whereas some (21.0%) said that the government was involved, and very few (2.9%) were indifferent on the issue. The disparity between the two sites confirmed what Eshun (2014) points out as being the two main types of ecotourism in Ghana, namely state-led ecotourism (SLE) and community-based ecotourism (CBE).

The 3. Major risks communiting ecotourism in Mole (Data source, Fieldwork, 20					
	Risks	Frequency	Percentages		
	Land encroachment	12	9.5		
	Logging	45	35.7		
	Extreme weather	19	15.1		
Valid	Poaching	23	18.3		
	Bushfires	21	16.7		
	Robbery/Crime	6	4.7		
	Total	126	100.0		

Table 3. Major risks confronting ecotourism in Mole (Data source: Fieldwork, 2018)

Consequently, depending on whether an ecotourism site is managed by the government through the Wildlife Division and Forestry Service, or through the Tourism Management Committees, as in the case of the CBE, their corporate strategies differed greatly. The MNP, which is a leading SLE, draws much commitment and working capital from the government. The GTA website markets MNP, alongside designing and distributing brochures in its offices nationwide. Despite some efforts being made at marketing the SLE in Ghana, 42% of the respondents concluded that the government's efforts through the National Tourism Organisations having to do with ecotourism

marketing in the country were totally inadequate. Earlier research than the present implies that the government, particularly through the GTA, must strengthen its marketing strategies at all ecotourism sites across the country (Eshun & Tagoe-Darko, 2015).

Hunters are the main culprits, who deliberately, or through carelessness, set some portions of the Park or its boundaries on fire, with the concomitant biodiversity loss. A respondent explained:

"Some deliberately set fires around the edges of the Park to vent their anger at the Park authorities. Some have not been treated fairly, because they had to evacuate their farming lands for the creation of the Park without compensation."

Land encroachment was also found to be a problem, with, for example, 9.5% of the risks being due to those who defiantly bought plots of land that had been legally allocated to the Park authority, therefore generating land ownership disputes. The encroachment of parks and reserves is increasingly becoming a problem in Ghana, especially with the rapid urbanisation (Adjewodah & Beier, 2004). The rapid urbanisation has also resulted in high demand for wood, especially for fuel and furniture (35.7%). Poaching registered 18.3% of the risks confronting the Park. Some poachers had suffered fatal attacks by the animals, as can be seen in the following statement:

"Four persons were killed in 2016 and 2017 by buffalos at the Park. But the fear is, if these act[s] of poaching and logging are not prevented, the Park will soon become a wasteland, unsuitable for ecotourism. These illegal acts will continue unless the silent and weak institutions start to bite."

Interestingly, the literature on tourism risk management has yet to engage seriously in how climate change affects tourism (Moreira, 2007; DeChazal & Rounsevell, 2009). Hidalgo (2015), researching the ramifications of climate change on the agriecotourism businesses in the Philippines, argued that climate change will continue to affect both current and future tourism demands worldwide. For example, the temperatures between November and March at Mole contribute to the low visitorship to the Park, with it remaining a risk (15.1%). Beyond the above, some 4.7% of the respondents agreed that the tourists to the areas concerned were prone to much criminal behaviour, with highway robbery being mentioned as a major factor. Travelling the road from Larabanga to Fofulso, there were no police barracks along the almost 140km stretch of road to enforce the key measures put in place to minimise the attendant risks (Table 4).

Table 4. Measures to manage risks at MIVI (Data source. Ficiawork, 2010)	
Risk	Management mechanism
Bush burning	 Fining of the culprits Monetary rewards made to persons who helped arrest the perpetrators A satellite disk over the entire Park to monitor activities therein
Poaching	 A satellite disk to monitor activities in and around the Park A 24-hour security patrol service in and around the Park Prosecuting of the culprits to serve as a deterrent to potential culprits
Land encroachment	 Education regarding land markings The taking of legal measures to protect the Park's boundaries Mediating of disputes between the Park management and the affected community members Compensations paid to those affected Education in general
Logging	 The deployment of park guards to keep the forest safe Penalising of those intending to log, or who are caught in the act of logging Education The usage of the satellite to check activities in the Park

Table 4. Measures to manage risks at MNP (Data source: Fieldwork, 2018)

Also, on the issue of the highway robbery of, and extortion from tourists, the respondents were not able to suggest specific preventative measures, except to depend on the central government to protect them. At the time of the study, 71 (67.6%) of the respondents did not think that the community had to do anything to manage the risks that threatened to uproot the sustainability of ecotourism, while 11 (10.4%) thought that it did, and 23 (22.0%) were uncertain about the issue. Interestingly, none of the respondents mentioned the raiding of farms by elephants as a source of conflict between themselves and management, although there exists some amount of literature in Ghana attesting to this (Adjewodah & Beier, 2004; Eshun, 2011; Eshun & Tonto, 2014).

A similar study at the WHS showed that 10 (6.6%) of the respondents pointed out that tribal conflict was a major risk to the sustainability of the Sanctuary (Table 5). This addition was totally absent in the result from MNP. There are more migrants to the Weichiua, as compared to Mole and this might account for the conflict among tribes. Also, both MNP and WHS have issues of illegal logging taking place at the locations, which therefore demands that management and the local communities devise the right strategies to curb the trend. Also, the issue of poaching registered a lower percentage at WHS. Two factors are immediately accountable for this result. First, there is a huge community reverence for the hippos at WHS, which may have positive stewardship towards the other faunal species in the Sanctuary. Secondly, there is more access to protein sources around the Wechiau area because of especially the Black volta.

	Risks	Frequency	Percentages
Valid	Land encroachment	14	9.3
	Illegal Logging	71	47.0
	Extreme weather	22	14.6
	Poaching	10	6.6
	Bushfires/Wildfires	21	13.9
	Tribal Conflicts	10	6.6
	Robbery/Crime	3	2.0
	Total	151	100.0

Table 5. Major risks confronting ecotourism at WHS (Data source: Fieldwork, 2018)

Furthermore, interviews were conducted with the manager and staff of the WHS, on ways of addressing risks at the Sanctuary. Some of the risk measures are presented in Table 6.

Table 6. Measures to manage risks at WHS (Data source: Fieldwork, 2018)

The rangers: The Park management team had employed some of the youth to patrol the Park during the day, and sometimes at night. The activities of the so-called 'Park Rangers' were usually limited to the day, because of the distance from the main township to the site, and also because of the absence of power supply between the community and the site. Street lights were also not available.

Orientation: The community members were orientated to appreciate the presence of the hippos. Their orientation took two main forms: the 'Kaka Festival', with 'Kaka' meaning 'hippos' in the local language; and community meetings, at which the views of the community members were voiced. The adoption of such approaches orientated the local community members to see themselves as the stewards of the surrounding ecosystems.

Fence construction: In partnership with the Canadian government, a fence was being built around the Sanctuary, which would prevent especially illegal fishermen and poachers from pursuing their unlawful activities.

Conflict resolution and possible prevention: The government had adopted the use of such alternative dispute resolution mechanisms as negotiation to bring the aggrieved groups to consensus. In terms of crime minimisation, the visibility of the police was increased through the patrolling of the police team, and through the erection of police barriers along the major community roads.

Unlike in the case of the fauna in Mole, the community members in Wechiau believed that the hippos in the Sanctuary had saved them in their most recent battle with a particular tribe from Burkina Faso. Thus, they saw the hippos as animals that kept them safe. Consequently, the sustainability of the animals meant life and the absence of death, and the community members were intrinsically inclined to protect them. Eshun and Tonto (2014) show that the threats to the monkeys (i.e. the Mona and Black and White Colobu, the flagship species), at Boabeng-Fiema Sanctuary, are minimal, because of the locals' reverence for them as children of gods.

Local communities' understanding of ecotourism sustainability

The existing plethora of research on ecotourism (Weaver & Lawton, 2007; Scheyvens & Momsen, 2008; Rusko & Prochazkova, 2011; Eshun & Tagoe-Darko, 2015; Regmi & Walter, 2017; Ramón-Hidalgo et al., 2018) has largely been silent on how the local communities define and interpret the concept of sustainability in relation to ecotourism development. The study, therefore, asked the respondents to define the meaning of 'ecotourism sustainability' (Figure 4). A total of 229 responses were obtained from the two study communities, of which balance for local development and biodiversity conservation registering the highest percentage of 31%.

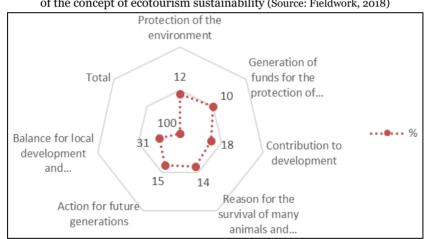


Figure 3. Respondents' understanding of the concept of ecotourism sustainability (Source: Fieldwork, 2018)

Table 7. The relationship between the educational level of the respondents and their understanding of ecotourism sustainability (Data source: Fieldwork, 2018)

8	• •	, ,
Educational level	Pearson correlation sig. (two-tailed) N	1 .039 105
What is your understanding of 'ecotourism sustainability'?	Pearson correlation sig. (two-tailed) N	-0.201* .039 105

^{*.} Correlation is significant at the 0.05 level (two-tailed)

The locals have a fair understanding of the meaning of sustainability, at least in theory. Due to the relatively high educational level Wechiau, the study conducted a Pearson Correlation, which established a relationship between community members' educational level and their understanding of ecotourism sustainability (Table 7). The result of r = -0.21 showed that the level of education of a respondent should not be

taken as an indication of their level of understanding of the nature of ecotourism sustainability. The existing research attests to an understanding beyond the highest educational level attained, in view of the special orientation of community members that help them to understand and to gain skills that should help them contribute to sustainability (Eshun, 2011; Hidalgo, 2015; Ramón-Hidalgo et al., 2018).

A number of legislative instruments promulgated in the last four decades have helped to manage, develop and conserve biodiversity in Ghana (Amoako-Acheampong, 2013; Mensah & Adofo, 2013; Ramón-Hidalgo et al., 2018). Most of the statutes are sector-based, and they can be conflicting, inchoate, obsolete and unenforceable (Eshun, 2014). Currently, Western scientific knowledge underpins global biodiversity conservation (Hens, 2006; Eshun, 2011, 2014; Eshun & Tagoe-Darko, 2015). Dumbe et al. (2018), therefore, argue convincingly that ecotourism 'experts' must avoid seeing local people as lacking knowledge that could ultimately benefit ecotourism sustainability. As a point in case, whereas the tourists view the hippos at Wechiau as mere animals, the locals hold the belief that the hippos protect them from their enemies. Consequently, many proponents of ecotourism sustainability have argued for creating platforms that allow for the host community to bring their various interests and views on board in pertinent decision-making (Eshun, 2011; Rusko & Prochazkova, 2011; Regmi & Walter, 2017).

Tourist inflow and relationship with the local communities

The sustainability of ecotourism depends on the relationship that exists between the host and the tourist (Ramón-Hidalgo et al., 2018). In the current study, the responses that were received from the respondents showed that the respondents of the study areas were friendly towards the visitors. Over eighty percent (83.8%) of the respondents at Mole indicated that the community members were friendly toward the tourists, with 16.2% stating that the community members were very friendly, which is a positive indication for ecotourism sustainability. However, 8.6% insisted that the tourists posed a threat for them, while 91.4% said that the tourists posed none. Similarly, in Wechiau, 63.8% and 36.2% of the respondents stated that the community members were friendly and very friendly, respectively, toward the visitors.

At Wechiau, only 1.9% of the respondents said that the presence of the tourists posed a threat to their culture. They further indicated that they were sidelined in the management of the Sanctuary, which affected their interaction with the visitors there. In Mole, the data on the threats posed by the tourists were complex. The inflow of tourists to a destination is never static (Honey, 2008; Akama et al., 2011; Amoako-Acheampong, 2013; Fennell, 2014; Eshun & Tichaawa, 2019). This said, data obtained for the study showed that since 2001, tourism inflows had consistently exceeded 900 tourists in both of the two study areas. The manager at MNP stated:

"The increase in 2008 was due to the African Cup of Nations hosted in Ghana. The Tamale Stadium hosted the Group D matches and brought a lot of football enthusiasts to the area. The years 2016 and 2017 were challenging, because of the severity of the harmattan and [because of] the closure of the Buipe and Yapei Bridges."

The outbreak of Ebola from 2014 onwards accounted for a fall in the number of visitors to the Park, especially in terms of its international visitors. In Wechiau, the figures for visitors have consistently been above 900 per year since 2004. Hidalgo (2015) argues that environmental factors determine the inflow of tourists, with such factors manifesting themselves in the form of natural disasters, the outbreak of disease, or weather conditions. Currently, at WHS during the dry season there is relatively higher numbers of international tourists visiting the Sanctuary, whereas midyear, between June and October, there are more domestic tourists visiting the site.

Most of the tourists to the two ecotourism sites were found to be allocentric (Eshun, 2014; Eshun & Tonto, 2014). However, among the domestic tourists, distance was regarded as a discouraging factor. From Accra to Wa is about 700km via land, from Wa to Wechiau is about 22km, and from Wechiau to the Sanctuary is 18km (total 740km), which tends to frustrate the average ecotourist. Table 8 shows the tourist inflow to WHS, along with the amount of revenue generated each year. The remarkable increase in the tourist inflow from 2005 to 2006 was due to the rebranding and development of the site, with financial support granted by the Canadian government.

Table 8 . Tourist inflow and amount of revenue						
generation at Wechiau on a yearly basis (Data source: Fieldwork)						
		-			-	

Year	Number of International visits	Number of domestic visits	Total number of visits made	Amount of revenue generated (Cedis)
2004	870	634	1504	8114.45
2005	391	550	941	5073.30
2006	1144	512	1656	7551.85
2007	1183	673	1856	11 725.30
2008	1018	797	1815	15 867.15
2009	1339	931	2270	25 695.05
2010	1236	678	1914	14 493.50
2011	825	759	1584	23 300.00
2012	961	694	1655	21 561.00
2013	965	943	1908	26 484.80
2014	788	499	1287	23 840.00
2015	459	364	823	15 722.00
2016	344	419	763	23 922.00
2017	567	350	917	40 672.00

From 2006 to 2010, the inflow of international tourists to the area was in the thousands. The highest was in terms of domestic tourism in 2009, with 931 tourists. From 2011, the numbers began to fall again, with the number of international visits falling back into the hundreds, with the major causes being the threat of an outbreak of Ebola in Africa, and the political tensions in the neighbouring countries, like Cote d'Ivoire.

In 2016, the numbers fell drastically, especially in terms of international visits, which was due to the severity of harmattan, which called for the cancelling of many flights. The above-mentioned factors lay further credence to the evidence that tourism products can be affected by externally induced disruption (Gabbatt, 2010; PATA, 2011).

CONCLUSION

In the face of the many risks and the poor biodiversity conservation principles concerned, there is a need to unravel the concept of sustainability in ecotourism, especially in the developing countries, where the concept is gaining more attention as a win-win strategy for purposes of biodiversity conservation and economic development (Yang & Nair, 2014; Romero-Brito et al., 2016; Agyeman et al., 2019). Sustainability is a cardinal concept in terms of ecotourism-related scholarship (Honey, 2008; Kimbu & Tichaawa, 2018; Ramón-Hidalgo et al., 2018). A number of ecotourism sites are either rapidly degrading, or have already been degraded (Fennell, 2014; Romero-Brito et al., 2016). The above has called for critical research into such issues as the branding and marketing of ecotourism sites, the community participation in ecotourism, the risks facing biodiversity, and the ecotourism sustainability concerned (Rogerson, 2015; Eshun & Tonto, 2014; Yang & Nair, 2014; Romero-Brito et al., 2016).

Other works on ecotourism position community participation congruently with sustainability (Tosun, 2000; Scheyvens & Momsen, 2008; Becken et al., 2014; Eshun & Tonto, 2014). Building on the earlier studies undertaken in the same field, the work showed that the level of local participation in ecotourism was relatively low, especially at the MNP. Research has shown that the amount of local participation at the SLEs in Ghana tends to be relatively low (Amoako-Acheampong, 2013; Mensah & Adofo, 2013; Eshun and Tagoe-Darko, 2015; Agyeman et al., 2019). In addition, the few benefits from both the SLEs and CBEs in Ghana have been the cause of disgruntlement among some fringe communities in Ghana (Agyeman, 2013; Eshun, 2014; Eshun & Tagoe-Darko, 2015; Agyeman et al., 2019). Furthermore, the study shows that the nexus of risk management and ecotourism sustainability has no specific practices to help protect biodiversity and visitors. The existing risk management is not holistic and remains largely ad hoc in approach (with it often being initiated only when a disaster occurs). Currently, the risks facing the study sites include mostly logging, bushfires and poaching, as well as criminal activities. The study also shows that the marketing strategies at the study sites remain largely ineffective. Although hippos and elephants remain the flagship species of WHS and MNP respectively, the marketing strategies involved have yet to exceed the offering of such unique selling propositions that set the sites apart from other such sites in Ghana. In sum, further research can build on the empirical and theoretical outcomes of the study and employ Granger's (2000) proposed view of the stages in risk management, toward developing practical risk management strategies for sustainable ecotourism development in Ghana and beyond.

REFERENCES

- Adjewodah, P. & Beier, P. (2004). Working with traditional authorities to conserve nature in West Africa. *African Conservation Telegraph*, 1(2), 3-5.
- Agyeman, Y.B. (2013). The role of local knowledge in sustaining ecotourism livelihood as an adaptation to climate change. Doctoral thesis submitted to the University of Waterloo.
- Agyeman, Y. B., Yeboah, A. O., & Ashie, E. (2019). Protected areas and poverty reduction: The role of ecotourism livelihood in local communities in Ghana. *Community Development*, 50(1), 73-91.
- Akama, J.S., Maingi, S. & Carmago, B.A. (2011). Wildlife conservation, safari tourism and the role of tourism certification in Kenya; a postcolonial critique. *Tourism Recreation Research*, 36(3), 281-291.
- Amoako-Acheampong, A. (2013). Ecotourism and local community development: a study of the Wechiau Community Hippopotamus Sanctuary in the Upper West Region of Ghana. MPhil thesis submitted to the University for Development Studies.
- Angelkova, T., Koteski, C., Jakovlev, Z. & Mitrevska, E. (2012). Sustainability and competitiveness of tourism. *Procedia Social and Behavioral Sciences*, 44, 221-227.
- Assaker, G., Vinzi, V. & O'Connor, P. (2011). Examining the effect of novelty seeking, satisfaction, and destination image on tourists' return pattern: a two factor, non-linear latent growth model. *Tourism Management*, 32, 890-901.
- Becken, S., Mahon, R., Rennie, H. & Shakeela, A. (2014). The Tourism Disaster Vulnerability Framework: an application to tourism in small island destinations. *Natural Hazards*, 71(1), 955-972.
- Belsky, J. (1999). Misrepresenting communities: The politics of community-based rural ecotourism in Gales Point Manatee, Belize. *Rural Sociology*, 64(4), 641–66.
- Bentley, T.A., Page, S. & Walker, L. (2004). The safety experience of New Zealand adventure tourism operators. Journal of Travel in the Mediterranean, 11, 280-286.
- Churchill, G.A. & Brown, T.J. (2004). Basic marketing research in education: a conceptual introduction. Longman, New York.
- Deac, L.A., Gozner, M. & Sambou A. (2019). Ethnographic Museums in the Rural Areas of Crisana Region, Romania Keepers of Local Heritage, Tradition and Lifestyle. *GeoJournal of Tourism and Geosites*, 27(4), 1251–1260.
- DeChazal, J. & Rounsevell, M.D.A. (2009). Land-use and climate change within assessments of biodiversity change: A review. *Global Environmental Change* 19, 306–315.
- Dumbe, Y., Seebaway, Z.M. & Eshun, G. (2018). The nexus of traditional ecological knowledge and ecotourism development: a case of Bobiri Forest and Butterfly Sanctuary, Ghana. *African Journal of Hospitality, Tourism and Leisure*, 7, 1-19.

- Eshun, G. (2011). Ecotourism Development in Ghana: A Postcolonial Study with Focus on Boabeng-Fiema Monkey Sanctuary and Kakum National Park. PhD Thesis. Universitity of Leicester. Unpublished.
- Eshun, G.(2014). Towards the dual mandate of ecotourism in Africa: a comparative study from Ghana. *African Insight*, 44(3), 164-184.
- Eshun, G. & Tonto, J.N.P. (2014). Community-based ecotourism: its socio-economic impacts at Boabeng-Fiema Monkey Sanctuary, Ghana. *Bulletin of Geography, Socio-economic Series*, 26, 67-81.
- Eshun, G. & Tagoe-Darko, E. (2015). Ecotourism development in Ghana: a postcolonial analysis. *Development Southern Africa*, 32, 392-406.
- Eshun, G., Adjei, P. O-W. & Segbefia, AY. (2016). Ecotourism and Marketing Nexus: A Study at Bobiri Forest Reserve and Butterfly Sanctuary in Ghana. *African Journal of Hospitality, Tourism and Leisure*, 5 (2):1-10.
- Eshun, G. & Tichaawa, T.M. (2019). Reconsidering participation for local community well-being in ecotourism in Ghana. *GeoJournal of Tourism and Geosites*, 27(4), 1184-1200.
- Fennell, D.A. (2014). Ecotourism. Routledge, New York, NY.
- Gabbatt, A.. (2010). Volcanic ash cloud cost European business up to €2.5bn, http://www.guardian.co.uk/world/2010/apr/27/iceland-volcano-cost-business- europe/, accessed 28.04.2010.
- Goeldner, C.R. & Ritchie, J.R. (2003). Tourism principles, practices, philosophies. Wiley, Hoboken, NJ.
- Gozner, M., Tătar, C.F., Stupariu, M. & Măduta, F.M. (2017). Nature, Photography and Tourism in BihorVlădeasa Mountains (Romania). *GeoJournal of Tourism and Geosites*, Year X, Volume 20, OradeaGdansk, Romania-Poland, Editura Universității din Oradea.
- Granger, K. (2000). An information infrastructure for disaster management in Pacific island countries.

 Australian Journal of Emergency Management. Autumn, 20-32.
- Hajibaba, H., Boztug, Y. & Dolnicar, S. (2016). Preventing tourists from cancelling in times of crisis. Annals of Tourism Research, 60, 48-62.
- Harilal, V. & Tichaawa, T.M. (2018a). Ecotourism and alternate livelihood strategies in Cameroon's protected areas. *EuroEconomica*, 37(2), 133-147.
- Harilal, V. & Tichaawa, T.M. (2018b). Community awareness and understanding of eco-tourism within the Cameroonian context. In Van de Wald, A, Kotze, N, Barker, C & Kruger, E (eds), Proceedings of the Biennial Conference of the Society of South African Geographers: 1 5 October 2018, University of the Free State, pp. 163-177.
- Harilal, V., Tichaawa, T.M. & Saarinen, J. (2019). Development without policy: Tourism planning and research needs in Cameroon, Central Africa. *Tourism Planning and Development*, 16(6), 696-705.
- Hens, L. (2006). Indigenous knowledge and biodiversity conservation and management in Ghana. *Journal of Human Ecology*, 20(1), 21-30.
- Hidalgo, H.A. (2015). Vulnerability assessment of agri-ecotourism communities as influenced by climate change. *International Journal of Advanced Science Engineering Information Technology*, 5(6).
- Honey, M. (2008). Ecotourism and sustainable development: who owns paradise?. Island Press, Washington, DC. Idowu, B., Atufe, F., Osuagwu, N., Bello, O., Echenin, S., Ogunmila, T. & Okeke, C. (2014). How Ebola is taking toll on Nigeria Economy, http://leadership.ng/business/381861/ebola-takingtoll-nigerias-economy, accessed on 04.02.2015.
- Ilies, D.C., Buhas, R., Ilies, M., Ilies, A., Gaceu, O., Pop, A.C., Marcu, F., Buhas, S.D., Gozner, M., & Baias, S. (2018). Sport Activities and Leisure in Nature 2000 Protected Area Red Valley, Romania. *Journal of Environmental Protection and Ecology*, 19, No 1, 367–372.
- Environmental Protection and Ecology, 19, No 1, 367–372.

 Ilies, D. C., Onet, A., Marcu, F.M., Gaceu, O.R., Timar, A., Baias, S., Ilies, A., Herman, G.V. Costea, M., Ţepelea, M., Josan, I. & Wendt, J. (2018). Investigations regarding the air quality in the historic wooden church in Oradea city, Romania, in Environmental Engineering and Management Journal, Vol.17, no11, pp.2731-2739, http://www.eemj.icpm.tuiasi.ro/pdfs/accepted/204_294_Ilie%C8%99_17.pdf.
- Ilies, D.C., Onet, A., Herman, G.V., Indrie, L., Ilies, A., Burtă L., Gaceu, O., Marcu, F., Baias, S., Caciora, T., Marcu, A.P., Pavel, O.I., Costea, M., Ilies, M., Wendt, J. & Mihincău D. (2019), Exploring the indoor environment of heritage buildings and its role in the conservation of valuable objects, *Environmental Engineering and Management Journal*, December Vol. 18, No. 12, 2579-2586.
- Indrie L., Ilies, D. C., Onet, A., Wendt, J. Ilies, M., Timar, A., Ilies, A., Baias, S. & Herman, G.V. (2019). Indoor air quality of museums and conservation of textiles art works. Case study: Salacea Museum House, Romania, *Industria textile*, Vol. 70 No 1, pp 88-93.
- Kanlayanasukho, V. (2014). An analysis of the tourism industry's management responses to political crises in *Thailand*. in Ritchie, B.W. & Campiranon, K. (eds). Tourism crisis and disaster management in the Asia-Pacific, CABI Publishing, Wallingford.
- Kimbu, A.N. & Tichaawa, T.M. (2018). Sustainable development goals and socio-economic development through tourism in central Africa: Myth or reality? *GeoJournal of Tourism and Geosites*, 23(3), 780-796.
- Kiper, T. (2013). Role of ecotourism in sustainable development. Advances in Landscape Architecture, www.intechopen.com/books/advances-in-landscape-architecture/role-of-ecotourism-in-sustainabledevelopment/, accessed 20.08.2019.
- Korstanje, M.E. (2011). The fear of traveling: a new perspective for tourism and hospitality. Anatolia, 22(2), 222-233.

- Kuto, B.K. & Groves, J.L. (2004). The effect of terrorism: evaluating Kenya's tourism crisis, e-Review of Tourism Research, 2(4), 88-94.
- Lincu, A., Ilieş, M., Ilieş, D.C., Herman, G.V., Baias, S., Gozner, M., Costea, M., & Mihincău, D. (2018). Conservating the traditional cellars of Salacea, Bihor County, Romania. *GeoJournal of Tourism and Geosites*, 23(3), 748–758, https://doi.org/10.30892/gtg.23311-325.
- Manful, E. & Eshun, G. (2015). Ethical Ethos in Cross-National Social Research: Ghanaian researchers' reflections. *International Journal of Research in Social Sciences*, 5(1), 238 251.
- Mensah, I. & Adofo, E. (2013). Community participation in ecotourism: the case of Bobiri Forest Reserve and Butterfly Sanctuary in Ashanti Region of Ghana. *American Journal of Tourism Management*, 2, 34-42.
- Mkono, M. (2013). African and Western tourists: object authenticity quest?. *Annals of Tourism Research*, 41, 195-214. Moreira, P. (2007). *Aftermath of crises and disasters: notes for an impact assessment approach*. In Laws, E.,
- Prideaux, B. & Chon, K. (eds). Crisis management in tourism, CABI Publishing, Wallingford.

 Pennington-Gray, L. & Schroeder, A. (2013). International tourist's perceptions of safety and security: the role of social media. *Matkailututkimus*. 9(1), 7-20.
- Qu, H., Kim, L.H. & Im, H.H. (2011). A model of destination branding: integrating the concepts of the branding and destination image. *Tourism Management*, 32, 465-476.
- Ramón-Hidalgo, A.-E., Kozak, R.A., Harshaw, H.W. & Tindall, D.B. (2018). Differential effects of cognitive and structural social capital on empowerment in two community ecotourism projects in Ghana. *Society and Natural Resources*, 31(1), 57-73.
- Regmi, K.D. & Walter, P. (2017). Modernisation theory, ecotourism policy, and sustainable development for poor countries of the global South: perspectives from Nepal. *International Journal of Sustainable Development and World Ecology*. 24(1), 1-14.
- Romero-Brito, T.P., Buckley, R.C. & Byrne, J. (2016). NGO partnerships in using ecotourism for conservation: systematic review and meta-analysis. *PLoS ONE*, 11(11).
- Rusko, M. & Prochazkova, D. (2011). Solution to the problems of the sustainable development management.

 Research papers, Faculty of Materials Science and Technology, Slovak University of Technology.
- Scheyvens, R. and Momsen, JH. (2008). Tourism and Poverty Reduction: Issues for Small Island States, *Tourism Geographies*, 10(1):22-4.
- Tarlow, P.E. (2011). Tourism risk management in an age of terrorism. Economía Autónoma, 4(7), 18-30.
- Tosun, C. (2000). Limits to community participation in the tourism development process in developing countries. *Tourism Management*, 21(6), 613-633.
- Ural, M. (2015). Importance of risk management for the sustainability of tourism. *Journal of Social Sciences Institute*, 18(33), 163-178.
- Rogerson, C.M. (2015). Tourism and regional development: The Case of South Africa's distressed areas. Development Southern Africa, 32 (2), 277-291.
- Weaver, D.B. & Lawton, L.J. (2007). Twenty years on: the state of contemporary ecotourism research. *Tourism Management*, 28(5), 1168-1179.
- Yang, C.L. & Nair, V. (2014). Risk perception study in tourism: are we really measuring perceived risk?. *Procedia – Social and Behavioral Sciences*, 144, 322-327.
- *** COMCEC Coordination Office. (2017). Risk and crisis management in tourism sector: recovery from crisis in the OIC member countries report. The Office, Ankara.
- *** Ghana Statistical Service. (2010). Population and housing census: Central Region, Analysis of District Data and Implications for Planning. Accra: Ghana.
- *** National Planning Commission. (2015). Nepal earthquake 2015: post disaster needs assessment. NPC, Kathmandu.
- *** National Disaster Management Organisation. (2015). Disaster at Bunso, retrieved from https://mobile.ghanaweb.com/GhanaHomepage/regional/Bunso-Canopy-Walkway-Incident-was-caused by-overloading/ Accessed/20/08/18.
- *** Pacific Area Travel Association (PATA). (2003). Crisis. It won't happen to us!. PATA, Bangkok.
- *** Pacific Area Travel Association (PATA). (2011). Bounce back tourism risk, crisis and recovery management guide, PATA, Bangkok.
- *** Wildlife Division. (2000). Wildlife Division Policy for Collaborative Community Based Wildlife Management. September 2000. Accra: Wildlife Division.
- *** World Bank .(2006). Not if But When: adapting to natural hazards in the Pacific Islands Region. The World Bank, Sydney
- *** World Bank. (2018). Improving vocational training and skills development delivery systems for the tourism sector in Ghana. Unpublished, Accra.
- *** World Travel and Tourism Council. (2019). Travel and tourism economic impact 2017, South Africa. WTTC, London.

Submitted: Revised: Accepted and published online 26.10.2019 28.02.2020 04.02.2020

SPECIALLY PROTECTED AREAS OF THE KALININGRAD REGION: CONTINUITY OR A NEW BEGINNING

Andrey V. LEVCHENKOV*

Immanuel Kant Baltic Federal University, Institute of Environmental Management, Spatial Development and Town Planning, Department of Urban Planning, Land Management and Design, 14A Alexander-Nevsky Street, 236041, Kaliningrad, Russia, e-mail: ALevchenkov@kantiana.ru

Yuliya N. GRISHANOVA

Immanuel Kant Baltic Federal University, Institute of Living Systems, Laboratory of Ecology and Biodiversity, 14A Alexander-Nevsky Street, 236041, Kaliningrad, Russia, e-mail: IGrishanova@kantiana.ru

Citation: Levchenkov, A.V. & Grishanova, N.Y. (2020). SPECIALLY PROTECTED AREAS OF THE KALININGRAD REGION: CONTINUITY OR A NEW BEGINNING. GeoJournal of Tourism and Geosites, 28(1), 332–348. https://doi.org/10.30892/gtg.28126-473

Abstract: The paper analyses the formation of Specially Protected Areas (SPAs) in the south-east of the Baltic region within the borders of modern Kaliningrad region over the last century. The purpose was to update the look at the continuity in the field of environmental conservation. The study draws on previously unpublished post-war archive data and on the evidence of recent changes in the SPA system of the region. To investigate the continuity of environmental activities in the area, original German sources on the key SPAs of East Prussia and the reasons for their formation were analysed.

Key words: Specially Protected Areas (SPAs), Kaliningrad region, East Prussia, natural monuments, environmental conservation

* * * * * *

INTRODUCTION

The history of environmental activities on the territory of the present-day Kaliningrad region is among the least researched issues of regional studies. Russian sources provide scarce information on the history and specifics of the formation of protected natural areas in the pre-war period. Only a few natural objects, such as Zehlau-Bruch (Zehlau raised bog), and **Rominten Forest** surface in research (Schwill et al., 2010). It was not until the 1990s that scientific community and public initiative groups began to show more attention to this issue (Gubareva, 1994; Grishanov, 1998; Kuchenyova, 1998). Nonetheless, the Soviet period of environmental conservation of the region is usually poorly documented, with inconsistent dates of SPAs formation mentioned in various sources. For example, according to different sources, the formation of the first four SPAs date back to 1963, 1967, and 1973 (Tsybin, 2004; Volkova et al.,

^{*} Corresponding author

2017). Among the current publications on this topic a series on natural monuments should be mentioned (Medvedev, 2016, 2017). Meanwhile, it is crucially important to find out to what extent modern environmental conservation inherits from the pre-war tradition, or whether it was methodologically and culturally formed from grassroot. We believe that this disputable issue deserves thorough analysis.

RESEARCH METHODS AND MATERIALS

The reconstruction and analysis of environmental conservation tools, their formation and development in the south-east of the Baltic region are of undoubted interest. To solve this task, we used the methodology of analysing available – primarily German – sources: we also resorted to post-war archival materials. The primary sources dating back to the period of implementation of environmental activities in the Kaliningrad region were not much in academic circulation, except for secondary literature (Lohmeyer, 1961; Kramer, 1990). Moreover, studies were primarily focused on just two aspects - SPA emergence time and their characteristics, while the internal logic of decision making and compliance with national environmental development processes remained outside the scope of research. Another aspect of the study was continuity of environmental activities, with the questions whether the development of the institution of protected areas was synchronous in the pre- and post-war period and in what directions it developed (often multi-vectorally). To eliminate the terminological confusion, the authors used the term Protected Areas (PAs) for the pre-war period (direct translation of Naturschutzgebiet). The term Specially Protected Areas (SPAs) was used in relation to the Soviet and present-time periods of environmental conservation history in the southeast of the region (according to the Federal Law of the Russian Federation No. 33-FL).

RESULTS AND DISCUSSION

1. THE PRE-WAR PERIOD: THE BEGINNING OF ENVIRONMENTAL CONSERVATION

The idea of protecting natural objects at the state level in the German states originates from the movement for protection of historical and cultural monuments. At the end of the 19th century there was a consensus of all stakeholders (state and municipal bodies, public and private persons) which gave impetus to the formation of relevant institutions. The legislative basis for natural monuments protection in Prussia was set up by the decree of 19.11.1891, which delegated some authority and responsibilities in this area to the provinces. Aiming to work out general conceptual principles for that matter, the provincial president of East Prussia Count Udo zu Stolberg-Wernigerode (1840–1910) organized a conference in Koenigsberg on November 17, 1892. The plenary report was made by Reinhold Persius (1835-1912), an invited (state) monument conservator from Berlin. As a result of the conference, the provincial parliament formed the Commission for the Study and Protection of Monuments in the Province of East Prussia on March 11, 1989. The commission included 13 members, as well as representatives of the scientific community.

The objectives were as follows: to awaken people's awareness of the significance of natural monuments and to involve people from all walks of life in monuments' preservation, maintenance and rehabilitation (Boetticher, 1898). On the 16th of December, the commission began its work by choosing the executive board and experts from its members. The architect Adolf Boetticher (1841–1901) known for his work on the programme of photographing monuments of East Prussia (Przypkowski & Jamski, 2005) was elected provincial conservator. Unlike in other countries, in Germany a provincial conservator was not appointed but elected, usually for a term of five years.

"THE LIST..." OF ALFRED JENTZSCH

The commission also included a 43-year-old geologist, Alfred Jentzsch (1850-1925), who was director of the East Prussian Provincial Museum of the Association of Physics and Economics. Three categories were chosen for the selection of potential conservation objects: intact natural landscapes – in the face of ever-increasing involvement of land in the economic turnover (in East Prussia land area occupied by agricultural use due to deforestation, land improvement and drainage of wetlands increased to 68.17% or 2 515 989 ha (Bloech, 1980), also for the preservation of wetlands diversity; trees of considerable size and age, and geological objects. Based on these prerequisites, A. Jentzsch filed an application to the commission in March 1896 requesting that "... besides monuments and antiquities in the narrow sense of the word, conservation objects should include certain natural formations, distinguished by their age or special features" (Jentzsch. 1900, p. 7). The Commission approved the application and asked him to develop a questionnaire whose results had to be prepared for publication no later than 1898. Stamped by the head of the provincial government, the printed questionnaires were circulated only in April 1897. As is often the case, the author did not meet the prescribed deadline, and the work extended until the autumn of 1900.

"The List ..." Of Alfred Jentzsch is structured according to the alphabetical index of settlements of respective administrative-territorial units. The location of the natural object, its name and the name of the applicant were all sequentially indicated— for example, an over-600-year-old oak tree (Quercus pedunculata) in the manor park in Neuhausen (Guryevsk) or the savin juniper (Juniperus sabina) growing in Nordenburg (Krylovo). The second part of "The List ..." contains brief descriptions of individual species of trees and shrubs (the most prominent items were provided with drawings). The description of the exact location of objects is of particular interest. For example, it is reported that in 1872 prof. Caspary measured the linden that grows north of the church in the cemetery of Muehlhausen (Gvardeyskoye). At a height of three feet from the ground, its circumference was 4.87 m, the size of the crown measured 19 steps and its height was approximately 22.00 m. The tree was estimated to be 400 years old. The third chapter was devoted to the location of noteworthy boulders. Being a geologist (in 1878 Jentzsch participated in the preparation and publication of the Geological map of East Prussia on the scale of 1:100 000), the author studied this topic in the utmost detail, as we believe.

As an example, a boulder of Breitenstein (Ilyushino) can be mentioned, its outstanding size was as follows: length -4.80 m; width -3.50 m; height above ground level -0.45 m; circumference -15.00 m. One can only wonder at the amount of work the author of "The List ..." had to do, given the huge number of questionnaires sent. The publication turned out to be less academic than educational and focused on local history. Further activities required more detailed and painstaking work done by a more numerous team rather than an enthusiastic individual and, most importantly, the presence of a permanent state environmental authority. Initial features of the application, the content of the questionnaire, the lack of time, a large number and heterogeneity of correspondents hindered a detailed description and assessment of all the proposed objects. Despite the fact that some objects were described in detail, many were listed as 'vacant' ones, i.e. requiring additional study. Nevertheless, the importance of this list is indisputable, since it was the first contribution of this kind to environmental activities in Germany.

2. STATE INITIATIVE

In 1898, the Prussian Ministry of Religious, Educational and Medical Affairs commissioned Hugo Conwentz (1855-1922), the director of the West Prussian Provincial Museum in Danzig (Gdansk), to prepare an expert note concerning the state of affairs in

natural objects conservation. In 1904, the document was prepared and handed over to the ministry (Conwentz, 1904). Analyzing this document, even the contemporary fellow experts noticed the author's one-sided and irrational position regarding environmental conservation. Thus, assuming that the Ministry of Finance would resist the move, Conwentz proposed creating and supporting communal unions, public associations and private initiatives, which would not require funding from the state. To coordinate public and private environmental initiatives, he proposed to set up a public institution.

In 1906, Conwentz was given the authority to establish the *State Commission for the Protection of Natural Monuments*, which would enable and oblige the state to collaborate with municipalities, institutions and public associations. Officially, the Commission took office in Berlin only in 1910. Thus, it was in Prussia that nature conservation formally reached the state level for the first time; however, it did not mean that nature conservationists automatically received any preferences. On the contrary, in 1912 the draft law on natural monuments protection did not win a majority in the Prussian parliament— which was a logical consequence as conservative deputies resisted the expansion of conservation activities on private property. Another body for improving the efficiency of nature conservation was the public "provincial committees".

Representatives of relevant institutions and associations, academic bodies, or just concerned individuals could become members of provincial committees. Day-to day work was carried out by the board called, since 1924, "The Commissars".

3. THE FIRST PROTECTED AREAS OF EAST PRUSSIA (within the borders of the modern Kaliningrad region territory)

By the beginning of the 20th century, comprehensive protection of the entire landscape, rather than its individual parts, became the predominant concept of nature conservation in Germany. The first protected areas of this kind in East Prussia included Zehlau raised bog, Chaika Lake on the Curonian Spit, and the Galtgarben and moraine.

3.1. Zehlaubruch raised bog

In early 1909, the Geological Land Service filed a request to the Prussian government to preserve a marsh in East Prussia. On the 6th of April 1909, the Prussian Minister of Agriculture, State Property and Forests gave his agreement in principle. A well-known paleo-botanist Professor Henry Potonié (1857-1913) was invited to study relevant marshes and he singled out Zehlau as particularly remarkable. Another active supporter of the protection status assignment was Carl A. Weber (1856-1931), who was a botanist at the Prussian experimental swamp station in Bremen in 1894-1924. On the 10th of March 1910, the mash was subsequently declared protected natural area. At that time, it was the largest protected area (2 360 ha) in Germany. Why was Zehlau chosen to become the first SPA in East Prussia while there were other equally remarkable swamps? In our opinion, a combination of factors was of crucial importance here. Firstly, it remained an intact mash in its original state despite the cultivation plans which had existed since the 18th century. The first geodetic survey was carried out in 1826 followed in 1841-42 by a more accurate one with the levelling and tracing of probable drainage ditches. In the 1860s, the Forestry department made an attempt to drain the northwestern section of Zehlau, but faced considerable difficulties and abandoned the project. Secondly, a specific element of the surrounding landscape and part of the glacial landscape, Zehlau was located in the valley of the river Pregel on the outskirts of a large forest range Gauleden (Ozersky forest), I most of the province's marshes.

At the time of obtaining the protected status, Zehlau-Bruch had hardly undergone a comprehensive scientific study. If Jentzsch had paid more attention in his work to the typology of mashes, their morphology and chemical composition, the tax inspector

Stiemer would have approached the issue of studying the existing mashes in the province from a purely utilitarian point of view (Stiemer, 1875). Apart from the above-mentioned works by Stiemer and A. Jentzsch, the first specialized research of the geology and flora of the mash was conducted by Hugo Gross (1888-1968). Gross is a pioneer researcher in (paleo) botany, geology, and dendrology of East Prussia. But the significance of his "Botanical Forest Reference Guide on East Prussia" as a list of natural monuments is not entirely clear to the authors, although W. Wagner refers to it saying that the status of natural monuments was obtained by the outstanding trees in 1935/38 (Wagner, 2009). A systematic study of the mash as an environmental object was interrupted by the First World, so the monograph was released only in 1929 (Gams & Ruoff, 1929) In addition to its uniqueness as a growing raised bog, Zehlau attracted the attention of ornithologists as a nesting ground for the crane and the Ural owl in the forest adjacent to the bog.

3.2. Lake Chaika (Moewenbruch)

Lake Chaika (Moewenbruch) by the village Rossitten on the Curonian Spit has an area of approximately 30 ha and owes its status primarily to Prof. Johannes Thinemann (1863-1938), the director of the Rossitten ornithological station. He repeatedly applied to the government with a proposal to grant the lake the status of a bird sanctuary. In January 1906, his next application to the head of the Koenigsberg government was supported by the Association for the Natural Monuments Protection in East Prussia. Only then the state agreed to "allow there ornithological research and, if possible, leave the lake in an intact state" (Article to the conservation of natural monuments, 1926). The explanatory note states that the banks covered with club-rush and reeds are the nesting site for numerous bird species, such as the Black-headed gull, the Common tern, the Reed bunting, the Great crested grebe, the Marsh warbler, and others. With the formation of the Curonian Spit as the federal-level natural protected area on December 6, 1940, the lake became part of it, but due to special legislative acts it had a higher protective status and was supervised by the ornithological station (Article to the conservation of natural monuments, 1926).

3.3. Mount Galtgarben

At the same time, a public commission submitted a proposal to the district council of Fischhausen concerning the end moraine landscape with the Galtgarben elevation, which stated that there was "a need to preserve the natural monument of particular beauty and originality, and to prevent it from getting into the hands of speculators sooner or later" (Article to the conservation of natural monuments, 1926). In this case, however, it was primarily a matter of historical and cultural significance of the landscape rather than of the natural object itself. Besides the natural object comprising a mixed coniferous forest with peat bogs and endorheic basins, the territory of the monument also included historical objects: an iron cross (1818) in memory of the East Prussian Landwehr participation in the war against Napoleon in 1813-15; a tenmeter high observation deck (1894), and the Bismarck Tower (1906). Among the prehistoric monuments there was the Prussian fortress "castrum Rinow" - a circular shaft fortification mentioned in 1278. Even before the final decision on the purchase, the head of the district government declared Galtgarben protected area on February 27, 1908. The decision based on the law of 15 July 1907 on the prohibition of changing the territory through construction development. The issue of environmental protection became particularly relevant in a new political climate after the end of the First World War: Art. 150 of the Basic Law of Germany placed natural monuments under state protection. The institute of Commissars for the Protection of Natural Monuments was formed (In 1922 Prussia had 12 land and 10 district commissions having 12 provinces divided into 37 governmental counties). The efforts of conservationists were mainly focused on developing a unified law on nature conservation. In the 1920s, Prussia was hardly the epitome of environmental activities among German states. In 1931, with its 300-state environmental institutions of various levels, Prussia was lagging far behind Wuerttemberg— among other cities—where commissions had existed since 1911 in all 64 oberamts (comparable to Prussian districts) (Wettengel, 1993).

3.4. Samland coastal grove

The so-called Samland coastal grove with the area of approximately 2 800 ha became the fourth protected area in East Prussia. The status was granted by the resolution of 28.06.1934 (Newsletter for nature conservation, 1934) stating that the boundary of the nature reserve lies at a distance of approximately 100 m from the coast (from Pillau to Cranz) and includes adjacent gorges and forests. Rules of conduct in a protected area are comparable to the modern order prevalent in national parks; walking only on specified roads, ban on the destruction of vegetation, hunting, making fire, driving and walking along the coastal slope and foredunes etc. This protected area should be considered, first of all, in terms of protection measures on the steep coast of the Sambian Peninsula, but not as a complex, valuable or unique landscape. In 1911, the Coastal Municipalities established the Samland Coastal Protection Union whose main goal was to awaken public interest to the preservation of the crumbling Sambian coast, as well as fundraising for the construction and maintenance of shore protection structures (groynes, walls etc.). After World War I the Union developed a project to protect the coast. It aimed at the expansion of the beach and the protection of the steep coast foot. At the first stage it was planned to build 60 groynes and take care of the foredune. Construction of the groynes began in 1926 in the northern section of the coast (Brückmann, 1923; Levchenkov & Ryabkova, 2012). Therefore, the protection status granted to the coastal strip of the peninsula should be considered in this perspective.

The long-awaited **Law on Nature Protection** was adopted on 06.26.1935. For the first time, the law established common nature protection regulations at the federal level for the whole territory of the country. The term "nature conservation" was significantly extended by the concepts "landscape appearance protection" and "protection of landscape parts". Since April 1, 1936, the *Imperial Commission for Nature Conservation* became a supreme environmental authority subordinate to the *Imperial Forestry Agency*. The commission was tasked, among other things, with studying natural monuments and SPAs, providing consulting and expert services (as the highest environmental authority), bird ringing control, and listing and delisting of protected objects. Following the legislative framework initiated by the Law on Nature Protection of 1935, all protected objects could be divided into three types. Territories with federal status reached a new level and enjoyed the highest status. As of January 1, 1943, eight such SPAs (out of 21 in the entire province) were located within the today's borders of the Kaliningrad region (Lohmeyer, 1961); there were 55 protected areas of higher and approximately 880 of lower level (1938) throughout Germany (Wettengel, 1993).

Next were provincial (regional) and local levels, which included, as a rule, remarkable small landscapes and natural monuments. Taking into account that natural conservation activity was part of the forestry authority, it is not surprising that the long-standing hunting grounds, **Rominten Forest** and **German Elk Forest** became the first new federal protected areas in 1937. Two pre-existing SPAs confirmed their status; they were **Galtgarben** with an area of 33.82 ha (Resolution of 09.30.1939) and the Zehlau raised bog with an area of 518.79 ha (Resolution of 3.2.1940). The **Rominten Forest** protected area amounted to 22 170 ha of virgin coniferous and deciduous forest, as well as swampy meadows. It was an area of exceptional scenic beauty, also highly rich in rare species of flora and fauna (the Black Stork *Ciconia nigra*, the Elk *Alces alces*, the Red Deer *Cervus elaphus*, the Raven *Corvus corax*). The raised bog at Nassawen (Lesistoye) was of particular

interest as the place of raised bog plants and the swamp spruce forest around Sodwarier See. The so-called **German elk forest** occupied a special position in the nature conservation system in East Prussia (12.9.1937, area 46 550 ha). The reserve became a special forest management area comprising 11 forests joined by Rossitten and Schwarzort forests on the Curonian spit in 1939 and by Leipen and Grauden in 1941 (Table 1).

Table 1. Forestry of protected area German Elk Forest

	Forestry	Total area, ha	Area, covered by forest, ha
1.	Pfeil	6 622	4 963
2	Klein Naujock=Erlenwald	4 830	4 066
3.	Tawellningken=Tawellenbruch	11 511	9 084
4.	Ibenhorst	6 521	5 264
5.	Rossitten	10 187	8 869
6.	Gertlaucken	4 589	3 767
7.	Alt-Sternberg	7 113	6 725
8.	Neu-Sternberg	5 644	4 826
9.	Drusken	4 968	4 411
10.	Leipen	4 833	4 364
11.	Papuschienen/Grauden	7 294	5 076
	Total	74 112	61 415

In 1938, Hans Kramer (1896-1982) was appointed as Director of the Forestry and Reserve Area. The main task, as the name of the forest suggests, was to preserve the only Elk population in Germany in its natural environment. In July 1941, Elk Forest was removed from the provincial control and became subordinated to the Federal Forest and Hunting Agency. With its total area of more than 100 000 ha (75 000 state and 25 000 leased forests), the nature reserve was almost a single woodland of mixed and vast alder forests with a high diversity of fauna species (the Common Crane Grus grus, the Owl Bubo bubo, the Small Spotted Eagle Aquila pomarina and the Great Spotted Eagle Aquila clanga). If, in terms of their size, Rominten Forest and Elk Forest were not national parks in the modern sense of the term, they definitely were their predecessors. Basically, they were personal hunting grounds of the "main hunter" of Nazi Germany, and in 1941 they received the status of "state hunting grounds". No special authorities of federal significance existed for protected areas at that time – nothing similar to the present-day Curonian Spit National Park, Large objects were taken care of by the relevant authorities on their grounds. The owners were obliged to look after individual monuments if the latter were located on their sites. Since 1934, the general management of environmental activities at the level of government districts and on sites was carried out by the institute of nature conservation officials. In the early 1940s, the Curonian Spit received protected status, the process having lasted for nearly 18 moths. First, the southern part of the spit was granted the status (Resolution of 6.12.1940, area 4 769 ha), and then its northern part, which previously (1923-39) belonged to Lithuania (Resolution of 9.5.1942, area approximately 8 700 ha). The rationale behind the decision included typical sea beaches, unique landscape of moving dunes, richness in species and in number of avifauna of the sea and shoals were provided as a ground. In addition, it was noted that the spit is the easternmost habitat of such dune plants as the Goatsbeard Tragopogon floccosus and the Sweet-scented Toadflax Linaria odora. In 1928, a section of the Curonian Spit from the Lithuanian border (point 50.8 km) to the forest part at 55 km (the spit's distance was counted from its northern extremity) was declared protected area according to Otto Jessen (1891-1951), Professor of the Rostock University (Jessen, 1937). Vehicles was prohibited (allowed only in exceptional cases on official business), with only cartage allowed for local

residents. Forestry lands were a protected territory of the spit (at least until December 1940). The constant maintenance of the foredune and the part of heather up to the post road was the responsibility of Rossitten's dune caretaker, who was directly subordinate to the *Water Construction Administration* in Labiau and the head Directorate in Koenigsberg. The caretaker had 10 workers at his disposal to carry out repair work.

The opinion of the aforementioned Conwentz about dune reinforcement is worth quoting: "Thanks to planting and afforestation, a complete change has occurred in the dunes and their flora and fauna in the coastal areas of the North and Baltic seas. In 1900, 8 120 ha of particularly typical moving dunes of the Curonian Spit reaching at places a height of 70 m were fixed and lined with forests, while 5 150 ha still remained mobile. In addition, the spit was equipped with an artificial protective dune preventing the formation of new moving dunes almost along its entire length. Only between Rossitten and Sarkau there still remained an untouched 3km-long stretch, but when restrictive works started there too, the original nature monument ceased to exist" (Conwentz, 1904, p.9). We could not find an unequivocal answer regarding the rule of conduct on loose dunes before and after the protection status. However, the analysis of the available sources leads to the conclusion that dune landscapes had not enjoyed protection status at least until December 1940. In 1937, a small **Bredshuller** raised bog (or Elchwinkler bog) with an area of 3 ha was added to the list of the PAs of regional importance. It was granted protection status not so much as a unique object but as the conservation area for the elk *Alces alces* and the gray crane *Grus grus*.



Figure 1. Continental Dunes (Schroetter & von. Jaeck. 1978)

A special type of protected objects is represented by geological monuments, such as **the gorges of the Katzenbach** and **Trakis creeks**, and also the **continental dunes of Unter-Eisseln.** The area called *Katzengruende* is indicated "as the territory of special landscape importance" (Newsletter for nature conservation, 1934). It represented a gorge with the stream of *Svetlogorka* (Katzenbach) running from the current Svetlogorsk-1 and Grachevka (Craam) village. A similar **Trakis Creek Gorge** (Resolution of 8.3.1938) with an area of 42,78 ha was a woodland of small-leaved lime mixed with 200-year-old oaks.

The gorges at the northern edge of the present-day *Chernyakhovsky forest* was 12-15 m deep. High diversity of ferns was noted. The bed of the stream had erratic boulders.

The Continental Dunes of Unter-Eisseln (Resolution of 14.5.1938) with an area of 86.5 ha is located south of Bolshoye Selo (Figure 1).

They are relict formations related by origin to the great delta of the great-Neman river. It was believed that this eastern-most habitat of some plants makes it possible to explore the natural course of inland dune consolidation.

In his list named "Protected Territories of the German East" (Lohmeyer, 1961) additionally mentions three objects whose status has not been confirmed in spite of meticulous search (other authors found *nine* protected areas, which were marked by H. Lohmeyer excluding the **Bredshuller** raised bog, and both parts of the Curonian Spit were included in the "Elk Forest" (Medvedev, 2017). These are Bolshoye Mokhovoye Marsh in the Neman delta, Verkhovoye swamp of Nemonin at the Curonian Lagoon and the whole delta of the Neman. The latter object as a protected area seems unlikely.

A special place in the environmental activities of East Prussia was occupied by ornithological conservation areas, which, however, often coincided with the existing official protected areas. Having no legal status, they nevertheless played an important role. Among those planned for protection, the following should be named:

- 1. Mupiau raised bog (the *Big Bushes* tract in the former Kamensky reserve (meaning the reserve that existed in 1963-2004) in Grauden Forestry, which was about 1.700 ha, including marginal forest areas. The nesting place of the Crane *Grus grus*, the Small Spotted Eagle *Aquila pomarina*, and the Black Stork *Ciconia nigra*.
- 2. Protective bulk islands of the Koenigsberg Canal. The nesting site of the Common Tern *Sterna hirundo*, the Small Tern *Sterna albifrons* and the Common Ringed Plover *Charadrius hiaticula*.
 - 3. Ponds of the Koenigsberg water supply system in Samland.
- 4. Water meadows of the Pregel's mouth. The nesting place of the Dunlin Calidris alpina, the Black-tailed Godwit Limosa limosa, the Common Redshank Tringa totanus Linnaeus and the Ruff Philomachus pugnax.

Thus, the territory of the modern Kaliningrad region and the pre-war environmental system included **fifteen** (out of 47 in the whole province) specially protected objects:

- 1. Typical hunting sanctuaries, which were directly subordinated to the hunting agency: Elk forest (together with both parts of the Curonian Spit) and Rominten Forest. They were habitats of the Elk *Alces alces* and included almost all state forests.
 - 2. Landscapes of raised bogs (Zehlaubruch, Bredshuller, Bolshoye Mokhovoye Marsh).
- 3. Geological (Trakis and Katzengruende gorges) and geomorphological objects (Galtgarben, the Samland peninsula coast, the relic dunes of Unter-Eisseln).
 - 4. Ornithological objects (Lake Chaika) (Lohmeyer, 1961).
 - 5. Monuments of nature including 272 objects (Jentzsch, 1900).

The composition and the scope of the protected areas in East Prussia fully reflect the specificity of this natural region.

4. POST-WAR PERIOD

In the first years of the newly formed Koenigsberg (Kaliningrad) region, the issue of natural conservation was not a priority compared to the problems of economic recovery. However, it does not mean that no attention was paid to the issue. At the beginning of 1946 (Order No. 66-p from 16.01.1946 of the Council of People's Commissars of the RSFSR (Russian Soviet Federative Socialist Republic), laws and regulations on hunting reserves enforced for the RSFSR were extended to the territory of the Special Koenigsberg Military District. At the same time, it was requested that "... The Main Directorate for Hunting and

the Main Directorate for Reserves at the Council of People's Commissars will send representatives to Koenigsberg in order to organize the Department of Hunting Management (hereinafter referred to as DHM) and will organize and restore the nature reserves" (State archive of the Kaliningrad Region (SAKR, Fund 380, Inventory 1, Case 3, Page 3). According to the first DHM report submitted in April 1946, there was a significant reduction in the number of hoofed and fur-bearing animals in the Kaliningrad region due to hostilities, as well as to unsupervised hunting in the first post-war year. The numbers of the Elk Alces alces, the Deer Cervus elaphus, the Fallowdeer Dama dama and the Roe Deer Capreolus capreolus were extremely low. However, with wetland fowl the story was completely different. Owing to the destruction of the reclamation system, most of the coastal areas adjacent to the bays appeared to be flooded and impassable for humans, which had had a positive effect on waterfowl population (SAKR, F. 380, Inv. 1, C. 3. P. 9-12). In July 1946, a commission arrived from the Main Directorate of Reserves to examine the former German reserves (to the authors is unknown the extent to which the General Directorate of Reserves knew about the protected areas of East Prussia) and to submit materials to the Council of Ministers regarding the organization of three State reserves (Astravishken, Rominten and Elk forest) covering a total area of 65 thousand ha (SAKR, F. 380, Inv. 1, C. 3, P. 7-8). However, those nature reserves did not happen. They were last mentioned in the 1947 DHM report stating that the Main Department for nature reserves had never answered to repeated requests to organize those protected areas in the Kaliningrad region, which delayed allotting hunting grounds, including the territory of the planned reserve, to the Military Hunting Society (SAKR, F. 380, Inv. 1, C. 8, p. 36-37). According to the authors, this was due to the state's general policy which was reoriented after the war towards developing rather than protecting nature, which resulted in the elimination of the majority of reserves in favour of the national economy (Brain, 2012; Lyubchenko & Liverovskaya, 2014).

Naturally, it was the state's authorities that showed interest in the new RSFSR region's nature. Thus in 1949-52 the Complex Commitee from the Komarov Botanical Institute made an assessment of the region's forests, vegetation, botanical gardens, parks, etc. in order to use them in national economy. A high appraisal was, in particular, given to the diversity and richness of ornamental and introduced plants (SAKR, F. 297, Inv. 7, C. 266; P. 26; Kuchenyova, 1998). As follows from the report of DHM in 1947, hoofed animals were considered as valuable breeding material for further dissemination in the Union of Soviet Socialist Republics (SAKR, F. 380, Inv. 1, C. 8, P. 12).

A **new stage** of "quasi-protective" activity in the region is associated with the improvement of environmental legislation at state level, including the adoption of the first law on environmental protection of the RSFSR (1960), as well as a number of other laws and regulations aimed at preserving the country's natural resources (Makeeva, 2017). To that end, in the first half of the 1960s the *Main Department of Hunting and Nature Reserves of RSFSR* system forms a network of wildlife reserves with the aim to protect and reproduce hunting and commercial species. Such reserves were created for a certain period only; unlike nature sanctuaries, they were not meant for complete withdrawal of their territory from economic use (Lyubchenko & Liverovskaya, 2014).

It was during this period that the first SPAs appeared in the Kaliningrad region. According to the Resolution of the Council of Ministers No. 569 of 05.13.1963, the executive committees of structural units of the RSFSR were ordered to establish nature reserves in especially valuable lands and to ensure that the hunting grounds were assigned to local associations of hunters and fishermen. This the first hunting nature reserves —the "Kursk Spit" (under the name the "Kursk Spit" the zoological reserve existed until August 26, 1985, since then it named the Curonian Spit"), the "Vistula"

Spit", "Maysko-Krasnopolyansky" and "Kamensky" – were created in our region (Order of the Regional Executive Committee No.582-P dated July 3, 1963). It is noteworthy that this order prohibited any hunting in the nature reserves. The Forestry Department was entrusted with supervisory and monitoring functions, and the protection of the two other nature reserves was entrusted to the National Hunter Inspection, a division of the regional executive committee. The reason for creating the fifth reserve in the region is worthy of note. In 1976, the director of the Kalining adveroprom Trust filed an appeal to the regional executive committee requesting to consider the ban on hunting and dog training on the territory adjacent to a deer farm within a radius of 10-15 km. The issue was resolved positively and resulted in setting up Novoselovsky complex (!) nature reserve for a period of 10 years. It was subordinate to the state hunting inspectorate (Regional executive committee order No. 341-p dated 12.08.1976). The purpose was to protect the Sika Deer Cervus nippon livestock introduced in 1975 into the Novoselovsky reindeer antler farm. It appears to be quite obvious that the first regional nature reserves were formally created without any scientific justification; they served as hunting reserves, or, as in the latter case, as a sanitary zone for a deer farm.

Quite different factors and causes underlie in the history of natural monuments protection in the Kaliningrad region, which are described in detail in the series publication *Nature of the Kaliningrad region* (2013-2017) (Medvedev, 2016; 2017). One fact is worth noting: the region's scientific community played an active role in the formation of the SPAs network. In 1970-80, the *All-Russian Society for the Conservation of Nature* (*RSCN*) (Makeeva, 2017) was becoming a powerful environmental force in the country. Scientists from two leading regional universities, Kaliningrad State University and Technical Institute, became founders of the Kaliningrad RSCN. Among them, Galina Kuchenyova (1925–2007) occupies a special place. One can only guess whether the Soviet / Russian scientists were fully aware of the historical heritage in the field of nature conservation. Most likely, they were not, which became apparent from the analysis of the methodology and subject matter of the 1985 and 1900 lists of nature monuments. There is not a single correlation between 59 objects of the Decree and 568 natural monuments (albeit those of the entire territory of East Prussia).

In the 1900 List, individual objects are indicated as nature monuments, but among them there is seldom a forest, an urban forest, or a park. Meanwhile, in the List of 1985, the majority of monuments are viewed as park complexes: urban, manor, and suchlike dendrological parks. The difference is due to a different methodological approach to the compilation. The List of 1900 was initially focused on old trees and boulders of outstanding size. The name of the questionnaire developed by A. Jentzsch was very clear: "The questionnaire on the presence of old trees, which are of special interest because of their generic type, size, unusual development or special factors" (Jentzsch, 1900, p. 4). The 1985 List, however, was aimed at protecting historical heritage. What looks like something outstanding for a contemporary – a collection of a large number of various introduces – was in fact a common practice 100-200 years ago, when each estate owner strived to enrich their park in every possible way. Erratic boulders, for example, are not represented in the modern list of monuments at all.

National parks as territories for people's organized communication with nature enjoy certain restrictions on economic activities, and they are a relatively young form of SPAs in Russia. Not before the 1980s did he RSCN develop the principles for this category of SPAs, and since 1983 the formation of the national park system was vested in the RSFSR Ministry of Forestry. The **Curonian Spit** National Park was established on the territory of the Kaliningrad Region in 1987 in order to preserve unique natural complexes of the Curonian Spit and use them for educational, recreational, scientific and cultural

purposes. The initiative to set up this national park also belongs to G. Kuchenyova who was at the time secretary of the Kaliningrad branch of the RSCN (Zueva, 2017).

Thus, by the beginning of the 1990s, a network of SPAs had been founded on the territory of the Kaliningrad region; it included one national park, four nature reserves and 61 natural monuments. The nature protection system was established in accordance with the national trends in the development of nature conservation of that time – on the one hand, it was a priority of the national economy over protection of nature (nature reserves), and on the other, an active position of initiative citizens and scientific organizations of the region (national park and nature monuments).

5. THE 1991-2005 PERIOD

At the federal level, the early 1990s became almost the most favourable period for the preservation of natural heritage in Russia. In 1995, the State Duma of the Russian Federation ratified the "Convention on Biological Diversity" and passed very significant environmental laws: "On the Animal World" and "On Specially Protected Territories". The latter identified seven SPAs categories and set out their status, goals, objectives, protection regime, sources of funding, formation order, functioning, etc. The plan to create 72 new reserves and 46 national parks was approved for the period up to 2005 (Order of the Russian Federation Government of April 23, 1994 No. 572-p "On the organization of state natural reserves and national natural parks in the Russian Federation"). In compliance with the Order, it was planned to create a natural reserve "Praydinsky" in the Kaliningrad region, which included the natural marsh complex of the Baltic Lake Plain (Zehlau raised bog) covering an area of 2.4 thousand hectares. However, this plan was not to become reality. In 2001, the order was no longer valid because a new plan had been approved to develop a smaller-scale SPAs network in Russia –nine new reserves were envisaged instead of 72; "Pravdinsky" reserve was not included for the lack of state funding (Tsybin, 2004). The creation of three complex (landscape) nature reserves ("Dyunny", "Gromovsky", "Vishtynetsky") was the most significant contribution to the conservation of biodiversity during this period (1994) at the regional level. Those SPAs were formed owing to the initiative of Kaliningrad State University scientists.

The main criteria for the selection of these territories were high biological diversity, unique landscapes, and a large number of rare species. However, already in 1998, the hunting lobby pressurized the start of a systematic destruction of the state nature reserve area as the basis for regional protection of biological diversity. In May 1998, the profile of three newly created nature reserves was changed from "complex (landscape)" to "zoological". Those SPAs, in fact, became hunting reserves with ensuing shrinking of environmental protection functions. The regional authorities thus prioritized environmental management over nature conservation (Dedkov & Grishanov, 2014). The same decree rendered the Regulations for four previously created zoological reserves (1963 and 1976) invalid, and the Vistula Spit special protected area no longer appeared in the new general provision on state natural reserves. At the same time, the sanctuary mode extended for a period of 10 years (i.e. until 31.03.2004) was not cancelled. Thus, between 1998 and 2004, the conservation status of the Vistula Spit territory was legally questionable.

In 1999, the regional *Department for the Protection, Control and Regulation of the Use of Hunting Animals* proposed setting up, for a period of 10 years, a state biological (zoological) species reserve of regional significance in Slavsky District, with the aim to preserve the historically unique population of the Elk and to reproduce the number of species in the region. As a result, the reserve was established within the boundaries of Berezhkovskoe hunting farm. In fact, it was nothing but a raider capture of significant hunting grounds by stakeholders. A big positive step against this negative background was made with the resolution of 29.05.1999 No. 298 "On approving the list of wetlands

(Peat Places) to be preserved in the intact state on the Kaliningrad Region territory", according to which 45 valuable wetlands were taken under protection.

At that time, the situation with the SPAs network on the territory of the Kaliningrad region was unsatisfactory. Research was carried out only on the territory of the "Vistula Spit State Nature Reserve (SNR)" (for the Russian part of the Vistula spit the name Baltic Spit is used) where Kaliningrad State University carried out detailed landscape-geobotanical studies and systematic ornithological observations (Gubareva, 1994; Grishanov, 1998, 2001). Resorts of federal significance (the SPAs of the Kaliningrad region included 2 resorts of federal significance from 2000 to 2013. They were Zelenogradsk and Svetlogorsk-Otradnoe according to the Federal Law of the Russian Federation "On specially protected territories") and natural monuments were almost not functioning as SPAs. The protection regime had been cancelled for the former complex nature reserves – the most valuable territories with the highest level of biological diversity. The only really functioning SPAs at the moment is the Curonian Spit Nature Park, which is small in area, quite specific in terms of biological diversity and is under a threat of a profound transformation of the main natural complexes owing to everincreasing recreational load (Dedkov & Grishanov, 2014, Grishanov et al., 2016).

In 2004, the documents stipulating the conditions for SPAs formation and functioning expired, and were not formally extended for seven out of eight state natural reserves established by regional executive authorities in 1963, 1976, 1994. In fact, the regional system of SPAs aimed at maintaining biological diversity had been destroyed by that time (Dedkov & Grishanov, 2014). In the same year, the regional government found it impossible to approve the Provision on the Vistula Spit state natural complex (landscape) – a reserve of regional significance – developed by the Administration of Natural Resources and Environmental Protection of the MNR of Russia for the Kaliningrad region. The refusal was explained by the fact that it would result in too many restrictions and prohibitions (A nature reserve was revoked of its status the day before yesterday. oopt.info. 02.04.2004). The protests of environmental organizations (Protected Baltic Spit interferes with government: A. Koroleva Ekozashchita's leader interview IA REGNUM. 29.03.2004), as well as the petition of the Baltiysk Council of Deputies to preserve the status of protected areas for the Vistula Spit (Elkina, 2004) were left unnoticed.

Lifting the SPAs status for all nature reserves took place without any scientific justification and environmental expertise required in such cases. The paradox of the situation is that the joint Russian-Swedish project for the development of the Nature Conservation Scheme for the Kaliningrad region had been completed by 2004. The final document contained the plan and scientific substantiation of SPA network development in the region; namely, it provided for the conservation status of the Vistula Spit as a state complex natural reserve of regional significance with the prospect of improving the conservation status in accordance with the level of its importance and priority. It was suggested that the Vistula Spit nature reserve be included in transboundary SPAs (Tsybin, 2004). Shortly after the nature reserves, the protected status of 45 wetlands was also revoked (regional administration decree No. 39 of 3.02.2005). The destruction of SPAs networks during the described period was due to another change of regional administration and unambiguous interests of private hunting and other organizations. Thus, according to the governor's decree of August 12, 2005, seven private companies received hunting grounds of 222 thousand ha (1/7 of the region's territory) including the territories of the former nature reserves; no tendering was held for the use of wildlife objects. Only protests of scientific and cultural communities helped to cancel the notorious decree on hunting grounds. However, the status of nature reserves remained uncertain. There was no order to cancel the nature reserve regime, but the validity period had expired (Akimov, 2005; The Vice-Speaker of the Kaliningrad Duma accuses Governor Egorov of illegal transactions with state property. REGNUM. 09.09.2005).

An era of regulatory confusion in the field of nature conservation came with the appointment of the new governor from Moscow (Georgy Boos) and "non-locals" coming to power. Thus, in 2006, the new authorities recognized all SPAs of the region as valid and approved the "Concept the target regional program of ecological rehabilitation of the territory of the Kaliningrad region for 2006-2010" (No. 510 of 12.07.2006) (according to which the SPAs system of the region included the National Park "Curonian Spit", 2 resorts of federal significance, 8 state zoological reserves of regional significance, 59 natural monuments of regional significance and 45 specially protected wetlands (peat deposits). It was despite the fact that since March 2004 there had been neither resolutions on the extension of protection regime for 8 zoological reserves, nor resolutions on their elimination. Only three years later Governor's decrees (No 7 from 04.02.2009 and No 16 from 25.02.2009) put an end to all those regulatory inconsistencies. They cancelled the resolution establishing the Zapovedny zoological reserve and the notorious resolution № 351 from 18.05.1998 "On approval of the regulations concerning state natural reserves". The network of zoological reserves of the region was legally completely eliminated. As a result, in 2010 the Kaliningrad region officially had the Curonian spit National Park, two resorts of federal significance and 60 natural monuments of regional significance (Figure 2, Table 2).



Figure 2. The scheme of SPAs of federal and regional importance of the Kaliningrad region for 2019 (without natural monuments)

Table 2. Legend to Figure 2

1	The Curonian spit National Park
2	The Vishtynetsky Natural Park
3	Dyunny State nature reserve
4	Gromovsky State nature reserve
	Strerves of the geological profile: Dunaevskoye, Mayskoye, Mozhaykino, Nadezhdinskoe 2, Pionerskoye, Romanovskoye, Tikhorechenskoe, Filino, Shatrovskoye, Pokrovskoye

6. CURRENT STATE OF THE SPAs NETWORK IN THE KALININGRAD REGION (2010-17)

The environmental assessment of the project "Schemes of nature protection of the Kaliningrad region" revealed that of all the tasks planned in the "Concept of the target program of ecological improvement of the Kaliningrad region for the years 2006-2010" the only one implemented by 2010 was the publication of the Endangered Species List (The Red Data Book of the Kaliningrad region), developed by a team of Immanuel Kant Russian State University scientists with the participation of Kaliningrad State Technical University biologists (Dedkov & Grishanov, 2010b). A "promising" development of a regional SPAs network can be traced in the so-called 2009 Forest plan of the Kaliningrad region. The plan includes only four projected (!) SPAs: the Baltic Spit, Dyunny, **Gromovsky** and **Vishtynetsky** compex nature reserves. Based on the Immanuel Kant Baltic Federal University team's research, three regional SPAs were organized in 2012 on the initiative of the Kaliningrad regional Government: the Vishtynetsky Natural Park, Dyunnny and Gromovsky complex reserves. Works were carried out within the framework of the first stage of the regional network set-up (natural framework nuclei) and their functioning optimization. Illegal amber mining and trafficking demanded protection status for amber deposits and related landscape elements in the region, which was done in May 2013 (9) and in June 2014 (1) through approval of 10 state natural reserves of a geological profile (Dunaevskoye, Mayskoye, Mozhaykino, Nadezhdinskoe 2, Pionerskove, Romanovskove, Tikhorechenskoe, Filino, Shatrovskove and Pokrovskove).

Therefore, creation of geological reserves is in fact a forced measure. After five years of these SPAs' existence, the situation with illegal mining has practically remained unchanged, obviously calling for tougher penalties. Thus, 83 specially protected areas of federal and regional importance have been created on the territory of the Kaliningrad Region during the entire post-war period. At present, 20 SPAs (nature reserves, nature monuments) have been reorganized, gone, or eliminated for various reasons. At the beginning of 2018 (Order of the Ministry of Natural Resources and Ecology of the Kaliningrad Region dated January 18, 2019 N18), the region's SPAs system included one national (Curonian Spit) and one natural park (Vishtynetsky), 12 state natural reserves of regional significance (two complex and 10 geological) and 50 natural monuments of regional importance (two hydrological and 48 dendrological). The possibility of creating federal-level protected areas (National Park Category) in the Kaliningrad Region is currently being discussed, the Baltic Spit and Vishtynetsky Natural Park being considered candidates for this status. (The Baltic Spit will become a specially protected natural area. gov39.ru. 10.07.2017; "The compromise suggested by the governor is impossible" rugrad.eu. 03.09.2019).

CONCLUSION

At all times, the SPAs system of a state or region represents a consensus of desires and needs between the government and society. The issues of continuity in the framework of changing political and socio-economic models on a certain territory also play an important and often unsurprising role. The issue of environmental protection is no exception here. Therefore, the state of environmental protection on the territory of the Kaliningrad region (pre-war and a current one) represents the role of the scientific and cultural community and the state's priorities in full: nature is either an object of protection or a resource for hunting or other foraging. The interests and needs of scientific and cultural community come second. It is from this angle that the question should be answered: is there a connection between the pre-war and post-war SPAs systems? Do the SPAs of the modern Kaliningrad region keep up the traditions and fulfil the tasks of pre-war protected areas? As mentioned above, the pre-war SPAs, German Elk Forest and Rominten Forest, performed the functions of hunting reserves at the highest

state level in Germany. In the post-war period, they were mirrored by similar nature reserves - Kamensky, Maysko-Krasnopolyansky, etc. Soviet authorities failed to create a complex protected area of a raised bog similar to Zehlaubruch (it all ended poorly for Zehlaubruch after the war. A military training ground located to the south of the swamp causes irreparable damage by fires and destruction of vegetation). The Gromovsky and Dyunny nature reserves with valuable marsh complexes (Bolshove Mokhovove Marsh and part of Kozye Marsh) are comparable only in part, as they were created primarily as hunting reserves to preserve the elk population. This primary function again echoes that of pre-war protected areas, where the elk was also a key protected species (Elk Forest).

Only the Curonian Spit has retained its federal status because of its unique landscapes from the point of view of both German and Russian authorities. The Vyshtynetskiy Nature Park represents the reincarnation of the pre-war Rominten Forest whose creation, however, was fraught with certain difficulties. At the same time there are some interesting points. For example, the Sambian coast was not considered as a prospective special protected area during the Soviet period, but in 2010 it was included into the Protected Area List (The Red Data Book of the region) as a valuable ecosystem in need of special protection. The Vistula Spit did not enjoy a protection status before the war; then it was a nature reserve for 40 years (from 1963 to 2004); today, however, it is again viewed as a potential special protected area (The Baltic Spit will become a specially protected natural area. gov39.ru. 10.07.2017). Geological and geomorphological objects were also ignored during the Soviet period. The establishment of modern geological reserves is more likely a forced measure against illegal amber diggers than a scientifically based decision. The number of nature monuments is also incomparable: over 270 against 60. In general, it can be argued that there has been a qualitative and quantitative reduction of protected natural objects. However, at present, the studied region demonstrates a trend for strengthening the role of the scientific and cultural community in the selection of objects for the creation of protected areas of various levels.

REFERENCES

Akimov, V. (2005). Black Stork, White-backed Woodpecker..., Kaliningradskaya Pravda, 30 august, no. 161, p. 3. Bloech, H. (1980). Agriculture of East Prussia, Lueneburg, p. 24.

Boetticher, A. (1898). Instruction for the care and preservation of monuments in the province of East Prussia.

Publishers Emil Rautenberg, Koenigsberg.
Brain, S. (2012). The Destruction of the Zapovedniki Revisited, *Studies in the History of Biology*, V. 4, no. 1, pp. 57-72. Brueckmann, R., (1923). Our Samland beach, p. 80.

Conwentz, H. (1904). The endangerment of natural monuments and suggestions for their conservation. Memorandum, presented to the Minister of Spiritual, Educational and Medical Affairs, Berlin.

Dedkov V. & Grishanov, G. (2010a). The system of conservation areas as the basis for biodiversity preservation in the south-eastern Baltic, IKBFU's Vestnik. Ser. Natural and medical sciences, no. 7, pp. 8-13.

Dedkov, V. & Grishanov, G. (2010b). The Red Book of the Kaliningrad region, Kaliningrad: I. Kant RSU, p. 334. Dedkov V. & Grishanov, G. (2014). Environmental studies in the southeastern Baltic region, In Environmental problems. Eurasian space. Moscow, MSU, pp. 302-317. Elkina S. (2004). Deputies defended the reserve on the Baltic Spit, Yantarnyj Kraj, 3 June, p. 1.

Gams, H. & Ruoff, S. (1929). History, structure and plant cover of the Zehlaubruch. In: Writings of the Phys.oekon. Society of Koenigsberg, B. 66, H.1, pp. 1-193. Grenz, R. (1973). Labiau District. An East Prussian Homebook. Marburg/Lahn, p. 402.

Grishanov, G. (2001). Bird migration on the Vistula Spit of the Baltic Sea, Avian Ecology and behaviour, vol. 6, pp. 62-63. Grishanov, G. (1998). The fauna of land vertebrates of the zoological wildlife sanctuary Wislin Spit» (Kaliningrad Region), Role of Protected Areas in Saving Biodiversity, Kaniv, pp. 176-177.

Grishanov, G. & Grishanova Yu. (2016). Integration of the KOTR of the Kaliningrad region into the network of specially protected natural territories of regional significance, Inventory, monitoring and protection of key ornithological territories of Russia, no. 7. Mahachkala: Union of Birds of Russia, pp. 86-94. Gubareva, I. (1994). Flora of the Vistula Spit, The Candidate Biological science abstract of dissertation:

03.00.05. St.-Petersburg, pp. 180.

- Jentzsch, A. (1878). The bogs of the province of Prussia. Koenigsberg in Pr. In: Writings of the Phys.-oekon. Society in Koenigsberg. pp. 89-131.
- Jentzsch, A. (1900). Proof of the remarkable and to be protected trees, shrubs and erratic blocks in the province of East Prussia. In: Contributions to Prussia's natural history. Publishers Emil Rautenberg, Koenigsberg, p. 150.
- Jessen, O. (1937). Village and dunes of Pillkoppen on the Curonian Spit, supplements to the reports of the Geographical Society of Rostock. Nr.8. Rostock, p. 27.
- Schroetter, F. von & Jaeck, C. (1978) Map of East Prussia with Prussian Lithuania and West Prussia with the Netz District, Wiesbaden, Steiner. – 25 Maps.
- Kramer, H. (1990). Elk forest. Country, people, hunting. Hunting and cultural publishing, Sulzberg in Allgaeu, p. 356. Kuchenyova. G. (1998). Study of the flora and vegetation of the Curonian Spit, Problems of study and conservation of the Curonian Spit, Kaliningrad, pp. 253-270.
- Levchenkov, A. & Ryabkova, O. (2012). Investigations of Zemland Peninsular Coasts in the Early XX Century,
- Geomorfologiya, no. 2, pp. 93-99. Lohmeyer, H. (1961). Protected Territories of the German East. Yearbook of the Albertus-Universität zu
- Königsberg, Würzburg, pp. 306-311. Lyubchenko, O. & Liverovskaya, T. (2014). The history of the formation and current state of the network of protected areas in the northwest of the European part, Climate and Nature, no. 1(10), pp. 3-37.
- Makeeva, E. (2017). Conservation policy of the USSR in the 1960-1980s: successes, failures and contradictions, In History and Archeology: materials of the IV International Scientific Conference – St-Petersburg, July 2017. St-Petersburg: Own publishing house, pp. 37-41.
- Medvedev, V. (ed) (2016). Nature of the Kaliningrad region. Old trees. Kaliningrad: Istok, p. 104.
- Medvedev, V. (ed) (2017) Nature of the Kaliningrad region: old parks and plants regional monuments of nature. Kaliningrad: Istok, p. 104.
- Poelking, H. (2012). East Prussia. Biography of a province. Be.bra Verlag, Berlin, p. 549.
- Przypkowski, J. & Jamski, P. (2005). The Photographer is here! People from the old East Prussia on historical photographs from the monument office in Koenigsberg, Warsaw: Institut of Art Polish Academy of Sciences, p. 173.
- Schoenichen, W. (1926), Article to the conservation of natural monuments. The nature reserves of Prussia. Eleventh volum e. Berlin: Publishers Gebrueder Borntraeger, p. 333.
- Schwill S., Strauss A., Napreenko M., Gusev W. & Haberl A. (2010). 100 years Zehlau climate relevance of a raised bog in Kaliningrad, Russia. Final report. Michael Succow Stiftung, p. 51.
- Stiemer. (1875). Writings of of the Phys.-oekon. Society of Koenigsberg, 16th issues, Koenigsberg, pp. 7-20. Tsybin, Y.A. (2004) Scheme of nature protection of the Kaliningrad Region. TENAX Media, Kaliningrad, p. 136 (in Russian).
- Wagner, W. (2009). Cultur in rural East Prussia. History, manors and people in the District Gerdauen. In 2 volumes. Husum. p. 715 and p. 1384.
- Wettengel, M. (1993). State and nature conservation 1906-1945. On the history of the State Agency for the Preservation of Natural Monuments in Prussia and the National Agency for Nature Conservation,
- Historical Journal, Vol. 257. pp. 355-592. Volkova, I.I., Shaplygina, T.V. & Bubnova, E.S. (2017). Specially Protected Natural Areas of the Kaliningrad Region. In: Gritsenko V.A., Sivkov V.V., Yurov A.V., Kostianoy A.G. (eds) Terrestrial and Inland Water Environment of the Kaliningrad Region. The Handbook of Environmental Chemistry, vol. 65. Springer, Cham, pp.481-494.
- Zueva, A. (2017). Soul of the City, In Nature of the Kaliningrad region. Old parks and plants regional monuments of nature. Kaliningrad: Istok, pp. 90-92.
- *** Article to the conservation of natural monuments. The nature reserves of Prussia. Eleventh volume. (1926). Berlin, p. 333. *** Angrapa Coast. The case of Gennady Razumovsky, In Artistic Publicistic Almanach, Special Issue. Kaliningrad: Yantarnyj Skaz, no. 2. 2006, p. 98.
- A nature reserve was revoked of its status the day before yesterday. 02.04.2004. Retrieved from: http://oopt.info/news/02a0404.html [Accessed: 26 March 2018].
- *** Newsletter for nature conservation, no.1, 12th year's issues (1934), Berlin, p.37.
- *** Protected Baltic Spit interferes with government: A. Koroleva Ekozashchita's leader interview IA REGNUM. 29.03.2004. Retrieved from: https://regnum.ru/news/238624.html [Accessed: 26 March 2018].
- *** State archive of the Kaliningrad Region (SAKR), Fund P-380, Inventory 1, Case 8, Page 36-37.
- *** State archive of the Kaliningrad Region (SAKR), Fund P-297, Inventory 7, Case 266, Page 26.
 *** State archive of the Kaliningrad Region (SAKR), Fund P-380, Inventory 1, Case 3, Page 3.
- *** State archive of the Kaliningrad Region (SAKR), Fund P-380, Inventory 1, Case 8, Page 12.
- *** State archive of the Kaliningrad Region (SAKR), Fund P-380, Inventory 1, Case 3, Page 9-12.
 *** State archive of the Kaliningrad Region (SAKR), Fund P-380, Inventory 1, Case 3, Page 7-8.
- *** The Baltic Spit will become a specially protected natural area. The official portal of the Government of the Kaliningrad region. 10.07.2017. Retrieved from: https://gov39.ru/news/101/117445/ [Accessed: 30 March 2018].
- *** The Vice-Speaker of the Kaliningrad Duma accuses Governor Yegorov of illegal transactions with state property. 09.09.2005 Retrieved from: https://regnum.ru/news/polit/510195.html [Accessed: 26 March 2018].
- *** The compromise suggested by the governor is impossible. 03.09.2019Retrieved from: https://rugrad.eu/ interview/1136839/smi/ [Accessed: 04 September 2019].

Submitted: Revised: Accepted and published online 19.06.2019 02.03.2020 05.03.2020

CAMPING TOURISM: A REVIEW OF RECENT INTERNATIONAL SCHOLARSHIP

Christian M. ROGERSON

School of Tourism & Hospitality, College of Business and Economics, University of Johannesburg, Bunting Road, Johannesburg, South Africa, e-mail: chrismr@uj.ac.za

Jayne M. ROGERSON*

School of Tourism & Hospitality, College of Business and Economics, University of Johannesburg, Bunting Road, Johannesburg, South Africa, e-mail: jayner@uj.ac.za

Citation: Rogerson C.M. & Rogerson J.M. (2020). CAMPING TOURISM: A REVIEW OF RECENT INTERNATIONAL SCHOLARSHIP. GeoJournal of Tourism and Geosites, 28(1), 349–359. https://doi.org/10.30892/gtg.28127-474

Abstract: One of the most under-researched facets of lodging is that which surrounds the niche of camping tourism. This review article traces trends and recent developments shaping international research on camping tourism. The analysis begins with a discussion of definitional and conceptual issues. Thereafter, the international spread of camping tourism as well as its local impacts for destinations is interrogated. The marginal role of camping in overall tourism studies scholarship is isolated. Key themes of concern in recent research are, inter alia, demand-side considerations; supply-side research; a distinctive scholarship on holiday camps and low-budget tourism; and, new innovations and management challenges which are associated with the changing character of camping tourism in many parts of the world. Knowledge gaps are identified in literature both in terms of the geography and thematic foci of camping tourism literature. Among knowledge gaps are the supply-side evolution of camping tourism, the role of private sector entrepreneurs, local development impacts and planning, and innovative management interventions for the sustainable development of camping tourism.

Key words: camping tourism; caravan parks; innovation; sustainable management; research review

INTRODUCTION

Camping tourism is a global phenomenon which is rising in significance and at the same time is experiencing considerable changes in its complexion. This review article traces trends and recent developments impacting the broad research field which is styled as 'camping tourism'. Arguably, whilst camping tourism research has expanded in recent years it still remains one of the 'poor cousins' of international tourism scholarship. This said, a search in Google Scholar and Scopus of relevant terms such as 'camping', 'caravan parks'

_

^{*} Corresponding author

and 'recreational vehicles' discloses an emerging body of research across several countries and with different thematic foci. In particular, it can be observed there has been an upturn of research around camping tourism which has occurred since the appearance in 2013 and 2014 of two influential review papers by Brooker & Joppe (2013, 2014). This survey of the 'state of the art' of literature on camping tourism builds upon the foundations provided by these authors. The paper is informed by the viewpoint that "a review of past research efforts is an important endeavour in all academic research areas" (Nunkoo et al., 2013: 5). In particular, among several advantages of the pursuit of review articles are the identification of knowledge gaps where additional research might be useful as well as potentially to facilitate theoretical advances. In unpacking major international debates in the development of scholarship around camping tourism two sections of material are provided. In the first part the analysis begins with a discussion of definitional and conceptual issues.

Thereafter, the international spread of camping tourism as well as its local impacts for destinations is interrogated. The marginal role of camping in overall tourism studies scholarship is highlighted. In the second part of the article the focus turns to an overview of several key research foci that can be isolated in extant writings. Themes of concern are, inter alia, demand-side considerations; supply-side research; a distinctive scholarship on holiday camps and low-budget tourism; and, new innovations and management challenges which are associated with the changing character of camping tourism in many parts of the world.

INTERNATIONAL DEBATES Definition and Conceptual Issues

Over several centuries Ward & Hardy (1986: 2) draw attention to the fact that "the word camp had a purely military connotation: the temporary accommodation of armies in the field using tents and portable huts". The term's meaning evolved gradually to cover also the improvised short-term settlements of various groups such as migratory farm workers, nomads, gypsies, explorers and refugees. Protest camps represent another manifestation of short-term temporary settlements undertaken often with tents and portable huts (Feigenbaum et al., 2013). In its most extreme form the 'non-recreational camp' connotes detainment and incarceration. As pointed out by Collins & Kearns (2010: 59) "the prefix 'concentration' surely signals the grimmest incarnation of 'camping'". Arguably, therefore, the activity of 'camping' initially became an inevitable accompaniment to human activities at locations where permanent buildings were either unavailable or deliberately not provided for shelter. Historically, therefore, much of the phenomenon of camping "was a necessary evil, not an activity undertaken for its own sake" and significantly it "was a penance not a pleasure" (Ward & Hardy, 1986: 2). Collins et al. (2020: 21) point out that the verb 'camping' and its term 'camp' as a code for spaces of mobile dwelling "occupy ambivalent territory". For the affluent and well-housed groups camping can be a space and time of recreational discretion whereas for those vulnerable, less fortunate and living precariously, the camp as a form of 'informal housing' might offer temporary respite from forced and continual mobility (Kearns et al., 2019; Collins et al., 2020). Historically, in terms of recreation and tourism Blichfeldt & Mikkelsen (2013) assert that originally camping was defined as staying in a tent in nature as a low-cost form of accommodation when on holiday.

For Brooker & Joppe (2014: 335) camping, however, "has matured beyond its origins as an inexpensive, temporary sojourn in a rural environment, evolving into a highly fragmented niche tourism sector". Its definition is contested now with 'traditionalists' simply equating it with tents and outdoor recreation. Nevertheless, for an increasing number of campers this view is changing as the activity "involves sleeping at least one night in a recreational vehicle (RV), caravan, cabin or other type of temporary shelter where the comforts of home can be enjoyed" (Brooker & Joppe 2014: 335). This aligns camping with

the phenomenon of 'drive tourism' which enables the bringing of a home in the form of a diverse range of recreational vehicles, including caravans (Prideaux & McClymont, 2006; Van Heerden, 2010a; Østby, 2013; Blichfeldt & Mikkelsen, 2014; Prideaux, 2020).

Patterson et al. (2015) style caravanning tourism as a special form of tourism with the caravan as part of both tourism transportation as well as accommodation. Caravanning is thus to be understood also as a subset of drive tourism as well as a component of wider recreational experiences that involve hospitality outdoors (Van Heerden, 2010a; Caldicott, 2011; Brooker & Joppe, 2013; Lashley, 2015). For Doğantan & Emir (2019) caravan tourism is associated with strong linkages to nature-based tourism. In seeking to conceptualize camping as a whole Collins & Kearns (2010: 59) start from the proposition that "if all inclusive resorts and luxury hotels are one end of the tourism accommodation spectrum, then campgrounds surely lie at the other". Beyond cost and amenity-related considerations, camp grounds and caravan parks are seen as distinctive forms of accommodation in two major respects. The actual accommodation (caravan or tent) "is generally owned by the user, hence what is paid for is just short-term rental on the site that includes access to a range of (traditionally rudimentary) ancillary services" (Collins & Kearns, 2010: 59).

Further, in some instances, "the same holidaymakers who on one occasion might stay in hotels or resorts, on another opt to stay in campgrounds" (Collins & Kearns, 2010: 59). In turn this means that "the privations incurred through access to only basic facilities and exposure to the elements are, generally, a matter of choice rather than necessity" (Collins & Kearns, 2010: 59). Accordingly, 'camping' must be understood as "a holistic activity and accommodation choice" (Brooker & Joppe, 2014: 335). For Crabeck (2013) camping is a shadowy element of the lodging sector with particular difficulties in terms of its enumeration. It encompasses an array of activities from basic camping to luxury RVs as well as upmarket cabins, and most recently the growth of 'glamping'. Arguably, over the past decade "camping has been experiencing a transformation through the implementation of a novel and innovative accommodation increasingly referred to as glamping" (Hrgović et al., 2019: 773). The latter - a recent innovation in creative accommodation - derives from the words glamour and camping and is attracting mounting interest (Cvelić-Bonifačić et al., 2017; Lee et al., 2019). Brochado & Perreira (2017: 77) view it is "an emergent concept in camping that combines comfort with direct contact with nature". Hrgović et al. (2019) assert that glamping is an umbrella term for numerous types of accommodation provision. It most often takes the form of tents but can also include other innovative types of luxury accommodation such as yurts or treehouses (Hrgović et al., 2018). As a whole Brooker & Joppe (2013: 1) characterise the outdoor hospitality sector as including caravan parks, camping grounds and glamping and observe that it "has emerged from a low-cost tourist niche to a mainstream versatile recreation experience valued at different levels by different segments".

International Expansion and Destination Impacts

The phenomenon of recreational camping — in its various manifestations—is observed throughout the world, albeit is viewed as particularly popular in the tourism economies of North America (Stephens et al., 1989; Janiskee, 1990; Timothy & Teye, 2009; Brooker & Joppe, 2014; Young, 2017), Australia (Caldicott et al., 2014) and New Zealand (Collins & Kearns, 2010; Collins et al., 2018). Its popularity is further recorded in several countries of Europe including Croatia (Grzinic et al., 2010; Cerovič, 2014), Denmark (Mikkelsen & Blichfeldt, 2015), Germany (Doğantan & Emir, 2019), Spain (Garcia-Pozo et al., 2011; Salo et al., 2020), Turkey (Doğantan et al., 2017) and United Kingdom (Rees Pryce, 1967; Prentice & Witt, 1991; Lashley, 2015). This said, in many destinations camping is weather-sensitive and a highly seasonal phenomenon (Collins & Kearns, 2010; Triantafillidou & Siomkos, 2013; Hewer et al., 2015; Lashley, 2015). According to Cerović (2014: 57) camping "is an important economic branch in Europe which generates nearly

400 million overnights and which makes up the majority of accommodation units in some countries". In the USA recent estimates are of approximately 16 000 campgrounds with just over half privately owned and operated the remainder being public-agency campgrounds (Timothy & Teye, 2009). In Australia caravan parks are the second highest provider of domestic tourism accommodation (Caldicott, 2011) and the subsector provides at least half of the country's national tourism bed capacity (Caldicott & Scherrer, 2013a). South Africa is noted as another significant focus for the camping sector (Van Heerden, 2008, 2010a, 2010b, 2020). Other destinations where camping has attracted some academic concern include Indonesia (Budiasa et al., 2019), Iraq (Al-Zahawai et al., 2019), Mexico (Jimenez & Martinez, 2017), and Sri Lanka (Jayakody, 2019). It is considered that across the international context the economic effects of camping tourism "have been steadily increasing over the past few years, given the fact that camping is transforming from a niche to a mainstream-tourism product" (Mikulić et al., 2017: 227). In several countries, such as Australia, New Zealand or South Africa, the geography of camping and of caravanning is closely tied to coastal areas and coastal tourism (Collins & Kearns, 2010; Doğantan & Gűlenc, 2017; Rogerson & Rogerson, 2019, 2020). In others, such as the USA, however, a focus on nature tourism and protected areas means that non-coastal areas assume significance in the overall spatial distribution of camping tourism (Timothy & Teye, 2009).

The Poor Cousin of Tourism Research

Despite its widespread occurrence and significant economic contribution across several destinations Rice et al. (2019: 424) aver that as "compared to other sectors of the tourism industry, camping is relatively under-researched". For Brooker & Joppe (2013: 1) it "has received minimal attention in the literature". The deficit in academic research about camping is underscored also by several other scholars (Prideaux & McClymont, 2006: Mikulić et al., 2017). Most recently, Van Rooij & Margaryan (2020: 3) observe that despite its significance as a growing form of outdoor recreation "camping has received minimal attention in the research literature". Lashley (2015: 121) maintains that "the amount of research undertaken with the specific intention of exploring caravanning and caravaners is limited". Likewise, Mikkelsen & Cohen (2015) assert that caravanning is a relatively neglected topic in tourism scholarship. Overall, the activity of camping and caravanning is one of the least well-researched of different lodging forms as is shown through the findings of the recent bibliometric analysis produced by Okumus et al. (2019). One potential reason for its under-researched character is caravanning often is considered only as "a mundane type of holidaymaking" (Mikkelsen & Blichfeldt, 2015: 252). Caldicott (2011: 10) writes of its representation of "ordinary and routine practices" and suggests its lack of attention relative to other forms of leisure is accounted for by its "fragmented" character.

Lashley (2015: 115) states that when caravanners go on holiday they can be likened to snails "in that they carry their 'homes' with them". This said, caravan parks offer a range of accommodation options from basic to resort standard and can include in some countries short-term as well as permanent sites (Gilbert, 2013). Caldicott et al. (2018) argue that the caravan park, as a subsector of tourism accommodation services, has been viewed as the traditional symbol of caravanning. But, that the focus in some countries — particularly Australia and New Zealand - is shifting now more on the caravan itself and its serviceability as a long-term, touring residential home as opposed to a temporary short-term holiday unit to be conveniently parked in a caravan park (Caldicott et al., 2014; Collins et al., 2018).

CONTEMPORARY RESEARCH THEMES Demand-Side Issues

The existing international scholarship on camping and caravanning is dominated by demand-side investigations variously of the demographics, motivations and

satisfaction of participants with choices of particular camp sites (Stephens et al., 1989; Prideaux & McClymont, 2006; Van Heerden, 2010b; Park et al., 2010; O'Neill et al., 2011; Østby, 2013, Brooker & Joppe, 2014; Brochardo & Pereira, 2017; Mikulić et al., 2017; Van Heerden, 2020). Demographically whilst camping is viewed as appealing to all age cohorts (with the exception of 18-24 years) it is seen as particularly popular with young families (Brooker & Joppe, 2013; Mikkelsen & Blichfeldt, 2015). From Spain there is evidence that, as compared to other accommodation types, camp site tourism is less sensitive to congestion. Indeed, whilst campers can be sensitive to overcrowded locations, a crowded atmosphere can be accepted if embedded in an attractive social environment and thus towards a positive social experience from camping (Salo et al., 2020). In Denmark caravan sites are viewed as 'safe places' that allow children to experience independence and afford an opportunity for children to do things on their own (Mikkelsen & Blichfeldt, 2015). Danish camping sites mostly are visited by both extended and nuclear families (Blichfeldt & Mikkelsen, 2013). In Australia, however, Prideaux & McClymont (2006: 57) discern a notable "shift from family to retired and empty nester caravanning". The travels of 'grey nomads' have been the focus of considerable investigation in Australian research (Holloway et al., 2011; Patterson et al., 2015).

Distinctions are drawn between different market segments of campers such as participants that use static (or rarely moved) holiday caravans as opposed to the group of mobile or touring caravans (Lashley, 2015; O'Dell, 2015). The most important differentiation is between the short-term segment and those full-timers who live permanently or semi-permanently in their caravan or RV (Lashley, 2015). Gilbert (2013) points out that caravan parks span the void between the sectors of tourism and housing. Further, in Australia, the United Kingdom and New Zealand they have been providing accommodation options for groups at risk of homelessness (Nelson & Minnerv. 2008: Brooker & Joppe, 2013; Gilbert, 2013; Kearns et al., 2019; Collins et al., 2020). In the case of Belgium the residential function of caravan parks is now more important than that for leisure travellers (Crabeck, 2013). The deep historical roots of many Americans with being outdoors and their association with open spaces has been documented in a number of studies (Garst et al., 2010; Kambic, 2018). An early study into the growth of recreational vehicles in the USA revealed that "the RV life style is characterized by a strong desire to experience the outdoors and socialize with other campers while still retaining the comforts and convenience of a familiar domicile" (Green, 1978: 429). In New Zealand Collins & Kearns (2010) suggest that campgrounds represent "therapeutic landscapes" to the extent that they facilitate literal proximity to areas of natural beauty and a strong sense of being 'in' nature and correspondingly away from the stresses of urban environments. Campers embrace selfimposed simplicity and can break away from normal routines and distance themselves physically and psychologically from urban living and enjoy a sense of community in many campgrounds (Collins & Kearns, 2010; Lashley, 2015). The social benefits of camping as family holidays can be significant allowing families and friends to spend quality time together in natural settings (Timothy & Teye, 2009; Mikkelsen & Blichfeldt, 2018). Brooker & Joppe (2014: 336) write of the personal rewards and liminal experience which "provides individuals with opportunities to reconnect with simpler living practices, natural environments and with themselves, family and friends". For others, however, budgetary considerations are paramount as camping is usually less expensive than other forms of lodging (Timothy & Teye, 2009). In addition, Lashley (2015) draws attention to caravanning and camping holidays as an affordable option during hard economic times in Europe.

Supply-side Considerations

The supply-side of camping and caravanning was relatively uncharted academic territory until recent years (Caldicott, 2011). Private sector entrepreneurship is a

particularly neglected theme with extant research pointing to a significant role for lifestyle entrepreneurs (Van Rooij & Margaryan, 2020). In the USA Timothy & Teye (2009) stress the different roles assumed in the supply of facilities by the public and private sector.

Although private campgrounds account for 53 percent of facilities they account for three-quarters of US demand as public agency campgrounds are not as commercialized and instead are subsidized by governments and viewed as non-profit or self-sustaining enterprises with few amenities on offer. Some of the most recent innovative supply-side research has emerged out of Australia and New Zealand. In Australia Caldicott (2011) examines the parallel development of the caravan manufacturing sector and of the caravan park sector. The life cycle of caravan parks in Australia has been analysed within the framework of Butler's classic tourism area life cycle model. Using historical data it is shown that the pattern of caravan park development and evolution conforms to the involvement, exploration, development, consolidation and stagnation stages of the model (Caldicott & Scherrer, 2013a). In the cases of Australia and New Zealand the development of these caravan parks was undertaken both under the aegis of the public sector as well as by private entrepreneurs (Collins & Kearns, 2010; Caldicott, 2011). Beginning from rudimentary sites caravan parks were upgraded as caravanners demanded an array of improved amenities.

The historical experiences of Australia and New Zealand confirms the assertion of Simeoni & Cassia (2019) that the makers of caravans are 'co-creators' of the tourism experience of caravanning. The period of the mid-1970s is described as "the glory days" of the caravan sector in Australia (Caldicott & Scherer, 2013b: 117). A progressive downturn began in the numbers of caravan park sites and capacity engineered "through the closure of parks in favour of higher economic yielding development scenarios" (Caldicott, 2011:5).

As explained by Prideaux & McClymont (2006) this demise of caravan parks was driven mainly by a conversion in coastal areas of beachfront land to high rise units and hotels. According to Gilbert (2013) while the redevelopment of low impact caravan sites into higher uses creates economic benefits at the same time there are negative ramifications for low cost family holidays as well as longer term impacts for the supply of affordable accommodation in coastal areas of Australia. With the reinvention of 'camping' in terms of improved quality accommodation and other facilities there is a recent wave of resurgence in caravanning as a component of drive tourism as reflected in an upturn in registrations of new campervans and motor homes (Caldicott & Scherrer, 2013b). For many caravan parks in Australia and New Zealand a tipping point emerges with the potential for either closure and redevelopment or rejuvenation and transformation (Collins & Kearns, 2010; Caldicott & Scherrer, 2013b). Indeed, caravan/campgrounds in both Australia and New Zealand have a precarious and uncertain foothold in urban space as with escalating land prices they are sought after spaces for property redevelopment (Bunce, 2010; Collins et al., 2020).

Holiday Camps and Low-Budget Tourism

The historical development of organised holiday camps in which the activity of 'camping' takes place in purpose-built 'luxury' chalets is a further supply-side theme of note. The British experience is documented in the seminal works by Dawson (2007) and Ward & Hardy (1986). Dawson (2007) attributes the growth of commercial holiday camps to the successful conclusion of a 20-year campaign with the passage of the Holidays With Pay Act in 1938. The final legislation recommended one week's annual paid vacation for all full-time workers and thus created a market for mass pleasure sites for ordinary working people and their families in Britain. The building of holiday camps was a solution to addressing what was at the time a crisis in terms of the limited affordable leisure options for working-class consumers (Dawson, 2007). According to Ward & Hardy (1986: 22) the first holiday camp entrepreneur was not Billy Butlin but one Joseph Cunningham who started in 1908 for the 'working lads' of Liverpool a holiday camp on the Isle of Man which "provided cheap

accommodation on a massive scale, but instead of chalets, the campers slept in row upon row of candle-lit tents". By 1938 there were approximately 200 small holiday camps in Britain variously organized by commercial enterprises, unions and political groupings; some were tents in the field whilst others had barrack-like accommodation (Dawson, 2007).

The two new chains of holiday camps that emerged in the 1930s by Butlin and Warner marked a major change in terms of their size, facilities and organization (Dawson, 2011). Aimed at the emerging mass market the first Butlins camp opened at Skegness in 1936 (Ward & Hardy, 1986). As argued by Dawson (2007: 300) the chain of camps launched by Butlin and Warner "provided all the entertainment, activities and amenities, necessary for a healthy and restful vacation in cheerful surroundings for an inexpensive allinclusive price". The holiday camps built by Warner and Butlin were initiatives for 'packaging leisure' and a response to the perceived demand for low-cost all-inclusive holidays (Middleton, 2010; Dawson, 2011). Overall, these sites of organized pleasure "built on earlier ideas of all-inclusive camping holidays and developed more comfortable accommodation for the emergent working-class family market (Dawson, 2007; 303). By the 1970s Goodall (1987: 95) observes that the British holiday camps were past their prime and heading on a downhill trajectory as a consequence of competition both from a growing sector of selfcatering accommodation as well the rise of cheap 'Sun-Med' packages. Nevertheless, the enduring legacy of these holiday camps and their entrepreneurs is evidenced by several proposals which have emerged since 2013 for the establishment of low-cost resorts to be developed in South Africa based upon the Butlin's model as affordable holiday options for 'ordinary' families (Ensor, 2013; Mthente Research and Consulting Services, 2013). The proposal was to re-develop underused state properties such as disused municipal caravan parks into budget tourist facilities and thereby boost local demand for domestic affordable holidays most especially for the less affluent Black holiday-maker (Rogerson, 2015).

New Innovations and Management Challenges

As argued by Milohnić et al. (2019: 457) in the 21st century camping "is strongly marked by new trends in the development of accommodation at camp sites, foremost by new demand that combines wishing to stay outdoors and wanting all the comforts of home". The key drivers of change in Europe are that for certain groups camping becomes a lifestyle choice by guests who opt for camping accommodation not out of personal constraints but out of conviction and perceived need. The influence of glamping is seen as considerable and most especially in the United Kingdom (Cerović, 2014; Brochado & Pereira, 2017) and Croatia (Hrgović et al., 2019). According to Brooker & Joppe (2013: 4) glamping removes camping's negative attributes and whilst contributing to increased profitability and occupancy "glamping represents a transition from outdoor to indoor hospitality". It rejuvenates and redesigns the product of camping bringing together "in symbiosis the hotel industry and camping" (Hrgović et al., 2018: 622) This trend for 'neocomfort' is "contributing to the renewed interest of tourists for camping" and offering managers of campsites an opportunity for an "extreme makeover" (Cerović, 2014: 57).

It is maintained that the "popularity of glamping, particularly among the younger generations, is driving the overall transformation of classical camping into glamping with numerous implications for the general competitiveness of the sector" (Milohnić et al., 2019: 457). No longer is camping the stereotype of 'poor man's tourism"; glamping which is a specific kind of camping neutralizes its drawbacks through the provision of a high level of comfort (Sakacova, 2013; Petrusa & Vlahov, 2019; Liberato et al., 2020). For Ketter (2020) the rise of glamping is one response to the demands of (especially European) Millennial travellers and their reshaping of the hospitality sector. For Bigné & Decrop (2019) glamping illustrates one of the (many) paradoxes of postmodern tourists in terms of living 'more authentic experiences' which are closer to nature but in comfortable conditions. In the

wake of radical changes that are internationally impacting the camping sector and caravan parks a critical supply-side research focus is that of the innovative management of these sites (Lucivero, 2012; Cvelić-Bonifačić et al., 2017; Brochado & Brochado, 2019; Milohnić et al., 2019). In a useful contribution Blichfeldt (2009) chronicles the case of one specific caravan enterprise in Denmark as a focus for innovation and entrepreneurship in terms of the diversification of product offerings introduced at the case site. Within the fluid environment of the changing character of 'camping' it is argued there is a need for developing competitive management strategies for traditional camping grounds and caravan parks. One useful step is the introduction of integrated reporting as a framework for an upgraded approach for benchmarking for competitiveness (Persic et al., 2017).

Another aspect of management strategy is competitive pricing and revenue management as is shown by Poldrugovac et al. (2019). The sustainable management of campsites is an issue of increasing research attention (Timothy & Teve, 2009; Del Moretto et al., 2017). Gračan & Birin (2013) stress the significance of implementing ecological standards in the sustainable development of camping localities. Sustainable camp site management and the certification of camp sites is further explored by Milohnić & Cvelić-Bonifačić (2015). From the experience of Croatia, one of the major camping destinations in Europe, it is stressed that "innovative camping management is expected to manage changes of the camping product by embracing a quality mix of accommodation units and introducing innovative forms of camping accommodation" (Cerović, 2014: 56). Given the financial crises experienced in several European countries combined with rising travel costs there is an emerging segment of consumers who are demanding "alternative systems of camping accommodation, whereby camping equipment is no longer bought but rented in the campsite itself" (Cerović, 2014: 57). The required management shifts are thus both to address the market segments of those seeking low-cost leisure options as well as lifestyle campers with a demand "for comfortable stays in a natural environment, and the desire to spend time in well-kept dream resorts that are technologically advanced at the same time" (Cvelic-Bonifačić et al., 2017: 102). Overall, across several areas of Europe the response has been product innovation with the transformation of traditional campsites into "holiday parks" or "camping resorts" sometimes with a mix of offerings (Prentice & Witt, 1991).

CONCLUSION

It has been observed recently that camping and caravan parks are "a rather neglected element of the tourism and hospitality industry" (Mikulić et al., 2017: 226). Nevertheless, there has been a welcome upturn in academic interest particularly over the past decade. This rise in scholarly concern has been boosted both by the sustained popularity of camping tourism as a form of outdoor hospitality as well as by significant changes in the complexion of this tourism segment. In common with trends in international tourism scholarship as a whole the balance of academic research on camping tourism currently is dominated by studies conducted in the global North. This points to one knowledge gap about camping tourism, namely its manifestation and development in the global South; at present there appears an emergent literature in the case of South Africa. The observed shifts occurring in camping tourism away from its traditional low-budget character signal several issues for a future research agenda. Demand-side investigations merit further attention in relation to the distinctive demographics, motives and satisfaction of participants with camp sites and caravan parks. In addition, the less developed supply side of camping tourism requires greater scholarly scrutiny, including through the pursuit of historical investigations about the evolution of camping tourism. The shifting role of private entrepreneurs as well as of the state in the sector's unfolding development is little explored. Of policy concern is the nexus of camping tourism with local economic development and the implications for local tourism planning and destination development. Finally, there is a

critical cluster of research issues surrounding innovation and camping tourism, including around the sustainable management of camp sites or caravan parks.

Acknowledgements

Thanks are due to South Africa's national Department of Tourism for funding this review as part of a broader investigation on the planning and utilisation of caravan parks in the country. Useful inputs for revision of earlier drafts have been obtained from reviewer comments as well as the contributions made by Teddy, Dawn and Skye Norfolk,

REFERENCES

- Al-Zahawai, M.I., Bilal, A.T. & Al-Daloy, S.E. (2019). Activating and Managing Camping Tourism and Its Role in Increasing Tourist's Expenditure. Journal of University of Human Development, 5 (1), 44-60.
- Bigné, E. & Decrop, A. (2019). Paradoxes of Postmodern Tourists and Innovation in Tourism Marketing. In E. Fayos-Sola & C. Cooper (eds.), The Future of Tourism, Cham, Switzerland: Springer International, 131-154.
- Blichfeldt, B.S. (2009). Innovation and Entrepreneurship in Tourism: The Case of a Danish Carayan Site, Pasos, 7(3), 415-431. Blichfeldt, B.S. & Mikkelsen, M.V. (2013). Vacability and Sociability as Touristic Attraction. Tourist Studies, 13 (3), 235-250.
- Blichfeldt, B.S. & Mikkelsen, M.V. (2014). Camping, Tourism. In J. Jafari & H. Xiao (eds.), Encyclopedia of Tourism, (Living Edition), Dordrecht: Springer, 1-2.
- Brochado, A. & Brochado, F. (2019). What Makes a Glamping Experience Great? Journal of Hospitality and Tourism Technology, 10 (1), 15-27.
- Brochado, A. & Pereira, C. (2017). Comfortable Experiences in Nature Accommodation: Perceived Service Quality in Glamping. Journal of Outdoor Recreation and Tourism, 17, 77-83.
- Brooker, E. & Joppe, M. (2013). Trends in Camping and Outdoor Hospitality An International Review. Journal of Outdoor Recreation and Tourism, 3-4, 1-6.
- Brooker, E. & Joppe, M. (2014). A Critical Review of Camping Research and Direction for Future Studies.

 Journal of Vacation Marketing, 20 (4), 335-351.

 Budiasa, M., Suparta, K. & Nurjaya, W. (2019). Implementation of Green Tourism Concept on Glamping
- Tourism in Bali. Advances in Social Science, Education and Humanities Research, 354, 210-214.
- Bunce, D. (2010). Relocatable Homes: Medieval Tenure in the 21st century? Urban Policy and Research, 28 (3), 277-292. Caldicott, R. (2011). Supply-side Evolution of Caravanning in Australia: An Historical Analysis of Caravan Manufacturing and Caravan Parks, Lismore, NSW, Australia: School of Tourism and Hospitality, Southern Cross University.
- Caldicott, R.W. & Scherrer, P. (2013a). The Life Cycle of Caravan Parks in Australia: The Case of Northern New South Wales. Australian Geographer, 44 (1), 63-80.
- Caldicott, R.W. & Scherrer, P. (2013b). Facing Divergent Supply and Demand Trajectories in Australian Caravanning: Learnings From the Evolution of Caravan Park Site-mix Options in Tweed Shire. *Journal*
- of Vacation Marketing, 19 (2), 117-131. Caldicott, R., Jenkins, J.M. & Scherrer, P. (2018). Wherever I Park my RV, That's My Home. In C.M. Hall & D. Müller (eds.), The Routledge Handbook of Second Home Tourism and Mobilities, Abingdon: Routledge.
- Caldicott, R., Scherrer, P. & Jenkins, J. (2014). Freedom Camping in Australia: Current Status, Key Stakeholders and Political Debate. Annals of Leisure Research, 17 (4), 417-442.
- Cerović, Z. (2014). Innovative Management of Camping Accommodation. Horizons: International Scientific Journal Series A, 13, 55-68.
- Collins, D. & Kearns, R. (2010). Pulling Up the Tent Pegs?: The Significance and Changing Status of Coastal Campgrounds in New Zealand. Tourism Geographies, 12 (1), 53-76.
- Collins, D., Bates, L., Kearns, R. & Evans, J. (2020). Considering the Camp: Ambivalent Geographies of Mobile Dwelling. Applied Mobilities, 5 (1), 21-38.
- Collins, D., Kearns, R., Bates, L. & Serjeant, E. (2018). Police Power and Fettered Freedom: Regulating Coastal Freedom Camping in New Zealand. Social and Cultural Geography, 19 (7), 894-913.
- Crabeck, S. (2013). Measuring the Supply of Tourism Accommodation: Figures that Make No Sense?:
- Reflections on Campsite Statistics for Wallonie (Belgium). *Journal of Tourism History*, 5 (2), 201-215. Cvelić-Bonifačić, J., Milohnić, I. & Cerović, Z. (2017). Glamping Creative Accommodation in Camping Resorts: Insights and Opportunities. *Tourism in Southern and Eastern Europe*, 4, 101-114.
- Dawson, S. (2007). Working-class Consumers and The Campaign for Holidays With Pay. Twentieth Century British History, 18 (3), 277-305.
- Dawson, S. (2011). Holiday-Camps in Twentieth Century Britain: Packaging Pleasure. Manchester: Manchester University Press. Del Moretto, D., Colla, V. & Branca, T.A. (2017). Sustainable Mobility for Campsites: The Case of Maccia Lucchese. Renewable and Sustainable Energy Reviews, 68 (2), 1063-1075.
- Doğantan, E. & Emir, O. (2019). Determination of Trailer Park Criteria in Rural Areas. Journal of Tourism and Gastronomy Studies, 7 (4), 2383-2398.
- Doğantan, E., Gűlenç, S. & Kozak, N. (2017). The Evolution and Transformation of Camping and Coastal Campgrounds in Antalya, Turkey. Turizam, 65 (1), 75-85.
- Ensor, L. (2013). 'Butlins-style' Resorts for Holidaying Poor. Business Day Live (Johannesburg), 15 May.

- Feigenbaum, A., Frenzel, F. & McCurdy, P. (2013). Protest Camps. London: Zed.
- Garcia-Pozo, A., Sanchez-Ollero, J.L., & Marchante-Lara, D.M. (2011). Applying a Hedonic Model to the Analysis of Campsite Pricing in Spain. *International Journal of Environmental Research*, 5 (1), 11-22.
- Garst, B.A., Williams, D.R. & Roggenbuck, J.W. (2010). Exploring Early Twenty-first Century Developed Forest Camping Experiences and Meanings. *Leisure Sciences*, 32, 90-107.
- Gilbert, H. (2013). The Loss of Low Cost Caravan Parks Causes, Cases and Social Consequences. In K. Ruming, B. Randolph & N. Gurran (eds.), Proceedings: *State of Australian Cities Conference*, 2013, Sydney: State of Australian Cities Research Network.
- Goodall, B. (1987). Book Review: Goodnight Campers!: The History of the British Holiday Camp. *The Town Planning Review*, 58 (1), 95.
- Gračan, D. & Birin, A. (2013). The Implementation of Ecological Standards in Sustainable Development of Croatian Camps. *Tourism in Southern and Eastern Europe*, 2, 131-143.
- Green, F.B. (1978). Recreational Vehicles: A Perspective. Annals of Tourism Research, 5 (4), 429-439.
- Grzinic, J., Zarkovic, A. & Zanketic, P. (2010). Positioning of Tourism in Central Dalmatia Through the Development of Camping Tourism. *International Journal of Economic Perspectives*, 4 (3), 525-535.
- Hewer, M.J., Scott, D. & Gough, W.A. (2015). Tourism Climatology for Camping; A Case Study of Two Ontario Parks (Canada). *Theoretical and Applied Climatology*, 121 (3-4), 401-411.
- Holloway, D., Green, L. & Holloway, D. (2011). The Intratourist gaze: Grey Nomads and 'Other Tourists'. *Tourist Studies*, 11(3), 235-252.
- Hrgović, A-M.V., Cvelić-Bonifačić, J. & Licul, I. (2018). Glamping New Outdoor Accommodation. *Ekonomska Misao I Praksa*, 2, 621-639.
- Hrgović, A-M.V., Cvelić-Bonifačić, J. & Milohnić, I. (2019). Dimensions of Service Quality in Glamping. Tourism in Southern and Eastern Europe, 5, 773-785.
- Janiskee, R.L. (1990). Resort Camping in America. Annals of Tourism Research, 17 (3), 385-407
- Jayakody, J.A.D.C. (2017). Identification of Factors Affecting the Success of Caravan Tourism Industry in Sri Lanka. MBA thesis (Entrepreneurship), University of Moratuwa, Sri Lanka.
- Jiminez, L.N. & Martinez, O.F. (2017). Using GIS to Analyse the Camping Industry: The case of Mexico. In C. Lee, S. Filep, J.N. Albrecht & W.J.L. Coetzee (eds.), *CAUTHE 2017: Time for Big Ideas? Re-thinking the Field for Tomorrow.* Dunedin: University of Otago, 687-691.
- Kambic, K. (2018). Book Review: Heading out: A History of American Camping. Journal of Tourism History, 10 (3), 298-300. Kearns, R., Collins, D., Bates, L. & Serjeant, E. (2019). Campgrounds as Service Hubs for the Marginally Housed. *Geographical Research* 57 (3), 299-311.
- Ketter, E. (2020). Millennial Travel: Tourism Microtrends of European Generation Y. Journal of Tourism Futures. DOI 10.1108/JTF-10-2019-0106
- Lashley, C. (2015). Researching Snails on Holiday: An Agenda for Caravanning and Caravanners? Research in Hospitality Management, 5 (2), 115-122.
- Lee, W.S., Lee, J-K., & Moon, J. (2019). Influential Attributes for the Selection of Luxury Camping: A Mixed-logit Method. *Journal of Hospitality and Tourism Management*, 40, 88-93.
- Liberato, P., Coelho, J. & Liberato, D. (2020). Price Versus Service Assessment in Glamping. In V. Katsoni & T. Spyraidis (eds.), Cultural and Tourism Innovation in the Digital Era. Cham, Switzerland: Springer Proceedings in Business & Economics, 629-638.
- Lucivero, M. (2012). Camping and Open-air Tourism: An Opportunity for Sustainable Tourism in Coastal Areas. In 6th Conference of the International Forum on Urbanism (IFoU) TOURBANISM, Barcelona. Delft: International Forum on Urbanism, 1-9.
- Middleton, V.T.C. (2010). Sir William Edmund Heygate Colbourne (Billy) Butlin 1899-1980. In R. Butler & R.A. Russell (eds.), *Giants of Tourism*. Wallingford: CABI Publishing, 32-44.
- Mikkelsen, M.V. & Blichfeldt, B.S. (2015). 'We Have Not Seen the Kids for Hours': The Case of Family Holidays and Free-range Children. *Annals of Leisure Research*, 18 (2), 252-271.
- Mikkelsen, M.V. & Blichfeldt, B.S (2018). Grand Parenting by the Pool. Young Consumers, 19 (2), 127-140.
- Mikkelsen, M.V. & Cohen, S.A. (2015). Freedom in Mundane Mobilities: Caravanning in Denmark. *Tourism Geographies*, 17 (5), 663-681.
- Mikulić, J., Prebežac, D., Šerić, M., & Krešić, D. (2017). Campsite Choice and the Camping Tourism Experience: Investigating Decisive Campsite Attributes Using Relevance-determinance Analysis. *Tourism Management*, 59, 226-233.
- Milohnić, I. & Cvelić-Bonifačić, J. (2015). Sustainable Camping Management: A Comparative Analysis Between Campsites and Hotels in Croatia. *Tourism in Southern and Eastern Europe*, 3, 211-222.
- Milohnić, I., Cvelić-Bonifačić, J., & Licul, I. (2019). Transformation of Camping into Glamping Trends and Perspectives. *Tourism in Southern and Eastern Europe*, 5, 457-473.
- Mthente Research and Consulting Services (2013). Towards Developing a Budget Travel Destination Chain in South Africa. Report prepared for the Industrial Development Corporation, Johannesburg.
- Nelson, K. & Minnery, J. (2008). Caravan Parks as Social Housing: The Tensions Between Public Goals and Private Interests in Brisbane, Australia. *Planning Practice & Research*, 23 (4), 479-494.

- Nunkoo, R., Smith, S.L.J. & Ramkissoon, H. (2013). Residents' Attitudes to Tourism: A Longitudinal Study of 140 Articles from 1984 to 2010. *Journal of Sustainable Tourism*, 21, 5-25.
- O'Dell, S. (2015). Post-war Tourism in the Tendring District and Beyond: The Rise of the Holiday Caravan Park, c 1938-1989. PhD Dissertation, University of Essex.
- O'Neill, M.A., Riscinto-Kozub, K.A. & Van Hyfte, M. (2010). Defining Visitor Satisfaction in the Context of Camping Oriented Nature-based Tourism: The Driving Force of Quality. *Journal of Vacation Marketing*, 16 (2), 141-156.
- Okumus, F., Köseoglu, M.A., Putra, E.D., Yildiz, M. & Dogan, I.C. (2019). Conceptual Structure of Lodging-context Studies: 1990-2016. *Journal of Hospitality & Tourism Research*, 43 (2), 210-225.
- Østby, P. (2013). Car Mobility and Camping Tourism in Norway, 1950-1970. *Journal of Tourism History*, 5 (3), 287-304. Park, J., Ellis, G., Kim, S.S. & Prideaux, B. (2010). An Investigation of Perceptions of Social Equity and Price Acceptability Judgments for Campers in the U.S. National Forest. *Tourism Management*, 31, 202-212.
- Patterson, I., Pegg, S. & Mahedevan, R. (2015). The Benefits of Short Stay Caravan Travel Based on the Lived Experiences of Grey Caravanners in Australia. *Tourism Analysis*, 20 (5), 539-549.
- Persic, M., Jankovic, S. & Cvelić-Bonifačić, J. (2017). Integrated Reporting As a Trend and Challenge for Benchmarking and Competitiveness of the Camping Business. *Tourism in Southern and Eastern Europe*, 4, 451-468.
- Petrusa & Vlahov, A. (2019). The Role of Glamping in Development of Camping Tourism Offer Possibilities and Future Prospects in the Republic of Croatia. In J. Simurina, I.N. Braje & I Pavić (eds.), *Proceedings of FEB Zagreb 10th International Odyssey Conference on Economics and Business 12-15 June Opatija*, Croatia. Zagreb: University of Zagreb Faculty of Economics & Business, 826-843.
- Poldrugovac, K., Jankovic, S. & Persic, M. (2019). The Significance of Competitive Pricing and Revenue Management in Camping. *International Journal of Revenue Management*, 11 (1-2), 76-88.
- Prentice, R.C. & Witt, S. F. (1991). Holiday Parks: Current Issues and Trends. *International Journal of Hospitality Management*, 10 (3), 229-244.
- Prideaux, B. (2020). Drive and Car Tourism: A Perspective Article. Tourism Review, 75 (1), 109-112.
- Prideaux, B. & McClymont, H. (2006). The Changing Profile of Caravanners in Australia. *International Journal of Tourism Research*, 8, 45-58.
- Rees Pryce, W.T. (1967). The Location and Growth of Holiday Caravan Camps in Wales, 1956-65. Transactions of the Institute of British Geographers, 42, 127-152.
- Rice, W.L., Park, S.Y., Pan, B. & Newman, P. (2019). Forecasting Campground Demand in US National Parks. Annals of Tourism Research, 79, 424-438.
- Rogerson, C.M. (2015). Restructuring the Geography of Domestic Tourism in South Africa. Bulletin of Geography: Socio-Economic Series, 29, 119-135.
- Rogerson, C.M. & Rogerson, J.M. (2019). Tourism, Local Economic Development and Inclusion: Evidence from Overstrand Local Municipality, South Africa. *GeoJournal of Tourism and Geosites*, 25 (2), 293-308.
- Rogerson, C.M. & Rogerson, J.M. (2020). Coastal Tourism in South Africa: A Geographical Perspective. In J.M. Rogerson & G. Visser (eds.), New Directions in South African Tourism Geographies. Cham, Switzerland: Springer International, 227-247.
- Sakacova, K.L. (2013). Glamping Nature Served on a Silver Platter. Masters thesis, Aalborg, Aalborg University, Denmark.
- Salo, A., Teixidor, A., Fluvia, M. & Garriga, A. (2020). The Effect of Different Characteristics on Campsite Pricing: Seasonality, Dimension and Location Effects in a Mature Destination. *Journal of Outdoor Recreation and Tourism*, 29, 100263
- Simeoni, F. & Cassia, F. (2019). From Vehicle Suppliers to Co-creators in Tourism: The Evolving Role of Italian Motorhome Manufacturers. *Current Issues in Tourism*, 22 (2), 218-236.
- Stephens, K.T., Leonard, M.J. & Smolder, D.L. (1989). Camping Tourism in the Smoky Mountains. *Tourism Management*, 10 (1), 66-69.
- Timothy, D. J., & Teye, V. B. (2009). Tourism and the Lodging Sector. London: Butterworth-Heinemann.
- Triantafillidou, A. & Siomkos, G. (2013). Summer Camping: An Extraordinary Nostalgic, and Interpersonal Experience. *Journal of Vacation Marketing*, 19 (3), 197-208.
- Van Heerden, C.H. (2008). Leisure Motorhoming: The Case of the Motorhome Club of South Africa. South African Journal for Research in Sport, Physical Education and Recreation, 30 (1), 125-136.
- Van Heerden, C.H. (2010a). Self Drive Tourism in South Africa With Specific Emphasis on Caravanning. In B. Prideaux & D. Carson (eds.), *Drive Tourism: Trends and Emerging Markets*. London: Routledge, 85-97.
- Van Heerden, C. H. (2010b). An Exploratory Analysis of Leisure Caravanning in the Kruger National Park in South Africa. *Innovative Marketing*, 6 (1), 66-72
- Van Heerden, C. H. (2020). Motivation and Involvement in Camping A Gender Perspective. *African Journal of Hospitality, Tourism and Leisure*, 9 (1), 1-14.
- Van Rooij, N. & Margaryan, L. (2020). Integration of "Ideal Migrants": Dutch Lifestyle Expat-reneurs in Swedish Campgrounds. *Rural Society*. DOI. 10.1080/10371656.2020.1718329.
- Ward, C. & Hardy, D. (1986). Goodnight Campers!: The History of the British Holiday Camp, London: Mansell. Young, T. (2017). Heading Out: A History of American Camping. Ithaca: Cornell University Press.

Submitted: Revised: Accepted and published online 26.11.2019 03.03.2020 09.03.2020

THE POTENTIALS OF CROSS-BORDER TOURISM DEVELOPMENT IN THE LOWER-TISA VALLEY

Bettina TÓTH*

University of Szeged, Faculty of Science and Informatics, Department of Economic and Social Geography 2 Egyetem utca, 6722, Szeged, Hungary, e-mail: bettina.toth3@gmail.com

György VIDA

University of Szeged, Faculty of Science and Informatics, Department of Economic and Social Geography 2 Egyetem utca, 6722, Szeged, Hungary, e-mail: vidagyorgy.vida@gmail.com

Gábor LADOS

University of Szeged, Faculty of Science and Informatics, Department of Economic and Social Geography 2 Egyetem utca, 6722, Szeged, Hungary, e-mail: ladosg.szte@gmail.com

Zoltán KOVÁCS

University of Szeged, Faculty of Science and Informatics, Department of Economic and Social Geography, 2 Egyetem utca, 6722, Szeged, Hungary, e-mail: zkovacs@geo.u-szeged.huResearch Centre for Astronomy and Earth Sciences, Geographical Institute, Budapest, Hungary, e-mail: zkovacs@iif.hu

Citation: Tóth, B., Vida, G., Lados, G. & Kovács, Z. (2020). THE POTENTIALS OF CROSS-BORDER TOURISM DEVELOPMENT IN THE LOWER-TISA VALLEY. GeoJournal of Tourism and Geosites, 28(1), 360–375. https://doi.org/10.30892/gtg.28128-475

Abstract: Recent trends in European spatial development show that unexplored border regions have huge potentials for tourism development, what can, on the one hand, positively influence their economic performance, and on the other hand, provide good opportunities for cross-border cooperation. This paper aims to investigate the potentials of tourism development along the Serbian and Hungarian sections of the Tisa river. The analysis of socio-demographic conditions was based on data of the 2001 and 2011 population census, in addition, tourist attractions on both sides of the border were collected and catalogued. Results show that the Hungarian-Serbian border region provides good opportunities for tourism development, which may enhance cooperation among local actors, including municipalities and entrepreneurs.

Key words: tourism development, cross-border cooperation, border regions, tourist attractions, Tisa

* * * * * *

INTRODUCTION

Since the fall of the 'Iron Curtain' geographical research on cross-border cooperation has intensified. During the Cold War international boundaries often

^{*} Corresponding author

constituted rigid spatial barriers. People on both sides of international boundaries lived at dead ends, with limited and controlled contacts between them. Economic development was hindered by the lack of investments and limited opportunities for cross-border cooperation. Under such circumstances border regions often became peripheralized which resulted in the outmigration of skilled people and a subsequent social erosion (Lang, 2015). After 1989, as 'European integration' intensified, borderlands gained an impetus for more prosperous economic development throughout Europe. EU launched cross-border cooperation programmes to overcome barriers and differences in structures, to compensate for peripheral location and unequal development, and to design border regions that allow the local populations to improve economically and to interact culturally and socially (Wastl-Walter, 2009). The role of tourism as a tool of cross-border cooperation and regional development has been continuously strengthening within the EU (Buidosó et al., 2015). Tourism related cross-border development requires new forms of cooperation from nation states, especially along the Schengen border (Zaitseva et al., 2016). Recent examples show that the role of rivers in cross border tourism development is increasing (Kropinova, 2013). This is the point of departure for this paper which aims to investigate the potentials of tourism development along the Serbian and Hungarian sections of the Tisa river. The Tisa is one of the main rivers in East Central Europe with a length of 966 km, connecting five post-socialist countries: Ukraine, Romania, Slovakia, Hungary and Serbia (Nagy et al., 2019). Opportunities for tourism development are especially favourable in the lower section of the river (i.e. south of Szolnok), where the Tisa is navigable and there are bigger centres (e.g. Szeged, Szentes, Zrenjanin, Becej) that can serve as catalysts for regional tourism development.

The main research questions this paper would like to address are as follows:

- What are the general socio-economic conditions in the Lower-Tisa Valley on both sides of the Serbian-Hungarian border, and how they relate to the wider surroundings?
 - What types of tourism attractions can be found in the region?
 - What are the potentials for long-term coordinated tourism development?
- What kind of policy recommendations can be formulated in the light of international experiences?

The rest of this paper is organized as follows. First, we review the literature on the geographical challenges of border regions and the possible role of cross-border tourism development. We then discuss the data collection and research methodology. A section then follows with main findings of the research and the key tourist attractions and their potentials. Finally, we turn back to the main research questions discuss the results in the light of international experiences, present our conclusions and formulate policy recommendations.

THE CHALLENGES OF BORDER REGIONS AND THE ROLE OF TOURISM DEVELOPMENT

Border regions are special areas within the European Union. The EU defines border zones as areas within 25 km from the EU boundary, hence there are many NUTS 3 level units which are classified as border regions, however, not all of them connect directly with the border line, and there are excessive areas of NUTS3 regions that lie much farther away from the boundary than 25 km (Eurostat, 2018). In 2014 approximately one third of the EU population lived in border regions while only 28% of the total GDP originated from there, and the per capita GDP values were only 88% of the EU average (European Commission, 2017). Thus, border regions not only concentrate a significant part of the EU population, but they are generally lagging behind in socio-economic development compared to other non-border regions. This is also acknowledged by the Union as in the 2014-2020 development period, €6.6 billion has been allocated to 60 cross-border cooperation programmes (European Commission, 2017, 126). In addition, these regions

often show weaknesses in providing adequate infrastructure, high quality services, and well-paid jobs. Thus, a general symptom of border regions that they face difficulties in retaining people. Due to these factors border regions constitute long-term challenges for all member states, but as Table 1 clearly indicates post-socialist countries are especially hard-hit by the shrinkage and demographic erosion of border regions. Therefore, the issue has special relevance in the regional development policy of these countries.

2005-2015	Terrestrial border region	Non-border region	Total
EU-15			
Total change	4.0	4.3	4.2
Natural change	0.7	1.4	1.2
Net migration	3.4	2.9	3.0
EU-13			
Total change	-3.5	-1.2	-2.5
Natural change	-1.5	-0.9	-1.3
Net migration	-1.9	-0.3	-1.2
EU-28			
Total change	1.3	3.6	2.8
Natural change	-0.1	1.1	0.7
Net migration	1.4	2.5	2.1

Table 1. Demographic changes in border and non-border EU regions (2005-2015) (Data source: Eurostat and DR REGIO, derived from European Commission 2017, 127)

There are several obstacles in cross-border cooperation and they most typically include physical geographic barriers (mountain ranges, rivers etc.) or cultural (e.g. language) differences. In addition, socio-economic inequalities on two sides of a border or inadequate infrastructure linkages (e.g. poor transport connections) could also hinder territorial developments in border regions (ESPON, 2019). The disadvantages of borders as socio-economic barriers can also be measured by monetary indicators. As a recent study highlights, Hungary must calculate with a significant loss of GDP because of the Schengen borders created at the external boundary of the EU (Camagni et al., 2017).

The study area of this paper also belong to the "external boundary" of the EU, and a more intense economic cooperation across the boundary is not only the interest of Hungary and Serbia, but also the European Union. Based on socio-economic indicators border regions can often be considered as peripheral areas in line with the centre-periphery theory (Lang, 2015; Nagy & Timár, 2017). Although 'periphery' implies some backwardness and underdevelopment, the interpretation of periphery at a macro-regional scale is extremely difficult, since a peripheral border region may be an advanced region from the perspective of another country (Pénzes, 2013; Smetkowski, 2015; Vida & Dudás 2017, Chapman & Meliciani, 2018; Iammarino et al., 2018, Tatar et al., 2020). Traditional centre-periphery models (e.g. Rokkan, 1970; Wallerstein, 1974; Bourdieu, 1986) highlight three dimensions of spatial relationship between centres and peripheries: economic, political and cultural. In each dimension core regions are dominant against peripheries, but the latter can also benefit from relative backwardness (e.g. cheaper labour force, stronger or "deeper" local culture) (Blahó, 2012). Peripheral and central status cannot be seen as static concepts and there is a constant change in this relationship (Lang, 2015).

In the East Central European context, the Hungarian-Serbian border region can be classified as a traditional agricultural area, where modern industry arrived late (mainly in the socialist period), and focused predominantly on the processing of agricultural products (e.g. food industry). Such agricultural border regions are very often regarded as peripheries with poor socio-economic indicators as far as demographic conditions,

balance of migration, level of foreign direct investment, employment rates or income are concerned (Pénzes, 2013; Bujdosó, et al., 2015; Vida & Dudás, 2017; Gozner et al., 2017; Ilieş et al., 2018; 2019; Deac & Gozner, 2019; ESPON, 2019; Pregi & Novotny, 2019; Tatar et al., 2020). Tourism could be considered as an opportunity for peripheries in catching up with more developed regions, which can contribute not only to the economic progress but also to the socio-cultural environment, such as improving the quality of life (Rátz & Puczkó, 2002; Kovács & Nagy, 2013; Prokkola et al., 2015). However, different infrastructural and institutional capacities of the two sides, and in many cases the different interests, may further restrict cross-border cooperation. Furthermore, the fact that in many cases border regions are less developed regions of a country, the resulting lack of investment and loss of labour force, often hinders developments.

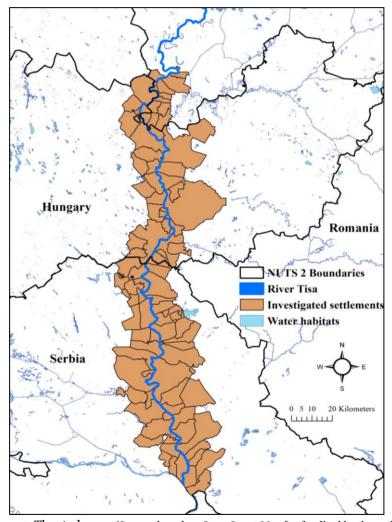


Figure 1. The study area (Source: based on Open Street Map [1,2]; edited by the authors)

The EU has also realised the importance of strengthening links between border areas, and one of the top priorities of cross-border cooperation programs is tourism development, which offers an excellent opportunity for neighbouring border regions to

develop common touristic programmes (Tarpai, 2010; Muhi & Remenyik, 2013). Especially alternative forms of tourism (e.g. ecotourism, rural tourism) could be regarded as potential fields of cross-border tourism developments. They are becoming more and more popular nowadays, which, unlike mass tourism, involve the discovery of unspoiled natural environment alongside new or unexplored tourist destinations (Marton et al., 2016). These forms of tourism could especially play key role in the development of border regions that were hermetically cut off from tourist flows in the past. Depending on their characteristics, they could be barriers or filters of tourism development regarding touristic flows, marketing, promotion, the development of touristic infrastructure or creating regional brands (Wieckowski, 2010). In the literature there is a three-fold typology in spatial relations between borders and tourism: the boundary line is far from tourist area, the tourist destination is adjacent to the border on one side, or the tourist zones outstretch or meet at the border line (Gelbman & Timothy, 2010). The Lower-Tisa Valley as a unique tourist destination belongs to the third category, stretching along the river and connecting two countries on both sides of the Schengen Border.

RESEARCH DESIGN AND METHODOLOGY

During the research, first the exact boundaries of the case-study area, the Lower-Tisa Valley had to be defined. In the delimitation all settlements between Tiszakécske (Hungary) and Titel (Serbia) were considered that are directly bordering the river, or lying offside but the centre of the settlement is within 10 kilometres from the Tisa (Figure 1).

Due to geographical proximity these settlements have developed in strong interrelationship with the Tisa in the past, and their economy traditionally hinges on the river. Since the main aim of this study is to assess the potentials and limitations of tourism development along the Lower-Tisa Valley we had to combine different research methods and data sources that were available on both sides of the case-study area, in order to make a comparative study possible. The analysis of socio-demographic conditions was based on data of the 2001 and 2011 population census (2002 in the case of Serbia). For the sake of analyses tourist attractions were collected and catalogued from the Internet websites of settlements and other possible sources (e.g. tourist information websites) [1,2,3] (Indrie et al., 2019). In addition, academic publications focusing on tourism development along major European rivers that connect different countries were selected and analysed.

MAIN RESEARCH FINDINGS

SOCIO-ECONOMIC CONDITIONS IN THE LOWER-TISA VALLEY

The delimited area includes 83 settlements (35 on the Hungarian, and 48 on the Serbian side) covering a total area of 6665 km2, where on the eve of the last census (2011) 640 thousand people lived (Table 1). The size of the settlements varies greatly, the most populous is Szeged (Hungary) with 168 thousand inhabitants, and the smallest one is Mali Pesak (Serbia) with only 94 people. To measure the level of urbanization we ignored the legal definition of towns as it is different in Serbia and Hungary, moreover it is politically often motivated, not always reflecting the actual position of a settlement within the urban hierarchy. Therefore, we considered the statistical threshold of 5 thousand inhabitants to define cities in the study area. As Table 1 shows the urban ratio (83%) of the Lower-Tisa Valley was significantly higher in both census-years than that of the wider region (in Hungary the Dél-Alföld NUTS2 region and in Serbia Voivodina).

This means that on average larger settlements prevail in the study area compared to the wider surrounding. The Hungarian side had slightly higher urban ratios both in 2001 and 2011, which is the outcome of the dominance of Szeged, the regional centre of

Dél-Alföld. On the Serbian side Novi Sad with similar regional functions lies off from the Tisa, which surely sets limitations also for tourism development.

Considering population dynamics both the Serbian and Hungarian sides of the study area experienced population shrinkage between 2001 and 2011, although with different intensity (Figure 2). Despite relatively favourable demographic conditions the Serbian side recorded faster population decrease during the investigated period, which was mainly the outcome of outmigration towards the EU core countries. Biggest relative population losses were recorded in the smallest settlements, like Vojvoda Zimonic (-28.2%), Velebit (-24.3%) or Jazovo (-24.1%), but similar dimensions (above 20% loss) characterised also Bocar, Dala and Sterijino. While none of the Serbian settlements showed population growth, five Hungarian municipalities recorded population increase between 2001 and 2011. Four of them (Deszk, Tiszasziget, Újszentiván, Sándorfalva) are located in the agglomeration of Szeged and they have been aeffected by suburbanisation since the 1990s, and only Cserkeszőlő, the spa-village in the north is lying off.

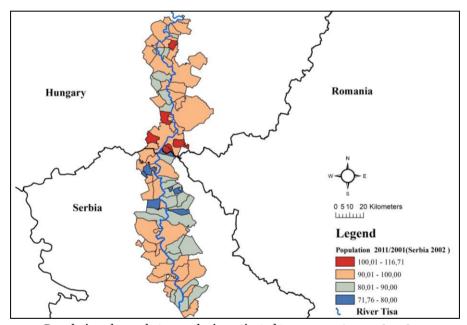


Figure 2. Population change between the investigated two census (Source: based on Open Street Map [1,2], Hungarian Central Statistical Office [4] and Statistical Office of the Republic of Serbia [5];

The age composition of local population is more favourable on the Serbian side. The share of elderly (65+) is lower and the proportion of children (below 15) is higher. This results lower average values of ageing-index in 2011, and if we consider the trends between 2001 and 2011, Serbian settlements perform clearly better in demographic terms (Figure 3). We can observe an opposite trend regarding employment/unemployment on the two sides of the Lower-Tisa Valley. The rate of employment is significantly higher on the Hungarian side, thanks to the recent economic upswing of the country (Figure 4). However, we must also note that there is a group of settlements in the northern section of the study area (called Tiszazug), where the situation is not so favourable. These are smaller municipalities with disadvantageous location, relatively far from major centres (e.g. Szolnok, Kecskemét). The rate of unemployment confirms this picture (Figure 5).

The level of unemployment is nearly twice on the Serbian side and there is a cluster

of settlements south from Petrovo Selo and Novi Becej where the lack of jobs causes high unemployment rates, e.g. Perlez (21.0%), Zabalj (19.8%) or Backo Gradiste (18.2%).

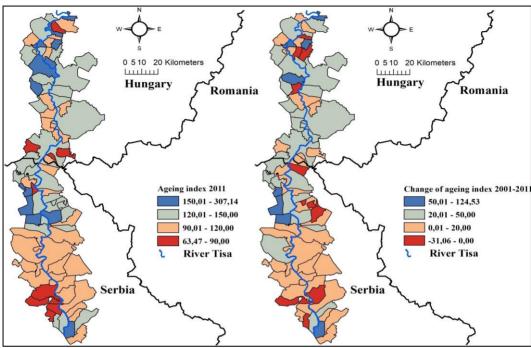


Figure 3. Ageing index patterns in the investigated settlements (Source: based on Open Street Map [1,2], Hungarian Central Statistical Office [4] and Statistical Office of the Republic of Serbia [5]

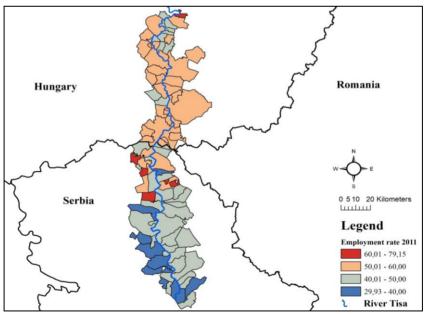


Figure 4. Employment patterns in the investigated settlements (Source: based on Open Street Map [1,2], Hungarian Central Statistical Office [4] and Statistical Office of the Republic of Serbia [5]

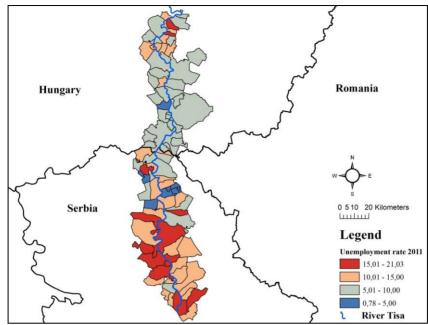


Figure 5. Unemployment patterns in the investigated settlements (Source: based on Open Street Map [1,2], Hungarian Central Statistical Office [4] and Statistical Office of the Republic of Serbia [5]

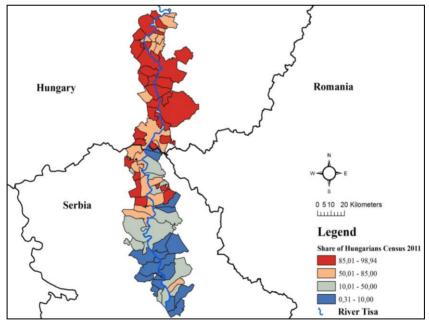


Figure 6. Share of Hungarians in the investigated settlements (Source: based on Open Street Map [1,2], Hungarian Central Statistical Office [4] and Statistical Office of the Republic of Serbia [5];

On the Hungarian side of the research area there is also a group of settlements where unemployment is a problem e.g. Tiszainoka (15.8%), Cibakháza (15.7%), Csépa (14.1), Nagyrév (13.0%). All of these settlements belong to the Tiszazug inner-

periphery.Regarding ethnicity, the Serbian side is multi-ethnic with substantial share (2011:32%) of Hungarians, who concentrate mainly in the northern municipalities of Vojvodina, close to the boundary (e.g. Tresnjevac 96.9%, Gornji Berg 92.4%, Horgos 82.6%) (Figure 6). To sum up we can conclude that the Serbian and Hungarian sections of the Lower-Tisa Valley are fairly similar as far as the levels of urbanization and demographic structure of the populations are concerned, even though they have belonged to two different countries over the last century. The economic conditions are clearly worse on the Serbian side with lower employment rates and higher levels of unemployment. This highlights the potentials of tourism development in the future which could enhance job-creation. The presence of Hungarians on both sides of the border and the lack of cultural/language barrier could provide good basis for cross-border economic cooperation, including the development of tourism.

The potentials of cross-border tourism development in the Lower-Tisa Valley.

Table 2. Socio-economic indicators for the case-study area and its wider regions (Source: National Census
2001 (2002), 2011, Hungarian Central Statistical Office [4], Budapest and Serbian Statistical Office [5], Belgrade)

	Hungarian	Serbian	Total case-	Dél-Alföld	Vojvodina
	-side	-side	study area	NUTS 2	NUTS 2
Number of settlements	35	48	83	254	467
Population number 2001 (Serbia 2002)	37 8157	29 7824	67 5981	137 7652	203 1992
Urban ratio (%) 2001 (Serbia 2002)	85,98	79,75	83,23	71,82	68,20
Population number 2011	36 5493	27 4737	64 0230	129 7735	193 1809
Population change 2001- 2011 (%)	-3,35	-7,75	-5,29	-5,80	-4,93
Share of elderly (65+), 2011 (%)	17,11	16,67	16,96	17,62	16,39
Share of children (below 15), 2011 %	13,75	14,60	14,12	14,01	14,36
Ageing-index 2011	124,40	114,76	120,13	125,84	114,08
Change of a geing indes 2001-2011 (%)	30,61	17,42	24,77	30,56	16,26
Employment rate 2011 (%)	57,11	45,34	52,09	53,72	45,40
Unemployment rate 2011 (%)	7,29	13,15	9,79	7,89	13,35
Share of Hungarian ethnicity 2011	85,13	32,28	62,46	86,39	13,00

EVALUATING TOURIST ATTRACTIONS IN THE LOWER-TISA VALLEY

During the research information about existing and possible tourist attractions in the Lower-Tisa Valley have been collected in a structured and systematic way, mostly via the Internet. Some of these attractions are well known, and have already been frequented by tourists, others are still to some extent hidden for visitors. These attractions may provide the basis for long-term tourism development planning in the region (MacCannell, 1976; Michalkó, 2016; Aspridis et al., 2015). The Lower-Tisa Valley offers a great variety of attractions that can be grouped into four broad categories: natural, man-made, tourism services and hospitality (Figure 7). In addition, we distinguish hospitality services that are necessary for tourism development, and we also defined several sub-groups of attractions during the typology (Lew, 1987; Aspridis et al., 2015; Swarbrook, 2002).

Due to the proximity to the river the study-area is extremely rich in natural attractions. The Tisa offers good opportunities for sport tourism including rowing, canoeing and kayaking. In addition, water surfaces are ideal for sportfishing and bathing. There are many natural strands along the river bank, that vary between well-equipped locations (e.g. Tiszakécske or Csongrád) with high quality tourism services (restaurants, accommodation

etc.) and isolated sand beaches (e.g. Tiszainoka) with calmness and peaceful landscape. Water surfaces sustain an extremely rich flora and fauna. In particular, the yearly "blooming" of the Tisa which is the hatch of vast numbers of mayflies is considered a local natural wonder. The blooming of the Tisa is already a well-known tourist attraction advertised in international catalogues. As an outcome of large-scale flood regulations in the second half of the 19th century there are also many billabongs next to the river providing good opportunities for bird-watching, sportfishing and rowing. Forests and floodplains along the river provide ideal conditions for hiking and other outdoor activities. Among the natural beauties floodplain meadows (e.g. Tiszaalpár, Tiszaug) and arboretums (e.g. Tiszakürt) with excellent habitat for flora provide great potentials for tourism, just like rare geomorphological formations e.g. loess terraces along the Tisa (e.g. Kanjiza) or the Titel Loess Plateau. The Lower-Tisa Valley offers not only natural beauties but also many cultural and historical attractions. Regarding the built environment churches like the Orthodox church in Novi Kneževac (Serbia) or the Catholic church in Cibakháza (Hungary) are excellent examples for valuable historical heritage. There are a lot of mansions and palaces in the area (e.g. the Pallavicini palace in Sándorfalva, or the Marcibanji-Lederer castle in Čoka) that are open to visitors. Museums are important among local tourist attractions with rich exhibitions like the Jozsef Koszta Museum in Szentes, or the Museum Žeravica in Novo Milosevo exhibiting agricultural and other machines. Monuments erected to commemorate past events (e.g. battles, floods) and well preserved folk architectures are also widely spread in the area. In addition, long traditions of pottery (e.g. Hódmezővásárhely, Cserkeszőlő) enrich local cultural attractions. Settlements located in the Lower-Tisa Valley organize many events annually where the focus ranges from local to national and even international relevance (e.g. SZIN music festival in Szeged).

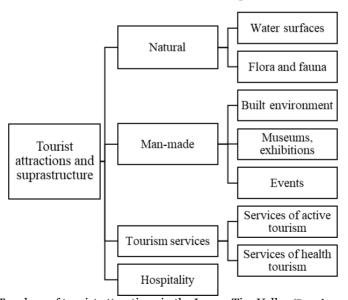


Figure 7. Typology of tourist attractions in the Lower-Tisa Valley (Based on own design)

Most of the settlements organize annual fairs (village feasts), festivals and other events like the horse-driving competition in Cserkeszőlő, the gastronomy festival in Szentes, the sausage festival in Adorjan, or the aivar festival in Deszk. These events are aimed not only to attract visitors but also to preserve local folk-traditions. We have made an inventory of tourist attractions on the Hungarian section of the Lower-Tisa Valley (Table 3).

Table 3. Tourist attractions on the Hungarian side of the Lower-Tisa Valley based on our own collection, Data source: based on Open Street Map [1,2] and event calendars [3]

Natural attractions			Man-made attractions				Total number of attractions
Water surfaces and strands	Flora and fauna	Σ	Built environment	Museums, exhibitions	Events	Σ	
42	30	72	195	53	97	345	417

Similar survey, based on the same methodology on the Serbian section of the river was, unfortunately, not possible. Nevertheless, as Table 3 shows clearly man-made attractions, especially those related to the built environment, significantly outnumber natural attractions. This does not mean, however, that man-made attractions would be more important in future tourism development, rather it is an indication that there is a rich pool of attractions in the area with 417 targets where both natural and man-made attractions complement each other providing tourist a healthy mix of entertainment. Tourist "attractions" in their widest sense include not only beauties of the natural landscape, spectacular scenery, historic sites, museums and local programmes, which are normally associated with the word, but also the services and facilities which cater to the everyday needs of tourists (Lew, 1987). In this respect the study area is relatively underdeveloped. Perhaps the only exception is health tourism which is well-developed due to many spas (e.g. Tiszakécske, Cserkeszőlő, Becej) with high quality thermal water.

Accommodation facilities are available in the region and they range from bed and breakfast, apartments, guest-houses in villages and hotels in towns. Bigger concentrations of tourist accommodation and Airbnb are found in larger cities (Boros et al., 2018), in this case in Szeged (Dudás et al., 2018). As we see, there is a rich collection of tourist attractions in the Lower-Tisa Valley with great variety of spectacles and entertainment, that could easily be developed to thematic routes of sport, health or cultural tourism along the river (Swarbrook, 2002; Michalkó, 2016). However, the management of visitor attractions is rather poor, tourism marketing and branding is still in its infancy (Smith et al., 2019). Moreover, cooperation among municipalities in the field of tourism planning is weak or lacking. Under these circumstances it is no surprise that the number of tourist arrivals in the region is well below the expectations.

DISCUSSION

Rivers as possible targets of tourism development are increasingly on the agenda in the European Union. As natural corridors through national borders they can connect various tourist destinations on either side of borders. Ecotourism has great potentials in water-related cross-border developments where the unspoiled, unique natural landscape meets with cultural heritages of the region (Rátz & Puczkó, 2002; Kovács & Nagy, 2013). In the following we briefly introduce three European good practices in tourism development along rivers crossing international boundaries. We focus here on initiatives which – partly – lies on EU outer boundaries, hence they may provide some experiences for tourism development in the Hungarian-Serbian border regions.

- Development of tourism along the Drava river (between Hungary and Croatia) Along the Hungarian-Croatian border a long-term cooperation between local actors of tourism (e.g. municipalities, national parks, local business sector) has been set up, where mainly EU financed infrastructural developments – such as ports, camp sites, bike routes – were implemented in 2007 and 2008 (Muhi & Reményik, 2013). As a recent cooperation, the DRAWA international project aimed at developing a water tour along the Drava river between Hungary and Croatia and enhance tourism on both sides of the border. The project was implemented between 2017 and 2019 within the INTERREG V-A

Hungary-Croatia Co-operation Programme (2014-2020). Within the project natural and artificial barriers of the riverbed were detected, and a mobile application was developed supporting water tourism and shipping on the river. The application was aimed to help water transport (navigating on the river) and tourism development (Ilies et al., 2018), providing up-to-date information about tourist attractions of the region (e.g. information about sites, accommodation, gastronomy and active touristic programmes). Along the route, information boards were also set up in order to inform tourists on both sides of the border [6]. This project could be linked to other tourism related developments in both countries, such as the development of a bicycle route between Pécs (Hungary) and Osijek (Croatia), latter lying on the bank of the Drava river (STRDA 2014).

- Development of E-70 water tour between Rotterdam and Klaipeda

As part of the Trans-European Transport Network (TEN-T), the so-called Rotterdam-Klaipeda E-70 water route has earmarked significant resources in the previous and actual EU development cycles (Figure 8).

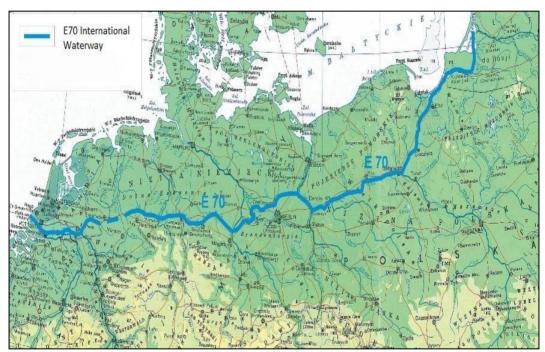


Figure 8. The E-70 waterway connecting Rotterdam and Klaipeda (Source: www.mdwe7o.pl)

The water route is in the line of important East-West transport corridors, which is – together with railways – planned to partly replace highway by 2030 [7]. Water tourism development in the Lithuanian-Russian border (Kropinova, 2013) and integration of the two Lithuanian rivers, Neman and Sesupe into water tourism (Hall, 2017) are also parts of E-70 waterway development. In addition to building the infrastructure along the route for navigation and water tourism (e.g. ports, piers, promenades), the project also aims to draw attention to tourist attractions of the region [8]. Tourism development in the Polish-Lithuanian-Russian border includes touristic products with some added values, such as 'Amber Road' or "The World Amber Way" (Hall, 2017). Attractiveness of this thematic route is aimed to be exploited through appropriate marketing activities and TDM (Tourism Destination Management) tools.

- The Lithuania - Poland - Russia Cross-border Cooperation Programme 2009 -2013

In her paper Kropinova (2013) provides recommendations for tourism development in the outer regions of the EU. Potential tourism development focuses on tourism innovation systems, which are results of actions aimed at creating a new product and consist of a large number of interconnected actors involved in tourism, both represented by public, non-commercial and business sectors (e.g. individuals, organisations, institutions) (Kropinova, 2013, 53; Ilies et al., 2019). Policy recommendations of this cross-border cooperation could be summarised as follows:

- a) Introducing new types of tourism products, with special attention to joint, transboundary thematic routes;
- b) Introducing new types of activities, which were not developed earlier in the region due to some institutional or infrastructural limitations (e.g. ecotourism);
- c) Developing tourism information network between the cross-border regions (common database on the regions' tourism potential);
- d) Establishment of a new type of organisation or committee (which tackle down the restrictions on the work of a foreign guide on their territory);
- e) Implementation of season extending activities or cooperation (e.g. 'Museums over the borders' programme);

The above best practices reinforce the potentials of cross-border tourism development in the Lower-Tisa valley. In the studied Hungarian-Serbian border region historical, cultural and social traditions as well as unexplored natural attractions provide good opportunities for tourism development, where the Tisa river could serve as an axis, linking municipalities and entrepreneurs on both sides of the border, and enhancing cross-border cooperation among stakeholders.

CONCLUSION

Since the end of the South Slavic civil war, and the successful European integration of some of the countries the tourism market of South-east Europe and the Balkan region has been dynamically expanding. There are rich national variations in the region in terms of development levels, resources, facilities, services or attractions in tourism (Smith et al., 2018). They provide a solid basis for future tourism development in which cross-border cooperation has many excellent potentials. One of these development scenarios is linked with major rivers crossing the region and connecting its countries including the Danube or the Sava. In the contemporary geopolitical context, crossing the Schengen boundary the Lower-Tisa Valley can be considered as a possible gate towards the Balkans, and a possible development axis in many fields, including tourism. Based on the research results and the international trends documented in the literature we can formulate some recommendations for policy makers, which can be categorised into four groups: management-, tourism-, infrastructure- and education-related ones.

- I. Management-related recommendations:
- Local actors in tourism development (e.g. municipalities, tourist boards, other professional organisations and entrepreneurs) should join and act together. For this purpose, a special tourist association should be established uniting actors from both sides of the border.
- Cross-border projects in tourism development should be maintained for a longer period, not just for the project lifetime.
- Tourism-related developments in the area should be harmonised with the goals of the wider tourist destination area.
- Common marketing strategy for the whole tourist region should be elaborated and maintained.
 - II. Tourism-related recommendations:

- Emphasis should be placed on cross-border thematic route(s) which require cooperation among actors on both sides of the border.
- Thematic routes should integrate natural, as well as social and cultural values. For example, in the case of the Lower-Tisa Valley, ecotourists may visit the region to take part in kayak or canoe tours along the Tisa River, but the tourist destination should also provide alternative programmes, where tourists can experience local cultural, historical and social values.
- The definition of target groups is vital in the formulation of tourism development plans. In terms of water tourism not just active tourists or professional sportsmen, but families and eco-tourists should be considered as potential target groups.
- Small villages along the river should be provided by special assistance in developing basic services (e.g. catering, accommodation) and attracting more tourists.

III. Infrastructure-related recommendation:

• Sport-related – basic – infrastructural developments are necessary for future tourism development, such as ports, camp sites, bicycle routes or running tracks along the river.

IV. Education-related recommendation:

• The involvement and training of local people in tourism development is important, which would also positively influence the socio-economic conditions of the tourist destinations especially in small peripheral settlements.

As this paper demonstrated unexplored border regions have huge potentials for tourism development, what can, on the one hand, positively influence their economic performance, and on the other hand, provide good opportunities for cross-border cooperation. In the Hungarian-Serbian border region historical, cultural and social traditions provide good opportunities for tourism development, which may enhance cooperation among local actors, including municipalities and entrepreneurs. In future cross-border cooperation the Tisa river deserves particular attention. It can provide the axis of development and generate synergies among – up to now – separated geographical entities. Future research should focus on the connection between landscape aesthetic values (Lontai-Szilágyi et al., 2019) and tourism services on both the Serbian and Hungarian sections of the Lower-Tisa Valley, and help find new objectives for tourism development.

Acknowledgements

This research was supported by the HUSRB/1602/31/0204-WATERTOUR project, the Hungarian Scientific Research Fund (OTKA) Grant Agreement No. K119710, the Ministry of Human Capacities, Hungary grant agreement 20391-3/2018/FEKUSTRAT, and the Ministry for Innovation and Technology, Hungary grant agreement TUDFO/47138-1/2019-ITM.

REFERENCES

Aspridis, G., Sdrolias, L., Kimeris, Th., Kyriakou, D. & Grigoriou, I. (2015). Visitor attraction Management: Is there space for new thinking despite the crisis? The cases of Buckingham Palace and the Museum of Acropolis, In V. Katsoni (Ed.), Cultural Tourism in a Digital Era, pp. 329-347, Springer International Publishing AG Switzerland. DOI: 10.1007/978-3-319-15859-4_28

Blahó, A. (2012). Centre-periphery tensions regarding Central and Eastern Europe, In Fábián, A. (Ed.), A peaceful world is possible: in honour of Judit Balázs, pp. 263-279, University of West Hungary, Sopron.

Boros L., Dudás. G., Kovalcsik. T., Papp S. & Vida, Gy. (2018). Airbnb in Budapest: analysing spatial patterns and room of hotels and peer-to-peer accommodations. In *GeoJournal of Tourism and Geosites*, no. 1, vol 21, 26-38.

Bourdieu, P. (1986). The forms of capital, In J. G. Richardson (Ed.), Handbook of theory and research for sociology of education, pp. 241-258, Greenwood Press, Westport.

Bujdosó, Z., Dávid, L., Varga, D., Zhakupov, A., Gyurkó, A. & Pénzes, J. (2015). Tourism development and cross-border cooperation in the Hungarian-Romanian border region, In *GeoJournal of Tourism and Geosites*, no. 2, vol 16, pp. 154-164.

Camagni, R., Capello, R., Caragliu, A. & Toppeta, A. (2017). Quantification of the effects of legal and administrative border obstacles in land border regions, Politecnico di Milano, Milano. doi: 10.2776/25579.

- Chapman, S. & Meliciani, V. (2018). Explaining regional disparities in Central and Eastern Europe, In *Economic of Transition*, no. 3, vol. 26, pp. 469-494. http://dx.doi.org/10.1111/ecot.12154
- Deac, L.A., Gozner, M. & Sambou A. (2019). Ethnographic Museums in the Rural Areas of Crisana Region, Romania Keepers of Local Heritage, Tradition and Lifestyle. *GeoJournal of Tourism and Geosites*, 27(4), 1251–1260.
- Dudás G., Kovalcsik T., Boros L., Kovalcsik B., Vida Gy. (2018). Az Airbnb szálláskínálatának jellemzői a megyei jogú városokban. In *Területi Statisztika*, no. 5, vol. 58, pp. 462-488.
- Gelbman, A. & Timothy, D. (2010). From hostile boundaries to tourist attractions, In *Current Issues in Tourism*, no. 3, vol. 13, pp. 239-259.
- Gozner, M., Tătar, C.F., Stupariu, M. & Măduta, F.M. (2017). Nature, Photography and Tourism in BihorVlădeasa Mountains (Romania). *GeoJournal of Tourism and Geosites*, Year X, Volume 20, OradeaGdansk, Romania-Poland, Editura Universității din Oradea.
- Hall, D.R. (2017), Tourism and geopolitics. Issues and concepts from Central and Eastern Europe, Wallingford: CAB International.
- Ilies, D.C., Buhas, R., Ilies, M., Ilies, A., Gaceu, O., Pop, A.C., Marcu, F., Buhas, S.D., Gozner, M., & Baias, S. (2018). Sport Activities and Leisure in Nature 2000 Protected Area Red Valley, Romania. *Journal of Environmental Protection and Ecology*, 19, No 1, 367–372.
- Ilieş, D. C., Oneţ, A., Marcu, F.M., Gaceu, O.R., Timar, A., Baias, S., Ilieş, A., Herman, G.V. Costea, M., Ţepelea, M., Josan, I. & Wendt, J. (2018). Investigations regarding the air quality in the historic wooden church in Oradea city, Romania, in *Environmental Engineering and Management Journal*, Vol.17, no11, pp.2731-2739, http://www.eemj.icpm.tuiasi.ro/pdfs/accepted/204_294_Ilie%C8%99_17.pdf.
- Ilieş, D.C., Oneţ, A., Herman, G.V., Indrie, L., Ilieş, A., Burtă L., Gaceu, O., Marcu, F., Baias, S., Caciora, T., Marcu, A.P., Pavel, O.I., Costea, M., Ilieş, M., Wendt, J. & Mihincău D. (2019). Exploring the indoor environment of heritage buildings and its role in the conservation of valuable objects, *Environmental Engineering and Management Journal*, December Vol. 18, No. 12, 2579-2586.
- Indrie L., Ilieş, D. C., Oneţ, A., Wendţ, J. Ilieş, M., Timar, A., Ilieş, A., Baias, S. & Herman, G.V. (2019). Indoor air quality of museums and conservation of textiles art works. Case study: Salacea Museum House, Romania, Industria textile, Vol. 70 No 1, pp 88-93. Iammarino, S., Rodriguez-Pose, A. & Storper, M. (2018). Regional inequality in Europe: evidence, theory and policy implications, In *Journal of Economic Geography*, no. 2, vol. 19, pp. 273-298. https://doi.org/10.1093/jeg/lby021.
- Kovács, I. & Nagy, G. (2013). Tourism in peripheric regions The possibilities of thematic routes, In *Analele Universitatii din Oradea* Seria Geografie, no. 2, vol. 23, pp. 220-228.
- Kropinova, E.G. (2013). Cooperation between Russia and the EU in the field of innovative development of tourism: the case of the Lithuania Poland Russia cross-border cooperation programme, In *Baltic Region*, no. 4. vol. 5, pp. 48-57. https://doi.org/10.5922/2079-8555-2013-4-5.
- Lang, T. (2015). Socio-economic and political responses to regional polarisation and socio-spatial peripheralisation in Central and Eastern Europe: a research agenda, In *Hungarian Geographical Bulletin*, no. 3 vol. 64, pp. 171-185.
- Lew, A.A. (1987). A framework of tourist attraction research, In *Annals of Tourism Research*, no. 4, vol. 14, pp. 553-575, https://doi.org/10.1016/0160-7383(87)90071-5.
- Lontai-Szilágyi, Z., Bertalan-Balázs, B., Zsiros, B., Vasvári, M., Kumar, S.S., Nilanchal, P., Martonné Erdős, K. & Szabó, S. (2019). A novel approach of mapping landscape aesthetic value and its validation with rural tourism data, In *Hungarian Geographical Bulletin*, 68(3), pp. 283-301.
- MacCannell, D. (1976). The Tourist: A New Theory of the Leisure Class, New York Shocken Books.
- Marton, G., Raffay, Z., Prisztóka, Gy., Raffay, Á. & Kiss, R. (2016). A Dráva-mente, mint határmenti, periférikus tér turizmusfejlesztésének problémái [The Drava Region, as peripheral border area and challenges of its tourism development], *Turisztikai és Vidékfejlesztési Tanulmányok*, no. 2, vol. 1, pp. 34-48.
- Michalkó, G. (2016). Turizmológia [Tourismology], Akadémiai Kiadó, Budapest.
- Muhi, B. & Reményik, B. (2013). A határ menti és a határon átívelő idegenforgalmi lehetőségek Magyarország, Horvátország és Szerbia esetében [Opportunities in cross-border tourism for Hungary, Croatia and Serbia], In J. Szalma (Ed.), A magyar tudomány napja a Délvidéken 2013 [Hungarian science day in Délvidék], pp. 541-557, Novi Sad: Hungarian Scientists Society in Vojvodina.
- Nagy, Gy., Vida, Gy., Boros L., Ćirić, D. (2019). Decision trees in environmental justice research a case study on the floods of 2001 and 2010 in Hungary. In *Open Geosciences*, no. 1, vol. 11, pp. 1025-1034.
- Nagy, E. & Timár, J. (2017). The (re-)production of peripherality in Central and Eastern Europe, European Spatial Research and Policy, no. 2, vol. 24, pp. 5-16. DOI 10.1515/esrp-2017-0006
- Pénzes, J. (2013). The dimensions of peripheral areas and their restructuring in Central Europe, *Hungarian Geographical Bulletin*, 62(4), pp. 373-386.
- Pregi, L. & Novotny, L. (2019). Selective migration of population in functional urban regions of Slovakia, In *Journal of Maps*, no. 1, vol. 21, pp. 94-102. DOI: 10.1080/17445647.2019.1661880.

- Prokkola, E-K., Zimmerbauer, K. & Jakola, F. (2015). Performance of regional identity in the implementation of European cross-border initiatives, In *European Urban and Regional Studies*, no. 1, vol 22, pp. 104-117.
- Rátz, T. & Puczkó, L. (2002). The impacts of tourism, Hame Polythechnic, Hameelinna.
- Smetkowski, M. (2015). Spatial patterns of regional economic development in Central and Eastern European countries, In *Geographia Polonica*, no. 4, vol. 88, pp. 539-555. http://dx.doi.org/10.7163/GPol.0033
- Smith, M., Sulyok, J., Jancsik, A., Puczkó, L., Kiss, K., Sziva, I., Papp-Váry, Á.F. & Michalkó, G. (2018). Nomen est omen Tourist image of the Balkans, In *Hungarian Geographical Bulletin*, no. 2, vol. 67, pp. 173-188. DOI: 10.15201/hungeobull.67.2.5
- Swarbrooke, J. (2002). The Development and Management of Visitor Attractions, Butterworth-Heinemann, Oxford. https://doi.org/10.1002/jtr.459
- Tatar, C.F., Studzieniecki, T., Czimre, K. & Penzes, J. (2020). Marketing awarenessof crossborder destination the case study of Bihor-Hajdu/Bihar Euroregion. In *GeoJournal of Tourism and Geostites*, no. 1, vol. 28, pp. 95-103.
- Tarpai, J. (2010). Turisztikai desztinációs menedzsment kialakítása az ukrán-magyar határrégióban [Development of tourism destination management in the Ukrainian-Hungarian border region], In *Jelenkori Társadalmi és Gazdasági Folyamatok*, no. 1-2, vol. 5, pp. 28-32.
- Vida, Gy. & Dudás G. (2017). Geographical context of the revealed competitiveness of urbanised areas in Hungary excluding the Budapest agglomeration. In *Geographica Pannonica*, no. 3, vol. 21, pp. 179-190.
- Wallerstein, I. (1974). The modern word-system: capitalist agriculture and the origins of the European world-economy in the sixteenth century, Academic Press, New York.
- Wastl-Walter, D. (2009). Borderlands, In R. Kitchin & N. Thrift, (Eds.), *International Encyclopedia of Human Geography*, vol 1. pp. 332–339. Oxford: Elsevier.
- Wieckowski, M. (2010). Tourism development in the borderlands of Poland, In *Geographia Polonica*, no. 2, vol. 83, pp. 67-81.
 Zaitseva, N.A., Korneevets, V.S., Kropinova, E.G., Kuznetsova, T.Y. & Semenova, L.V. (2016). Cross-border movement of people between Russia and Poland and their influence on the economy of border regions, In *International Journal of Economics and Financial Issues*, no. 4, vol. 6, pp. 1690-1695.
- *** Eurostat (2018). Border region, In *Methodological manual on territorial typologies*, pp. 100-103, Eurostat, Luxembourg.
 *** European Commission (2017). *My region, my Europe, our future, Secenth report on economic, social and territorial cohesion*, European Commission. Brussels.
- *** ESPON (2019). State of the European territory, Inception Report, ESPON, Luxembourg.
- *** STRDA (2014). Cycling tourism in the Hungary-Croatia border area, South Transdanubian Regional Development Agency, Pécs.
- https://www.openstreetmap.org/#map=9/46.2179/20.1215 (Accessed: 08.11.2019).
- http://www.geofabrik.de/en/index.html (Accessed: 10.11.2019).
- https://www.programturizmus.hu/ (Accessed: 08.08.2019).
- http://www.ksh.hu/?lang=en (Accessed: 04.11.2019).
- https://www.stat.gov.rs/en-US/ (Accessed: 05.11.2019).
- http://ddvizig.hu/en/hirek-ddvizig-en/5afc81b9-bc57-4391-a058-bd5a9023c02f (Accessed: 09.10.2019).
- https://financialobserver.eu/poland/polish-inland-waterways-in-progress/ (Accessed: 11.11.2019).
- https://mdwe70.pl/en/o-projekcie (Accessed: 08.11.2019).

Submitted: Revised: Accepted and published online 26.10.2019 04.03.2020 10.03.2020

GeoJournal of Tourism and Geosites

Year XIII, no. 1, vol. 28, 2020

